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DIAMOND DRILLING REPORT

FOR THE KNOB HILL AND IRONSIDES GROUPS OF CLAIMS,

PHOENIX PROPERTY

N.T.S. 82 E/2

Lat: 49° Ø6' North

Long: 118° 35' West

Owned By: Kettle River Resources Ltd. 33Ø Copper St., Box 13Ø Greenwood, B.C. VØH 1JØ

Operated By: Battle Mountain (Canada) Inc. 2910 - 390 Bay Street Toronto, Ontario M5H 2Y2

Author: Michael E. Caron, P. Geo.

Date: November, 1992

GEOLOGICAL BRANCH ASSESSMENT REPORT

SUMMARY

During June, 1992, nine diamond drill holes, for a total of 1364.49 metres of drilling, were completed on claims within the Knob Hill and Ironsides Groups of 100 and 73 units, respectively. These claim groups are part of Kettle River Resources Ltd.'s Phoenix property, located near Greenwood in south-central British Columbia. This property includes the abandoned Phoenix open pit copper skarn mine, as well as numerous smaller occurrences and mine workings. These nine drill holes were located to the north and northwest of the abandoned open pit mine and were drilled to test soil and rock geochemical anomalies discovered during field work carried out in 1990, together with IP anomalies discovered during 1991.

Drilling has indicated that IP anomalies in this area, as well as colncident soil and rock geochemical anomalies are generally related to narrow, rootless, skarn-related massive sulfide pods within Triassic sediments (Brooklyn Group) or to graphitic metasediments within underlying Paleozoic Knob Hill Group rocks.

Surface soil and rock geochemical anomalies, as well as subsurface IP anomalies in the area of the present work are considered to have been adequately tested by this drilling campaign. Results were not strongly positive and no further drilling in this particular area is recommended.

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INTRODUCTION

The Knob Hill and the Ironsides Groups of claims are part of the larger Phoenix property located near Greenwood in south-central British Columbia (*Fig. 1*). Access to the property is achieved via all-weather roads and secondary roads and trails. This property includes the town site and mine workings of Phoenix established near the turn of the century, as well as the large open pit skarn copper mine operated by Granby Corporation from 1956 to 1976.

Field work completed during 1992 on claims within the Knob Hill and Ironsides Groups includes nine NQ diamond drill holes totalling 1364.49 metres. Drilling was completed during June, 1992. Drill core was logged and split for assay at Battle Mountain (Canada) Inc.'s Greenwood field office. Analysis for Au and Cu was carried out by Bondar Clegg & Company Ltd. in Vancouver. Drill core is currently stored at a facility near Greenwood operated by Kettle River Resources Ltd.

LOCATION, TOPOGRAPHY, CLIMATE

Location and Access:

The Phoenix property is located six kilometres east of the City of Greenwood, B.C., and includes the historic town site and mine site of Phoenix. The property is located on map sheet NTS 82 E/2 at latitude 49°06' north and longitude 118°35' west (*Fig.* 2). These coordinates are those of the old town site of Phoenix, near which most of the current drilling was conducted.

Primary access to the property is gained by an all-weather road extending eastward from Greenwood four and one-half kilometres to Phoenix. This road also extends eastward to Highway 3 north of Grand Forks. Secondary roads and trails provide additional access to much of the property.

Topography and Landscape:

Elevations over the property range from approximately 900 metres above sea level in the Eholt valley east of Phoenix to approxi-





mately 1600 metres above sea level at the summit of Knob Hill near the abandoned Phoenix open pit mine. The height of land above the Greenwood and Eholt valleys generally forms a rolling upland. Old tailings ponds and mine dumps are numerous in the area, particularly near the Phoenix open pit. Small open pits, adits and caved mine workings are scattered elsewhere throughout the property.

Climate and Vegetation:

The climate of the area is moderate and semi-arid. Cool winters are the norm with snow accumulations at the higher elevations not generally exceeding one to two metres. Summers are generally dry; total annual precipitation is approximately 25 to 35 cm. Summer temperatures rarely exceed 30° C and winter minimum temperatures rarely fall below -30° C.

The slopes are generally covered by fir, hemlock, pine and sparse cedar trees. Open grasslands occur locally on southerly and westerly facing slopes. The area sustains small scale logging and small areas of dense second growth forest are found in wetter areas, particularly on northerly facing slopes above the Eholt Valley.

PROPERTY

Following are lists of claims included in the Ironsides and Knob Hill Groups that are held by Kettle River Resources Ltd. These groups lie within the Greenwood Mining Division on map sheet 82E/2. The Ironsides Group consists of 19 crown granted claims, 38 twopost claims and 1 modified grid system claim of 16 units (*Table 1*), and the Knob Hill Group consists of 21 crown granted claims, 12 mineral leases, 3 reverted crown grants, 33 two-post claims and 3 modified grid system claims of 10, 3 and 18 units, respectively (*Table 2*).

EXPLORATION HISTORY

The first claims in the Phoenix area were staked by Henry White and Matthew Hatter on July 15, 1891. In 1896, J.F.C. Miner, a rubber

Page 2

TABLE 1 - CLAIMS LIST (IRONSIDES GROUP)

CLAIM NAME	NEW TITLE NUMBER	OLD TITLE NUMBER	UNITS	CLAIM TYPE	EXPIRY DATE
AFTNA FR		10245	1	CG	
GOLD DROP FR		1252	1	CG	
NUMBER 13		1260	1	CG	
GIPSY		1811	1	CG	
TOOTHPICK FR		3171	1	ĊĠ	
MONTE CRISTO FR		3381	1	CG	
OLD IRONSIDES		589	1	CG	
KNOB HILL		590	1	CG	
WAR EAGLE		678	1	CG	
GREY EAGLE		793	1	CG	
BULLION		865	1	CG	
PHOENIX		894	1	CG	
MONTEZUMA		915	1	CG	
GOLDEN EAGLE		921	1	CG	
FOURTH OF JULY		922	1	CG	
VICTORIA		933	1	CG	
GILT EDGE		977	1	CG	
AETNA		978	1	CG	
MISSING LINK		979	1	CG	
EYE 1	216651	36969	1	Ł	1/28/2002
EYE 2	216652	3697Ø	1	L	1/28/2002
EYE 3	216653	36971	1	L	1/28/2002
CAP 1 FR	216654	36972	1	L	1/28/2002
CAP 2	216655	36973	1	L	1/28/2002
CAP 3	216656	36974	1	L	1/30/2002
BAT # 3	215574	571Ø	16	L	3/23/2002
PRIOR # 9	215587	5723	1	L	3/23/2002
PRIOR 10	215588	5724	1	L	3/23/2002
GLENSIDE 2 FR	215573	5709	1	L	3/28/2002
PRADO # 1	216658	37058	1	L	4/05/2002
EYE 4 FRAC	216659	37186	1	L	5/3/2/2002
SUPERCHIEF FR	216660	37188	1	L	6/04/2002
COLTHERN # 1	215758	5894	1	L	6/20/2002
PAC # 24	216393	21721	1	L	6/25/2002
PAC # 26	216395	21723	1	L	6/25/2002
PAC # 28	216397	21725	1	L	6/25/2002
PAC # 30	216399	21727	1	L	6/25/2002
PAC # 31	216499	21728	1	L	6/25/2002
PAC # 32	216401	21729	1	L	6/25/2002
CYCLOPS	216351	20028	1	L	7/06/2002
SILVER UNIEF FR	216352	20029	1	L	710712002
BOBCAT # 0	216400	21/61	1	L	(101)2002 7,07,0000
DUBLAI # 0	210497	21/02	1	<u>د</u>	7/07/2002
	210400	21703	1	ند ۱	7/07/2002
	216413	21/04	1		0/10/2002 0/10/2002
PAC 34 FP	210410 016/1/	21320	1	ь 1	0/12/2002 9/10/0000
	210414	21920	i 1		9/12/2002
PAC 36	216418	21928	1	L L	8/12/2002
PAC 37	216417	21020	1	1	8/10/0000
PAC 38	216418	21930	1	-	8/12/2002
	2.0-10		•		

CLAIM NAME	NEW TITLE NUMBER	OLD TITLE NUMBER	UNITS	CLAIM	DATE
PAC 39 FR	216419	21931	1	L	8/12/2002
PAC 40 FR	216420	21932	1	Ĺ	8/12/2002
BULLION FR	214589	3171	1	L	8/23/2002
GEM FR	21 459Ø	3172	1	L	8/23/2002
WENDY NO 13	216325	18055	1	L	10/26/2002
PAC # 42	216427	22145	1	L	11/02/2002
PAC # 43	216428	22146	1	Ł	11/02/2002
_					

TABLE 2 - CLAIMS LIST (KNOB HILL GROUP)

NEW TITLE OLD TITLE UNITS CLAIM EXPIRY CLAIM NAME NUMBER TYPE DATE NUMBER CG 1264 1 GARFIELD ROB ROY 1556 1 CG CG 1692 1 JOKER CG 17Ø5 1 TIMER FR CG BANNER 1847 1 2384 1 CG SURPRISE FR 2385 1 CG SYLVESTER K CG 1 WOODSTOCK 2627 CG 2628 1 LITTLE DALLES CG MAY 2629 1 2875 1 CG DENVER 1 CG PILOT 3297 3298 1 CG DEXTER FR CG LOG CABIN FR 3299 1 FOUR PAW 355Ø 1 CG CG STEMWINDER 588 1 CG 796 1 BROOKLYN 901 1 CG NEW YORK CG CIMERON 98Ø 1 **IDAHO** 981 1 CG CG STANDARD 982 1 ML 100 1 MŁ 10/22/93 CUSTER FR ML 100 1 ML 10/22/93 BRANDON ML 100 LITTLE ANNIE 1 ML 10/22/93 ML 100 1 ML 10/22/93 BRANDON FR SYLVESTER K FR ML 1Ø6 1 ML 9/22/93 ML 102 ML BELMONT FR 1 10/26/93 ML 100 MARSHALL 1 ML 10/22/93 LITTLE BROWN ML 100 1 ML 10/22/93 MARSHALL FR ML 1Ø3 ML 1 4/21/93 ML 98 BOSTON 1 ML. 11/21/93 ML 98 WILLAMENA FR 1 ML 11/21/93 STAFFORD FR ML 98 1 ML 11/21/93 1Ø BAT # 1 215568 57Ø4 L 3/19/2002 PRIOR # 1 215579 5715 1 L 3/22/2002 PRIOR # 2 21558Ø 5716 1 L 3/22/2002 PRIOR # 3 215581 5717 1 L 3/22/2002 PRIOR # 4 215582 5718 1 L 3/22/2002 1 L PRIOR # 5 215583 5719 3/22/2002 PRIOR # 6 215584 5720 1 3/22/2002 L PRIOR # 7 215585 5721 1 L 3/22/2002 PRIOR # 8 215586 5722 1 3/22/2002 L 215569 BAT # 2 57Ø5 3 L 3/23/2002 1 PRIOR 11 215589 5725 L 3/23/2002 PRIOR 12 215590 1 5726 L 3/23/2002 PRIOR 13 215591 5727 1 L 3/23/2002 PRIOR 14 215592 5728 1 L 3/23/2002 GLENSIDE FR 215578 5714 1 L 3/28/2002 GLENSIDE 1 1 215593 5729 L 3/28/2002 GLENSIDE 2 215594 573Ø 1 Ĺ 3/28/2002 GLENSIDE 3 215595 5731 1 L 3/28/2002

CLAIM NAME	NEW TITLE NUMBER	OLD TITLE NUMBER	UNITS	CLA IM TYPE	EXPIRY DATE
PRIOR FR	21576Ø	5896	1	L	6/Ø8/2ØØ2
ORONOCO	214575	3Ø96	1	R	6/08/2002
YUKON FR	214576	3Ø97	1	R	6/08/2002
CRACKER JACK	214577	3Ø98	1	R	6/08/2002
PAX FR	214688	3773	1	L	6/17/2002
COLTHERN FR.	215759	5895	1	L	6/20/2002
WENDY FR	214583	312Ø	1	L	7/06/2002
LITTLE BURNE FR	214596	3186	1	L	8/04/2002
PIPE 5 FR	214588	317Ø	1	L	8/23/2 00 2
CRACKER JACK 1 FR	214591	3173	1	L	8/23/2002
CRACKER JACK 2 FR	214592	3174	1	Ł	8/23/2002
BAT 4	215928	6Ø44	18	L	8/27/2002
BAT FRACTION	2159Ø9	6Ø45	1	Ł	8/27/2 00 2
COY No 1	216378	22521	1	L	9/21/2002
COY No 2	216379	20522	1	L	9/21/2002
COY No 3	21638Ø	20523	1	L	9/21/2002
COY No 4 FR	216381	2Ø524	1	L	9/21/2002
COY No 5 FR	216382	20525	1	L	9/21/2002
COY # 6	216423	22Ø8Ø	1	L	9/22/2002
COY # 7	216424	22081	1	L	9/22/2002
COY # 8 FR	216425	22Ø82	1	L	9/22/2002

footwear manufacturer from Granby, Quebec, together with mining promoters J.P. Graves and A.L. Little of Spokane, Washington, formed the original Granby Company to work in the area.

By 1889, the Canadian Pacific Railway had extended a branch line to Phoenix and underground mining of copper and gold ores began, using a combination of square set and room and pillar stopes, serviced by numerous shafts and adits. Later, open pit mining methods were developed and the Ironsides Mine became one of the first open pit mines in western Canada.

In 1890, the City of Phoenix was incorporated and the Granby Smelter in Grand Forks was completed. Most of the ore feeding the smelter in Grand Forks came from the Ironsides Mine; however, eight different mineralized zones contributed to production from the Granby property. Ore was also produced in the mining camp by the Consolidated Mining and Smelting Company, primarily from the Snowshoe Mine. Production rates from the camp at this time varied widely; a maximum rate of approximately 3000 tons per day was achieved. In 1919, the Granby mine and smelter closed due to low copper prices, lower ore grades and a shortage of coking coal for the smelter furnaces.

In 1956, the Granby Company re-purchased the property and evaluated the property with the intent of mining by open pit trackless mining methods. Open pit production began in 1960 at a rate of 900 tons per day and was increased to 2000 tons per day in 1961 and was further increased to 3000 tons per day in 1972.

By 1973, declining production was supplemented by processing low grade copper ore stockpiled in previous years. Mill feed was augmented by ore trucked from the Lone Star Mine 20 km to the south in Washington State. An unsuccessful attempt was also made to mill ore from the nearby Oro Denoro Mine. Granby terminated mining operations at Phoenix in 1974 and later dismantled and moved the Phoenix mill. The property later fell under the ownership of Noranda through the purchase of the assets of Granby Corporation.

No significant work was done on the property until 1981 when Noranda optioned the Phoenix property to Kettle River Resources Ltd., who carried out an exploration program focused on the



precious metals potential of the property. A drilling program rediscovered the Sylvester K Zone in 1983. Noranda elected to participate in continuing exploration during 1984 - 1985 and continued drilling the Sylvester K occurrence and other anomalies found during the course of geological, geophysical, and geochemical surveys.

In 1987, Skylark Resources attempted to mine the Sylvester K Zone but abandoned the operation after mining and unsuccessfully processing only a few hundred tons of ore.

During 1989 - 1990, Kettle River Resources Ltd. acquired outright ownership of the present property from Noranda. Battle Mountain (Canada) Inc. optioned the property from Kettle River Resources Ltd. and conducted a program of reconnaissance geological mapping and sampling during the early portion of the 1990 field season. This work was subsequently expanded to a larger program including establishment of a survey-controlled grid over the southwestern portion of the property around the Phoenix mine workings, with cut and flagged cross lines at 100 metre intervals. A magnetometer survey and geochemical soil survey over the entire grid was followed by detailed geological mapping of a portion of the grid at a scale of 1:1000. Drilling programs were completed during both 1991 and 1992.

SUMMARY GEOLOGY AND MINERAL DEPOSITS

The Phoenix area is underlain by a complexly folded, faulted, metamorphosed and mineralized sequence of Paleozoic and Mesozoic volcanic and sedimentary rocks, overlain in turn by Eocene volcanic and epiclastic rocks (*Fig. 3*).

Paleozoic rocks at Phoenix include the Knob Hill Group, consisting of (in order of abundance) chert, cherty siltstone, cherty argillite, mafic flows, mafic volcaniclastic sediments and minor limestone. Scanty fossil evidence (*Fyles, 1990, pers. comm.*) indicates that Knob Hill rocks may be as old as Devonian, although other workers in the area prefer a late Paleozoic age.

Unconformably overlying the Knob Hill Group is an interfingering

sequence of sharpstone (chert pebble) conglomerate, limestone and clastic limestone, shale, argillite, and volcanics (aphanitic or brecciated andesitic flows and tuffs) belonging to the Brooklyn Formation of Middle to Upper Triassic age. Small intrusives of microdiorite and diorite, together with possibly coeval andesites of the Eholt Formation, overlie and intrude Brooklyn Formation rocks and may be equivalent to the Jurassic Rossland Group.

Sparse narrow monzonite to granodiorite dikes may be Cretaceous in age and belong to the regionally extensive Nelson Intrusions. These dikes are generally not more than one or two metres wide and are traceable along strike for only a few metres.

Locally, epiclastic sediments of the Eocene Kettle River Formation unconformably overlie older rocks. These arkosic sandstones to conglomerates, containing minor carbonaceous interbeds, are largely confined to restricted depositional basins. Overlying these Eocene epiclastic rocks are hypabbysal and volcanic rocks belonging to the Eocene Marron Formation. These rocks include syenite, feldspar ± biotite ± hornblende porphyry, pulaskite, alaskite, and trachyte. Related volcaniclastic sediments are also present in limited quantities.

Little (1983) identified several north-trending fold axes within preTertiary sequences in the Phoenix area. During more recent regional mapping, Fyles (1990) identified a series of north-dipping thrust slices within preTertiary volcanics and sediments. Bounding thrust faults are frequently marked by irregular pods and lenses of serpentinite and listwänite.

The distribution of Eocene volcanic and epiclastic units is controlled by a complex sequence of faults related to Tertiary Basin and Range extensional activity. In general, Tertiary rocks dip moderately to the east due to rotation along west-dipping listric normal faults. The Phoenix area lies near the western boundary of the northern extension of the well-known Republic graben which trends north-northeast and likely represents some of the latest Tertiary faulting. This graben is marked by subparallel en echelon high-angle faults and is filled with Eocene volcanic and epiclastic rocks.

PreTertiary rocks throughout the area are regionally metamorphosed to greenschist facies. Contact thermal metamorphism is frequently present and is largely related to the intrusion of stocks of Cretaceous granodiorite. Skarn is developed widely, although it is generally confined to Upper Triassic clastic and carbonate-rich sedimentary units.

Mineralization at Phoenix falls into several distinct types. These include mineralization related to skarns, to massive sulfides (possibly volcanogenic), to veins and possibly to fault-controlled replacements.

The majority of past production at Phoenix has reportedly been from skarns. Total production from Phoenix is approximately 27,000,000 tonnes of ore containing about 30,000 kg of gold, 192,000 kg of silver and 230,000 tonnes of copper. Most of this production came from skarn deposits on the Old Ironsides, Knob Hill and Victoria claims. These deposits consisted of disseminated and massive ore bodies containing chalcopyrite, malachite, pyrite, magnetite, hematite and pyrrhotite. Also contributing to this production were smaller ore bodies on the War Eagle, Monarch, Rawhide, Snowshoe, Stemwinder, Brooklyn and Idaho claims.

Massive sulfide mineralization at Phoenix is represented by the Sylvester K - San Jacinto - Marshall area. This area, located a few hundred metres northwest of the Ironsides open pit, contains small discontinuous massive pyrite and pyrrhotite lenses near a contact zone between limestone and fine clastic sediments. These sulfide lenses locally contain as much as 1 opt Au.

Vein-related mineralization is best known from historical mining activity in the Brooklyn - Stemwinder - Victoria area as well as in the Rawhide - Monarch - War Eagle area. Quartz - calcite - sulfide veins produced gold grades locally in excess of 1 opt Au over narrow widths (typically about one metre).

Thrust-related mineralization may be present at Phoenix as well. Pyrite mineralization within talc - serpentine - carbonate - gypsum zones has been documented in several locations. Drill holes between the Idaho mine and the Twin Creek tailings dam, one drill hole in the Snowshoe mine area, and several drill holes to the south of the property boundary have encountered intercepts of this type of alteration and mineralization. No assays for gold or copper are known to exist for these intercepts on the Phoenix property; however, information from drill holes located south of the property boundary indicates that anomalous gold is locally present in this environment.

1992 DRILLING PROGRAM

A limited program of diamond drilling was carried out during June, 1992. Nine diamond drill holes were completed during this program; seven of these holes were collared on claims included within the Knob Hill Group of 100 units, and two holes were collared on claims included within the Ironsides Group of 73 units (see Drawing 2 for drill hole locations).

Purpose:

Diamond drilling at Phoenix was carried out to evaluate soil and rock geochemical anomalies recognized during the 1990 field program (J.R. Deighton et al, Assessment Report - April, 1991), as well as IP anomalies identified during a geophysical survey carried out in 1991 (J. Roth, 1992).

Technical Details of the Drilling Program:

This drilling program was carried out by Beaupre Diamond Drilling, Box 1141, Princeton, B.C., VOX 1WO, utilizing a Longyear Super 38 skid-mounted diamond drill rig, a JD 950 crawler tractor and a four-wheel-drive pickup truck. A small skid-mounted water pump and flexible hose was used to provide water for drilling purposes. Drilling was carried out on a round-the-clock basis by two crews, each consisting of a driller and an assistant.

Drill Holes:

The following list (*Table 3*) summarizes pertinent data for each drill hole, including hole number, location coordinates, collar elevation, azimuth, dip and length.

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Hole No.	Coordi	inates	Claim	Elevation	Length	Dip	Azimuth	Core	
	N E			(m)	(m)			Size	
PY-92-11	9700	9654	Montezuma	1417	121.92	60	270	NQ	
PY_02_12	10000	9946	Gilt Edge	1395	152.40	45	270	NQ	
PV_02_13	10600	8869	Marshall	1384	180.75	60	270	NQ	
PX = 92 = 13	10600	9076	Marshall	1391	245.36	45	270	NQ	
PX 02 15	10800	9220	Marshall Fr	1408	157.88	75	270	NQ	
PX-92-15	10800	90/5	Marshall	1404	149.05	60	270	NQ	
PX-92-10	10400	9010	Timer Fr	1392	160.02	45	270	NQ	
PX-92-18	10400	9300	New York	1405	137.16	65	270	NQ	
PX-92-19	10781	9874	Little Brown	1295	69.95	90		NQ	

Table 3 (Drill Hole Parameters)

Logging and Sampling Procedures:

Drill core was transported from the drill site to Battle Mountain (Canada) Inc.'s field office in Greenwood for logging The core was first measured for core recovery and sampling. calculations and was then logged in detail prior to tagging intervals to be sampled. Core was often rechecked for logging accuracy and additional information following sampling. Core was split for sampling with a water-bath diamond saw. As a general rule, alternate one metre samples from mineralized intervals were selected for sampling and geochemical analysis. However, lithologic and alteration boundaries were taken into account when choosing sample intervals and additional samples were selected in mineralized intervals. Sampled intervals are clearly identified on the attached diamond drill logs (Appendix 1).

When logging core, every attempt was made to identify core with consistent lithologic names (eg: argillaceous siltstone, sharpstone [chert pebble] conglomerate, etc.) and/or alteration types (eg: epidote - chlorite skarn, etc.). Percentages of alteration minerals, sulfides and oxides were visually estimated and significant structural features (faults, shears, bedding etc.) were measured.

Geochemical Analysis:

Split drill core was bagged and shipped by means of Greyhound bus to Bondar Clegg & Company Ltd., 130 Pemberton Avenue, North Vancouver, B.C., V7P 2R5, where geochemical analyses for Au and Cu were carried out. Geochemical analyses exceeding 1000 ppb Au were replicated using assay techniques. All analytical data is included on the diamond drill logs (Appendix 1). Laboratory procedures are also described in detail in the appendices (Appendix 2).

Core Storage:

Drill core from these holes is stored at a core storage facility operated by Kettle River Resources Ltd. This facility is located 5 km south of Greenwood, B.C.

Interpretation Methods:

Due to the complex nature of the alteration and lithology encountered in drill core, no attempt was made to rigorously correlate drill core with stratigraphy encountered on the Phoenix property and elsewhere in the district. However, mapping on the property as well as other considerations indicate that these nine holes were drilled largely within Triassic Brooklyn Formation sediments and their altered equivalents, together with local Tertiary dikes. In addition, basal Knob Hill Group metasediments were penetrated in three of the holes, and volcanic/intrusive rocks most likely belonging to the Rossland Group were encountered in several holes.

DISCUSSION OF RESULTS

Drill Hole PX-92-11: (see cross-section - Drawing 3)

This hole was targeted on the down-dip projection of the Stemwinder Limestone from surface. The Stemwinder Limestone conglomerate was host to significant copper-gold mineralization in the old Stemwinder Mine located a short distance to the southwest of the drill hole collar.

After penetrating 4.00 metres of overburden, the drill hole passed through 74.35 metres of tuff and minor conglomerate interbedded with fine grained volcaniclastic (Eholt Fm., Rossland Gp.). This interval contained several feldspar porphyry dikes. The next 5.47 metres marked a large fault or shear zone (likely a low angle or thrust fault) marking the contact with underlying Knob Hill Group metavolcanics. The hole was terminated after passing through an additional 38.00 metres of highly deformed volcaniclastics, tuffs and flows for a total length of 121.92 metres. The Stemwinder Limestone was not encountered in drilling, likely due to low angle fault displacement.

Mineralization (pyrite) was weak throughout the hole. Alteration within Eholt Fm. rocks consisted of irregularly distributed chlorite, epidote and hematite. The underlying Knob Hill rocks contained sericite and locally abundant graphite. Au and

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Cu analyses were generally low; the highest Au analysis was 743 ppb over 1.07 metres within the fault zone separating the Knob Hill and Eholt rocks.

Drill Hole PX-92-12: (see cross-section - Drawing 4)

This hole was drilled near the western limits of the Gilt Edge low-grade copper anomaly, hosted at shallow depths within Jurassic Eholt Fm. volcanics and volcaniclastics. In addition to targeting near surface geochemistry, the hole was intended to test a portion of an extensive, strong IP anomaly.

After passing through 3.05 metres of overburden, the hole passed through 82.56 metres of andesite flows belonging to the Eholt Fm. This interval also contained a few Tertiary biotitefeldspar porphyry and pulaskite dikes. The final 65.89 metres drilled in this hole were within sheared and brecciated metasediments and metavolcanics of the Palaeozoic Knob Hill Group. Total length of the hole was 152.40 metres.

Eholt Fm. rocks encountered were weakly to strongly altered to chlorite, epidote, calcite and hematite, and generally contained about 1% pyrite. Locally, up to 3% pyrite was present, together with minor chalcopyrite in veinlets. The most anomalous assay interval in Eholt Fm. rocks was from 10.50 to 27.00 metres (16.50 m. length) which contained an average of 499 ppb Au and 2177 ppm Cu. Knob Hill Group rocks, locally graphitic, contained local very finely disseminated pyrite. These latter rocks were not geochemically anomalous.

This drill hole encountered near-surface mineralization comparable in width and grade to that reported from historic Granby drilling. The large IP anomaly is readily explained by graphitic interbeds within the Knob Hill Group, encountered at rather more shallow depths than anticipated.

Drill Hole PX-92-13: (see cross-section - Drawing 5)

This hole, located west of the San Jacinto pit and south of the Marshall shaft, was drilled to test two near surface IP anomalies, together with known sulphide mineralization and strong rock and soil geochemical anomalies.

After penetrating 4.27 metres of overburden, the hole passed through 171.49 metres of generally fine-grained clastic sediments belonging to the Triassic Brooklyn Group. This interval also contained Tertiary and Jurassic (?) pulaskite, diorite and hornblende porphyry dikes or sills up to 12.42 metres thick. Local, narrow skarn intersections were present in the upper portion of the hole, including the interval 50.00 -58.17 metres which consisted of amphibole/pyroxene-epidotechlorite-garnet-kspar skarn. The remainder of the fine sediments were variably hornfelsed (biotite and fine diopside) throughout. The final 4.99 metres of the hole (for a total length of 180.75 metres) was entirely within Jurassic (?) porphyritic diorite.

Sulfide within the Triassic clastics was quite variable, ranging from trace to 4% pyrrhotite plus pyrite. Two clearly anomalous intervals were seen; 6.00 to 14.50 metres (8.50 m. length) with 417 ppb Au and 41 ppm Cu, and 155.23 to 173.00 metres (17.77 m. length) with 445 ppb Au and 82 ppm Cu. These two intervals represent areas with better developed skarn mineralization, together with stronger sulphide content.

This hole clearly demonstrated that neither the IP anomalies nor the numerous small massive sulfide pods seen at the surface extend to any great depth. The porphyritic diorite seen in the bottom of the hole may be part of a large, nearly flat-lying body as very similar rocks are seen at comparable elevations in hole PX-92-14 to the east and in hole PX-92-17 to the south.

Drill Hole PX-92-14: (see cross-section - Drawing 6)

This hole was drilled directly to the east of and underneath the San Jacinto pit. The hole was intended to test poorly exposed massive sulfide mineralization seen in the pit, together with two strong, near-surface IP anomalies.

After passing through 1.52 metres of overburden, the hole encountered 36.48 metres of Triassic Brooklyn Formation marble with weak and variable calc-silicate alteration. The hole then

passed through 155.73 metres of variably skarn (calcite-epidotegarnet-amphibole) and hornfels (biotite-diopside) altered siltstone to conglomerate of the Brooklyn Formation. This interval was intruded by numerous Jurassic (?) and Tertiary dikes of diorite, diorite endoskarn, hornblende porphyry and pulaskite, up to 14.01 metres in width. The final 43.09 metres of the hole were in fine grained diorite, similar texturally to diorites seen in the bottom intervals of holes PX-92-13 and PX-92-17. Total length of the hole was 245.36 metres.

Sulfides were generally lacking in this hole. The highest sulfide content was found within coarser clastics with up to 4% pyrite and 6% pyrrhotite over narrow widths. Four narrow geochemically anomalous zones were seen within the mixed skarn/hornfels intercept from 38.00 to 67.80 metres. The strongest anomaly was 634 ppb Au and 76 ppm Cu over 1.00 metre from 47.50 to 48.50 metres.

This drill hole, similar to hole PX-92-13 to the west, demonstrated that neither near-surface massive sulfide mineralization nor near-surface IP highs extend to any great depth. Sulfidepoor calc-silicate alteration appears to be proximal to diorite intrusives and is quite restricted in extent.

Drill Hole PX-92-15: (see cross-section - Drawing 7)

This hole, drilled north of Marshall Lake and more-or-less along strike from hole PX-92-14 and the San Jacinto pit, was drilled to test a strong subsurface IP high.

The hole passed through 2.44 metres of overburden; the following 154.94 metres (to the end of the hole) was within interbedded siltstone, sandstone, chert pebble conglomerate and marble of the Triassic Brooklyn Formation. The finer grained clastics were found to be generally altered to hornfels (biotite + diopside), while the coarser clastics were variably altered to chlorite plus epidote. Marble interbeds were generally quite thin. Two Jurassic (?) diorite dikes (up to 15.95 metres in width) and one thin Tertiary pulaskite dike were seen to intrude the section. Total length of the hole was 157.38 metres.

Sulfide mineralization was generally weak in this hole and no significant assays were received. The IP anomaly may be due to narrow pyritic zones (up to 10% pyrite) in propylitized chert pebble conglomerates.

Drill Hole PX-92-16: (see cross-section - Drawing 8)

This hole, drilled north of and along strike from the Marshall showing, was intended to test a coincident subsurface IP high and resistivity low.

The hole passed through 3.35 metres of overburden, followed by 145.70 metres (to the end of the hole) of interbedded siltstone, sandstone, chert pebble conglomerate and marble of the Triassic Brooklyn Formation. Many of the clastic sediments were variably altered to biotite + diopside + kspar hornfels and minor pyroxene/amphibole skarn; marble interbeds were also locally calc-silicate altered. This interval was cut by several Tertiary and/or Jurassic (?) hornblende porphyry and plagioclase -hornblende porphyry dikes. These dikes were narrow (no more than 3.87 metres in width) and locally endoskarn altered (pyroxene/amphibole). Total length of the hole was 149.10 metres.

Sulfide mineralization was weak throughout this hole and no clear source for the IP/resistivity anomaly could be identified. No significant assays were received.

Drill Hole PX-92-17: (see cross-section - Drawing 9)

This hole was drilled along strike to the north of the Sylvester K massive sulfide showings and was intended to test both the downdip projection of the Timer zone massive sulfide showing as well as a strong near-surface IP anomaly.

After passing through 3.05 metres of overburden, the hole penetrated 145.17 metres of Triassic Brooklyn Formation siltstone, sandstone, chert pebble conglomerate and minor marble. The clastic sediments were variably and generally strongly altered to hornfels (biotite + kspar) and skarn (calcite + epidote + pyroxene/amphibole + garnet). Marble was

quite strongly altered to garnet or idocrase + epidote + pyroxene skarn). Clastic grain size generally increased in with depth (to the west), consistent with a transition from finer clastics to chert pebble conglomerate noted in surface mapping. Several Tertiary plagioclase-hornblende porphyry dikes (up to 11.23 metres in width) were seen in this interval. The final 11.80 metres of the hole were within a massive, medium grained Jurassic (?) diorite, similar texturally to diorites seen in the bottom of holes PX-92-13 and PX-92-14. Total length of the hole was 160.02 metres.

Sulfide content was generally fairly high throughout the Brooklyn intercept in the hole, ranging up to 8%, both disseminated and as fine stringers. Average sulfide content for the first 80.28 metres of core was approximately 3 to 4%. Pyrite was the only sulfide identified. Several geochemically anomalous zones were noted but both gold and copper analyses were quite low (maximum Au was 413 ppb over 0.25 metres and maximum Cu was 853 ppm over 0.58 metres).

The Timer zone massive sulfide body apparently does not extend to depth. The near-surface IP anomaly can be related to relatively high pyrite content within hornfelsed and skarned Brooklyn Formation clastic sediments.

Drill Hole PX-92-18: (see cross-section - Drawing 10)

This hole, drilled south of Marshall Lake, was intended to test a broad resistivity low coupled with a shallower IP high.

After passing though 2.47 metres of overburden, the hole passed through 78.61 metres of Jurassic (?) diorite. The first 46.74 metres of diorite was bleached, with saussuritized feldspars. Deeper portions of the diorite displayed a strong fine grained biotite overprint, with local kspar in the matrix. Beneath the diorite, 56.08 metres of Triassic Brooklyn Formation marble was penetrated. These marbles were intruded by several Jurassic (?) and/or Tertiary diorite, feldspar porphyry and pulaskite dikes, up to 7.60 metres thick. Total length of the hole was 137.16 metres.

The bleached interval within the near-surface diorite (46.74 metres) contained 3 to 5% pyrite throughout. Much of the pyrite was seen to be replacing amphibole or pyroxene phenocrysts, although local quartz + actinolite breccias contained up to 10% pyrite. No significant gold analyses were received from this hole; a near-surface copper anomaly (100 to 300 ppm Cu) is present.

The IP anomaly can be explained by pyrite within altered diorite. The deeper resistivity anomaly appears to coincide with the marble/diorite contact.

Drill Hole PX-92-19: (see cross-section - Drawing 11)

This hole, drilled to the northeast near Glenside Creek, was targeted to test a strong IP high and coincident resistivity low.

After passing through 5.49 metres of overburden, the hole encountered 21.11 metres of andesite flows belonging to the Jurassic Eholt Formation (similar to volcanics seen in the Gilt Edge area in hole PX-92-12). The remaining 43.35 metres drilling in this hole were within Paleozoic Knob Hill Group cherts and metavolcanics. Total depth in the hole was 69.95 metres.

Sulfide content was generally low throughout this hole. No significant assays were received. The IP anomaly is very likely due to graphitic cherts within the basal Knob Hill Group.

CONCLUSIONS

Where encountered in this drill program in the easternmost set of three drill holes (PX-92-11,12 and 19), Knob Hill Group rocks were penetrated at relatively shallow depths. Graphitic cherts and pyritic metasediments undoubtedly account for many of the broad, high amplitude IP anomalies underlying much of the area north of the Phoenix pit.

Calc-silicate alteration within overlying Triassic Brooklyn

sediments is generally restricted to ubiquitous but highly variable biotite + diopside ± kspar hornfels and much less pyroxene/amphibole + calcite + epidote + garnet skarn. Better analytical results are clearly related to higher sulfide intercepts within skarn. Skarn appears to be spatially (and perhaps genetically) related to Jurassic or Tertiary hornblende porphyry dikes. A large diorite body appears to underlie the Timer - Marshall - San Jacinto area and may be an important part of the mineralizing system.

Drilling has clearly indicated that the known sulfide occurrences have limited depth potential. In addition, it has shown that most of the near-surface IP anomalies can be adequately explained in terms of sulfide-bearing hornfels and minor skarn. Deeper anomalies may often reflect basal graphitic cherts within the Knob Hill Group.

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APPENDIX 1

HOLE: PX-92-11

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PROPERTY DISTRICT	Phoenix Greenwood	DATE LOGGED LOGGED BY	June 1992 David M. Jones		EASTING NORTHING	96+54 E 97+00 N	Depth	Method	Azimuth	Dip
CLAIM No. STARTED	Montezuma (L.915) June 10, 1992	DRILLED BY CORE LOCATION	Beaupré Drilling KRR Core Storage		ELEVATION COLLAR SURVEY	1417 none	0.00	Clino	270	60.0
COMPLETED	June 12, 1992	DOWNHOLE SURVEYOR SURVEY INSTRUMENT	Beaupré Acid Dip Test		LENGTH UNITS CORE SIZE	121.92 metres NQ	122.00	Acid		62.5
PURPOSE	Test downdip potential	of surface mineralization of								
COMMENTS	Stemwinder Limestone.		SIGNED BY	(M. Caron)						

		SUMN	ASSAY SUMMARY							
INTER From	RVAL To	DESCRIPTION	INTERVAL From To	L ,	DESCRIPTION	INTE From	RVAL To	LENGTH in metres	AVER Au ppb	AGE Cuppm
0.00 4.00	4.00 27.38	OVERBURDEN EHOLT FORMATION VOLCANICLASTIC/TUFF Moderate to highly faulted with associated chlorite + epidote + calcite + hematite on fracture surfaces and in breecias.	78.35 83. 83.82 121.	82 92	FAULT/SHEAR ZONE Brittle and ductile?; chlorite + sericite + quartz + graphite, trace pyrite. KNOB HILL GROUP VOLCANIC ROCKS Highly deformed, faulted, brecciated, trace pyrite.	78.35	79.42	1.07	743	19
27.38	30.04	K-FELDSPAR PHYRIC PORPHYRY (PUIL ASE ITE?)	121.9	92	E.O.H.					
30.04	32.67	EHOLT FORMATION VOLCANICLASTIC/TUFF								
32.67	35 32	PLACIOCLASE PHYRIC PORPHYRY				ĺ				
35.32	45.40	EHOLT FORMATION VOLCANICLASTIC/TUFF Highly broken, chlorite + hematite + epidote + calcite; weak calc-silicate alteration?								
45.40	46.88	PLAGIOCLASE PHYRIC PORPHYRY						1 I		
46.88	72.82	EHOLT FORMATION Possibly gradational into conglomerate (sharpstone facies); locally highly broken with chlorite + hematite + epidote + calcite \pm weak calc-silicate alteration; finely disseminated pyrite + quartz.				i				
72.82	78.35	VERY FINE GRAINED PORPHYRY Pervasive sericite + chlorite alteration with trace - 5% pyrite, probably intrudes fault zone below.								

HOLE: PX-92-11

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INTE	RVAL		DESCRIPTION				SAM	IPLE	ASS	SAYS
FROM	то			No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
0.00	4.00	COLLUVIAL/G	LACIAL COVER							
4.00	27.00	EHOLT FORM Pale-green to volcaniclastic/cr clasts of sedim dominantly chlo to chlorite and brittle faulting accompanied by locally stronger enhanced growt	IATION, VOLCANICLASTIC/TUFF grey feldspar (plagioclase?) + amphibole phyric ystal tuff with <1.4 cm heterolithic angular to sub-rounded hentary and igneous origin; groundmass alteration is orite + calcite + epidote with mafic phenocrysts converted clasts typically converted to epidote + zoisite(?) + calcite; as chloritic shears and finely milled breccia zones y earthy hematite and chlorite as well as variable calcite; repidote + zoisite alteration appears to correlate with th of amphibole phenocrysts (porphyroblasts?).				-			
		8.10 - 12.90	Highly broken and faulted with heavy hematite + chlorite + calcite on fractures and fault surfaces: faults typically	20120	8.70	9.82	1.1 2	Brecciated volcaniclastic/tuff with hematite + calcite + chlorite.	19	3
			20-40° tca; milled breccia zone from 12.30 - 12.90.	20121	10.66	11.12	0.46	Calcite + epidote ± hematite veined breccia.	8	5
	:	12.90 - 15.50	Medium to highly fractured with strong hematite + chlorite + calcite on fractured surfaces.	20122	12.00	13.00	1.00	Chlorite + calcite + hematite-rich faulted zone.	<5	10
				20123	14.80	15.45	0.65	Hematite + chlorite + calcite rich fault zone.	<5	2
		15.50 - 17.07	Decreased fractures but with strong hematite + calcite; hematite drops off sharply after 17.07; calcite + epidote	20124	16.60	17.00	0.40	Broken rock with calcite + epidote + hematite veining.	8	3
		17.05 - 22.40	vein cross-cut by hematitic vein at 16.95 @ 12° tca. Weakly to moderately fractured with more abundant	20125	18.29	19.00	0.71	Eholt Fm. volcaniclastics with minor calcite and no hematite.	<5	3
			calcite + epidote + zoisite replacement and veining; disseminated pyrite with calcite + epidote vein at 20.65 - 21.00.	20126	20.50	21.10	0.60	Zone of disseminated pyrite with calcite + epidote veining.	<5	162
		22.40 - 27.00	Hematite + calcite + chlorite @ 15° tca (vein/fracture) at 22.45; less broken than prior interval; characterized	20127	22.50	23.50	1.00	Typical faulted rock with hematite + chlorite + calcite.	<5	3
			by moderate to abundant calcite veins with epidote +	20128	23.50	24.50	1.00	Similar to sample 20127.	<5	4
			zoisite setvages and associated 0 - trace % pyrite; abundant calcite + chlorite + sericite(?) + hematite on fracture surfaces; disseminated hematite?	20129	25.00	26.00	1.00	Brecciated volcaniclastic/tuff with hematite + chlorite + calcite + trace pyrite.	<5	3
27.00	27.38	FAULT BRECO Milled fault bro estimated at 15	CIA eccia with abundant chlorite + sericite \pm hematite; fault -20° tca at contact with dike or sill.	20130	26.62	27.40	0.78	Milled fault breccia/chloritic shear with chlorite + sericite + calcite + hematite, trace pyrite.	<5	3

HOLE: PX-92-11

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INTE	RVAL	DESCRIPTION			IPLE	ASSAYS			
FROM	то		No.	From	To	Length %Rec	Description	Au, ppb	Cu, ppm
27.38	30.04	K-FELDSPAR PHYRIC PORPHYRY DIKE OR SILL (PULASKITE?) K-feldspar phyric (<.01-1 cm), non-magnetic, porphyry dike or sill with fine grained salmon groundmass; appears to have a pervasive calcite + chlorite + sericite groundmass and phenocryst alteration; only weakly fractured and cross-cut by calcite veins.	I						
30.04	32.67	EHOLT FORMATION, VOLCANICLASTIC/TUFF Pale green volcaniclastic/crystal tuff as in interval 4.00 -27.00; pervasive chlorite + epidote + sericite + zoisite(?) groundmass and phenocryst/clast alteration; cross-cut by calcite + epidote + hematite (earthy) veins with finely disseminated and locally vein controlled pyrite; typical faults/fractures @ 20-30° tca; contact with feldspar (plagioclase) porphyry @ 48° tca.	20131 20132 20133	29.93 31.00 32.00	30.63 32.00 32.67	0.70 1.00 0.67	Highly broken k-spar porphyry dike cut by calcite + epidote + hematite veins with trace pyrite. Same as sample 20131. Same as sample 20131.	14 13 12	6 3 3
32.67	35.32	K-FELDSPAR PHYRIC PORPHYRY Plagioclase phyric slate-grey to brown fine grained porphyritic intrusion; very weakly magnetic; groundmass rock altered to chlorite + sericite \pm calcite, cut by <1-3 mm calcite veins.				ļ			
35.32	45.40	EHOLT FORMATION, VOLCANICLASTIC/TUFF Volcaniclastic/crystal tuff as in interval 4.00 -27.00, 30.04-32.67, but greater abundance of lithic clasts; pervasive chlorite + epidote + calcite \pm hematite alteration; entire interval is highly broken with hematite + calcite coated surfaces and 0 - trace disseminated and /or calcite + epidote vein associated pyrite; consistent dominant hematite + chlorite + calcite fracture set at 20-30° tca; second set of similar fractures at approximately 50° tca; both sets are important controls on alteration and mineralization.	20134 20135 20136 20137 20138 20139 20140 20141 20142	35.36 37.00 38.00 39.00 40.00 41.00 42.00 43.00 44.00	36.00 38.00 39.00 40.00 41.00 42.00 43.00 44.00 45.40	0.64 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.40	Eholt Fm. volcaniclastic/tuff fault breccia with trace pyrite. Same as sample 20134. Same as sample 20134.	<5 15 <5 8 <5 <5 <5 <5 <5	3 2 4 5 3 5 3 4 6
45.40	46.88	PLAGIOCLASE PHYRIC PORPHYRY Weakly magnetic, moderately fractured and cross-cut by calcite veins.							
46.88	72.82	EHOLT FORMATION, VOLCANICLASTIC/TUFF Greater abundance of clasts (5-25%) than prior intervals and greater percentage of carbonate clasts; minor chert clasts; presence of small feldspar and larger, evenly distributed mafic crystals indicate rock is a volcaniclastic; mafic clasts may, in part, be shale(?); alteration is typical pervasive chlorite + calcite with highly variable epidote + calcite veining,							

HOLE: PX-92-11

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INTERVAL		DESCRIPTION	SAMPLE					ASSAYS	
FROM	TO		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
		hematite + chlorite + calcite veining (concentrated in fault zones) and 0 to trace disseminated and vein localized calcite.							
		46.88 - 59.28 Highly broken rock with abundant hematite + chlorite + calcite on fracture surfaces; locally strong replacement by epidote + zoisite (51.50 - 57.00) of unclear origin.	20143	47.00	48.00	1.00	Eholt Fm. volcaniclastic/tuff fault breccia with strong chlorite + hematite + calcite.	<5	2
			20144	49.00	50.00	1.00	Same as sample 20143.	<5	3
			20145	51.00	52.00	1.00	Eholt Fm., less broken with more epidote and less hematite.	<5	2
			20146	53.00	54.00	1.00	Same as sample 20145.	11	2
			20147	55.00	56.00	1.00	Same as sample 20145.	15	3
		58.25 Fault at 70-80° tca.	20148	57.00	58.00	1.00	Brecciated Eholt Fm., moderate hematite + chlorite.	9	2
		59.28 - 72.82 Moderately broken with typical pervasive chlorite +	20149	59.00	60.00	1.00	Same as sample 20148, trace pyrite.	21	10
		sericite \pm calcite + epidote alteration but only rare hematite + calcite veins along fractures; trace - 1% pyrite increases from 60 m, disseminated and locally	20150	60.00	61.30	1.30	Same as sample 20148, up to 1% pyrite with calcite + epidote + quartz + hematite veins.	154	12
		abundant in calcite + epidote veins ($<<1.3$ mm) ±	20151	62.00	63.00	1.00	Same as sample 20148, trace pyrite.	<5	5
		hematite and/or quartz + pyrite veins/silica flooded zones	20152	64.00	65.00	1.00	Same as sample 20148, trace pyrite.	<5	2
		(<1-2 cm); rock becomes increasingly clastic in appearance with depth; prominent fault/fracture sets at	20153	65.00	66.00	1.00	Same as sample 20148, up to 0.5% pyrite near calcite + epidote veins.	19	30
		20-50-70° tca.	20154	67.00	68.00	1.00	Same as sample 20148, trace pyrite in fractures and with calcite veins.	<5	20
			20155	69.00	70.00	1.00	Same as sample 20148, trace pyrite.	<5	3
			20156	71.00	72.00	1.00	Same as sample 20148, trace pyrite.	16	4
72.82	77.00	FINE GRAINED. HOLOCRYSTALLINE INTRUSIVE]	
		Either a highly altered, fine grained, holocrystalline intrusive rock, or a highly altered, highly milled fault breccia, or an altered quartzose clastic sedimentary rock; probably the first, but indeterminable; pervasive sericite	20157	72.82	74.00	1.18	Altered intrusive or silicified fault breccia, about 0.5% pyrite with sericite + chlorite + quartz.	<5	19
		+ silica + chlorite ± calcite alteration and finely disseminated, very evenly	20158	74.00	75.00	1.00	Same as sample 20157.	<5	32
		distributed, 0.2 - 0.6% pyrite; fractured nature indicates a silicified fault	20159	75.00	76.00	1.00	Same as sample 20157.	<5	25
		breccia; apparent upper contact at 40° tca (fault).	20160	76.00	77.00	1.00	Same as sample 20157.	<5	9
77.00	78.35	PULASKITE (?) Probable Pulaskite(?) as plagioclase (?) + biotite (after hornblende) phyric intrusion; possibly fine grained equivalent of "biotite feldspar porphyry" or the fine-grained feldspar porphyry dikes higher in hole; highly faulted and sheared compared with prior intervals; indicates prior interval is a silicified fault micro-breccia; highly chloritic + sericitic faults/shears at 0-25° tca;							

HOLE: PX-92-11

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INTERVAL		DESCRIPTION	SAMPLE					ASSAYS	
FROM	ŤŎ		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
		nil sulphides indicates this is a late dike, possibly "pulaskite" family; dike intrudes silicified fault zone??							
78.35	79.42	SILICIFIED FAULT ZONE Silicified, highly milled fault zone with disseminated pyrite.							
		 78.35 - 78.94 Chloritic + sericitic highly milled breccia/micro-breccia. 78.94 - 79.42 Appears to be an unbroken version of same; possible "acolian" sandstone equivalent? prominent faults at base @ 30-35° tca and 50° tca. 	20161	78.35	79.42	1.07	Fault breccia with silica + sericite + chlorite + 0.2% pyrite/pyrrhotite.	743	19
79.42	82.14	SHEAR ZONE Chlorite + sericite? + epidote altered shear (ductile?) locally cross-cut by brittle breccias; general shear planes @ 45-55° tca; fault breccias and banding at base of interval are 40-50° tca; probably sheared Knob Hill volcanic rocks?	20162	80.00	81.00	1.00	Chlorite + sericite + epidote shear, no sulfides.	27	19
82.14	83.82	BRECCIA ZONE Chloritic, finely to coarsely milled breccia-zone cross-cutting ductile- shear/mylonite(?); deformed Knob Hill volcanic rocks; no sulphides; abundant quartz clasts after silica veins.	20163	82.50	83.50	1.00	Chlorite breccia with quartz clasts, no sulfides.	<5	50
83.82	86.43	KNOB HILL GROUP VOLCANIC ROCKS Generally ductile deformed (mylonitized) volcanic rocks of the Knob Hill Group, cross-cut by brittle breccia; volcanic rocks are cream to pale green with fine "tuff-like" laminations; quartz + feldspar + mafic phenocrysts locally evident but generally << 5%; silica bands are interpreted as introduced during plastic deformation, not as chert; ductile and brittle banding @ 40-55° tca.							
		84.45 - 85.95Finely disseminated pyrite.86.0015 cm silica band.	20164	84.70	85.60	0.90	Pyritic zone in sheared volcanics.	14	55
86.43	121.92	TUFFACEOUS AND FLOW VOLCANIC ROCKS (KNOB HILL GROUP) Cream to beige to pale green ductile deformed tuffaceous and flow volcanic rocks (Knob Hill); subsequent whole-rock analysis has shown this rock (sample at 94.0 metres) to be a tholeiitic basalt, on the boundary	20165	86.43	88.00	1.57	Ductilely deformed tuffs/flows.	<5	46
		between iron-rich and magnesium-rich tholeiite; deformation may be	20166	89.00	90.00	1.00	Ductilely deformed tuffs/flows.	<5	36 26
		mylonitic in origin or rheo-ignimbritic flow foliation, commonly @ 10-30° tca; indicates primary deformation not related to brittle faulting; excellent	20167	91.00 93.00	92.00 94.00	1.00	Ductilely deformed tuffs/flows.	<5 <5	26 25

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1

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
FROM	то	 devitrified spherulite textures are common (especially at 94.00, 97.00, 103.40 m); silicification locally follows flow banding and locally has replaced lapilli(?); trace pyrite. 103.85 - 109.95 Mixed volcanics cross-cut by several brittle fault zones (possibly old "chert breccia" terminology); trace pyrite; volcanic intervals are "silicified" with large silica clasts dominating the brittle faults; brittle faults are highly chloritic and only very weakly calcareous, typically @ 50° tca (35-70° tca); where present, pyrite appears to be concentrated in or adjacent to silica veins and/or "clasts", also as pyritic "mud" along shears with graphite. 	No. 20169 20170 20171 20172 20173 20174 20175 20176 20177	From 95.00 97.00 99.00 101.00 103.85 105.00 106.00 107.00	To 96.00 98.00 100.00 102.15 105.00 106.00 107.00 108.00	Length %Rec 1.00 1.00 1.00 1.00 1.15 1.15 1.00 1.00 1.00 1.00	Description Ductilely deformed tuffs/flows. Ductilely deformed tuffs/flows. Ductilely deformed tuffs/flows. Ductilely deformed tuffs/flows. Ductilely deformed tuffs/flows. Variably broken silicified volcanics with trace pyrite. Variably broken silicified volcanics with trace pyrite. Variably broken silicified volcanics with trace pyrite. Variably broken silicified volcanics with trace pyrite.	Au, ppb <5 <5 9 <5 13 8 <5 <5 <5	Cu, ppm 18 25 29 44 32 43 46 63 42
1		100.05 121.02 Denosion and micro branciss of intensely silicified(2)	20177	108.00	110.00	1.00	with trace pyrite.	< 3	42
		ductilely deformed (mylonitized?) Knob Hill(?) volcanic	20176	109.00	110.00	1.00	with trace pyrite.	Ŭ	31
	:	rocks; relict clasts/blocks of cream-tan volcanics up to 30 cm_totally_silicified_and/or_absent_in_highly_brecciated	20179	110.00	111.00	1.00	Silicified volcanic breccia, trace	<5	57
		areas; three stages of silicification apparent:	20180	111.00	112.00	1.00	Strongly broken silicified volcanic breccia, trace to 0.3% pyrite.	14	44
		(2) early faulting, massive silicification (possible	20181	112.00	113.00	1.00	Strongly broken silicified volcanic	119	54
		(3) silica-infilling in breccia zones; Pyrite (and rare chalcopyrite) is associated with silica veins (stage 2) and as soot-black breccia infilling; total	20182	113.00	114.00	1.00	Strongly broken silicified volcanic breccia, trace to 0.3% pyrite, 30 to 60% silica.	10	63
		pyrite ranges from trace -3%; estimates in description column do not include fine grained pyrite; prominent	20183	114.00	115.00	1.00	Pyrite-filled silica breccia, 0.5 to 2% pyrite.	41	60
		fault dips $45-55^\circ$ tca throughout interval; minor second set @ 30 tca: possible ghost euhedral quartz phenocrysts	20184	115.00	116.00	1.00	Pyrite-filled silica breccia, 0.5 to 2% pyrite.	16	58
		in massive silicified zone indicating silicified volcanic pile?? Closer look indicates quartz "phenocrysts" are	20185	116.00	117.00	1.00	Pyritic silica breccia, trace to 1.5% pyrite, trace chalcopyrite.	9	70
		actually clasts from an earlier breccia event.	20186	117.00	118.00	1.00	Silica breccia, laminated pyrite matrix, 1 to 4% pyrite.	27	134
			20187	118.00	119.00	1.00	Silica breccia, <0.5 to 2% pyrite.	7	57
			20188	119.00	120.00	1.00	Silica breccia, trace to 1% pyrite.	<5	22 53
			20189	120.00	121.00	0.92	Silica breccia, trace to 1% pyrite. Silica breccia, trace to 2% pyrite.	<5	55 17
	121.92	E. O. H.							
HOLE: PX-92-11

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INTERVAL	DESCRIPTION				SAM	IPLE	ASS	SAYS
FROM TO]	No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
	 Whole rock analysis of sample PX-92-11, 94.00 m: Description: Spherulitic (devitrified) volcanic flow of the Knob Hill Group (probably misidentified in the past as "radiolarian cherts"); and esitic to dacitic in composition: 							
	Chemical Analysis:							
	SiO2 43.97% AI2O3 12.33% TiO2 3.59% Fe2O3 2.06% FeO 9.46% MnO 0.11% MgO 5.90% Na2O 1.73% K2O 0.47% CaO 8.22% P2O5 0.89% LOI 7.39% Sr 233 ppm Zr 745 ppm Y 43 ppm Total 96.12%							

RECOVERY TABLE - DRILL HOLE PX-92-11

		RECOVERT (10)	- ROM		RECOVERT (%)
0.00	7.92	5.05	57.61	58.05	58.89
7.92	8.53	95.08	58.06	59.13	46.73
8.53	9.75	75.41	59.13	59.74	101.64
9.75	10.55	83.75	59.74	60.81	95.33
10.55	11.46	98.90	60.81	6Z.79	93.94
11.46	12.68	69.67	62.79	63.89	81.82
12.68	14.02	91.04	63.89	64.80	93.41
14.02	15.24	73.77	64.80	65.84	100.00
15.24	15.85	81.97	65.84	68.28	101.64
15.85	17.07	102.46	68.28	71.63	101.49
17.07	18.29	100.00	71.63	72.54	93.41
18.29	19.81	84.87	72.54	74.98	92.21
19.81	20.73	116.30	74.98	75.60	100.00
20.73	22.86	104.23	75.60	76.20	128.33
22.86	23.47	81.97	76.20	77.00	93.75
23.47	25 <i>.</i> 45	86.87	77.00	77.90	100.00
25.45	26.21	111.84	77.90	78.48	51.72
26.21	28.35	99.07	78.48	78.94	43.48
28.35	29.26	100.00	78.94	60.77	87.43
29.26	32.31	100.00	80.77	83.82	101.64
32.31	33.83	82.24	83.82	87.02	96.25
33.83	34.90	112.15	87.02	90.07	100.00
34.90	35.36	76.09	90.07	93.27	98.44
35.36	37.19	92.90	93.27	96.32	100.98
37.19	38.10	65.93	96.32	99.36	96.71
38.10	39.01	115.38	99.36	100.58	91.80
39.01	41.45	84.02	100.58	102.41	98.36
41.45	43.28	92.90	102.41	105.46	98.36
43.28	44.04	68.42	105.46	108.51	96.72
44.04	44.35	87.10	108.51	110.19	95.24
44.35	46.18	85.25	110.19	111.40	78.51
46.18	47.08	87.78	111.40	114.45	88.52
47.08	48.31	86.99	114.45	117.65	95.31
48.31	49.83	86.84	117.65	120.70	92.46
49.83	50.44	81.97	120.70	121.92	110.66
50.44	51.36	94.57			
51.36	52.73	89.05			I
52.73	53.64	116.48			
53.64	55.17	94.77			l l l l l l l l l l l l l l l l l l l
55.17	56.39	78.69			
56.39	57.61	97.54			

HOLE: PX-92-12

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PROPERTY DISTRICT	Phoenix Greenwood	DATE LOGGED LOGGED BY	June 1992 M. Caron		EASTING NORTHING	94+46 E 100+00 N	Depth	Method	Azimuth	Dip
CLAIM No. STARTED	Gilt Edge (L.977) June 13, 1992	DRILLED BY CORE LOCATION	Beaupré Drilling KRR Core Storage		ELEVATION COLLAR SURVEY	1395 none	0.00	Clino	270	45.0
COMPLETED	June 15, 1992	DOWNHOLE SURVEYOR SURVEY INSTRUMENT	Beaupré Acid Dip Test		LENGTH UNITS CORE SIZE	152.40 metres NQ	152.50	Acid		43.0
PURPOSE	To test surface Cu/Au m Anomaly "GG".	ineralization (Gilt Edge) + IP						i		
COMMENTS	Encountered Knob Hill	basement at shallow depth.	SIGNED BY	(M. Caron)						

	SUM	ASSAY SUMMARY					
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au ppb Cu ppm	
0.00 3.05 3.05 46.38 46.38 55.63 55.63 71.92 71.92 72.85 72.85 86.51 86.51 152.40 152.40	OVERBURDEN ANDESITE FLOWS (EHOLT FORMATION - ROSSLAND GROUP) Chloritized, epidotized, calcite + hematite on fractures, trace - 3% pyrite + chalcopyrite. BIOTITE FELDSPAR PORPHYRY (Tertiary). ANDESITE FLOWS same as 3.05 - 46.38. PULASKITE (Tertiary). ANDESITE FLOWS same as 3.05 - 46.38. KNOB HILL GROUP (Palaeozoic). Sheared and brecciated mudstones and interbedded mafic volcanic flows or tuffs. E.O.H.			10.50 27.00 including 10.50 24.00 inctuding 11.00 19.00	16.50 13.50 8.00	499 2,177 581 2,502 785 3,045	

HOLE: PX-92-12

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INTE	RVAL		DESCRIPTION				SAM	PLE	ASS	SAYS
FROM	то			No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
0.00	3.05	OVERBURDEN	4							
3.05	46.38	ANDESITE FL Massive, fine generally epide approximately 1 to 3%). Subseq at end of log) i andesite of the	OWS (Eholt Formation - Rossland Group) grained, chloritized throughout, feldspar phenocrysts otized, sparse quartz \pm calcite veinlets throughout; % disseminated and stringer pyrite throughout (locally up uent whole rock chemical analysis (sample at 17.57 metres ndicates that this rock is an altered high alumina basaltic calc-alkali series.							
		6.30 - 6.55 6.70	Shear zone @ 25° tca, strong earthy red hematite. Narrow hematite shear.	20270	6.00	7.00	1.00	Propylitic andesite with hematitic fractures.	21	70
		4.00 - 11.25	Generally hematitic zone, broken ground with hematite along fractures and in narrow shears.	21867	7.00	9.00	2.00	Chloritized andesite with about 1% disseminated pyrite.	30	110
		10.50	Small fault, milled breccia/gouge.	21868	9.00	10.50	1.50	Same as sample 21867, some epidote after feldspar.	38	113
		10.50 - 11.00	Strongly epidotized, pale groundmass epidote with later bright green veinlet epidote; approximately 1% chalcopyrite in narrow veinlets.	20271	10.50	11.00	0.50	Epidotized andesite with about 1% chalcopyrite.	393	1744
		11.00 - 11.43 11.43 - 15.50	Fault, broken, chloritic, gouge towards bottom. Moderately epidotized interval, hematite along fractures;	21869	11.00	12.00	1.00	Same as sample 20217, 1% chalcopyrite in veinlets with epidote.	752	3020
			0.5% chalcopyrite, mostly in narrow veinlets.	20272	12.00	13.00	1.00	Epidotized andesite with minor chalcopyrite in veinlets.	1023	4676
				21870	13.00	14.00	1.00	Same as sample 20272.	419	2027
				20273	14.00	15.00	1.00	Same as sample 20272.	548	3350
				21871	15.00	17.00	2.00	Same as sample 20272.	402	1871
		18.45	Small shear with late calcite + hematite.	21872	17.00	19.00	2.00	Epidotized and chloritized andesite, calcite + hematite along fractures, minor sulfides.	1365	3774
				21873	19.00	21.00	2.00	Same as sample 21872.	254	1531
		21.60 - 28.77	Broken zone in chloritized and moderately epidotized	21874	21.00	22.00	1.00	Same as sample 21872.	301	2038
			medium grained andesite; most fractures with hematite coating local late calcite; minor disseminated pyrite and	20274	22.00	23.00	1.00	Broken, hematitic andesite with minor pyrite and chalcopyrite.	415	2410
			chalcopyrite.	21875	23.00	24.00	1.00	Strongly epidotized and chloritized andesite, hematite/calcite fractures, 0.5% chalcopyrite.	141	1033
				20275	24.00	25.00	1.00	Same as sample 20274.	188	863
				21876	25.00	26.00	1.00	Same as sample 21875.	112	699
				20276	26.00	27.00	1.00	Same as sample 20274.	94	574

HOLE: PX-92-12

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INTE	RVAL	DESCRIPTION				SAM	IPLE	ASS	SAYS
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
			21877	27.00	28.00	1.00	Andesite, strong epidote + chlorite + fracture hematite, minor sulfides.	60	490
		28.77 - 34.60 Moderately to strongly epidotized interval in medium grained andesites, brighter green veinlet epidote cross- cuts groundmass epidote (often feldspar); late hematite ± calcite along fractures; minor pyrite + chalcopyrite along fractures.	20277	28.00	29.00	1.00	Epidotized andesite, late hematite calcite, minor pyrite + chalcopyrite.	57	282
		29.50 - 29.75 Fault breccia, angular clasts in hematitic	20278	29.50	29 .75	0.25	Hematitic fault breccia.	48	378
		groundmass/gouge.	21878	29.75	32.00	2.25	Same as sample 21877.	53	324
		31.95 Narrow fault breccia @ 57° tca. 32.40 - 32.60 Brecciated zone with strong epidote and strong fracture controlled hematite.	21879	32.00	33.95	1.95	Same as sample 21877.	41	165
		33.95 - 34.64 Epidotized fault breccia with hematitic matrix, 1-2% fine grained disseminated pyrite.	20279	33.95	34.64	0.69	Hematitic fault breccia with 1 - 2% pyrite.	26	174
		36.00 - 37.24 Abundant groundmass and fracture hematite; <1% disseminated pyrite.	20280	36.00	37.00	1.00	Andesite with strong hematite, local strong epidote, <1% pyrite.	41	182
		37.60 - 38.81Moderately to strongly epidotized interval.38.45 - 38.55Narrow fault breccia with hematitic matrix.							
		38.81 - 39.60Abundant groundmass and fracture hematite.39.60Narrow hematite filled shear @ 25° tca.	20281	38.81	39.60	0.79	Andesite with strong hematite.	43	260
46.38	55.63	BIOTITE FELDSPAR PORPHYRY (Tertlary?) Medium grained, equigranular, margin chilled over 0.5 m, generally massive with no obvious fabric, biotite locally replacing hornblende laths, groundmass slightly pink (K-feldspar?), weakly chloritized with sparse calcite \pm quartz veinlets, minor disseminated pyrite in lower chilled margin.							
55.63	71.92	ANDESITE FLOWS (Eholt Formation) Similar to interval 3.05 - 46.38, fine to medium grained, chloritized throughout.							
		56.25 - 56.90 Strong groundmass epidote plus about 1% line disseminated pyrite.	20282	56.00	57.00	1.00	Epidotized andesite with about 1% pyrite.	18	96
		57.87 - 63.90 Moderate to strong epidote, both in stringers and in groundmass (replacing feldspar); 0.5-2% fine	20283	58.00	60.00	2.00	Same as sample 20282.	25	75
		 disseminated pyrite (best where epidote is strongest). 66.15 - 71.92 Strongly epidotized feldspar, mafic minerals chloritized throughout, minor pyrite. 							
		70.00 - 70.25 Chlorite + quartz + calcite fault breccia, sharp contacts @ 16° tca.							

HOLE: PX-92-12

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INTE	RVAL	DESCRIPTION				SAM	IPLE	ASS	AYS
FROM	TO		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
71.92	72.85	 70.25 - 71.92 Abundant hematite + calcite veinlet, minor pyrite. PULASKITE (Tertiary) Subhedral, equant k-feldspar crystals in a fine grained salmon feldspathic matrix containing very fine fresh biotite needles, local chlorite, narrow sparse calcite veinlets throughout. 	20284	70.25	71.92	1.67	Andesite with abundant hematite calcite veinlets, minor pyrite.	<5	123
72.85	86.51	ANDESITE FLOWS (Eholt Formation) Fine grained, massive, chloritized throughout.							
		 73.13 - 75.67 Fault breccia, angular clasts in chlorite + hematite ± calcite matrix, sharp contacts @ 20° tca. 75.85 - 76.23 Moderately epidotized interval. 79.10 - 79.55 Rubble (fault breccia?) 	20285	75.00	76.00	1.00	Fault breccia, chlorite + hematite + calcite matrix.	7	111
86.51	92.60	KNOB HILL GROUP SEDIMENTS (Palaeozoic) Intensely sheared (mylonitized) black mudstone, abundant quartz + calcite boudins to 2 cm in diameter, quartz boudins may represent broken silicified zones (or alternatively, recrystallized light coloured chert); fissile, with abundant graphitic partings; <0.5% fine disseminated pyrite, possible abundant very fine black syngenetic pyrite. Shear approximately 40° tca.							
		 92.02 - 92.60 Two alternatives: 1. Completely silicified, brecciated and resilicified fine sediment. 2. Brecciated and silicified light coloured chert. Rock cut by several 1-3 mm white quartz veinlets (late) no visible sulphides. 	20286 20287	87.00 92.02	89.00 92.60	2.00 0.58	Sheared black mudstone. Silicified fault breccia.	<5 <5	25 7
92.60	104.15	KNOB HILL GROUP ALTERED MAFIC VOLCANIC FLOWS Fine grained altered volcanic flows, locally abundant k-feldspar(?) filled spherulites to 1 cm, very fine tan or buff clays outlining shearing; no sulphides; thin black mudstone partings; local siliceous zones up to 20 cm thick (similar to 92.02 - 92.60).	20288 20289	94.00 98.00	96.00 100.00	2.00 2.00	Spherulitic volcanic. Spherulitic volcanic.	<5 <5	45 55
104.15	126.70	KNOB HILL GROUP SEDIMENTS (Palaeozoic) Sheared black mudstone with minor, narrow mafic volcanic interbeds; minor, narrow silicified, brecciated and quartz-veined zones; abundant graphite along shear/fracture surfaces, shearing generally 35-40° tca; <0.5% disseminated pyrite.	20290 20291 20292	106.00 112.00 118.00	108.00 114.00 120.00	2.00 2.00 2.00	Sheared black mudstone. Sheared black mudstone. Sheared black mudstone.	<5 <5 <5	26 45 35

HOLE: PX-92-12

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INTE	RVAL	DESCRIPTION				SAN	IPLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
126.70	129.22	KNOB HILL GROUP ALTERED MAFIC VOLCANIC FLOWS Fine grained matic volcanic, non-spherulitic, local contorted shale partings, minor disseminated pyrite.							
129.22	140.23	KNOB HILL GROUP SEDIMENTS (Palaeozoic)Brecciated and sheared black mudstone with <0.5 m wide, volcanic	20293 20294 20295	130.00 134.00 138.00	132.00 136.00 140.00	2.00 2.00 2.00	Brecciated black mudstone. Brecciated black mudstone. Brecciated black mudstone.	<5 <5 <5	42 32 24
140.23	143.40	MEDIUM GRAINED MAFIC DIKE Largely biotite + feldspar, massive, equigranular, trace pyrite, slightly chilled towards margins, minor chlorite.							
143.40	150.50	KNOB HILL GROUP SEDIMENTS (Palaeozok) Brecciated and sheared black mudstone with <0.5 m wide, volcanic interbeds and narrower (10-20 cm) bands of silicified/brecciated sediment or brecciated chert; 0-2% medium grained disseminated pyrite. Fine grained siliceous biotite hornfels, somewhat brecciated, no sulphides.				:			
		144.40 - 146.46 Fault breccia (silicified, brecciated, resilicified) or	20296	145.00	146.00	1.00	Silicified fault breccia.	<5	19
		146.46 - 149.15 Intensely milled chloritic, clay-rich fault breccia, 1% disseminated pyrite, shear angle about 20° tca. 149.15 - 150.50 Silicified fault breccia, same as 144.40 - 146.46, lower contact 40° tca.	20297	147.00	149.00	2.00	Milled fault breccia.	<5	88
150.50	152.40	INTERBEDDED VOLCANIC ROCK AND CONTORTED BLACK MUDSTONE Locally abundant tan clays, trace pyrite.	20298	151.00	152.00	1.00	Interbedded mudstone and volcanics.	<5	68
	152.40	Е. О. Н.				_			

HOLE: PX-92-12

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INTERVAL	DESCRIPTION				SAN	1PLE	ASSAYS
FROM TO]	No.	From	То	Length %Rec	Description	Au, ppb Cu, ppm
	Whole Rock analysis: Sample PX-92-12, 17.57 metres Description: Epidote + chlorite + calcite altered "greenstone" (andesite?) flow rock of the Eholt Formation (Rossland volcanic equivalent)						
	Chemical Analysis:	1					
	SiO2 52.70% TiO2 0.64% Al2O3 16.19% Fe2O3 5.28% FeO 4.12% MnO 0.42% MgO 3.65% Na2O 3.28% K2O 3.14% CaO 4.73% P2O5 0.19% LOI 4.52% Total % 98.86% Sr 437 ppm Zr 87 ppm Y 19 ppm Rb 73 ppm Nb 12 ppm Ba 1300 ppm Si 437 ppm Si 98.96%						

RECOVERY TABLE - DRILL HOLE PX-92-12

FROM	то	RECOVERY (%)	FROM	TO	RECOVERY (%)
0.00	3.05	0.00	74.22	77.27	98.36
3.05	3.66	65.57	77.27	79.71	93.03
3.66	3.96	83.33	79.71	82.91	94.37
3.96	5.64	80.36	82.91	85.95	98.68
5.64	7.01	87.59	85.95	89.00	99.02
7.01	8.69	71.43	89.00	90.53	73.20
8.69	9.45	100.00	90.53	92.66	97.65
9.45	10.36	54.95	92.66	94.79	86.85
10.36	11.43	70.0 9	94.79	97.84	98.36
11.43	13.41	80.81	97.84	98.76	79.35
13.41	16.46	100.00	98.76	101.80	92.11
16.46	19.51	95.41	101.80	103.33	90.20
19.51	22.01	80.00	103.33	106.38	89.18
22.01	23.16	82.61	106.38	106.98	96.67
23.16	23.77	65.57	106.98	107.59	139.34
23.77	24.38	65.57	107.59	110.49	89.66
24.38	25.60	73.77	110.49	111.86	96.35
25.60	26.21	81.97	111.86	114.00	96.73
26.21	27.13	65.22	114.00	115.98	88.38
27.13	27.74	57 .38	115.98	119.02	95 <i>.</i> 39
27.74	28.19	55.56	119.02	120.09	95.33
28.19	28.65	32.61	120.09	122.83	91.24
28.65	30.78	91.55	122.83	123.44	52.46
30.78	31.24	86.96	123.44	123.90	58.70
31.24	34.44	89.06	123.90	125.12	86.07
34.44	36.12	90.48	125.12	126.03	90.11
36.12	37.80	105.95	126.03	129.05	98.34
37.80	40.84	99.67	129.05	130.15	86.36
40.84	43.89	98.36	130.15	132.28	104.69
43.89	45.42	88.24	132.28	134.11	87.43
45.42	45.87	82.22	134.11	135.33	95.90
45.87	46.94	104.67	135.33	138.07	87.5 9
46.94	49.07	95.31	138.07	141.12	98.36
49.07	49.99	95.65	141.12	144.17	95.08
49.99	53.04	100.00	144.17	145.17	75.00
53.04	55.63	95.37	145.17	146.46	85.27
55.63	58.67	100.00	146.46	147.83	80.29
58.67	61.87	89.06	147.83	148.74	65.93
61.87	64.92	102.30	148.74	149.35	68.85
64.92	68.12	96.87	149.35	150.57	94.26
68.12	71.17	96.39	150.57	152.40	100.00
71.17	74.22	94,10			

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PROPERTY DISTRICT	Phoenix Greenwood Mamball (1, 2288)	DATE LOGGED LOGGED BY	June 1992 David M. Jones		EASTING NORTHING	88+69 E 106+00 N	Depth	Method	Azimuth	Dip
STARTED	June 15, 1992	CORE LOCATION	KRR Core Storage		COLLAR SURVEY	1384 none	0.00	Clino	270	60.0
COMPLETED	June 17, 1992	DOWNHOLE SURVEYOR SURVEY INSTRUMENT	Beaupré Acid Dip Test		LENGTH UNITS CORE SIZE	180.75 metres NQ	152.40	Acid		60.0
PURPOSE	Test IP anomaly "C1" no	ear Marshall showing.								
COMMENTS	IP anomalies due to nea silicate hornfels and mi sulphides.	ar surface and at depth calc- inor skarn zones with minor	SIGNED BY	(M. Caron)						

	SUMM	MARY LOG		AS	SAY SUMN	IARY	
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVER Au ppb	AGE Cu ppm
0.00 4.27 4.27 50.00 50.00 58.17 58.17 68.02 68.02 68.88 68.88 100.70	OVERBURDEN FINE GRAINED CLASTIC SEDIMENTS Fine grained to very fine grained quartzose, with highly variable biotite and calc-silicate hornfels and localized skarn; trace to locally 4% pyrrhotite, trace to locally 2% pyrite. SKARN Amphibole/pyroxene + epidote + chlorite ± garnet ± k-spar skarn after medium to coarse grained quartzose clastic sediments; <1-3% pyrrhotite, <1-2% pyrite, trace chalcopyrite. FINE GRAINED CLASTIC SEDIMENTS Fine grained, with interbedded conglomerate; biotite ± calc-silicate hornfels; 0 to trace pyrrhotite + pyrite. PORPHYRITIC DIORITE with trace to 1% pyrite. CLASTIC SEDIMENTS Fine grained to coarse grained quartzose, with highly variable biotite and/or calc-silicate hornfels; trace to 1% pyrite, 0 to trace pyrrhotite; mylonitic fault zone @ 69.97 - 72.87.	100.70 113.12 113.12 122.17 122.17 132.89 132.89 137.69 137.69 140.96 140.96 175.76 175.76 180.75 180.75	DIORITE Fine grained; 1-2% pyrite, 0% pyrrhotite. FINE GRAINED CLASTIC SEDIMENTS Biotite + calc-silicate hornfelsed; <0.2-1% pyrite, 0 to trace pyrrhotite. INTRUSION Hornblende porphyry intrusion with local hornblende-megacrysts. CLASTIC SEDIMENTS Biotite ± calc-silicate hornfelsed fine grained to coarse grained; 0 to trace sulphides. PULASKITE CLASTIC SEDIMENTS Fine to coarse grained; 140.96-162.90 calc-silicate hornfels ± skarn with 0-4% pyrite, 0% pyrrhotite; 162.90-175.76 local hornfels; 165.75-166.58 minor skarn with generally <<1-2% pyrite, 0% pyrrhotite. DIORITE Porphyritic, weakly holocrystalline with fine grained and/or mafic porphyry border phase. EO.H.	6.00 14.50 including 7.37 8.02 155.23 173.00 including 165.75 166.00 and 169.56 169.78	8.50 0.65 17.77 0.25 0.22	417 4,085 445 2,630 1,127	41 160 82 210 104

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INTE	RVAL	DESCRIPTION	SAMPLE						SAYS
FROM	TO		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
0.00	4.27 10.95	OVERBURDEN CALC-SILICATE ALTERED CLASTIC SEDIMENTS Fine grained clastic sediments - siltstone to sandstone (average grain size < 1 mm) with up to 15 cm thick coarser grained (1-3 mm) beds; pale to dark grey to pale green, due to highly variable extent of calc-silicate alteration; at 5.10 m bedding is 7-8° tca, presumably dipping steeply to the west. Multiple stages of alteration appear to consist of: (1) early calc-silicate hornfels (dark grey = amphibole?; pale green = pyroxene; white to cream = K-spar flooding?); (2) calcite + epidote ± green garnet ± amphibole (+ chorite) ± pyrrhotite ± pyrite ± K-spar; (3) late pyrite + chlorite + calcite on fractures; pyrite almost always appears to cut pyrrhotite; Calc-silicate alteration is highly variegated, taking on a "banded" appearance, probably closely following bedding planes; skarn type atienation (calcite + epidote + garnet + chlorite/amphibole) takes on a similar banded look. Pyrrhotite approximately 0-3%, average ≤ 1%, associated mostly with calcite + epidote + chlorite + amphibole takes. Prominent fracture set @ 43-55° tca; bedding generally 15-25° tca. 7.37 - 7.92 Weak calcite + epidote + chlorite; best mineralized section of interval.	20191 20192 20193 20194 20195	4.27 6.00 7.37 8.02 9.50	6.00 7.37 8.02 9.50 10.95	1.73 1.37 0.65 1.48 1.45	Calc-silicate hornfels with trace to 1% pyrrhotite + pyrite. Same as sample 20291. Calcite + epidote + chlorite + garnet skarn with 1 to 4% pyrrhotite. Calc-silicate hornfels/skarn with trace to 1% pyrrhotite + pyrite. Same as sample 20195.	93 143 4085 169 119	16 10 160 48 40
10.95	12.50	BANDED CALCITE-EPIDOTE-GARNET-CHLORITE ± PYROXENE SKARN <1-2.5% pyrite and $\leq 1\%$ pyrrhotite; pyrite:pyrrhotite ratio is much higher in this skarn interval ($\geq 4:1$) than in 7.37-7.92 ($\leq 1:4$); pyrrhotite tends to be associated with green-brown garnet and pyrite with red-brown garnet; skarn cross-cuts earlier enigmatic hornfels and in turn is sliced up by faults @ 70-90° tca; skarn is entirely truncated by probable low angle (i.e. 70-90° tca) fault; originally fine grained sediments.	20196	10.95	12.50	1.55	Calcite + epidote + garnet skarn with pyrite ± pyrrhotite.	43	38

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INTE	RVAL	- · · · · · · · · · · · · · · · · -	DESCRIPTION				SAM	PLE	ASS	SAYS
FROM	TO			No.	From	То	Length %Rec	Description	Au, ppb	Си, ррш
12.50	17.12	HORNFELSED FINE GR Fine grained (<1-1.5 mm chlorite + epidote ground silicate (pyroxene + epidot and trace pyrrhotite; lo chlorite? or originally all ch be late calcite veins; inter- 65-80° tca.	AINED CLASTIC SEDIMENTS a) quartzose, clastic sediments with pervasive mass alteration and variable cross-cutting calc- te + garnet + calcite) bands with <1.2% pyrite weal "late" dark pyroxene/amphibole (now all alteration with pyrite; all alteration cut val highly fractured @ 40-60° tca, 5-10° tca and							
		12.50 - 14.50 Chlorite silicate ba	+ sericite altered groundmass with minor calc- ands and 0 to trace pyrite + pyrrhotite.	20197	12.50	14.50	2.00	Chlorite-sericite altered fine clastic sediments with 0 to trace pyrite + wurthoute	104	20
- - -		14.50 - 16.15 Moderate + pyroxer 0 to trace 3 cm or p top of "sh	to heavy calc-silicate banding (abundant K-spar ne + epidote + zoisite + chlorite veining) with pyrite + pyrrhotite; large quartz clasts up to ossible quartz alteration pods at 16.15, possibly aarostone" conglomerate?	20198	14.50	16.15	1.65	Heavy calc-silicate altered fine clastic sediments with 0 to trace pyrrhotite.	24	13
		16.15 - 17.12 Slightly of increasing chlorite \pm trace pyri	coarser sandstone, $(<1-2 \text{ mm grains})$, hosts g calc-silicate alteration (pyroxene + epidote + trace garnet) with $\le 1-2\%$ pyrrhotite and 0 to ite.	20199	16.15	17.12	0.97	Same as sample 20198, 1 to 2% pyrrhotite, 0 to trace pyrite.	44	20
17.12	50.00	CALC-SILICATE ALTERI SEDIMENTS Highly variable, calc-silicat clastic sediments; beds @ 45-55° tca (major), 70° tca	ED/HORNFELSED FINE GRAINED CLASTIC te and/or biotite hornfels after very fine grained 2 16-20° tca; fracture sets @ 5-30° tca (minor), a (major) and 80-90° (minor).							
		17.12 - 18.44 "Banded" ≤ 1-3% py green pyr ubiquitou pyrrhotite alteration	(parallel to bedding) calc-silicate alteration with yrrhotite and tr-1% pyrite; bands consist of pale roxene?, dark amphibole/pyroxene/ chlorite and is calcite; calcite + zoisite + pyroxene + e veins cross-cut dark pyroxene/amphibole (possibly zoned instead?).	20200	17.12	18.44	1.32	Banded calc-silicate with 1 to 3% pyrrhotite, trace to 1% pyrite.	20	26
		18.44 - 21.30 Pale gree K-spar flo	n to cream-yellow banded calc-silicate with local poding: 0 to trace sulphides.	20201	18.44	20.00	1.56	Calc-silicate k-spar hornfels with 0 to trace pyrite + pyrrhotite.	6	7
		20.00 - 27.00 Low angle K-spar ve	e fractures cross-cut (70-80° tca) calc-silicate and eining.	20202	20.00	21.30	1.30	Same as sample 20201.	<5	16

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INTE	RVAL		DESCRIPTION				SAM	IPLE	ASS	SAYS
FROM	то			No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
		21.30 - 22.10	Banded calc-silicate hornfels (pyroxene + amphibole/pyroxene + K-spar) with <1-2% pyrrhotite and trace pyrite.	20203	21.30	22.10	0.80	Bedding controlled calc-silicate, <1% pyrrhotite, trace pyrite.	53	21
		22.10 - 23.13	Calc-silicate and K-spar hornfels with 0 to trace nvrrholite + nvrite.	20204	22.10	23.13	1.03	Calc-silicate k-spar hornfels with 0 to trace pyrrhotite + pyrite.	18	5
		23.13 - 23.70	Pyroxene + amphibole bands with $<1.3\%$ pyrrhotite \pm <1% pyrite (late).	20205	23.13	23.70	0.57	Pyroxene-amphibole bands with 1 to 3% pyrrhotite.	10	17
		23.70 - 25.83	Biotite ± calc-silicate hornfels cross-cut by K-spar veins with 0 to trace pyrrhotite + pyrite; K-spar appears to develop within biotite hornfels.	20206	23.70	25.83	2.13	Biotite calc-silicate hornfels with 0 to trace pyrrhotite + pyrite.	<5	7
		25.83 - 26.06	Biotite \pm calc-silicate hornfels cross-cut by "late" calcite + pyroxene/amphibole + pyrrhotite + pyrite "clots" (α cossible Fe-pyroxene).	20207	25.83	26.06	0.23	Late calcite + pyroxene + pyrrhotite + pyrite, <1 to 2% sulfides.	<5	32
	i	26.06 - 50.00	Biotite hornfels cross-cut by K-spar veins and local minor calc-silicate "bands" with tr-2% pyrite ± pyrrhotite; local	20208	26.06	28.00	1.94	Biotite calc-silicate hornfels, 0 to trace pyrrhotite + pyrite.	<5	21
	:		pyrite clots with late calcite + pyroxene at 31.75 and 33.81 m; late calcite + pyroxene + pyrrhotite (1-2%) at	20209	28.00	30.00	2.00	Biotite hornfels, 0 to trace pyrite + pyrrhotite.	<5	6
			36.42; local pyroxene veins rimmed by k-spar, both cross- cutting biotite hornfels.	20210 20211	30.00 31.50	31.50 32.00	1.50 0.50	Same as sample 20209. Biotite hornfels, 1 to 2% pyrite, no	<5 <5	27 24
				20212	32.00	33.50	1.50	pyrrhotite. Biotite hornfels, 0 to trace pyrite.	<5	13
				20213	33.50	34.00	0.50	Biotite hornfels, 0 to trace pyrite + pyrrhotite.	9	24
				20214	34.00	36.28	2.28	Same as sample 20213.	<5	11
				20215	36.28	36.65	0.37	2% pyrrhotite, <1% pyrite.	<>	13
				20216	36.65	38.00	1.35	Calc-silicate hornfels with <1% pyrrhotite, trace pyrite.	<5	18
		38.00 - 48.31	Generally 0 to trace pyrrhotite with late pyrite coating fractures (0-1% locally).	20217	38.00	40.00	2.00	Biotite calc-silicate hornfels with 0 to trace pyrite + pyrrhotite.	<5	187
				20218	40.00	42.00	2.00	Same as sample 20217.	<5	8
				20219	42.00	44.00	2.00	Same as sample 20217.	<5	14
				20220	44.00	46.00	2.00	Same as sample 20217.	<5	29
				20221	46.00	47.00	1.00	pyrrhotite, 0 to trace pyrite.	<>	IU
				20222	47.00	48.31	1.31	Biotite hornfels, trace pyrite + pyrrhotite.	<5	12
	i			20241	48.31	50.60	2.29	Biotite calc-silicate hornfels with trace to 2% pyrite.	<5	17

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INTE	RVAL	DESCRIPTION				SAM	IPLE	ASSAYS		
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm	
50.00	58.17	AMPHIBOLE/PYROXENE + EPIDOTE + CHLORITE + CALCITE \pm GREEN-RED GARNET \pm K-FELDSPAR SKARN Amphibole/pyroxene + epidote + chlorite + calcite \pm green-red garnet \pm K-feldspar skarn with minor hornblende; alteration is highly variable with estimated <1-3% pyrrhotite, <1-2% pyrite; trace chalcopyrite; host rock is a medium to coarse grained quartzose clastic sediments with bedding @								
		16-20° tca.	20223	50.60	50.91	0.31	Pyroxene + amphibole skarn with 6% pyrrhotite.	32	615	
		52.55 - 52.77 Hornblende + plagioclase porphyritic intrusion with moderate to heavy cale-silicate, K-feldspar overprint, no sulphides.	20224	55.32	56.56	1.24	Amphibole + pyroxene + garnet skarn with 3 to 5% pyrrhotite, trace write + chalconwrite	89	46	
			20225	57.90	58.37	0.47	Amphibole + pyroxene + garnet skarn with 2 to 4% pyrrhotite, 1 to 2% pyrite, trace chalcopyrite.	101	255	
58.17	68.02	CLASTIC SEDIMENTS Fine to very fine grained quartzose clastic sediments with local coarse grained chert pebble conglomerate $(57.73-59.74)$; general biotite hornfelsed \pm calc-silicate hornfels overprint; 0 to trace pyrrhotite, 0 to trace pyrite. 57.73 - 59.74 Coarse grained chert pebble conglomerate.								
68.02	68.88	PORPHYRITIC DIORITE Porphyritic weakly holocrystalline diorite with local hornblende megacrysts and locally trace to 1% disseminated pyrite; weak to moderate sericite + chlorite alteration; diorite is internally faulted and appears to have intruded a fault zone @ 50° tca with K-feldspar + epidote at contact.								
68.88	69.97	BIOTITE-HORNFELSED QUARTZOSE CLASTIC SEDIMENTS Variably biotite-hornfelsed, medium grained quartzose clastic sediments with local minor cross-cutting potassium-feldspathization and calc-silicate alteration; 0 to trace % pyrite, 0% pyrrhotite.								
69.97	72.87	MYLONITIC FAULT ZONE Mylonitic fault zone @ 48-55° tca; with apparent potassium- feldspathization.								

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INTE	RVAL	DESCRIPTION				SAM	1PLE	ASS	SAYS
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
72.87	100.70	QUARTZOSE CLASTIC SEDIMENTS	20242	72.00	74 50	1.50	Distite homfals out by enidote 4		110
		bedded coarse grained, pebble conglomerates; highly variable biotite and/or	20242	73.00	74.50	1.50	calcite, <1 to 3% pyrite.	Ū	,
		calc-silicate hornfels with cross-cutting calcite + epidote + pyroxene + pyrite veins/bands.	20243	74.50	76.14	1.64	Biotite calc-silicate hornfels with calcite + epidote clots, 2 to 3% pyrite.	8	142
			20244	77.65	78.30	0.65	Altered breccia with quartz + epidote/zoisite + 2% pyrite.	7	171
			20245	78.65	79.70	1.05	Quartz + epidote/zoisite + k-spar hornfels, <1 to 3% pyrite.	20	192
			20246	79.70	81.00	1.30	Biotite hornfels with k-spar + pyroxene + epidote, <1 to 4% pyrite.	19	41
			20247	81.00	82.00	1.00	Calc-silicate hornfels, 1 to 3% pyrite.	20	98
			20248	82.00	83.00	1.00	Pyroxene ± k-spar hornfels, <1% pyrite.	47	63
			20249	86.75	87.52	0.77	Pyroxene hornfels, 1 - 2% pyrite with calcite + epidote.	62	144
			20226	93.76	94.34	0.58	Calc-silicate hornfels, about 3% py.	41	240
		95.95 - 97.60 Quartz pebble conglomerate.	20250	94.34	96.00	1.66	Calc-silicate k-spar hornfels, 1 to 3% pyrite.	22	128
			20251	96.00	97.00	1.00	Biotite hornfels, <1 to 2% pyrite.	31	105
			20252	97.00	98.00	1.00	Biotite calc-silicate k-spar hornfels, 1 to 3% pyrite.	14	84
			20253	98.00	99.00	1.00	Biotite calc-silicate k-spar hornfels, 2% pyrite.	7	36
			20254	99.00	100.00	1.00	Biotite calc-silicate hornfels, 1 to 3% pyrite with calcite + epidote.	18	155
			20255	100.00	100.70	0.70	Biotite calc-silicate hornfels, <1% pyrite.	7	126
100.70	113.12	FINE GRAINED DIORITE Plagioclase + hornblende phyric diorite; pervasive chlorite + sericite alteration cross-cut by calcite + epidote + zoisite + pyrite veins; 0.2-1%							
		disseminated and vein controlled pyrite.	20256	100.70	102.00	1.30	Porphyritic diorite with 1 to 2% pyrite.	23	115
		111.75 - 112.85 Fault zone, highly broken and brecciated with local calcite + pyroxene + pyrrhotite veins (<0.5-1% pyrrhotite).	20257	110.00	112.00	2.00	Calc-silicate altered diorite <1% pyrite.	23	103

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INTE	RVAL	DESCRIPTION				SAN	APLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Си, ррп
113.12	122.17	HORNFELSED FINE GRAINED CLASTIC SEDIMENTS Biotite + calc-silicate + K-spar hornfels after fine grained clastic sediments; generally <0.2-1% pyrite, 0 to trace % pyrrhotite; early biotite hornfels cross-cut by calc-silicate + K-spar hornfels, cross-cut by calcite + epidote + pyrite veins; replacement zoning from core to rim, typically consists of pyroxene- epidote- k-spar- biotite; sulphides (pyrite) with late calcite + epidote veins \pm quartz and locally with pyroxene replacements.	20258 20259	113.00 114.00	114.00 116.00	1.00 2.00	Calc-silicate k-spar hornfels, 1 to 2% pyrite. Biotite calc-silicate hornfels, 1 to 2% pyrite.	13 13	84 42
122.17	132.89	HORNBLENDE (EX-AUGITE?) PORPHYRY INTRUSION Hornblende + plagioclase phyric intrusion with local hornblendes megacrysts (≤ 0.5 -1.5 cm); moderately biotite hornfelsed with pyroxene altered chilled margins; local hornblende metasomatism along fractures; intrusive contact (fault?) @ 50° tca.							
132.89	137.69	FINE TO COARSE GRAINED CLASTIC SEDIMENTS Moderately biotite \pm calc-silicate hornfelsed fine to coarse grained quartzose clastic sediments; beds @ 30° tca; highly faulted and fractured with potassium-metasomatism adjacent to "Pulaskite" syenite.							
137.69	140.96	K-SPAR ("PULASKITE") PORPHYRY Typical K-spar megacrystic salmon syenite?; potassium-metasomatism; no sulphides; contact @ 75-85° tca.							
140.96	162.90	 FINE GRAINED CLASTIC SEDIMENTS Very fine to fine grained quartzose clastic sediments with thin (≤ 10 cm) conglomerate interbeds; increasing percentage of coarse clastic sediments down-hole; 149.96 - 152.00 Biotite hornfels cross-cuts by calc-silicate hornfels, cross-cut by calcite + epidote + zoisite veins (generally 0-2% pyrite, 0% pyrrhotite). 152.00 - 162.90 Decreasing calc-silicate alteration down-hole: local cross- 	20260 20261 20227	147.00 148.00 148.71	148.00 148.71 149.00	1.00 0.71 0.29	Calc-silicate hornfels, 1 to 2% pyrite. Calc-silicate hornfels, 1 to 2% pyrite. Pyroxene-amphibole hornfels with 2 to 4% pyrite.	20 16 39	52 41 66
		cutting calc-silicate + pyrite and quartz + pyrite veins; beds @ 37-38° tca: late calcite veins cut all.	20262	155.23	155.54	0.31	7 cm quartz + pyrite vein in calc-silicate hornfels.	225	461
			21802	155.54	157.00	1.46	Biotite pyroxene hornfels, chloritized, fine calcite veinlets, <0.5% pyrite.	455	78
			21803	157.00	158.50	1.50	Biotite pyroxene hornfels, local chert pebble conglomerate, trace to 5% pyrite.	398	106

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INTE	RVAL	DESCRIPTION					SAN	1PLE	ASSAYS	
FROM	то		No.	From	То	Length	%Rec	Description	Au, ppb	Cu, ppm
			21804	158.50	160.00	1.50		Pyroxene altered chert pebble sandstone, trace to 1% pyrite.	315	33
			21805 21806	160.00 161.50	161.50 163.00	1.50 1.50		Same as sample 21804. Same as sample 20804, local epidote, trace to 0.5% pyrite.	166 835	30 70
162.90	175.76	MEDIUM TO COARSE GRAINED CLASTIC SEDIMENTS Interbedded medium to coarse grained quartzose clastic sediments; generally moderate chlorite + sericite altered with local cross-cutting k- spar flooding and calc-silicate veins: <<1 to locally 2% pyrite: local k-								
		spar + quartz(?) + pyrite flooding in coarse grained conglomerate.	21807	163.00	164.50	1.50		Same as sample 21804, local conglomerate interbeds.	240	40
			21808	164.50	165.75	1.25		Pyroxene-altered chert pebble conglomerate, 1 to 5% pyrite.	904	224
		165.00 - 166.58 Pyroxene/amphibole skarn with cross-cutting calcite + epidote + k-spar veins and 2-5% pyrite.	20228	165.75	166.00	0.25		Pyroxene-amphibole Skarn with 2 to 5% pyrite.	2630	210
			20265	166.00	166.58	0.58		Pyroxene-amphibole skarn, 2 to 3% pyrite.	943	153
			21809	166.58	168.00	1.42		Chert pebble sandstone, epidote + chlorite ± pyroxene, trace pyrite. (338, 248, 289, 368 nph Au)	311	49
			21810	168.00	169.56	1.56		Same as sample 21809, somewhat coarser, some interbedded considerate.	220	53
			20263	169.56	169.78	0.22		6 cm quartz-pyrite infilled fault breccia with minor chlorite and enidote	1127	104
			21811	169.78	171.83	2.05		Same as sample 21810. (364, 173, 204, 255, 1180 and 1650 nph Au)	638	53
			20264	171.83	173.00	1.17		Quartz + k-spar + pyrite flooded conglomerate, 2% pyrite.	313	62
				173.00	175.03	2.03		Chert pebble conglomerate as sample 21811, <0.5% pyrite.	39	51
			20266	175.03	175.78	0.75		Hornfels + quenched diorite, 1 to 2% pyrite.	31	31
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INTE	RVAL	DESCRIPTION				SAM	IPLE	ASSAYS
FROM	TO		No.	From	То	Length %Rec	Description	Au, ppb Cu, ppm
175.76	180.75	PORPHYRITIC DIORITE Plagioclase-hornblende phyric, marginally holocrystalline diorite; approximately one metre of strongly plagioclase + hornblende phyric mafic border phase grading inwards to an inequigranular diorite; strong calc- silicate + biotite hornfels at contact, with 1-2% pyrite.						
	180.75	Е. О. Н.						
			Ī					

RECOVERY TABLE - DRILL HOLE PX-92-13

FROM	TO	RECOVERY (%)	FROM	TO	RECOVERY (%)	FROM	TO	RECOVERY (%)
								<u> </u>
0.00	4.27	0.00	50.60	52.58	88.38	114.45	115.06	81.97
4.27	4.88	65.57	52.58	53.64	110.38	115.06	117.35	90.83
4.88	6.10	81.97	53.64	53.95	90.32	117.35	118.57	86.89
6.10	6.71	86.89	53.95	56.69	90.15	118.57	119.48	82.42
6.71	7.62	92.31	56.69	58.52	100.00	119.48	120.40	83.70
7.62	10.21	86.49	58.52	59.74	97.54	120.40	121.31	71.43
10.21	13.26	96.72	59.74	60.66	82.61	121.31	123.44	9 1.55
13.26	13.87	95.08	60.66	61.11	77.78	123.44	125.27	95.63
13.87	15.24	87.59	61.11	62.79	99.40	125.27	126.80	113.07
15.24	16.15	84.62	62.79	63.55	88.16	126.80	129.84	98.68
16.15	17.07	85.87	63.55	64.00	91.11	129.84	132.89	100.00
17.07	17.53	78.26	64.00	65.07	74.77	132.89	135.48	97.68
17.53	18.44	94.51	65.07	65.84	120.78	135.48	136.40	92.39
18.44	20.42	94.44	65.84	68.88	94.08	136.40	138.99	94.21
20.42	21.18	78.95	68.88	71.17	89.96	138.99	142.04	99.34
21.18	22.86	95.24	71.17	74.22	99.34	142.04	143.56	84.21
22.86	23.62	81.58	74.22	75.59	83.94	143.56	145.08	93.42
23.62	24.69	84.11	75.59	78.03	98.77	145.08	148.13	90.16
24.69	25.30	65.57	78.03	81.08	99.34	148.13	150.72	88.80
25.30	26.06	100.00	81.08	82.30	83.61	150.72	152.40	95.24
26.06	26.97	97.80	82.30	83.06	143.42	152.40	154.23	83.61
26.97	28.96	89,45	83.06	84.73	92.81	154.23	157.28	90.16
28.96	29.57	77.05	84.73	86.26	93.46	157.28	157.73	84.44
29.57	30.78	79.34	86.26	87.02	72.37	157.73	160.32	91.51
30.75	32.00	99.18	87.0Z	88.09	102.80	160.32	162.76	92.21
32.00	34.44	97.54	88.09	88.54	100.00	162.76	164.29	94.77
34.44	34.90	65.22	88.54	89.00	89.13	164.29	166.12	98.36
34.90	36.73	94.54	89.00	89.61	95.08	166.12	168.55	97.94
36.73	37.34	106.56	89.61	90.98	89.05	168.55	170.60	146.34
37.34	38.10	82.89	90.98	92.35	83.21	170.50	174.65	76.05
38.10	38.71	101.64	92.35	95.25	84.14	174.65	177.70	101.64
38.71	40.54	104.92	95.25	97.38	96.71	177.70	180.75	100.00
40.54	41.30	100.00	97.38	100.43	101.64			
41.3	43.13	95.63	100.43	101.65	95.08			
43.13	44.50	93.43	101.65	102.87	100.00			
44.50	45.87	89.05	102.87	103.48	83.61			
45.87	47.09	91.80	103.48	104.55	84.11			
47.09	47.40	93.55	104.55	107.29	99.64			
47.40	48.31	91.21	107.29	109.58	100.00			
48.31	49.83	92.11	109.58	112.01	95.88			
49.83	50.60	84.42	112.01	114.45	86.07			
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PROPERTY DISTRICT	Phoenix Greenwood	DATE LOGGED LOGGED BY	June 1992 David M. Jones		EASTING NORTHING	90+76 E 106+00 N	Depth	Method	Azimuth	Dip
CLAIM No. STARTED	Marshall (L.2388) June 17, 1992	DRILLED BY CORE LOCATION	Beaupré Drilling KRR Core Storage		ELEVATION COLLAR SURVEY	1391 none	0.00	Clino	270	45.0
COMPLETED	June 20, 1992	DOWNHOLE SURVEYOR SURVEY INSTRUMENT	Beaupré Acid Dip Test		LENGTH UNITS	245.36 metres	137.20	Acid		43.5
					CORE SIZE	NQ	245.40	Acid		37.0
PURPOSE	To test near surface IP	anomaly "C2" at San Jacinto								
COMMENTS	рн.		SIGNED BY		<u></u>				1	
				(M. Caron)						<u> </u>

	SUMN	IARY LOG		ASSAY SUMMARY					
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTE From	RVAL To	LENGTH in metres	AVER. Au ppb	AGE Cu ppm	
0.00 1.52 1.52 38.00 38.00 51.37 51.37 60.45 60.45 67.80 67.80 81.17 81.17 151.72 151.72 165.73	OVERBURDEN MARBLE Marble and variable calc-silicate altered marble, trace-0.5% pyrite, trace chalcopyrite. CALC-SILICATE HORNFELS AND SKARN Tr-3% pyrite, tr-15% pyrthotite, trace chalcopyrite. DIORITE Fine grained, porphyritic; <0.5-1% pyrite, pyrrhotite. CALC-SILICATE HORNFELS AND SKARN <1-4% pyrite, <1 to locally 10% pyrrhotite, trace chalcopyrite. DIORITE Variably endoskarned, porphyritic; <1-2% pyrite, trace-1% pyrrhotite, trace chalcopyrite. CLASTIC SEDIMENTS Variably biotite to calc-silicate hornfelsed fine grained to medium to coarse grained; rare skarn; trace-4% pyrite, trace-6% pyrrhotite, trace cpy. HORNBLENDE PORPHYRY DYKE Hornblende porphyry dyke/sill intruding along fault zone at 153.26-154.93; no sulphides except 1-3% pyrite in fault zone.	165.73 174.27 174.27 178.23 178.23 183.61 183.61 192.32 192.32 202.27 202.27 245.36 245.36	CONGLOMERATE Medium grained conglomerate; chlorite + epidote altered, trace-3% pyrite. PULASKITE K-spar (Pulaskite) porphyry; no sulphides. BRECCIATED CLASTIC SEDIMENTS Calc-silicates, trace-5% pyrite; skarn developed near basal contact (diorite). DIORITE Fine grained, porphyritic; locally calc-silicate altered; trace-3% pyrite. SKARN Calcite + epidote + garnet skarn with small (<1 m) plagioclase + hornblende porphyry dykes (typically endoskarned); trace-4% pyrite, trace chalcopyrite. DIORITE Fine grained inequigranular hornblende + plagioclase phyric; 4 m thick plagioclase + hornblende aphanitic groundmass border phase; trace pyrite. E.O.H.	38.00 47.50 60.50 81.16	38.30 48.50 61.72 81.39	0.30 1.00 1.22 0.23	175 634 109 102	725 76 270 270	

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INTE	RVAL	DESCRIPTION				SAM	IPLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
0.00	1.52	OVERBURDEN			_				
1.52	8.84	MARBLE Highly broken/fractured marble with weak epidote + pyroxene(?) + amphibole(?) overprint in brecciated zones; 0 to trace pyrite; fracture sets @ 60° tca.							
8.84	38.00	CALC-SILICATE ALTERED MARBLE Blue-grey to pale green to white, highly variably calc-silicate altered marble and possible interbedded mudstones; blue-grey = amphibole(?); green =	20267	8.84	10.00	1.16	Calc-silicate altered marble/mud- stone, trace to 0.5% pyrite.	7	90
		pyroxene(?); white-pink = k-spar; generally trace pyrite, mostly associated with alteration bands and "late" veins and fractures; prominent fracture, fault orientations (offsetting alteration) @ 50-60° and locally 70° tca:	20268 20269	10.00 22.92	12.00 23.08	2.00 0.16	Same as sample 20267. Pyroxene + quartz altered marble, 0.2% pyrite.	<5 9	25 136
		alteration bands (bedding?) @ 35-48° tca.	21620	26.00	28.00	2.00	Pyroxene + amphibole altered marble, trace pyrite.	<5	13
			21621	28.00	30.00	2.00	Same as sample 21620, calcite + Epidote veins with trace to 0.5% pyrite.	<5	15
			21622	32.00	34.00	2.00	Same as sample 21621.	40	49
			21623	37.17	38.00	0.83	Pyroxene + epidote flooded marble, trace to 0.3% pyrite.	<5	46
38.00	51.37	CALC-SILICATE HORNFELS AND SKARN Highly variable pyroxene/amphibole + epidote + k-spar ± garnet skarn and hornfels after fine grained to coarse grained quartzose clastic sediments (locally conclomerate ("sharmstone") in appearance); average	20229	38.00	38.30	0.30	10 to 15% pyrrhotite in epidote + pyroxene/amphibole skarn band in fault.	175	725
		1% pyrrhotite, 1% pyrite for entire interval with cm-thick skarn zones containing up to 50% sulphides; 0 to trace chalcopyrite closely intermixed with merchanica + merica interval is bishly by the faulted with more	21624	38.30	39.00	0.70	Pyroxene skarn/hornfels with pyroxene + calcite clots, trace to 0.2% pyrite + pyrthetite	13	30
		alteration offset by faulting but late alteration/veining infilling faults + fractures; bedding is very approximately 25-35° tca (35° at 45.5);	21625	39.00	41.00	2.00	Pyroxene hornfels with cross-cutting calcite + epidote, trace to 0.2%	12	8
		prominent alteration/"banding" (@ 35-48" Ica (probably following bedding?); most prominent fracture fault set @ 50-55° toa (general 50-70° toa) offsets	21626	41.00	43.00	2.00	Same as sample 21625.	<5	5
		alteration.	21627	43.00	44.50	1.50	Pyroxene + epidote + k-spar + calcite skarn with clots of epidote + pyrrhotite + pyrite, <1 to 2%	<5	5
			20230	44.50	45.50	1.00	pyrrhotite, <1% pyrite. Calc-silicate hornfels with k-spar and 2 to 3% fracture controlled pyrite.	19	32

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INTE	RVAL	DESCRIPTION				SAM	IPLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
			20231	45.50	46.50	1.00	Same as sample 20230, <1 to 3% fracture mutite.	13	17
	:		20232	46.50	47.50	1.00	Calc-silicate k-spar hornfels with <1	27	33
			20233	47.50	48.50	1.00	Calc-silicate k-spar + epidote hornfels / skarn with <1 to 2%	634	76
			20234	48.50	49.50	1.00	Calc-silicate k-spar hornfels cut by epidote + calcite + amphibole (late) clots with <1% pyrrhotite being replaced by 1 to 2% rwite	18	28
			20235	49.50	50.50	1.00	Calc-silicate k-spar hornfels cut by trace pyrrhotite and <1 to 2% pyrite.	36	36
			20236	50.50	51.50	1.00	Calc-silicate k-spar hornfels cut by pyroxene + amphibole skarn, 8 to 10% pyrrhotite, 2 to 4% pyrite (late).	88	49
51.37	60.45	PORPHYRITIC DIORITE Fine grained plagioclase-phyric marginally holocrystalline diorite; generally moderately chlorite + sericite + biotite altered, with highly calc-silicate altered contacts and cross-cutting calc-silicate + subhide years in interior.	21628	51.50	52.00	0.50	Chlorite + sericite + calc-silicate altered diorite, <1% pyrrhotite, trace to 1% pyrite.	9	41
		finely disseminated pyrrhotite + pyrite throughout, generally <0.5 to locally 1%; intrusion is much less fractured than adjacent skarn/hornfels; using and fractures sets @ 25.45° to	21629	54.00	56.00	2.00	Same as sample 21628, 1 to 3 cm calc-silicate + sulfide veins, <0.5% pyrrhotite + pyrite.	12	46
			21630	58.00	60.00	2.00	Same as sample 21629, <1% pyrite + pyrrhotite.	18	86
3			21631	60.00	60.50	0.50	Calc-silicate altered diorite, <0.5% pyrrhotite + pyrite.	32	68
60.45	67.80	CALC-SILICATE HORNFELS AND SKARN Biotite + k-spar + calc-silicate hornfels cross-cut by variable pyroxene/amphibole + epidote + k-spar skarn; protolith is a fine grained to medium grained quartzose clastic sediment; orientation of alteration/skarn bands varies from 50-62° tca with one odd reading of 28° tca (possibly bedding?); generally $\leq 1\%$ pyrrhotite + pyrite with sulphides concentrated in "late" pyroxene skarn veins.	20237 21632	60.50 63.00	61.72 64.00	1.22	Banded pyroxene-amphibole skarn, pyrite replacing pyrrhotite along fractures. Biotite + k-spar hornfels with crosscutting calcite + epidote + zoisite clots, <1% pyrrhotite, <1% pyrite.	109 6	270 30

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INTE	RVAL	DESCRIPTION				SAN	APLE	ASS	SAYS
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
			21633	65.07	66.00	0.93	Biotite + calc-silicate hornfels with crosscutting pyroxene + amphibole + epidote + zoisite + quartz Skarn, <1 to 4% pyrite, <1 to 2% pyrrhotite.	31	31
			21634	66.00	67.71	1.71	Biotite calc-silicate hornfels with crosscutting epidote + calcite clots, <1 to 2% pyrite, trace to 0.5% pyrrhotite.	23	10
67.80	81.17	WEAKLY TO MODERATELY ENDOSKARNED PORPHYRITIC DIORITE Variably weakly to moderately biotite \pm k-spar (very localized) hornfelsed unequivocal granular, porphyritic (plagioclase) diorite with highly variable							
		cross-cutting calc-silicate zones and veins; weakly to moderately endoskarned (epidote + pyroxene + k-spar) at upper and lower contact; flat erev alteration (chlorite + sericite + biotite??) groundmass hosts	21635	67.71	69.26	1.55	Calc-silicate altered diorite, <1 to 2% pyrite, trace pyrrhotite.	143	83
		disseminated pyrrhotite (trace to 1%); late calc-silicate veins carry pyrite which replaces pyrrhotite; generally ≤ 0.2 -0.5% pyrrhotite, ≤ 0.2 -1% pyrite with rare chalcopyrite.	21636	69.26	71.00	1.74	Endoskam diorite (pyroxene + epidote + zoisite + quartz + calcite + chlorite + k-spar), highly magnetic pyrrhotite 0.2 to 2%. trace to 1% py.	12	48
		72.50 - 73.00 Diorite highly brecciated.	21637	71.00	73.00	2.00	Chlorite + k-spar + calc-silicate altered diorite, trace to 1% pyrrhotite + pyrite.	21	100
			21638	73.00	75.00	2.00	Same as sample 21637, <1 to 2%	11	90
			21639	75.00	77.00	2.00	Chlorite + calc-silicate altered diorite, trace to 1% pyrite, trace to 0.5% pyrrhotite.	9	24
			21640	77.00	79.00	2.00	Same as sample 21639, trace to 1% pyrite, trace to 0.2% pyrthotite.	9	32
			21641	79.00	81.16	2.16	Chlorite + calc-silicate altered diorite, trace to 1% pyrite, trace pyrrhotite.	15	39
81.17	146.38	BIOTITE/K-SPAR/CALC-SILICATE HORNFELSED FINE TO COARSE GRAINED CLASTIC SEDIMENTS Fine to medium to coarse chert-pebble conglomerate; apparently fine grained clastic sediments are altered to typical biotite \pm k-spar \pm pyroxene (uncommon) hornfels, commonly cross-cut by skarn pods of epidote +	20238	81.16	81.39	0.23	Pyroxene + zoisite + epidote + calcite banded skarn, 4 to 6% pyrrhotite.	102	270

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INTE	RVAL	DESCRIPTION				SAM	IPLE	ASS	SAYS
FROM	ΤO		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
		pyroxene + calcite \pm k-spar veins which typically contain abundant pyrite; coarse grained clastic sediments are generally altered to chlorite + epidote	21642	81.39	83.00	1.61	K-spar + pyroxene hornfels, trace to 0.5% pyrite.	21	94
		\pm pyroxene \pm amphibole \pm k-spar and commonly contain pyrrhotite and pyrite; the difference in alteration probably reflects zoning (7) around the more permeable chert-pebble conglomerate beds; hornfels and skarn	21643	86.00	87.00	1.00	Biotite + chlorite + epidote altered fine clastic sediments, trace to 0.5% pyrite.	18	44
		alteration are commonly offset by numerous small-scale faults; pyrite is typically late and abundant along fractures and locally in fault zones;	21644	87.00	88.00	1.00	Strongly epidotized fine clastic sediments, trace to 1% pyrite.	39	10
		bedding @ $38-45^{\circ}$ tca; mineralized bands tend to $40-60^{\circ}$ tca; fracture/fault sets are highly variable @ $10-20^{\circ}$ tca, $30-38^{\circ}$ tca, $50-60^{\circ}$ tca (last two fracture sets are locally perpendicular to bedding indicating low angle fault	21645	88.00	89.00	1.00	Epidote + chlorite + pyroxene altered clastic sediments, trace to 1% pyrite.	39	90
		dips).	21646	91.00	93.00	2.00	Chlorite + epidote-altered conglomerate, 0.2 to 1% pyrrhotite (strongly magnetic), trace to <0.5%	<5	29
			21647	94.00	95.00	1.00	Same as sample 21646, 0.5 to 0.8%	<5	39
	:		21648	95.00	95.64	0.64	Same as sample 21646, trace to 0.5%	<5	30
			21649	102.00	103.53	1.53	Chlorite + biotite ± calc-silicate altered clastic sediments, trace to 1% pyrite, trace to 0.5% pyrthotite.	22	64
			20239	103.53	103.82	0.29	Epidote + k-spar? cutting calc- silicate hornfels, 2 to 4% pyrite.	14	56
			21650	103.82	105.00	1.18	Same as sample 20239, trace to 1% pyrite, 0 to 0.5% pyrrhotite.	8	51
		:	21651	108.00	110.00	2.00	Biotite hornfels with epidote + calcite + pyroxene clots, <0.5% to 1% pyrite. 0 to trace pyrrhotite.	<5	24
			21652	112.00	113.30	1.30	Same as sample 21651, trace to 0.5% pyrite, 0 to trace pyrrhotite.	<5	23
			21653	114.00	116.20	2.20	Pyroxene + k-spar hornfels, 0 to trace pyrite.	<5	33
			20240	116.20	117.00	0.80	Brecciated pyroxene hornfels, 2 to 4% pyrite.	10	82
			21654	122.00	123.00	1.00	Biotite + k-spar hornfels, trace py.	<5	34
			21655	126.00	127.00	1.00	K-spar + chlorite-altered clastic sediments, trace pyrite.	7	40
			21656	131.00	132.00	1.00	Biotite ± pyroxene hornfels, trace to 0.5% pyrite.	<5	28

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INTE	RVAL	DESCRIPTION				SAN	MPLE	ASS	SAYS
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
			21657	134.00	136.00	2.00	Biotite + k-spar hornfels with zoned calcite + epidote + pyroxene ± k-spar clots, trace to 0.5% pyrite.	<5	13
			21658	138.00	138.60	0.60	Chlorite + calcite + epidote-altered breccia, 0.5 to 1% pyrite.	6	186
			21659	143.00	145.00	2.00	Biotite hornfels cross cut with chlorite + calcite + epidote \pm pyroxene + pyrite Skarn clots, 0.2 to 0.5% murite	<5	23
			21660	145.00	146.38	1.38	Same as sample 21659, <0.2 to 1% pyrite (locally).	<5	33
146.38	151.72	FINE TO COARSE GRAINED CLASTIC SEDIMENTS WITH WEAK BIOTITE HORNFELS \pm CALC-SILICATE ALTERATION Fine to medium to coarse grained quartzose clastic sediments with a general weak biotite hornfels and chlorite + epidote alteration; interval is highly broken with abundant visible fault offsets; trace pyrite is associated with "late" calcite + chlorite + epidote veins; bedding and calc- silicate banding @30-35° tca; fault at lower intrusive contact is perpendicular to bedding @ 38° tca.	21661	151.00	151.32	0.32	Calcite + epidote + chlorite + pyrite veins crosscutting chlorite + epidote altered clastic sediments, <1% pyrite.	7	107
151.72	165.73	 HORNBLENDE PORPHYRY Hornblende phyric (≤ 1 cm longest) fine grained, black-green porphyry; very weakly magnetic with pervasive chlorite + sericite(?) alteration, with very "late" small calcite veins; appears to intrude above and below a major fault zone, and is partially broken by it, at 153 m; no sulphides apparent; much less broken than surrounding intervals. 153.26 - 154.93 Fault breccia zone: highly brecciated @ 60° tca; rock appears potassium-feldspathized and silicified with approximately 1-3% infilling pyrite; late cross-cutting chalcopyrite + epidote faults; protolith may be highly altered Brooklyn clastic sediments (as above) or possibly a block of (rafted?) Knob Hill volcanics (?). 154.93 - 165.73 Hornblende phyric, locally megacrystic (up to 1.5 cm); moderately magnetic, pervasively chloritized but no sulphides. 	21662	153.26	155.93	2.67	Silica + k-spar-altered fault breccia, 1 to 3% pyrite.	78	187

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INTE	RVAL	DESCRIPTION				SAM	IPLE	ASS	SAYS
FROM	TO		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
165.73	174.27	QUARTZ PEBBLE CONGLOMERATE & INTERBEDDED FINE TO MEDIUM GRAINED CLASTIC SEDIMENTS Pervasively chlorite + calcite + epidote altered quartzose clastic sediments with finely disseminated to coarse clots of pyrite associated with "late" calcite + chlorite (coarse bladed - probably ex-pyroxene or amphibole?) veins.							
		165.73 - 168.86 Conglomerate facies.	21663	168.28	168.86	0.58	Chlorite + epidote-altered conglom. with late calcite + epidote + chlorite	47	457
		168.86 - 174.27 Fine to medium grained facies; has appearance of a biotite ± calc-silicate hornfels; fault contact at base with pulaskite, apparently @ 60° tca but not certain; general prominent fracture sets @ 30°, 45°, and 55° tca.	21664	173.78	174.32	0.54	+ pyrite vents, 1 to 3% pyrite. Locally fault brecciated clastic sediments with calcite + chlorite veins with pyrite, 1 to 3% pyrite.	58	442
174.27	178.23	PULASKITE (K-SPAR) PORPHYRY Typical "pulaskite", k-spar phyric intrusion: grey-green to salmon groundmass.							
178.23	183.61	HIGHLY BRECCIATED FINE TO COARSE GRAINED CLASTIC SEDIMENTS							
		Fault zone (estimated 50-60° tca) of variably highly brecciated, fine grained to coarse grained quatrzose clastic sediments: general nervasive chlorite	21665	179.29	180.25	0.96	Brecciated conglomerate with quartz + pyrite yeins, 0.5 to 3% pyrite.	41	240
		+ epidote + calcite alteration with pyrite (\pm quartz veins) associated with late calcite + chlorite + epidote \pm local pyroxene/amphibole skarn veins; local potassium-feldspathization adjacent to pulaskite; skarn alteration best developed near diorite contact.	21666	182.73	183.18	0.45	Pyroxene + amphibole + epidote + calcite skarn in brecciated conglomerate, 2 to 5% pyrite.	87	552
183.61	192.32	PORPHYRITIC, FINE GRAINED DIORITE Finely plagioclase phyric (\$ 1-2 mm), locally large hornblende phenocrysts,	21667	186.00	188.00	2.00	Diorite with local crosscutting	54	200
		in the grained marginally holocrystalline diorite; general that grey sericite + chlorite + epidote alteration cross-cut by variable calc-silicate alteration (epidote + zoisite + quartz + pyroxene/amphibole) with late disseminated and vein localized pyrite; diorite is more intensely calc-silicate altered near basal contact.	21674	191.69	192.32	0.63	carc-sincate veins, 0.5 to 2% pyrite. Diorite with marble/calc-silicate veining to skarn, 0.5 to 3% pyrite.	40	208
192.32	202.27	CALCITE + EPIDOTE ± GARNET SKARN Banded (50° tca after bedding?) calcite + epidote ± garnet (green to red) \pm pyroxene/amphibole skarn with \leq 1-2% pyrite and trace chalcopyrite; some yellow-brown minerals may be idocrase; pyroxene hornfels appears	21668	192.32	193.55	1.23	Calcite + epidote + pyroxene /amphibole (± garnet + calcite + epidote skarn), 1 to 3% pyrite, trace chalcopyrite.	21	158

HOLE: PX-92-14

PAGE: 8 of 8

INTE	RVAL	DESCRIPTION				SAN	(PLE	ASS	SAYS
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Си, ррт
		to be "early", cross-cut by skarn, cross-cut by "late" calcite + chlorite (after pyroxene/amphibole?) + epidote veins which carry all sulphides.	21669	193.55	195.17	1.62	Calcite + epidote + garnet ± pyroxene/amphibole skarn with <1 to 4% pyrite.	81	66
		 195.17 - 195.87 Plagioclase ± hornblende porphyry: fine grained plagioclase phyric (± hornblende) intrusion with aphanitic groundmass; locally heavily epidote + k-spar + calcite "endoskarned"; equivalent to hornblende phyric fine grained border phases of diorites. 195.87 - 197.14 Skarn banding @ 40-50° tca (bedding?). 	21670	195.87	197.14	1.27	Calcite + epidote + garnet skarn, <1 to 2% pyrite.	9	104
-		197.14 - 197.33 Plagioclase + hornblende phyric porphyry: intensely pyroxene + epidote endoskarned, fine grained plagioclase + hornblende phyric (<1-3 mm) porphyry; more prominent hornblende "phenocrysts" than interval at 195.17-195.87.				-			
		197.33 - 202.27 Skarn banding @ 30-35° tca; generally <1-2% pyrite,	21671	197.33	199.00	1.67	Garnet + calcite + amphibole / α	10	124
		pyroxene/amphibole veining; decreasing skarn,	21672	199.00	201.00	2.00	Same as sample 21671, 0.5% to 2%	18	46
:		gradational to pyroxene hornfels from 201.00 m.	21673	201.00	202.29	1.29	bynte. Skarn and calc-silicate hornfels, trace to 0.5% pyrite.	7	20
202.27	206.36	PLAGIOCLASE + HORNBLENDE PHYRIC PORPHYRY BORDER							
		PHASE TO DIORITE <1-4 mm plagioclase + hornblende phenocrysts in an aphanitic groundmass (black-grey); fully gradational into porphyritic-inequigranular diorite; 0 to trace pyrite.	21675	202.27	203.00	0.73	Plagioclase + hornblende porphyry, 0 to trace pyrite.	<5	33
206.36	245.36	FINE GRAINED INEQUIGRANULAR DIORITE Inequigranular, porphyritic diorite with local potassium-feldspathized zones imparting a "granodiorite" appearance; trace pyrite; late cross-cutting calcite + chlorite veins; entire interval is inequigranular and porphyritic, with local weakly hornblende megacrystic zones.							
	245.36	Е. О. Н.							

RECOVERY TABLE - DRILL HOLE PX-92-14

								page 1
FROM	TO	RECOVERY (%)	FROM	TO	RECOVERY (%)	FROM	TO	RECOVERY (%)
0.00	1.52	0.00	53.34	56.39	99.02	98.76	99.21	77.78
1.52	3.05	100.65	56.39	57.76	94.89	99.21	99.82	68.85
3.05	3.81	100.00	57.76	58.52	88.16	99.82	100.58	78.95
3.81	6.25	100.00	58.52	59.44	103.26	100.58	102.11	110.46
6.25	8.84	88.80	59.44	59.90	117.39	102.11	103.17	75.47
8.84	10.67	103.83	59.90	61.57	83.83	103.17	104.55	79.71
10.67	12.34	86.83	61.57	63.40	67.21	104.55	106.68	62. 9 1
12.34	13.72	72.46	63.40	63.70	83.33	106.68	108.20	115,13
13.72	14,18	102.17	63.70	65.07	91.24	108.20	110.79	94.21
14.18	16.15	79.19	65.07	66.45	91.30	110.79	113.84	100.00
16.15	16.76	113.11	66.45	66.90	77.78	113.84	114.45	81.97
16.76	18.75	95.48	66.90	68.58	98.81	114.45	117.35	81.03
18.75	19.81	100.94	68.58	69.64	100.00	117.35	120.40	97.70
19.81	22.56	93.09	69.64	71.78	88.79	120.40	121.31	82.42
22.56	24.08	98.03	71.78	72.85	87.85	121.31	122.53	102.46
24.08	25.91	91.80	72.85	74.68	101.09	122.53	123.44	109.89
25.91	26.97	95.28	74.68	76.20	92.11	123.44	124.05	83.61
26.97	28.04	100.00	76.20	77.11	82.42	124.05	124.97	71.74
28.04	28.96	84.78	77.11	77.72	81.97	124.97	126.49	100.00
28.96	32.00	98.68	77.72	79.86	96.26	126.49	129.24	90.91
32.00	33.83	100.00	79.86	80.62	89.47	129.24	130.15	100.00
33.83	35.06	97.56	80.62	81.08	100.00	130.15	132.59	88.52
35.06	37.19	100.47	81.08	82.30	90.16	132.59	135.63	98.03
37.19	38.10	117.58	82.30	83.06	72.37	135.63	138.68	98.36
38.10	39.78	94.05	83.06	83.82	71.05	138.68	141.73	98.36
39.78	41.15	83.94	83.82	84.28	86.96	141.73	144.48	95.27
41.15	41.76	65.57	84.28	85.65	93.43	144.48	147.53	97.38
41.76	42.67	71.43	85.65	86.10	100.00	147.53	148.74	100.00
42.67	43.13	54.35	86.10	86.87	84.42	148.74	150.57	87.43
43.13	43.43	53.33	86.87	88.54	98.80	150.57	153.01	100.00
43.43	44.20	94.81	88.54	89.61	79.44	153.01	156.06	96.72
44.20	44.81	98.36	89.61	90.07	89.13	156.06	156.21	86.67
44.81	45.79	89.39	90.07	90.37	100.00	156.21	157.43	82.79
46.79	47.24	104.44	90.37	90.83	110.87	157.43	159.72	82.10
47.24	47.85	100.00	90.83	92.20	67.15	159.72	162.76	98.36
47.85	48.46	100.00	92.20	92.96	55.26	162.75	155.81	97.70
48.46	49.23	71.43	92.96	94.18	101.64	165.81	168.86	72.79
49.23	49.53	50.00	94.18	96.01	95.63	168.86	171.91	95.08
49.53	50.29	111.84	96.01	97.08	94.39	171.91	174.96	98.03
50.29	52.58	97.38	97.08	98.30	95.90	174.96	178.00	97.37
52.58	53.34	100.00	98.30	98.76	71.74	178.00	181.21	91.90
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. COVERY TABLE - DRILL HOLE PX-92-14

		page 2
FROM	TO	RECOVERY (%)
181.21	181.97	84.21
181.97	183.18	97.52
183.18	185.62	100.00
185.62	187.45	90.71
187.45	188.97	90.79
188.97	191.11	100.00
191.11	193.24	75.12
193.24	196.29	97.70
196 29	198 73	92.62
108 73	100.70	73 77
100 34	202 20	98 36
202 20	205 44	08 76
202.35	200.44	50.00
203.44	210.07	100.00
207.07	210.92	91.00
210.92	213.97	100.00
213.97	217.02	101.64
217.02	217.93	113.19
217.93	220.98	96.07
220.98	224.03	98.36
224.03	227.08	97.70
227.08	230.12	98.03
230.12	233.17	99.34
233.17	236.22	100.00
236.22	239.27	98.03
239.27	242.32	96.72
242.32	245.36	100.33
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HOLE: PX-92-15

PAGE: 1 of 5

PROPERTY DISTRICT	Phoenix Greenwood	DATE LOGGED LOGGED BY	June 1992 M. Caron		EASTING NORTHING	92+20 E 108+00 N	Depth	Method	Azimuth	Dip
CLAIM No.	Marshall Fraction (L.2404)	DRILLED BY CORE LOCATION	Beaupré Drilling KRR Core Storage		ELEVATION COLLAR SURVEY	1408 none	0.00	Clino	270	75.0
STARTED COMPLETED	June 20, 1992 June 21, 1992	DOWNHOLE SURVEYOR SURVEY INSTRUMENT	Beaupré Acid Dip Test		LENGTH UNITS CORE SIZE	157.88 metres NQ	157.60	Acid		69.5
PURPOSE	To test IP anomaly "CC"	NNE of the San Jacinto pit.								
COMMENTS	IP due to up to 10% p hornfels and conglomera	urite over narrow widths in ite.	SIGNED BY	(M. Caron)						

	SUMI	MARY LOG		ASSAY SUMMARY				
INTERVAL	DESCRIPTION	INTERVAL	DESCRIPTION	INTERVAL	LENGTH	AVERAGE		
From To		From To		From To	in metres	Ацррь Сцррт		
0.00 2					Ne simifica			
	A OVERBURDEN BIOTITE / BYDOVENE HODNEELS				NO SIGNILICAR	c assays		
2.44 30.3	I BIOTTE + FIROAENE HORNFELS				1			
29.09 42.4	DIOTITE + DVDOVENE UODNEELS							
<u> </u>	MADRI F							
48.28 65.2	5 BIOTITE + PYROXENE HORNFELS					-		
65 25 84.4	3 CHERT-PERBLE CONGLOMERATE AND							
05.25 0	SANDSTONE			ſ	((
84.43 100.3	BIORITE							
100.38 127.1	CHLORITIZED SILTSTONE AND CHERT-							
	PEBBLE CONGLOMERATE			:	1			
127.10 134.8	0 PULASKITE							
134.80 139.4	3 CHLORITIZED SILTSTONE				1	1		
139.43 144.0	0 CHLORITIZED AND EPIDOTIZED CHERT-			i	l			
	PEBBLE CONGLOMERATE							
144.00 145.7	3 SILICEOUS HORNFELS		· · · · · ·					
145.73 155.6	1 DIORITE]]		4		
155.61 156.6	0 CHLORITIZED CHERT-PEBBLE							
	CONGLOMERATE							
156.60 157.3	8 MARBLE							
157.3	8 E.O.H.					l		
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HOLE: PX-92-15

PAGE: 2 of 5

INTE	RVAL	DESCRIPTION		<u> </u>		SAM	IPLE	ASS	SAYS
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Си, ррт
0.00 2.44	2.44 4.15	OVERBURDEN SANDY PHASE OF SHARPSTONE CONGLOMERATE							
4.15	36.51	FINE GRAINED, BIOTITE + PYROXENE HORNFELSED SILTSTONE Narrow interbeds of sandstone and chert pebble conglomerate.							
		 4.15 - 7.50 Banded pyroxene hornfels, banding (bedding) @ 32° tca, locally sandy, minor disseminated pyrite. 6.20 3 cm k-spar vein @ 27° tca. 7.50 - 8.33 Biotite hornfels, strongly fractured, no sulphides, bedding @ 35° tca. 8.33 - 8.70 Chert-pebble conglomerate matrix altered to epidote + pyroxene; bedding @ 35° tca. 8.70 - 16.10 Pyroxene hornfels with thin sandy and pebble interbeds, <0.5% disseminated and stringer pyrite, also sparse pyrite clots central to zoned (outwards) pyrite → chlorite → pyroxene(2) ≠ epidote natches: bedding @ 45° tca 	20299	6.00	7.00	1.00	Pyroxene hornfels, minor pyrite.	14	19
		11.78 - 12.00 Strongly epidotized fault breccia @ 10° tca in sandy sharpstone: = 2% coarse pyrite: some calcite in matrix	20300	10.00	12.00	2.00	Pyroxene hornfels + pyritic fault breccia.	16	25
		as cement. 17.37 - 18.12 Fault breccia in biotite + pyroxene hornfels; angular	20301 20302	14.00 17.37	16.00 18.12	2.00 0.75	Pyroxene hornfels with <0.5% pyrite. Fault breccia with epidote + k-spar	6 <5	4 2
		clasts strongly altered to epidote + k-spar + chlorite, black (chlorite ?) matrix, local calcite veinlets, no subbides					+ chlorite.	1	
		21.58 - 21.94 Epidotized fault breccia in biotite hornfels.	20303	20.00	22.00	2.00	Biotite hornfels with epidote clots and minor pyrite.	<5	111
		26.75 - 27.43 Strongly epidotized sandstone and chert- pebble conglomerate layer; bedding @ 35° tca; minor pyrite.	20304	24.00	26.00	2.00	Same as sample 20303.	<5	119
		27.04 1.5 cm k-spar ven along bedding.	20305	28.00 32.00	30.00 34.00	2.00 2.00	Biotite hornfels, local pyrite to 1%	<5	15
		35.66 - 36.51 Closely packed chert-pebble conglomerate, epidote + chlorite in matrix, no sulphides.	20300	52.00	J4.00	2.00	Biotite hornfels, local strong epidote, trace pyrite.	<5	3
36.51	38.98	MARBLE Fine grained, white to light green, variable bedding from 25-50° tca, no sulphides, highly irregular chloritic stylolites.							

HOLE: PX-92-15

PAGE: 3 of 5

INTE	RVAL	DESCRIPTION				SAN	(PLE	ASS	SAYS
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
38.98	43.43	BIOTITE + PYROXENE HORNFELS IN FINE GRAINED SEDIMENTS Strong pyroxene + epidote below 41.50, sparse k-spar veinlets to 5 mm, minor pyrite.							
		41.40 - 41.53 Narrow diorite (?) dyke, somewhat cross-cutting, epidote + local yellow-amber garnet in matrix.	20307	40.00	42.00	2.00	Epidotized pyroxene + biotite hornfels.	<5	4
43.43	48.28	MARBLE Mostly fine grained, white to green, local zoned veins + wall rock alteration, consisting of (from outside in) pyroxene \rightarrow k-spar \rightarrow epidote \rightarrow chlorite \rightarrow minor pyrite.	20308 20309	44.00 46.00	46.00 48.00	2.00 2.00	Marble + pyroxene + k-spar + epidote skarn. Same as sample 20308.	8 <5	72 29
48.28	65.25	PYROXENE + BIOTITE HORNFELS IN SILTSTONE Local sandstone and chert-pebble layers, bedding = 27° tca, coarser material has 0.5% pyrite + minor chalcopyrite.	20310 20311 20312 20313	50.00 54.00 58.00 62.00	52.00 56.00 60.00 64.00	2.00 2.00 2.00 2.00	Pyroxene + biotite hornfels. Pyroxene + biotite hornfels. Pyroxene + biotite hornfels. Pyroxene + biotite hornfels.	<5 <5 18 <5	23 14 9 12
65.25	67.35	CHERT-PEBBLE CONGLOMERATE Poorly sorted, light coloured angular chert clasts to 5 cm, strong chlorite + locally strong epidote in matrix, <0.5% disseminated pyrite.	20314	65.00	67.00	2.00	Chert pebble conglomerate with minor disseminated pyrite.	<5	33
67.35	71.16	FINE (CHERT PEBBLE ?) SANDSTONE AND SILTSTONE Chloritized throughout, bedding @ 40° tca, trace disseminated and fracture-controlled pyrite, locally moderate to strong epidote outlining bedding.	20315	69.00	71.00	2.00	Chloritic siltstone/sandstone.	<5	12
71.16	79.80	CHERT PEBBLE CONGLOMERATE Bedding 45-55° tca, poorly sorted, clasts up to 2 cm, angular, strong chlorite + moderate epidote in matrix, minor disseminated pyrite.							
		73.28 - 74.14 Fault breccia, locally filled with calcite.76.50 - 76.54 Fault breccia.	20316	73.00	75.00	2.00	Chert pebble conglomerate.	<5	43
			20317	77.00	79.00	2.00	Chert pebble conglomerate.	<5	52
79.80	84.43	FINE SANDSTONE With chert pebbles and siltstone, chloritized throughout, local epidotized zones, trace pyrite, local chert-pebble conglomerate interbeds.	20318	81.00	83.00	2.00	Chloritic siltstone/sandstone.	<5	12

HOLE: PX-92-15

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INTERVAL		DESCRIPTION	SAMPLE					ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
84.43	100.38	DIORITE Fine to medium grained, abundant equant feldspar phenocrysts, massive, quite uniform throughout; trace fine disseminated pyrite, local 1-2 mm cross-cutting epidote veinlets, lower contact @ 30° tca (bedding?).	_						
100.38	127.10	SILTSTONE AND CHERT PEBBLE SANDSTONE Generally chloritized throughout, irregular patches of epidote + chlorite + pyrite, local epidote in matrix outlining bedding @ 35° tca, local pyroxene alteration in siltstones, trace to 0.5% fine disseminated pyrite throughout, coarser sediments have 1-4% medium grained pyrite.	20319 21720 21721 21722 21723 21723 21724 21725	101.00 105.00 109.00 113.00 117.00 121.00 125.00	103.00 107.00 111.00 115.00 119.00 123.00 127.00	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	Chloritic siltstone/sandstone. Chloritic siltstone/sandstone. Chloritic siltstone/sandstone. Chloritic siltstone/sandstone. Chloritic siltstone/sandstone. Chloritic siltstone/sandstone. Chloritic siltstone/sandstone.	<5 <5 <5 <5 <5 <5	7 8 15 5 22 49 87
127.10	134.80	PULASKITE Pink tabular k-spar phenocrysts set in a finer grained salmon feldspathic matrix, minor biotite, chilled margins, lower contact @ 42° tca.							
134.80	139.43	FINE CHLORITIZED SILTSTONE Bedding @ 41° tca, local epidote \pm pyroxene flooding along tight fractures, <0.5% disseminated pyrite throughout, locally up to 1% fine stringer pyrite,	21726	136.00	138.00	2.00	Chloritized siltstone, 0.5 to 1% pyrite.	<5	25
139.43	144.00	CHERT PEBBLE CONGLOMERATE Strongly brecciated and altered to chlorite and epidote (in matrix), late calcite + hematite veining (locally very strong), shearing and local brecciation @ 30° tca, minor pyrite.	21727	140.00	142.00	2.00	Chert pebble conglomerate, brecciated, chlorite + epidote + hematite altered. Same as sample 21727.	17	17
144.00	145.73	FINE GRAINED, DARK SILICEOUS (?) HORNFELS Brecciated and re-healed, local minor chlorite and epidote, siltstone protolith(?), 0.5-2% disseminated and stringer pyrite.	21729	144.00	145.73	1.73	Siliceous (?) hornfels, pyrite 0.5 to 2%.	<5	62
145.73	155.61	DIORITE Fairly coarse grained, strong potassic alteration (k-spar flooding + fine secondary biotite), finer grained (chilled?) over last 50 cm with some hornblende phenocrysts to 7-8 mm.							
155.61	156.60	CHERT PEBBLE SANDSTONE Chloritized, some epidote in matrix, minor pyrite.						_	

HOLE: PX-92-15

PAGE: 5 of 5

INTERVAL		DESCRIPTION	SAMPLE					ASSAYS	
FROM	TO		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
156.60	157.38	MARBLE Chloritic stylolites + 1 cm band of highly chloritized siltstone.							
	157.38	Е. О. Н.							
	-								

RECOVERY TABLE - DRILL HOLE PX-92-15

FROM	TO	RECOVERY (%)	FROM	TO	RECOVERY (%)
0.00	2.44	0.00	96.62	99.06	100.00
2.44	3.66	32.79	99.06	101.50	100.00
3.66	4.88	39.34	101.50	102.72	93.44
4.88	6.25	91.24	102.72	105.77	98.36
6.25	7.92	85.63	105.77	107.55	101.59
7.92	9.30	100.00	107.66	109.88	96.85
9.30	11.28	90.91	109.88	112.78	105.17
11.28	14.33	100.00	112.78	114.91	85.45
14.33	14.78	106.67	114.91	117.96	96.39
14.78	17.37	97.30	117.96	118.72	100.00
17.37	20.27	100.00	118.72	120.09	94.89
20.27	23.32	100.00	120.09	120.70	96.72
23.32	26.52	96.88	120.70	121.31	100.00
26.52	29.56	99.34	121.31	122.68	89.05
29.56	32.61	97.70	122.68	122.83	100.00
32.61	35.66	100.00	122.83	124.05	91.80
35.66	38.71	97.38	124.05	127.10	97.05
38.71	41.76	100.65	127.10	130.15	103.28
41.76	44.61	97.70	130.15	133.20	90.16
44.81	47.85	99.34	133.20	136.25	101.64
47.85	50.90	100.00	135.25	139.30	98.69
50.90	51.82	100.00	139.30	142.34	103.62
51.82	53.95	89.20	142.34	145.39	98.36
53.95	50.85	96.55	145.39	148.44	100.00
57.65	37.01	55.26	140.44	151.49	100.00
57.51	60.05	98.30	151.49	104.33	107.75
67.00	65.09	100.00	154.33	137.00	30.72
03.09	60.10	98.04			
00.15	09.19 72 04	100.33			
03.13	12.24	32.09			
72.24	73.29	33.34			
/5.29	70.77	91.08			
70.77	70.33	93.60			
70.00	/3.00	91.50			
/ 9.00	01.30 87 oc	32.11			
01.30	03.00	104.17			
03.00	04.4J 97 AD	10.04			
97 49	0/.40 60 51	100.00			
0/.40	30.33 87 67	34./D			
50.03	33.3/ 86.69	102.03			
=0.07	74,9 2	100.00			

HOLE: PX-92-16

PAGE: 1 of 7

PROPERTY DISTRICT	Phoenix Greenwood	DATE LOGGED LOGGED BY	June 1992 David M. Jones		EASTING NORTHING	89+45 E 108+00 N	Depth	Method	Azimuth	Dip
CLAIM No. STARTED	Marshall (L.2388) June 22, 1992	DRILLED BY CORE LOCATION	Beaupré Drilling KRR Core Storage		ELEVATION COLLAR SURVEY	1404 none	0.00	Clino	270	60.0
COMPLETED	June 23, 1992	DOWNHOLE SURVEYOR SURVEY INSTRUMENT	Beaupré Acid Dip Test		LENGTH UNITS CORE SIZE	149.05 metres NQ	149.10	Acid		68.6
PURPOSE	To test IP anomaly "C1"	NNE of Marshall showing.								
COMMENTS	No obvious source for d	eep IP showing.	SIGNED BY	(M. Caron)						

	SUMN	ASSAY SUMMARY				
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH AVERAGE in metres Au ppb Cu ppm	
From To 0.00 3.35 3.35 19.78 19.78 21.32 21.32 30.93 30.93 31.43 31.43 34.24 34.24 38.11	OVERBURDEN CLASTIC SEDIMENTS Variably hornfelsed (± skarn), with minor interbedded marble; <1-5% pyrite; trace pyrrhotite, chalcopyrite, galena, sphalerite. ENDOSKARNED HORNBLENDE PORPHYRY Trace to 0.6% pyrrhotite, trace chalcopyrite, pyrite. HORNFELS/SKARN Mixed hornfels/skarn after fine-medium grained clastic sediments; trace to 1.5% pyrrhotite, trace chalcopyrite, trace pyrite. HORNBLENDE PORPHYRY Trace pyrite. MARBLE With variable hornfels/skarn zones; trace pyrite. PLAGIOCLASE-HORNBLENDE PORPHYRY	From To 66.21 68.68 68.68 69.01 69.01 74.11 74.11 109.62 109.62 142.11	locally 3% pyrite. CALC-SILICATE ALTERED MARBLE ("Aeolian sandstone" in part); trace to 0.5% pyrite. PLAGIOCLASE-HORNBLENDE PORPHYRY Endoskarned; trace pyrrhotite, pyrite, chalcopyrite. CLASTIC SEDIMENTS Calc-silicate hornfelsed, calcareous, quartzose; locally "aeolian sandstone"; trace to rare 5% pyrite, trace to rare 1% chalcopyrite (high sulphides in quartz veins). CLASTIC SEDIMENTS Variably calc-silicate altered very fine grained to coarse grained; local "aeolian sandstone"; trace to 1% pyrite, trace chalcopyrite, 0 to trace magnetite. MARBLE Marble and interbedded fine to coarse grained	From To	in metres Au ppb Cu ppm No significant assays	
38.11 53.81 53.81 66.21	Weakly endoskarned; trace to 1% pyrrhotite, pyrite. MARBLE Locally hornfelsed/skarned, with inter-bedded clastic sediments; 0-trace pyrite. CALC-SILICATE/BIOTITE HORNFELS After very fine grained clastic sediments; trace to	142.11 149.05 149.05	hornfelsed clastic sediments; local "aeolian sandstone"; trace to 4% pyrite, 0-trace chalcopyrite. CLASTIC SEDIMENTS Variably calc-silicate hornfelsed, fine grained; trace to 0.5% pyrite. E.O.H.			
HOLE: PX-92-16

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INTE	RVAL	DESCRIPTION				SAN	APLE	ASS	SAYS
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
0.00	3.35	OVERBURDEN							
3.35	19.78	VARIABLY HORNFELSED/SKARNED CLASTIC SEDIMENTS WITH MINOR INTERBEDDED MARBLE Biotite \pm k-spar hornfelsed fine to medium grained, locally coarse grained,	21676	4.57	5.07	0.50	Chlorite + epidote altered	9	30
		quartzose clastic sediments with cross-cutting epidote + calcite \pm pyroxene \pm amphibole bands and "pods" with local pyroxene/amphibole skarn; calc-silicate and skarn alteration are locally highly faulted/brecciated; sulphides					conglomerate with late calcite + epidote + pyroxene/amphibole, 1 to 4% pyrite.	_	
	:	associated with epidote + calcite + pyroxene "clots" and pyroxene + amphibole skarn; pyrite generally <1-5%, trace pyrrhotite, chalcopyrite, galena (?) and sphalerite; bedding and calc-silicate skarn banding generally	21677	5.64	6.40	0.76	Biotite hornfels with crosscutting epidote + k-spar + calcite skarn clots, <1 to 2% pyrite.	8	3
		constant @ 24-26° tca; faults are typically 50° tca (one at 35°) and lie nearly perpendicular to banding indicating, if beds are nearly vertical, that the faults are nearly flat structures, demonstrably offsetting alteration	21678	7.00	9.00	2.00	Same as sample 21677, 0.5 to 1.5% pyrite, 3 to 4% pyrite in local fault breccia at 8.90.	12	26
			21679	9.00	11.00	2.00	Biotite k-spar hornfels cut by variable epidote + zoisite + quartz + pyroxene/amphibole + chlorite	41	37
			21680	11.00	12.00	1.00	Balued skall, <1 to 3% pyric. Biotite k-spar hornfels with banded k-spar + quartz + pyrite \pm galena + chalcopyrite + sphalerite veins, 1 to 5% regrite	79	161
			21681	12.00	14.00	2.00	Biotite k-spar hornfels crosscut by epidote + calcite + k-spar ± pyroxene/amphibole + chlorite skarn clots and bands, <1 to 2% pyrite, trace pyrthetite.	14	16
		15.74 - 17.00 Minor marble interval with local pyroxene/amphibole skarn and minor pyrite.	21682	14.00	16.00	0.00	Mixed k-spar biotite hornfels and minor skarn, <1 to 2% pyrite.	15	45
			21683	16.86	17.24	0.38	Pyroxene + epidote + k-spar + calcite + amphibole/pyroxene skarn, 3% pyrite.	9	45
19.78	21.32	ENDOSKARNED HORNBLENDE PORPHYRY Variably endoskarned hornblende porphyry (chlorite + epidote after pyroxene/amphibole?) with strong pyroxene/amphibole metasomatic porphyroblast growth in adjacent clastic sediments; clots and dissemination of trace-0.6% pyrrhotite with intermixed chalcopyrite; intrusion is obviously "reduced" (ie. pyrrhotite versus pyrite) with respect to adjacent altered intervals.	21684	19.51	21.48	1.97	Hornblende porphyry endoskarn, trace to 0.6% pyrrhotite, trace pyrite, trace chalcopyrite, trace galena?.	6	59

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INTE	RVAL	DESCRIPTION				IPLE	ASS	SAYS	
FROM	TO		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
21.32	30.93	MIXED HORNFELS/SKARN OF FINE TO MEDIUM GRAINED CLASTIC SEDIMENTS Interbedded fine to medium to coarse grained quartzose clastic sediments with highly variable banded calc-silicate + k-spar hornfels (locally highly siliceous?) and localized amphibole/pyroxene + epidote skarn; hornfels generally devoid of sulphides; skarn and chlorite + epidote altered rocks contain trace-1.5% pyrrhotite, trace chalcopyrite, trace pyrite; mineral banding and bedding at 22-27° tca.	21685	23.05	24.16	1.11	Medium grained clastic sediments with heavy chlorite + epidote overprint, <0.5 to 1.5% pyrrhotite, trace chalcopyrite and pyrite.	6	60
		 24.20 - 25.90 Prominent pyroxene + epidote + k-spar banding. 26.37 - 29.27 Dominantly pyroxene/amphibole + epidote with trace- 0.5% pyrrhotite, trace chalcopyrite and pyrite. 	21686	27.00	29.00	2.00	Biotite k-spar hornfels with pyroxene/amphibole + epidote skarn, trace to 0.5% pyrrhotite, trace pyrite and chalcopyrite.	6	48
30.93	31.43	HORNBLENDE PORPHYRY Hornblende-plagioclase phyric porphyry (<1-2 mm phenocrysts) with general chlorite + epidote alteration, trace pyrite and minor amphibole metasomatism at contact; much less altered than previous hornblende porphyry at 19.78 - 21.32.							
31.43	34.24	MARBLE WITH VARIABLE HORNFELS/SKARN ZONES Marble with 15-20% pyroxene + epidote + pyroxene/amphibole hornfels/skarn bands and a general weak to moderate pyroxene + epidote overprinting; trace pyrite; bedding @ = 34° tca.	21687	33.00	34.00	1.00	Marble with minor crosscutting pyroxene/amphibole veins, trace pyrite.	<5	11
34.24	38.11	PLAGIOCLASE-HORNBLENDE PORPHYRY Plagioclase-hornblende phyric porphyry with pervasive chlorite + epidote + sericite alteration; trace to locally 1% pyrrhotite-pyrite; phenocrysts <1-3 mm.	21688	34.24	36.00	1.76	Plagioclase + hornblende porphyry with chlorite + epidote + sericite alteration, trace to 1% pyrite +	6	48
		37.00 - 38.00 Highly faulted (≈ 25-55° tca) and locally pyroxene + epidote skarned.	21689	36.00	38.11	2.11	Same as sample 21688 but with pyroxene + epidote skarn and lower sulfide content.	8	32
38.11	53.81	LOCALLY HORNFELSED/SKARNED MARBLE WITH INTER- BEDDED FINE TO MEDIUM GRAINED CLASTIC SEDIMENTS Marble/quartz sand marble with <10% interbedded fine to medium grained clastic sediments, 0.1-1.0 m thick; general weak to locally intense pyroxene + epidote + k-spar hornfels with minor (<10 cm) bands of							

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INTE	RVAL	DESCRIPTION				5	SAMPLE	AS	SAYS
FROM	то		No.	From	То	Length %R	tec Description	Au, ppb	Cu, ppm
53.81	66.21	pyroxene/amphibole + chlorite + calcite skarn with trace pyrite-pyrrhotite; banding-bedding generally @ $\approx 40^{\circ}$ tca; despite extensive calc-silicate alteration the lack of sulphides does not make this interval worthy of sampling; locally trace garnet. CALC-SILICATE/BIOTITE HORNFELS AFTER VERY FINE GRAINED CLASTIC SEDIMENTS Biotite \pm k-spar hornfels cross-cut by k-spar + epidote \pm							
		pyroxene/amphibole hornfels to skarn bands and clots (* 10-40% calc- silicates) after fine to very fine grained clastic sediments.							
		, , , , , , , , , , , , , , , , , , , ,						ĺ	
		53.81 - 57.50 Trace pyrite, epidote banding @ = 30° tca.	21600	50 00	60.00	2.00	Biotite k spor homfele with		15
		57.50 - 66.21 Trace-3% pyrite, generally greater degree of epidote + pyroxene/amphibole alteration.	21690	58.00	00.00	2.00	crosscutting epidote + k-spar + amphibole/pyroxene + calcite bands,	8	13
			21691	60.00	62.00	2.00	Same as sample 21690, trace to 2%	17	14
			21692	62.30	62.55	0.25	pyrite. 2 to 4 cm wide fault breccia with	19	369
		63.25 - 64.10 Major fault breccia (post-hornfels, no sulphides) @ 10° tca?					quartz + calcite + epidote, 3 to 10%		
			21693	65.00	67.00	2.00	K-spar + pyroxene + epidote hornfels \pm biotite hornfels, trace to 0.5% pyrite.	<5	30
66.21	68.68	CALC-SILICATE ALTERED MARBLE/QUARTZ GRAIN MARBLE (i.e. local "Aeolian Sandstone"). Variably calcite + epidote + k-spar + pyroxene/amphibole altered marble with local beds of highly rounded quartz grains;							
		67.00 - 67.32 Fault @ 20° tca; trace-0.5% pyrite.							
68.68	69.01	PLAGIOCLASE + HORNBLENDE PORPHYRY Fine grained plagioclase + hornblende phyric intrusion with plagioclase and hornblende metasomatism in "dyke" and wall rock (hornblende to 0.8 cm); much of this dyke may actually be highly metosomatized clastic sediments!?; general calcite + epidote + pyroxene/amphibole(?) alteration with trace pyrrhotite, pyrite, chalcopyrite; fault contact at bottom, @ 40° tca; interval is definitely mostly an igneous intrusion.	21694	68.27	68.88	0.61	Endoskarn plagioclase + hornblende porphyry, trace pyrite + pyrrhotite + chalcopyrite.	8	38

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INTE	RVAL	DESCRIPTION		-		SAN	(PLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
69.01	74.11	VARIABLY CALC-SILICATE HORNFELSED CALCAREOUS QUARTZOSE CLASTIC SEDIMENTS Highly variegated epidote + pyroxene + k-spar altered calcareous (locally marble) quartzose clastic sediments with distinctive well rounded, well- sorted, <1-3 mm quartz grains (equivalent to the "Aeolian Sandstone"); bedding and calc-silicate banding @ $\approx 25-32^{\circ}$ tca.							
		 69.01 - 73.00 0 to trace pyrite. 73.00 - 74.11 More abundant sulphides in dark calc-silicate hornfels. 	21695	73.00	75.00	2.00	Calc-silicate biotite hornfels with crosscutting epidote + quartz + calcite + chlorite, trace to 5% pyrite, trace to 2% chalcopyrite in 2 cm quartz veins.	13	163
74.11	88.93	BLACK HORNFELS WITH EPIDOTE AFTER VERY FINE GRAINED CLASTIC SEDIMENTS							
		Black to green-grey hornfels after very fine grained clastic sediments; cross cut by highly irregular "clots" and bands (<1-15 cm) of largely	21696	75.00	77.00	2.00	Epidote + calcite bands in hornfels, trace to 1% ovrite.	6	5
		epidote (zoisite?) \pm calcite + amphibole/pyroxene; pyrite generally with epidote bands/clots and varies from trace to locally 2%: banding	21697	77.00	79.00	2.00	Same as sample 21696, trace to 2% ovrite.	7	42
		(bedding?) @ ≈ 30° tca.	21698	83.00	85.00	2.00	Biotite hornfels with crosscutting epidote + calcite + pyroxene / amphibole clots, <0.5 to 1% pyrite.	<5	3
	:	87.50 Trace chalcopyrite with pyrite; bedding @ ≈ 23-30° tca.	21699	87.00	89.00	2.00	Biotite hornfels with crosscutting epidote + calcite ± minor pyroxene / amphibole bands, trace to 1% pyrite, trace chalcopyrite.	18	77
88.93	93.22	CALC-SILICATE BANDED MEDIUM TO COARSE GRAINED QUARTZOSE CLASTIC SEDIMENTS Variegated epidote + pyroxene + k-spar banded quartz pebble sandstone (similar to "Aeolian sandstone") to conglomerate; 0 to trace pyrite; bedding @ $\approx 37^{\circ}$ tca.							
93.22	105.06	HORNFELS WITH CROSS-CUTTING CALC-SILICATE ALTERATION Fine to very fine grained clastic sediments / biotite hornfels with highly variable cross-cutting epidote + pyroxene + calcite + k-spar bands and clots with local pyroxene/amphibole and rare magnetite (102.28 m); generally trace pyrite, 0 to trace chalcopyrite.	21700	100.00	101.00	0 1.00	Biotite hornfels with zoned pyroxene + epidote + k-spar bands, 0 to trace pyrite.	<5	4

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INTE	RVAL	DESCRIPTION				SAN	/PLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Си, ррт
			21711	102.21 104.00	102.33 105.00	0.12 1.00	Epidote + calcite + pyroxene / amphibole + k-spar skarn band with trace to 0.2% magnetite, trace pyrite. Same as sample 21700 with weak	<5	4 20
							pyroxene / amphibole, trace to 0.5% pyrite, trace chalcopyrite 10 cm.		
105.06	109.62	MEDIUM TO COARSE GRAINED QUARTZOSE CLASTIC SEDIMENTS WITH CALC-SILICATE BANDING Thinly bedded quartzose sandstones to conglomerate with variegated epidote + pyroxene + k-spar alteration bands following bedding planes; 20-23° tca; minor intervals of trace pyrite, generally in more highly permeable coarse clastic sediments.							
109.62	117.79	MARBLE Quartz sand rich marble with minor cross-cutting epidote + pyroxene bands/network breccias (<<1-4 cm); 0 to trace pyrite.	21702	114.09	114.42	0.33	Chlorite + epidote-altered 1 mm to 1 cm network breccia in marble, trace pyrite.	<5	13
117.79	130.65	HORNFELS WITH LOCAL MEDIUM TO COARSE GRAINED CLASTIC SEDIMENTS Fine to fine grained biotite hornfelsed clastic sediments with abundant medium to coarse grained interbeds (generally ≤ 10 cm); calc-silicate	21703	123.40	124.00	0.60	Clastic sediments with epidote + calcite + weak amphibole/pyroxene veins/clots, trace to 0.5% pyrite, trace chalcomizte	<5	47
		or as isolated clots; coarse clastic beds are typically epidote + calcite + chlorite altered (chlorite after amphibole/pyroxene) and carry most of the sulphides (pyrite, chalcopyrite); bedding is $\approx 22-25^{\circ}$ tca.	21704	125.64	126.32	0.68	Epidote + calcite + chlorite (after pyroxene?) altered conglomerate, 1 to 4% pyrite, trace chalcopyrite.	<5	156
		118.90 - 119.30 Minor marble interval.	21705	126.32	128.00	1.68	Hornfels with epidote + calcite \pm chlorite bands, trace to 1.5% pyrite.	68	193
			21706	128.00	130.65	2.65	Hornfels with epidote + calcite clots, trace to 1% pyrite.	28	10
130.65	140.86	MARBLE WITH INTERBEDDED VERY FINE GRAINED CLASTIC SEDIMENTS (HORNFELS) Marble and calcareous quartz sandstone; marble has generally weak network veins of enidote + nyrozene; garnet + nyrozene + enidote skarn	21707	130.65	132.00	1.35	Calcareous sandstone with $<1 \text{ mm}$ to 1.5 cm epidote + calcite + pyroyene	<5	44
		is developed locally adjacent to the thin hornfels band; this type of skarn may merely be a reaction skarn derived entirely from interaction between marble and hornfels; (this type of skarn is unlikely to carry gold); interval has 0 to trace pyrite associated with calc-silicate skarn alteration.	21708	138.00	139.00	1.00	network veins, trace pyrite. Pyroxene + epidote + calcite + garnet ± k-spar skarn with calcareous sandstone, trace pyrite.	<5	27

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INTE	RVAL	DESCRIPTION				SAN	(PLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Си, ррп
140.86	142.11	136.50 - 138.18 Minor very fine grained hornfels band. FINE TO COARSE GRAINED QUARTZOSE CLASTIC SEDIMENTS Very fine grained (local calc-silicate hornfels) to coarse grained (1-6 mm) "Aeolian Sandstone" with reaction(?) skarn at hornfels/coarser clastic interface; bedding @ 15-17° tca; trace pyrite locally with pyroxene bands.							
142.11	149.05	 VARIABLY CALC-SILICATED FINE TO MEDIUM TO COARSE GRAINED CLASTIC SEDIMENTS Dominantly very fine grained hornfelsed clastic sediments with minor (≤ 13 cm) interbeds of medium to coarse grained quartzose clastic sediments; weak to locally moderate pyroxene + epidote + calcite + k-spar "hornfels" localized around coarser grained beds; trace-0.5% pyrite with late epidote + calcite + chlorite veins. interval highly broken/faulted throughout last 3 m of hole. 147.65 Fault brecciated @ # 55° tca(?); fault is post calcsilication 	21709 21710	143.00 145.00	145.00 147.00	2.00 2.00	Biotite k-spar pyroxene hornfels with epidote + calcite + chlorite veins carrying trace to 0.5% pyrite. Same as sample 21709.	<5 <5	15 22
	149.05	E. O. H.							

RECOVERY TABLE - DRILL HOLE PX-92-16

FROM	TO	RECOVERY (%)	FROM	TO	RECOVERY (%)
			74.00	76.04	00.67
0.00	3.35	0.00	/4.95	70.04	90.57
3.35	4.27	/2.53	76.04	78.07	93.31
4.2/	4.00	80.33	70.01	/0.03	102.40
4.88	5.04	107.89	/8.03	84.10	33.07
3.64	0.40	103.95	01.00	04,12	05.24
6.40	7.62	66.52	04.12	87.67	93.24
7.02	/.92	100.00	03.00	07.0J 87.0J	101.05
1007	10.37	95.08	97.03	07.30	75.55
10.97	17.00	30./3	07.33	30.22	80.20
17.30	15.41	/5.12 07 18	01 50	51.05	00.25
13.41	15.34	97.70	91.09	05 1A	97 47
15.54	10.70	53.50	95.12	95.10	117 77
18.90	19.50	85 25	95.55	97.69	100.00
19.51	19.96	111 11	97.69	98.76	91.59
19.96	21.48	100.00	98.76	99.06	76.67
21.48	23.16	100.00	99.06	100.28	97.54
23.16	25.30	100.00	100.28	102.41	93.90
25.30	26.37	98.13	102.41	104.24	98.91
26.37	26.97	78.73	104.24	107.29	97.38
26.97	28.65	86.16	107.29	108.97	82.14
28.65	31.70	100.00	108.97	109.42	100.00
31.70	34.75	97.05	109.42	111.56	102.80
34.75	37.80	98.03	111.56	114.60	99.34
37.80	39.47	101.80	114.60	116,59	100.00
39.47	42.52	100.00	116.59	119.48	97.58
42.52	44.50	96.46	119.48	120.70	92.62
44.50	47.55	101.64	120.70	123.14	94.26
47.55	49.99	92.21	123.14	124.36	103.28
49.99	50.60	77.05	124.36	125.12	100.00
50.60	51.51	100.00	125.12	126.80	100.00
51.51	53.64	98.59	126.80	128.63	100.00
53.64	56.69	97.05	128.63	131.07	104.51
56.69	59.74	100.00	131.07	132.89	91.21
59.74	62.79	99.41	132.89	135.94	100.33
62.79	65.83	97.04	135.94	138.99	98.36
65.83	68.88	97.05	138.99	142.04	99.34
68.88	70.41	88.89	142.04	144.78	98.18
70.41	71 .9 3	105.92	144.78	145.85	95.33
71.93	74.06	92.49	145.85	148.13	81.14
74.06	74.98	110.87	148.13	149.05	86.96
			L		

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PROPERTY DISTRICT	Phoenix Greenwood	DATE LOGGED LOGGED BY	June 1992 David M. Jones	EASTING NORTHING	90+10 E 104+00 N	Depth	Method	Azimuth	Dip
CLAIM No.	Timer Fraction (L.1705)	DRILLED BY CORE LOCATION	Beaupré Drilling KRR Core Storage	ELEVATION COLLAR SURVEY	1392 none	0.00	Clino	270	45.0
STARTED COMPLETED	June 24, 1992 June 26, 1992	DOWNHOLE SURVEYOR SURVEY INSTRUMENT	Beaupré Acid Dip Test	LENGTH UNITS CORE SIZE	160.02 metres NQ	129.60	Acid		40.5
PURPOSE	To test surface IP and projection of Timer Zor	omaly "C1/C2" and downdip							
COMMENTS	Strongly pyritic hornfels	from 3.05 to 137.72.	SIGNED BY						

(M. Caron)

		SUMN	MARY LOG		ASSAY SUMMARY					
INTER	RVAL	DESCRIPTION	INTERVAL	DESCRIPTION	INTE	RVAL	LENGTH	AVER	AGE	
	2.05	OVEDBUDDEN	110/11 10	clastic radimente: <1.2% muite	11.00	17.00	6.00	74 ppo		
3.05	4.88	SKARN AND MARBLE	137.72 148.22	INTERBEDDED PORPHYRY AND CLASTIC	11.00	17.00	0.00	107	41	
4.88	16.11	1-5% pyrite. PORPHYRITIC DIORITE	10	SEDIMENTS Mixed hornblende-plagioclase porphyry & hornfelsed	28.00	30.00	2.00	203	102	
16.11	23.35	<1-4% pyrite. HORNFELS AND SKARN	148.22 160.02	clastic sediments; trace pyrite. DIORITE	37.30	37.55	0.25	413	41	
23.35	23 58	<1-3% pyrite. PORPHYRITIC DIORITE		Inequigranular diorite with porphyritic fine grained border phase	43.00	44.00	1.00	180	16	
23.58	35.57	2-3% pyrite. HORNEFI S. AND SKAPN	160.02	E.O.H.	51.00	52.00	1.00	162	18	
25.50	42.00	<1-8% pyrite. BIOTITE HORNEELSED CLASTIC SEDIMENTS			96.12	98.00	1.88	182	212	
33.32	43.00	<1-4% pyrite.			120.42	121.00	0.58	117	853	
43.00	83.33	VARIABLY HORNFELSED/SKARNED CLASTIC SEDIMENTS Variably calc-silicate hornfelsed/skarned clastic rediments: <1.7% nurite								
83.33	84.97	HORNBLENDE-PLAGIOCLASE PORPITYRY <1-2% pyrite.								
84.97	137.72	VARIABLY HORNFELSED/SKARNED CLASTIC SEDIMENTS								
		Variably hornfelsed/skarned fine to medium grained								

HOLE: PX-92-17

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INTE	RVAL		DESCRIPTION				SAM	IPLE	ASS	SAYS
FROM	то			No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
0.00	3.05	OVERBURDEN								
3.05	4.88	SKARN AND M 70% garnet(ido hematite stain a fault) contact w	(ARBLE crase?) + epidote + pyroxene skarn with bright red nd 30% marble; skarn best developed at brecciated (i.e. ith diorite (which is intensely potassium-feldspathized);	21730	3.05	4.18	1.13	Broken marble with 40% tan-brown garnet + epidote + chlorite skarn, 2 to 4% pyrite with strong red	65	80
		cm band at dior fault @ 55° tca,	by pyrite, locally to 5% and with massive pyrite along a 11 ite contact; diorite skarn contact @ 49° tca; brecciated perpendicular to mineral banding @ 55° tca.	21731	4.15	5.49	1.34	Garnet + epidote ± pyroxene / amphibole, 1 to 5% pyrite.	64	123
4.88	16.11	PLAGIOCLASE <1-2 mm euheo mafic minerals (b ± HORNBLENDE PHYRIC PORPHYRITIC DIORITE dral plagioclase crystals in an aphanite groundmass; all e.g. hornblende) altered to chlorite + sericite + pyrite (?);							
		internal portions + pyrite altera	s of dyke nearly holocrystalline; general sericite + chlorite tion with variable epidote; potassium-metosomatized stic sediments; generally $< 1.4\%$ nyrite both disseminated	21732	5.49	7.00	1.51	Diorite with pervasive chlorite + scricite + epidote + calcite alteration, 0.5 to 1.5% pyrite.	17	30
		and vein control	d vein controlled; two altered clastic sediment intervals in diorite.		7,00	8.00	1.00	Same as sample 21732, pyrite	22	44
		8.97 - 9.68	Hornblende + k-spar(?) metosomatized clastic sediments, imparting an igneous texture.	21734	8.00	9.00	1.00	Same as sample 21732, 0.5 to 1% pyrite, metasomatically altered wallrock (plagioclase + k-spar + berphande) from 8.77 to 9.68	23	74
				21735	9.00	10.00	1.00	Chlorite + calcite + epidote altered diorite, 1 - 2% pyrite.	21	63
				21736	10.00	11.00	1.00	Chlorite + epidote + calcite altered diorite, 1 to 2% pyrite.	27	18
		11.86 - 12.74	K-spar + pyroxene + epidote metosomatized clastic sediments locally, diorite is extremely crowded (>70%?)	21737	11.00	12.00	1.00	Same as sample 21726, last 15 cm. includes hornfels contact.	101	41
			with plagioclase crystals; fracture/faults @ approximately 30-38° tca.	21738	12.00	13.00	1.00	12.00 - 12.74 = hornfels, 12.74 - 13.00 = chlorite + epidote + calcite altered diorite, 1 to 4% pyrite.	133	25
				21739	13.00	14.00	1.00	Altered diorite as sample 21738, <1 to 3% pyrite.	213	7
			· · ·	21740	14.00	15.00	1.00	Same as sample 21739, 1 to 3% pyrite.	77	11
				21741	15.00	16.10	1.10	Same as sample 21739, 1 to 3% pyrite.	129	11
		}							 	<u></u>

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INTE	RVAL	DESCRIPTION			IPLE	AS	SAYS		
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
16.11	23.35	BIOTITE + K-SPAR HORNFELS WITH CROSS-CUTTING SKARN Biotite + k-spar hornfels with cross-cutting pyroxene/amphibole + epidote skarn after fine grained to locally coarse grained clastic sediments; calc-	21742	16.10	17.00	0.90	Biotite hornfels with 18 cm diorite dike, generally altered to chlorite +	517	34
		alteration banding and clastic sedimentary bedding at approximately 42-56° tca; $<1\%$ to locally 3% pyrite, generally in epidote + calcite ± amphibole/pyroxene zones.	21743	17.00	18.00	1.00	epidote ± k-spar, 1 to 3% pyrite. Biotite calc-silicate hornfels with crosscutting epidote + pyroxene + calcite + amphibole + sulfides, <<1 to 3% pyrite.	28	101
			21744	18.00	19.00	1.00	Banded biotite calc-silicate hornfels, locally brecciated and cut by epidote + pyroxene/amphibole, <1 to 2% pyrite.	39	20
			21745	19,00	19.70	0.70	Biotite hornfels cut by k-spar + epidote ± pyroxene/amphibole, <1 to 2% pyrite.	42	16
			21746	21.50	22.00	0.50	Biotite hornfelsed sandstone, <1% pyrite, trace chalcopyrite.	45	89
			21747	22.50	23.40	0.90	Biotite hornfels, cut by epidote + calcite + pyroxene/amphibole, <1 to 3% pyrite.	14	57
23.35	23 .58	PLAGIOCLASE + HORNBLENDE PHYRIC PORPHYRITIC DIORITE Diorite with minor hornblende megacrysts; dyke weakly "endoskarned" with pervasive chlorite + epidote + k-spar(?) alteration and 2-3% pyrite.	1						
23.58	35.52	HORNFELS \pm PYROXENE/AMPHIBOLE + EPIDOTE SKARN Biotite \pm k-spar hornfels after fine to medium grained, and locally thin- bedded, coarse grained clastic sediments; hornfels cross-cut by highly variable calcite + epidote + pyroxene/amphibole bands and zoned "clots" (calcite + pyroxene/amphibole cores with epidote + pyroxene rims) roughly <1-4 cm in diameter; cores contain euhedral stubby/equant to beaded crystals of either Fe-rich pyroxene (hedenbergite) or amphibole, now mostly retrograde altered to chlorite; sulphides are almost exclusively pyrite (trace chalcopyrite); pyrite generally with calcite + epidote \pm pyroxene/amphibole skarn and/or with late calcite + epidote veins or as fractures filling (<1-3 mm); bedding, mineral banding and faults all variable at approximately 30-60° tca.							

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INTE	RVAL	DESCRIPTION				SAN	IPLE	ASS	SAYS
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
		 23.58 - 24.43 Dominantly hornfels with weak to moderate calcite + silicate overprinting. 24.43 - 35.43 Moderate to heavy calc-silicate overprinting with locally 	21748	27.40	28,00	0.60	Biotite k-spar hornfels, epidote +	52	80
		dominant epidote + pyroxene (light green), pyroxene/ amphibole (dark green to black), or calcareous skarn bands or clots (eg. 26.30-29.90); pyrite preferentially localized within skarn "clots" with amphibole/pyroxene.	21749	28.00	29.00	1.00	calcite + pyrite \pm pyroxene veins, <1 to 2% pyrite. Biotite k-spar hornfels cut by pyroxene + epidote + calcite, <1 to 2% mmite	159	55
			21750	29.00	30.00	1.00	3% pyrite. Pyroxene/amphibole + epidote skarn after biotite bornfels. 3 to 8% pyrite.	246	148
			21751	30.00	31.00	1.00	Biotite hornfelsed siltstone / sandstone, chlorite + pyroxene / amphibole + epidote overprint, <1 to 2% pyrite.	85	34
			21752	31.00	32.00	1.00	Biotite hornfels, crosscutting epidote + pyroxene / amphibole bands (bedding), <1 to 4% pyrite.	57	42
		33.10 - 35.15 Highly faulted zone, faults in general both offset and are mineralized by pyrite.	21781	32.95	34.00	1.05	Epidote + calcite + chlorite + pyroxene/amphibole skarned and brecciated clastic sediments, <1 to 3% pyrite.	214	39
			21782	34.00	35.00	1.00	Same as sample 21781, lesser pyroxene/amphibole, <1 to 2% py.	110	28
35.52	43.00	BIOTITE HORNFELS OF FINE TO MEDIUM GRAINED AND							
		Biotite \pm k-spar hornfels of dominantly fine to medium grained clastic sediments, with minor coarse clastic sediment interbeds; general weak to locally moderate calcosilicate overprinting and general chlorite \pm etidote	21783	35.00	36.00	1.00	Epidote + chlorite + calcite altered clastic sediments with minor amphibole/pyroxene, <1 to 2% py.	26	15
		alteration.	21784	36.00	37.30	1.30	Same as sample 21783, <1 to 2% py.	25	17
			21785	37.55	38.10	0.55	Same as sample 21783, <1 to 2% py.	26	11
			21753	37.30	37.55	0.25	Biotite hornfels with epidote + chlorite, <1% pyrite.	413	41
			21754	41.55	42.00	0.45	Brecciated biolite hornfels with epidote + chlorite, associated with pyrite, <1 to 3% pyrite.	79	24
			21755	42.00	43.00	0 1.00	Biotite ± k-spar calc-silicate hornfels, pyroxene/amphibole + epidote skarn banding, <0.5 to 3% pyrite.	54	24

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INTE	RVAL	DESCRIPTION				SAN	NPLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
43.00	48.12	CALC-SILICATE HORNFELS/SKARN Biotite \pm k-spar hornfels with cross-cutting pyroxene + epidote + k-spar + calcite \pm pyroxene/amphibole banded skarn; mineral banding @ 45-60° tra: bedding locally @ 45-50° tra: sulphides (all pyrite) associated with	21756	43.00	44.00	1.00	Banded calc-silicate hornfels/skarn (epidote + pyroxene + k-spar + rare hornblende). <1 to 4% pyrite.	180	16
		epidote + calcite alteration and epidote + calcite + pyroxene/amphibole and also as pyrite veins along late fractures; <1 to locally 7% pyrite, the maining complex spirite with interest enders handling (complex 21758 and	21757	44.00	45.00	1.00	Biotite + k-spar hornfels cut by epidote + pyroxene + pyrite skarn, local bracciption <1 to 3% mutue	33	14
		21759); host rocks are fine to medium grained clastic sediments; altered	21758	45.00	46.00	1.00	Same as sample 21757, <1 to 4%	63	29
		Tooks commonly launce and locally of ecclared.	21759	46.00	46.68	0.68	Epidote + calcite \pm pyroxene /amphibole skarn in medium grained clastic sediments, 3 to 6% over 18 cm, remainder trace to 1% pyrite.	72	22
48.12	79.29	BIOTITE + K-SPAR HORNFELS WITH MINOR CALC-SILICATE ALTERATION General biotite \pm k-spar hornfels with highly variable cross-cutting pyroxene hornfels, with variable overprinting calcite + epidote \pm quartz \pm dark pyroxene/amphibole bands/ veins/ "clots"; pyrite is only noted sulphide and is closely associated with latter alteration assemblages; pyrite also occurs in the matrix of brecciated, hornfelsed/skarned zones and along "late" fractures indicating mineralization is probably in part syn-brittle deformation; as elsewhere alteration appears to closely follow coarser clastic sedimentary bedding planes, and is commonly the site of greater							
		sulphide deposition; prominent bedding @ 70-75° tea and 55° tea; local pyroxene/amphibole metasomatism is evident in the form of small (<1-3 mm) dark euhedral stubby to tath-like crystals growing in a calcite or	21760	50.05	51.00	0.95	Biotite + k-spar hornfels with crosscutting epidote + quartz + calcite veins, <1% pyrite.	50	23
		zoisite matrix, commonly rimmed by epidote/pyroxene - these crystals are retrograde altered to chlorite.	21761	51.00	52.00	1.00	Biotite + k-spar hornfels cut by calcite + quartz + epidote +	162	18
		52.50 - 57.60 Major fault zone/breccia zone of uncertain orientation.	21762	52.00	53.00	1.00	K-spar hornfels cut by quartz + calcite + epidote + pyrite veins, <1 to 1.5% pyrite.	45	32
			21763	53.00	54.00	1.00	K-spar hornfels with minor calcite epidote + pyroxene veins, <0.5% py.	14	12
			21764 21765	54.00 55.00	55.00 56.00	1.00	K-spar \pm calc-silicate hornfels, tr py. Brecciated calc-silicate hornfels with infilling calcite + chlorite, <1 to 3% pyrite.	13 9	15 9

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INTER	RVAL	DESCRIPTION				SAN	(PLE	ASS	SAYS
FROM	TO		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
			21766	56.00	57.00	1.00	Brecciated calc-silicate (epidote or zoisite?) hornfels with banded purple-grey calcite and pyroxene	34	10
			21767	57.00	57.45	0.45	same as sample 21766 with 10 to 15% calcite matrix <1 to 2% pyrite.	33	27
			21768	57.45	58.00	0.55	Biotite + k-spar hornfels with $1 - 3\%$	25	26
			21769	58.00	59.00	1.00	Biotite + k-spar calc-silicate hornfels with calcite + pyrite veins and clots, 1 to 3% pyrite.	52	76
			21770	59.00	60.20	1.20	Biotite + k-spar calc-silicate hornfels with crosscutting k-spar calc-silicate bands, local coarse pyroxene, 2 - 4% pyrite.	55	167
			21771	62.20	63.00	0.80	Biotite + k-spar hornfels with crosscutting calcite + epidote + chlorite + prite bands, 1 - 3% py.	32	29
			21772	63.00	64.00	1.00	Biotite + k-spar hornfels with k-spar calc-silicate veins. <1 to 2% pyrite.	35	51
			21773	64.00	64.40	0.40	Biotite + k-spar hornfels, <1 to 2% disseminated pyrite with calcite + epidote.	33	29
1 1			21774	72.30	73.00	0.70	Biotite hornfels with calcite + epidote clots, 1 - 2% pyrite.	33	32
			21775	73.00	74.00	1.00	Biotite + k-spar hornfels with crosscutting <1 cm calc-silicate bands, $\leq 1\%$ pyrite.	12	12
			21776	74.00	75.00	1.00	Biotite hornfels sandstone with 1 to 3% pyrite.	26	10
			21777	75.00	76.00	1.00	Same as sample 21776, calcite + epidote + pyrite clots, <1 to 2% pyrite.	46	10
			21778	76.00	77.00	1.00	Biotite hornfels crosseut by epidote + calcite bands ± calcite + pyroxene /amphibole, 1 to 4% pyrite.	22	7
			21779	77.00	78.00	1.00	Biotite + k-spar hornfels crosscut epidote \pm k-spar + calcite + pyrite clots and 1 - 2 mm pyrite veins, pyrite 1 to 6%.	40	4

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INTE	RVAL	DESCRIPTION				SAN	1PLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
			21780	78.00	79.00	1.00	Biotite + k-spar hornfels crosscut epidote ± k-spar + calcite + pyrite clots, 1 to 3% pyrite.	42	5
79.29	83.33	BIOTITE + K-SPAR ± PYROXENE HORNFELS ± EPIDOTE + PYROXENE/AMPHIBOLE SKARN						-	
		Biotite \pm k-spar \pm pyroxene banded (bedding) hornfels with local bands of epidote + calcite \pm pyroxene/amphibole skarn with pyrite; bedding and alteration banding @ 45-55° tca; interval is locally highly fractured and faulted @ 50-65° tca; sulphides associated with late epidote + calcite \pm	21786	79.29	81.30	2.01	Biotite calc-silicate hornfels with to 4 cm epidote + calcite + chlorite ± pyroxene/amphibole bands, <1 to 6% pyrite.	<5	18
		pyroxene/amphibole alteration; host rock is typical sequence of fine to medium grained, to locally coarse grained, clastic sediments; bottom 3 metres of interval is highly broken, indicating hornblende-porphyry may have intruded fault zone?	21787	81.30	83.33	2.03	Same as sample 21786, fewer skarn bands, <<1 to 2% pyrite.	30	26
83.33	84.97	HORNBLENDE + PLAGIOCLASE PHYRIC PORPHYRY Epidote + chlorite + calcite \pm pyroxene amphibole endoskarned hornblende + plagioclase, with local large lithic clasts; contains <1-1.5% pyrite, typically with late epidote + calcite \pm pyroxene/amphibole skarn "veins"; hornblende porphyroblasts or megacrysts up to 0.8 cm; remote possibility this is a highly metosomatized fine grained clastic sediment, but likely not; less broken than adjacent intervals.	21788	83.33	84.77	1.44	Hornblende porphyry with <1 to 2% pyrite, late epidote + calcite \pm pyroxene/amphibole.	20	70
84.97	96.12	BIOTITE ± K-SPAR HORNFELS Fine to medium grained, to local, minor coarse grained conglomeratic clastic sediments with weak to moderate biotite \pm local calc-silicate overprint; pyrite is only sulphide at trace to locally 1% (except sample 21789), associated with late epidote + calcite + chlorite \pm amphibole/pyroxene veins.	21789	90.11	90.65	0.54	Medium grained sandstone with heavy epidote + calcite + chlorite + quartz ± pyroxene/amphibole, 1 to 5% pyrite.	23	78
96.12	101.25	EPIDOTE + PYROXENE AMPHIBOLE SKARN/HORNFELS Biotite + k-spar + calc-silicate hornfels with 10-100% cross-cutting epidote + amphibolc/pyroxene skarn; skarn appears to have developed in a fault zone/breccia @ 70° tca (?) with late calcite filled fractures @ 30° tca (orthogonal sets); amphibolc/pyroxene alteration is retrograded to chlorite; in sample 217991 coarse bladed hedenbergite(? - now chlorite) is intimately inter-grown with pyrite (possibly retrograde pyrite after pyrrhotite?).	21790 21791	96.12 99.12	98.00 101.25	1.88 2.13	Intense epidote + amphibole /pyroxene skarned fault breccia, <2 to 10% pyrite. Same as sample 21790, <2 to 10% pyrite, intergrown coarse bladed pyroxene and pyrite.	182 91	212 158

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INTE	RVAL	DESCRIPTION				SAM	PLE	ASS	AYS
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
101.25	113.88	COARSE GRAINED QUARTZ PEBBLE CONGLOMERATE Quartz pebble conglomerate with minor (≤ 25 cm) medium to fine grained interbedded clastic sediments; conglomerate matrix is pervasively epidote + chlorite altered and rare epidote +calcite + pyroxene/amphibole with 1-2% pyrite is locally present, but <5 cm thick; generally trace pyrite.							
113.88	118.06	EPIDOTE + CHLORITE ± PYROXENE/AMPHIBOLE ALTERED MEDIUM GRAINED CLASTIC SEDIMENTS Generally medium, to locally fine-grained clastic sediments with pervasive chlorite + epidote alteration, locally after former coarse-grained amphibole/pyroxene alteration; pyrite is generally associated with amphibole/pyroxene alteration, with overall pyrite at <1 to locally 2%; local megacrystic hornblende "ghosts" give appearance of hornblende porphyry; hornblende crystals at 117.5 may be primary (ie. volcanic) but likely reflect hornblende metasomatism.	21792 21793	113.88 116.00	116.00 118.06	2.12 2.06	Epidote + chlorite ± pyroxene /amphibole altered medium grained sandstone with trace to 2% pyrite. Pyroxene/amphibole + epidote + chlorite altered medium grained sandstone, trace to 3% pyrite.	13 9	13 13
118.06	123.39	CONGLOMERATE \pm MEDIUM GRAINED CLASTIC SEDIMENTS \geq 60% quartz pebble conglomerate with minor interbedded medium to fine grained clastic sediments; general matrix epidote + chlorite alteration with local chlorite (retrograde) amphibole/pyroxene altered matrix and associated pyrite \pm chalcopyrite.	21794	120.42	121.00	0.58	Chert pebble conglomerate with pyroxene/amphibole + calcite altered matrix (± quartz veins), 1 to 3% pyrite, trace chalcopyrite.	117	853
123.39	134.46	BIOTITE + K-SPAR + CALC-SILICATE HORNFELSED VERY FINE TO FINE GRAINED CLASTIC SEDIMENTS Very fine grained to fine grained with highly variable biotite + k-spar to calc-silicate hornfels; degree of alteration decreases with depth; most intense alteration is calc-silicate hornfels with epidote + calcite + pyroxene/amphibole clots and bands which carry most abundant pyrite	21795	123.39	125.00	1.61	K-spar calc-silicate pyroxene (?) hornfels with epidote + calcite + pyroxene/amphibole clots, <1 to 2% pyrite.	44	70
		(average 2%); overall pyrite is trace to locally 2%.	21796	125.00	127.00 129.00	2.00	Calc-silicate hornfels with local epidote + calcite + k-spar clots, trace to 1% pyrite. Calc-silicate hornfels with trace	27 <5	12
134.46	137.72	MEDIUM TO COARSE GRAINED CLASTIC SEDIMENTS Thinly interbedded (1-3 cm), medium grained to locally coarse grained quartzose clastic sediments with general weak to locally moderate epidote + chlorite overprint; degree of calc-silication increases towards subjacent contact with diorite border phase.	21798	136.00	137.72	1.72	pyrite, abundant fracture hematite. Medium grained sandstone with local chlorite + epidote-altered matrix (after pyroxene/amphibole?), trace to 0.5% pyrite.	14	14

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INTE	RVAL	DESCRIPTION				SAN	IPLE	ASSAYS	
FROM	то		No.	From	To	Length %Rec	Description	Au, ppb	Cu, ppm
137.72	146.48	HORNBLENDE + PLAGIOCLASE PHYRIC PORPHYRY Hornblende (<1 mm - 1 cm; megacrystic) + plagioclase (lath-like, <1-5 mm) phyric porphyry with aphanitic groundmass and quenched contacts with adjacent clastic sediments; general chlorite alteration and abundant "late" calcite veins \pm trace pyrite; local k-feldspathized patchy along calcite + pyrite veins; overall 0 to trace pyrite; trace garnet with calcite veins.	21799	139.00	139.79	0.79	Weakly chlorite + calcite altered hornblende porphyry, minor k-spar, trace pyrite.	6	17
146.48	147.03	HORNFELSED MEDIUM GRAINED CLASTIC SEDIMENTS Calc-silicate (pyroxene/amphibole?) k-spar hornfels of medium grained clastic sediments with abundant purple-grey silica veins; 0 to trace% pyrite.	21800	146.48	147.03	0.55	Calc-silicate hornfels, 0 to trace pyrite.	<5	15
147.03	147.47	CALC-SILICATE ALTERED HORNBLENDE + PLAGIOCLASE PORPHYRY Pyroxene + epidote + chlorite + calcite ± garnet (rare) altered hornblende + plagioclase porphyry (as above at 137.72-146.48).							
147.47	148.22	CALC-SILICATE + K-SPAR HORNFELSED CLASTIC SEDIMENTS Very fine grained to fine grained clastic sediments, calc-silicate hornfelsed and locally partially converted to a fine grained dioritic appearing plagioclase + hornblende "clastic sediment"; 0 to trace pyrite.	21801	147.47	148.22	0.75	Calc-silicate k-spar hornfels, trace pyrite.	<5	23
148.22	150.44	HORNBLENDE + PLAGIOCLASE PHYRIC BORDER PHASE TO DIORITE Hornblende + plagioclase porphyry (above) gradational into inequigranular diorite (below); weakly chlorite with 0% pyrite.							
150.44	160.02	INEQUIGRANULAR PLAGIOCLASE + HORNBLENDE DIORITE Weakly chloritic, 0 to trace % pyrite; equant, stubby hornblende and lath- like plagioclase, both up to 1 cm.							
	160.02	Е. О. Н.							

RECOVERY TABLE - DRILL HOLE PX-92-17

FROM	ТО	RECOVERY (%)	FROM	то	RECOVERY (%)	FROM	то	RECOVERY (%)
								· • · · · · · · · · · · · · · · · · · ·
0.00	3.05	0.00	55.78	56.39	93.44	135.64	138.68	91.12
3.05	3.35	56.67	56.39	59.13	102.92	138.68	141.73	101.64
3.35	5.49	99.07	59.13	59.44	83.87	141.73	144.78	100.00
5.49	6.10	81.97	59.44	59.74	96.67	144.78	147.82	98.03
6.10	6.71	68.85	59.74	60.20	54.35	147.82	149.66	91.30
6.71	7.32	68.85	60.20	62.48	9 9.56	149.66	152.70	100.00
7.32	8.23	80.22	62.48	64.31	98.36	152.70	155.75	99.34
8.23	8.69	54.35	64.31	64.92	90.16	155.75	157.28	105.88
8.69	11.43	107.66	64.92	66.45	96.73	157.28	160.02	89.42
11.43	12.34	100.00	66.45	68.28	97.27			
12.34	14.48	85.98	68.28	69.19	100.00			
14.48	15.70	73.77	69.19	71.63	93.03			
15.70	17.22	89.47	71.63	74.52	91.00	I.		
17.22	18.29	79.44	74.52	77.57	100.00			
18.29	20.12	95.08	77.57	80.31	101.82			
20.12	22.86	96.3 5	80.31	81,69	101.45			
22.86	24.69	107.65	81.69	83.82	89.20			
24.69	25.76	91.59	83.82	86.87	101.64			
25.76	26.21	100.00	86.87	89.92	100.00			
26.21	26.52	106.45	89.92	92.96	96.05			
26.52	27.13	75.41	92.96	95.10	106.54			
27.13	28.80	93.41	95.10	98.30	91.25			
28.80	30.48	101.19	98.30	101.04	101.46			
30.48	32.01	93.46	101.04	104.08	96.05			
32.01	33,99	88.38	104.08	106.53	100.00			
33.99	35.05	100.00	106.53	108.20	100.00			
35.05	36.88	97.27	108.20	110.64	100.00			
36.88	38.10	90.16	110.64	111.25	100.00			
38.10	40.69	9 2.66	111.25	113.84	83.78			
40.69	41.30	108.20	113.84	115.37	100.00			
41.30	43.59	100.00	115.37	116.13	100.00	:		
43.59	45.87	89.91	116.13	117.35	100.82			
45.87	46.18	122.58	117.35	120.40	99.34			
46.18	47.24	110.38	120.40	122.53	93.90			
47.24	48.46	100.00	122.53	124.36	101.09			
48.46	50.29	85.25	124.36	125.12	113.16			
50.29	53.19	86.90	125.12	127.25	87.32			
53.19	54.10	57.14	127.25	128.78	90.20			
54.10	54.41	38.71	128.78	130.30	97.37			
54.41	54.71	50.00	130.30	132.59	99.56			
54.71	55.78	74.77	132.59	135.64	100.00			

HOLE: PX-92-18

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PROPERTY DISTRICT	Phoenix Greenwood	DATE LOGGED LOGGED BY	June 1992 M. Caron	EASTING NORTHING	93+00 E 102+00 N	Depth	Method	Azimuth	Dip
CLAIM No. STARTED	New York (L.901) June 27, 1992	DRILLED BY CORE LOCATION	Beaupré Drilling KRR Core Storage	ELEVATION COLLAR SURVI	1405 Y none	0.00	Clino	270	65.0
COMPLETED	June 28, 1992	DOWNHOLE SURVEYOR SURVEY INSTRUMENT	Beaupré Acid Dip Test	LENGTH UNITS CORE SIZE	127.16 metres NQ	129.60	Acid		60.0
PURPOSE	To test IP anomaly "A".								
COMMENTS	Anomaly explained by al copper anomaly.	bundant pyrite in diorite, weak	SIGNED BY	(M. Caron)					

	S	ASSAY SUMMARY				
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH AV in metres Au p	ERAGE pb Cuppm
0.00 2.4 2.74 49.4	OVERBURDEN BLEACHED DIORITE		· <u> </u>		No significant assay	5
49.48 61.7	3-5% pyrite. ALTERED DIORITE Potash altered diorite; k-spar + biotite.					
61.77 65.3 65.38 81.0	B PULASKITE (Tertiary) ALTERED DIORITE			Į		
81.08 86.29 86.29 86.94	MARBLE FELDSPAR PORPHYRY 3-10% pyrite.					
86.94 106.8 106.86 114.4	6 MARBLE 6 FINE GRAINED DIORITE					
114.46 130.2 130.27 133.3	MARBLE PULASKITE (Tertiary)					
133.38 137.10 137.10	5 MARBLE 5 E.O.H.					

HOLE: PX-92-18

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INTE	RVAL		DESCRIPTION		<u> </u>		SAN	IPLE	ASS	SAYS
FROM	то			No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
0.00	3.05	OVERBURDE	N							
2.74	49 .48	ALTERED DIC Medium graine matrix; mafic replaced by med	ALTERED DIORITE Medium grained, hazy feldspar phenocrysts set in a fine grained, light grey- matrix; mafic minerals (amphibole or pyroxene?) seem to be largely replaced by medium grained pyrite clots; weakly chloritic throughout, ligh grey-green, hard (siliceous?) generally fairly strongly broken, feldspar randomly oriented and probably altered to sericite and clay							
		randomly orie	need and probably altered to sericite and clays	21820	4.00	6.00	2.00	Bleached diorite, 3 to 5% pyrite in clots.	36	271
		(platy?) minera pyrite cross-sec	l (chlorite), both replacing amphiboles (most likely tabular tion)	21821	8.00	10.00	2.00	Bleached diorite, 2 to 6% pyrite in clots and stringers, minor calcite and hematite veinlets.	26	207
i		12.00 - 13.20	Breccia, cut by veinlets to 1 cm with quartz + tremolite or actinolite (locally) generally angular clasts in silica + pyrite matrix, pyrite up to 10% locally.	21822	12.00	14.00	2.00	Bleached diorite, 3 to 10% pyrite in clots, local breccia with quartz + tremolite or wollastonite.	42	345
		17.60 - 18.02	Pyritic breccia, 5-6% pyrite, some as finer grained pyrite in the matrix.	21823	16.00	18.00	2.00	Bleached diorite, 2 to 6% pyrite, local pyritic breecia.	12	110
				21824	20.00	22.00	2.00	Bleached diorite, 3 to 8% pyrite in clots with fine black chlorite, minor enidote after feldenars	<5	27
	1	1		21825	24.00	26,00	2.00	Same as sample 21824, 4 to 6% pyrite, epidote more abundant from 25.00 to 26.00.	10	67
				21826	28.00	30.00	2.00	Bleached diorite, 2 to 7% pyrite in clots, sparse epidote clots throughout	7	67
		;		21827	32.00	34.00	2.00	Strongly epidotized bleached diorite, 3 to 5% pyrite.	25	4
		39.42 - 49.48	Strong epidote replacing feldspars in narrow veinlets and	21828	36.00	38.00	2.00	Same as sample 21827,	9	4
			in irregular patches to 2 cm.	21829	40.00	42.00	2.00	Bleached diorite, strong 1 cm. epidote clots, 4 to 8% pyrite.	11	7
				21830	44.00	46.00	2.00	Same as sample 21829.	11	17
				21831	48.00	49.48	1.48	Bleached diorite, very strong epidote, 3 to 7% pyrite.	8	119
49.48	61.77	MEDIUM GRA Abundant fine sparse hornble throughout (aft weakly chloritiz	AINED DIORITE grained secondary biolite, minor matrix alteration to k-spar, nde laths to 5 mm (primary), modest amounts of epidote ter larger tabular feldspar crystals, at least in part), interval zed throughout, trace disseminated pyrite.							

HOLE: PX-92-18

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INTE	RVAL	DESCRIPTION				SAM	IPLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
		49.48 - 55.00 Chilled contact, with dark, fine grained matrix and larger more abundant hornblende phenocrysts.	21832 21833	52.00 56.00	54.00 58.00	2.00 2.00	Potassically altered diorite, trace py. Same as sample 21832.	21 <5	176 27
61.77	65.38	PULASKITE Pink feldspathic groundmass, sparse blocky k-spar phenocrysts to 1 cm, sparse calcite veinlets, upper contact @ 43° tca, lower contact @ 35° tca, contacts slightly chilled over 0.25 m.							
65,38	81.08	DIORITE Same diorite as 49.48 to 61.77, strong fine secondary biotite throughout, locally abundant small clots of yellow/brown garnet or idocrase, sparse chloritic fractures, trace disseminated pyrite. local minor epidote.	DRITE ne diorite as 49.48 to 61.77, strong fine secondary biotite throughout, ally abundant small clots of yellow/brown garnet or idocrase, sparse portice fractures, trace disseminated pyrite, local minor epidote. 21834 70.00 72.00 2.00 E 21835 74.00 76.00 2.00 E 21835 74.00 76.00 2.00 E		Diorite with strong secondary biotite plus groundmass garnet or idocrase, trace pyrite.	<5	32		
		74.00 - 78.00 Flooded with k-spar.			Diorite with strong k-spar overprint, trace pyrite.	<5	27		
81.08	86.29	MARBLE Massive, fine grained, white to light grey, sparse pyrite along fractures, local k-spar veins to 5 cm, local chloritic micro-breccias (small faults).	21836	83.00	85.00	2.00	Marble, minor pyrite.	8	23
86.29	86.94	FINE GRAINED FELDSPAR PORPHYRY DIKE Grey-green groundmass, epidotized feldspar phenocrysts, 3-10% pyrite disseminated in irregular clots and along contacts (@ 50° tca).	21837	86.29	86.94	0.65	Feldspar porphyry, 3 to 10% pyrite.	33	72
86.94	106.86	MARBLE Generally fine grained, white, massive, sparse chlorite fractures, sparse pyrite along fractures, 2 cm massive pyrite band at 91.10. 100.10 - 100.60 Fault breccia, small angular clasts, dark calcareous matrix.	21838 21839 21840 21841 21842	88.00 92.00 96.00 100.00 104.00	90,00 94.00 98.00 102.00 106.00	2.00 2.00 2.00 2.00 2.00	Marble, sparse pyritic fractures. Marble, sparse pyritic fractures. Marble, sparse pyritic fractures. Marble, sparse pyritic fractures. Marble, sparse pyritic fractures.	9 35 18 28 <5	18 35 23 15 3
106.86	114.46	FINE GRAINED DIORITE Equigranular, moderately to strongly epidotized and chloritized throughout, sparse fracture pyrite.	21843 21844	108.00 112.00	110.00 114.00	2.00	Fine grained diorite, sparse fracture pyrite. Same as sample 21843.	26 82	15 9
114.46	130.27	MARBLE Fine grained, massive, white to light grey, minor pyrite along chloritic fractures.	21845 21846 21847 21848	116.00 120.00 124.00 128.00	118.00 122.00 126.00 130.00) 2.00) 2.00) 2.00) 2.00] 2.00	Marble, minor pyrite. Marble, minor pyrite. Marble, minor pyrite. Marble, minor pyrite.	11 37 <5 <5	5 17 14 4

HOLE: PX-92-18

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INTE	RVAL	DESCRIPTION	DESCRIPTION SAMPLE						
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
130.27	133.38	PULASKITE Fine grained grey-pink feldspar + biotite groundmass, k-spar phenocrysts to 5-6 mm.							
133.38	137.16	MARBLE Fine grained, white to light grey, minor pyrite along pyritic fractures.	21849	134.00	136.00	2.00	Marble, minor pyrite.	65	9
	137.16	Е. О. Н.							
	-								
	1								
							<u> </u>		<u></u>

RECOVERY TABLE - DRILL HOLE PX-92-18

FROM	то	RECOVERY (%)	FROM	TO	RECOVERY (%)
	<u>,</u>			· · · · · · · · · · · · · · · · · · ·	
0.00	2.74	0.00	44.20	46.48	100.00
2.74	3.35	57.38	46.48	49.53	96.07
3.35	4.27	85.87	49.53	50.6	96.26
4.27	4.72	84.44	50.60	53.64	98.68
4.72	5.49	71.43	53.64	56.7	100.00
5.49	6.55	87.74	56.70	59.74	96.05
6.55	7.92	83.21	59.74	62.79	100.00
7.92	8.22	120.00	62.79	65.84	102.30
8.22	9.6	92.03	65.84	68.88	101.32
9.60	10.97	92.70	68.88	71.93	100.00
10.97	11.73	67.11	71.93	74.98	100.66
11.73	12.95	94.26	74,98	76.2	146.72
12.95	14.02	105.61	76.20	78.03	62.84
14.02	15.09	67.29	78.03	78.33	103.33
15.09	16.15	47.17	78.33	79.56	90.24
16.15	16.61	43.48	79.56	81.08	67.76
16.61	17. 9 8	83.21	81.08	84.12	100.33
17,98	18.44	95.65	84.12	87.17	96.07
18.44	19.51	94.39	87.17	90.22	100.00
19.51	19.96	66.67	90.22	93.27	95.74
19.96	20.88	81.52	93.27	96.32	101.64
20.88	23.16	97.81	96.32	99.21	97.23
23.16	23.93	84.42	99.21	102.26	100.00
23.93	26.21	78.95	102.26	105.31	99.67
26.21	26.82	67.21	105.31	108.2	102.08
26.82	27.89	100.00	108.20	110.34	101.87
27.89	28.35	100.00	110.34	111.56	97.54
28.35	29.11	78.95	111.56	114.6	98.68
29.11	29.72	85.25	114.60	117.66	101.31
29.72	31.09	78.83	117.66	120.7	99.67
31.09	32.21	90.18	120.70	123.74	100.33
32.21	32.92	57.75	123.74	125.8	100.00
32.92	33.99	76.64	126.80	129.84	99.01
33.99	35.37	92.03	129.84	131.37	88.24
35.37	36.42	85.71	131.37	132.89	98.68
35.42	37.95	92.81	132.89	135.02	106.57
37.95	39.17	94.26	135.02	137.16	97.20
39.17	40.69	92.11			
40.69	42.21	86.84			
42.21	43.59	108.70			
43.59	44.2	83.61			

HOLE: PX-92-19

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PROPERTY DISTRICT	Phoenix Greenwood	DATE LOGGED LOGGED BY	June 1992 M. Caron		EASTING NORTHING	98+74 E 107+81 N	Depth	Method	Azimuth	Dip
CLAIM No. STARTED COMPLETED	Little Brown (L.2390) June 29, 1992 June 29, 1992	DRILLED BY CORE LOCATION DOWNHOLE SURVEYOR SURVEY INSTRUMENT	Beaupré Drilling KRR Core Storage Beaupré Acid Dip Test		ELEVATION COLLAR SURVEY LENGTH UNITS CORE SIZE	1295 none 69.95 metres NQ	0.00	Clino		90.0
PURPOSE	To test IP anomaly "F,F	?".								
COMMENTS	Encountered Knob Hill (shallow depth.	Group cherts and volcanics at	SIGNED BY	(M. Caron)						

	SUMMARY LOG				ASSAY SUMMARY				
INTER From	RVAL To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au ppb Cu ppm		
0.00	5.49	OVERBURDEN				No significar	t assays		
5.49	26.60	ANDESITE FLOWS (?) Eholt Ecompation or Reseland Group							
26.60	34.45	KNOB HILL GROUP							
34.45	47.55	White chert. KNOB HILL GROUP							
1		Volcanic tuffs or flows.							
47.55	51.69	BIOTITE HORNBLENDE PORPHYRY							
51.69	53.50	KNOB HILL GROUP							
52.50	66 0E	VOICARIC FOCKS, SAME AS 34.45 - 47.55.				l			
33.30	33.83	Brecciated white chert.							
55.85	57.08	PULASKITE (Tertiary)				1			
57.08	58.40	KNOB HILL GROUP	1 1		}	ł	1		
	•	Brecciated white chert.							
58.40	60.18	HORNBLENDE PORPHYRY							
60.18	69.95	KNOB HILL GROUP							
		Volcanic rocks, same as 34.45 - 47.55.	1						
	69 .96	E.O.II.							
			1		Į	1	1		
							1		
						1			

HOLE: PX-92-19

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INTE	RVAL	DESCRIPTION		SAMPLE				ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Аи, рръ	Си, ррт
0.00	3.05	OVERBURDEN						:	
5.49	26.60	MEDIUM GRAINED ANDESITE FLOWS (JURASSIC EHOLT FORMATION) (Equivalent to Rossland Volcanics?); massive, hornblende phenocrysts throughout, generally weakly chloritized, <1% fine grained disseminated pyrite throughout, local epidote + pyrite (coarser) veining, as described in detail below, local weak k-spar flooding of matrix, network of very fine calcite veinlets.							
		5.49 - 6.09Broken rubble.6.30 - 10.00Epidote + pyrite veins cross-cutting andesite; veins from 1 mm to 3 cm (vein at 8.35), medium to coarse grained	21850	6.00	8.00	2.00	Chloritized andesite cut by epidote + pyrite veins, 1 to 2% pyrite.	<5	95 37
		pyrite, bright green epidote, total pyrite in interval is 2- 3%.	21851	8.00	10.00	2.00	+ pyrite vein at 8.35, 2 to 3% pyrite.	< >	37
			21852	12.00	14.00	2.00	Chloritized andesite, <<1% disseminated pyrite.	<5	42
ļ			21853	16.00	18.00	2.00	Same as sample 21852.	<5	31
			21854	20.00	22.00	2.00	chloritized andesite, <1% disseminated pyrite, sparse pyrite clots to 1 cm.	<>	44
			21855	24.00	26.00	2.00	Chloritized and epidotized (after feldspar?) and esite with <0.5 to 1% disseminated pyrite.	<5	37
26.60	34.45	KNOB HILL GROUP CHERT							
		Chert, white to very light grey, broken and rehealed with silica throughout, upper contact is 10 cm fault + breccia with iron oxides, sparse chlorite + pyrite along some fractures, generally < 0.5% pyrite.							
		27.32 - 28.15 Brecciated zone with 1-2% pyrite along fractures (some very fine grained and dark) and disseminated.	21856	27.00	29.00	2.00	Brecciated white chert, <0.4 to 2% pyrite along fractures.	17	95
		30.55 - 31.20 Fault breccia with weak iron oxide staining.	21857	31.00	33.00	2.00	Same as sample 21856, <0.5% pyrite.	<5	36
		33.75 - 34.45 Fault breccia (?) poorly cemented with 1-3% pyrite and black chlorite.	21858	33.75	34.45	0.70	Fault breccia (?) in chert, 1 to 3% pyrite with black chlorite.	<5	76
34.45	47.5 5	KNOB HILL GROUP FINE GRAINED VOLCANIC FLOWS (?)				• • •			
		Generally light grey, some thin interbedded white cherts, irregular wispy tan clay bands throughout, local chlorite, 1-4% disseminated, fracture and stringer pyrite. [Originally described as acid flows or rhyodacite	21859 21860	35.00 39.00	37.00 41.00	2.00	Volcanic, 3-4% py. in clots, stringers. Volcanic and minor chert, 2 to 5% pyrite, disseminated and in stringers.	10 20	218 236

HOLE: PX-92-19

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1

INTE	RVAL	DESCRIPTION	SAMPLE				IPLE	ASSAYS	
FROM	то		No.	From	То	Length %Rec	Description	Au, ppb	Cu, ppm
		subsequent chemical analysis of similar looking rocks from hole PX-92-11 in the Knob Hill Group have shown them to be altered (hydrated, carbonated) tholeiitic basalts.]	21861	43.00	45.00	2.00	Same as sample 21860, more chloritic, minor hematite plus calcite, <1% pyrite.	11	152
47.55	51.69	BIOTITE HORNBLENDE DIKE Mafic, abundant fine biotite and lesser 1-3 mm hornblende laths in white fine grained feldspathic matrix - weakly chloritized.							
		49.90 - 51.69 Chilled margin with 2-3 mm stubby augite or hornblende phenocrysts set in fine grained grey-pink matrix, <<1% disseminated pyrite.							
51.69	53.50	KNOB HILL GROUP FINE GRAINED VOLCANIC FLOWS (?) Same as 34.45 - 47.55, flow and banding (?) @ 30° tca, minor fracture pyrite, trace red hematite.	21862	52.00	53.00	1.00	Volcanic, minor pyrite.	<5	91
53.50	55.85	KNOB HILL GROUP CHERT White chert, brecciated and healed with silica, <0.5% pyrite.	21863	54.00	55.00	1.00	Chert breccia, <0.5% pyrite.	<5	43
55.85	57.08	PULASKITE (TERTIARY) K-spar + biotite + hornblende phenocrysts in a fine to medium grained salmon-pink feldspathic matrix, <0.5% disseminated pyrite, narrow (10-20 cm) chilled margins.							
57.08	58.40	KNOB HILL GROUP WHITE CHERT BRECCIA Strongly chloritic, 0.5-2% pyrite in clots.	21864	57.08	58.40	1.32	Chert breccia, 0.5 to 2% pyrite.	<5	39
58.40	60.18	HORNBLENDE PORPHYRY 2-4 mm hornblende or augite phenocrysts dark grey matrix, strong network of fine calcite veinlets, hornblende/augite chloritized, minor red hematite patches.							
60.18	69 .95	KNOB HILL GROUP FINE GRAINED VOLCANIC FLOWS (?) Volcanic flows with lesser white chert interbeds, flow banding or bedding in volcanics at 35° tca, banding outlined by pale tan clay wisps, $<1\%$.							
		60.18 - 60.85 Fault breecia?	21865 21866	61.00 65.00	63.00 67.00	2.00 2.00	Brecciated volcanic, <1% pyrite. Same as sample 21865.	22 50	16 74
	69.95	E. O. H.							

RECOVERY TABLE - DRILL HOLE PX-92-19

FROM	то	RECOVERY (%)
0.00	5.49	0.00
5.49	6.09	36.67
6.09	7.92	53.55
7.92	10.36	100.00
10.36	11.58	100.00
11.58	13.41	96.72
13.41	14.63	89.34
14.63	17.22	102.32
17.22	18.75	98.04
18.75	20.73	102.53
20.73	22.86	96.71
22.86	25.91	101.64
25.91	28.19	90.35
28.19	29.87	88.10
29.87	32.16	87.77
32.16	34.29	80.28
34.29	35.97	73.21
35.97	38.4	87.65
38.40	40.23	108.20
40.23	42.07	100.00
42.07	44.04	97.46
44.04	45.11	96.26
45.11	46.63	81.58
46.63	48.15	89.54
48.16	51.21	101.97
51.21	54.25	97.04
54.25	57.3	92.79
57.30	60.35	98.69
60.35	61.72	104.38
61.72	63.4	98.21
63.40	66.45	99.02
66.45	67.36	73.63
67.36	69.19	101.09
69.19	69.95	94.74
•		

APPENDIX 2

GEOCHEMICAL ANALYSIS FOR GOLD

Fire Assay Preconcentration finished by Atomic Absorption Spectroscopy:

A thirty gram sample is weighed into a fire assay crucible. The fire assay preconcentration consists of a standard litharge fusion followed by cupellation of the lead button to obtain the precious metals concentrated into a tiny (about 3 mg) silver prill. Bondar-Clegg has adopted this technique as our primary method for the preconcentration of gold and other precious metals because of its proven track record and sensitivity. The silver prill is dissolved in aqua regia and the diluted solution is then aspirated into the AAS flame for measurement of the gold concentration.

GEOCHEMICAL ANALYSIS FOR COPPER

Atomic Absorption Spectroscopy:

Copper is analyzed routinely by Atomic Absorption Spectroscopy (AAS) following the dissolution of the sample with aqua regia. AAS is an instrumental method of analysis in which a sample that has been put into an aqueous solution is aspirated into the flame of the instrument for measurement of the concentration of the element(s) of interest. A light source emits light at the wave length of the element to be measured in a beam that passes through the flame. The atoms of the element in the flame absorb the light in proportion to the concentration of the element in the sample solution. This absorption is compared to those measured when a series of standard solutions have been aspirated in order to determine the concentration of the element in the sample solution.

ASSAY ANALYSIS FOR GOLD

Fire Assay Procedure (all samples over 1000 ppb Au on original analysis re-analyzed by this method):

A prepared sample of one assay ton (29.166 grams) is mixed with a flux. The proportions of the flux components (the litharge, soda, silica, borax glass and flour) are adjusted depending upon the nature of the sample. Sliver is added to help in the collection of the gold. The samples are fused at 1950 deg. F until a clear meit is obtained. The 30 - 40 gram lead button that is produced contains the preclous metals and is then separated from Heating in the cupellation furnace separates the lead the slad. from the noble metals. The precious metal beads that are produced are transferred to test tubes and dissolved with aqua regia. This solution is analyzed using Atomic Absorption Spectroscopy by comparing the absorbance of these solutions with that of standard solutions. In the case of high grade samples (greater than 0.20 OPT), the precious metal bead is parted in dilute HNO1 acid to dissolve the silver and the remaining gold is weighed.

As part of routine quality control, a dupilcate analysis is run for 2 out of each batch of 24 samples, in addition to running a standard. These total approximately 24% of the samples. Also, all samples which are over 0.30 OPT on the original fusion are run again to verify the results. If a sample gives erratic results (eg: 0.10, 0.020, 0.30 OPT), this is indicated on the report. It is suggested that a new split be taken from the reject for preparation and analysis by metallics sieve procedure. Certified standards and in-house pulp standards as well as synthetic standards are run with each report or batch of samples. APPENDIX 3

KNOB HILL GROUP ASSESSMENT - SEPTEMBER, 1992

hole #	claim name	depth (m.)	no. assays
	به مر به ۵ به مر		
PX-92-13	Marshall	180.75	75
PX-92-14	Marshall	245.36	71
PX-92-15	Marshall Fr.	157.88	31
PX-92-16	Marshall	149.05	36
PX-92-17	Timer Fr.	160.02	72
PX-92-18	New York	137.16	30
PX-92-19	Little Brown	69.95	17
	total metres:	1100.17	
	total assays:		332

costs:

_

drilling:

	1100.17 m. drilling @ \$46.98 reclamation charge (crawler tractor) 1 casing shoe @ \$285.40	\$51,686.33 \$146.25 \$285.40
	subtotal:	\$52, 117.98
assays:	332 assays @ \$14.87 (includes freight)	\$4, 934.90
	total:	\$57, 052.88

IRONSIDES GROUP ASSESSMENT - SEPTEMBER, 1992

hole #	claim name	depth (m.)	no. assays
\$	دی کند سر می ر اند سر می		
PX-92-11	Montezuma	121.92	71
PX-92-12	Glit Edge	152.40	42
	total metres:	274.32	
	total assays:		113

costs:

drilling:

	274.32 m. drilling @ \$46.98 reclamation charge (crawler tractor)	\$12,889.37 \$146.25
	subtotal:	\$13, 035.62
assays:		
	113 assays @ \$13.92 (includes freight)	\$1, 573.40
	total:	\$14, 609.02

APPENDIX 4

Certificate of Author

List of Qualifications - Michael E. Caron

B.Sc. 1974 - University of British Columbia (Hons., Geology)

List of Publications

B.Sc. thesis - University of British Columbia (unpublished)

Relevant Experience

- 1974 to 1985 field geologist, Duval Corporation, extensive exploration work in the western and southeastern United States.
- 1985 to 1992 senior geologist, Battle Mountain Exploration Company, exploration carried out primarily in Nevada and British Columbia

Professional Affiliation

Professional Geoscientist, Association of Professional Engineers and Geoscientists of B.C., Certificate No. 18224

Michael E. Caron



4529---- 4200-• 4430 11 • 4530 4500_ = 9650 -4600. -4550 06 + 25N 106 + 25N - PX-92-13 11 MONTEZUMA (4710) 53 7 0 LAKE



LEOLOGICAL BRANCH ASSESSMENT REPORT 22,653

BATTLE MOUNTAIN (CANADA) INC.

Drill Hole Collars (1992 program)

PROJECT No.	75-96	DATA BY
NTS	826/2	DRAWN BY MEC
DRAWING No	2	DATE
SCALE 1:50	00 。	100 200 300 metres

BATTLE MOUNTAIN GOLD COMPANY


GEOLOGICAL BRANCH ASSESSMENT REPORT

22,653

BATTLE MOUNTAIN (CANADA) INC.

Drill Hole PX-92-11 cross-section BULLY MOUNTAIN

scale 1:500	•	10	20	30 metres
DRAWING No 3	2.03	DATE		/92
NTS 82E/2	2	DRAWN B	ay m	EC
PROJECT No. 75-96		DATA BY		











GEOLOGICAL BRANCH ASSESSMENT REPORT







E V S Cu (ppb Am) SS Cu (ppm Gu)	CEOLOGICA ASSESSMEN 222,1	AL BRANCH NT REPORT	
4600 elevation ((~~1)		
14600			
4680			
4600			
\$460			100
4406			
4350			
4500			
42.50			
4200			
4160	BATTLE MOUNTAIN	I (CANADA) INC.	-
4100		BATILE MOUN GOLD COMP	TAIN
	Drift F	ross-section	
	PROJECT No. 75-96	DATA BY	-
	DRAWING No 8 SCALE 1:500	DATE 11/92	
	1.000	10 20 30 metre	\$





