LOG NO: FFB 1	RD.
ACTION:	
FILE NO:	

DIAMOND DRILLING REPORT

FOR THE SNOWSHOE GROUP OF CLAIMS,

PHOENIX PROPERTY

N.T.S. 82 E/2

Lat: 49° 06' North

Long: 118° 35' West

Owned By: Kettle River Resources Ltd. 330 Copper St., Box 130 Greenwood, B.C. VOH 1J0

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

Author: Michael E. Caron, P. Geo.

Date: February, 1992

GEOLOGICAL BRANCH ASSESSMENT REPORT

22.112

SUMMARY

During April and May, 1991, eight diamond drill holes, for a total of 763 metres of drilling, were completed on claims within the Snowshoe Group of 93 units. This claim group is part of the Battle Mountain (Canada) Inc.'s Phoenix project, located near Greenwood in south-central British Columbia. This project includes the abandoned Phoenix open pit copper skarn mine, as well as numerous smaller occurrences and mine workings. These eight drill holes were located to the immediate east and southeast of the abandoned open pit mine and were drilled to test soil and rock geochemical anomalies discovered during field work carried out in 1990. The geochemical anomalies fell into two distinct groups; those anomalous in gold plus copper, and those primarily anomalous in gold alone.

Drilling has indicated that copper plus gold geochemical anomalies in this area are directly related to thin, mineralized skarn zones overlying much thicker intersections of weakly mineralized sharpstone (chert pebble) conglomerate. This drilling has also indicated that gold-only geochemical anomalies are correlated to narrow, widely spaced pyritic shears and veins.

Surface soil and rock geochemical anomalies in the area of the present work are considered to have been tested in considerable degree by this drilling campaign. Results were not strongly positive and no further drilling in this particular area is planned.

TABLE OF CONTENTS

INTR	ODUCTI	ON .	•••	•	•••	•	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	Page	1
LOCA	TION, Locat Topog Clima	TOPOG ion a raphy te an	nd Ad and	cces Lai	ss: nds:	car	· e:	•	•	•	•	•	•	•	•	•	•	•	:	•	•	Page Page	1 2
PROPI	ERTY		• •	•	•••			•	•		•		•	•	•	•	•	•		•		Page	2
EXPL	ORATIO	N HIS	TORY	•	• •	•				•	•	•	•		•	•		•	•	•		Page	3
SUMM	ARY GE	OLOGY	AND	MIN	NER	AL	DE	EPC	SI	T	3	•	•	•	•	•	•	•	•		•	Page	4
1991	DRILL Purpo Techn Drill Loggi Geoch	se: . ical : Hole ng an	 Detai s: . d San	ils npli	of 	th Pr	ie	Dr	il ur	li	.ng	, I , I	Pro	ogi	an	1:	•	•	• • •	•	• • •	Page Page Page Page	7 7 8 8
	Core Inter	Stora	ge:																			Page	9
DISCU	JSSION Drill Drill Drill Drill Drill Drill Drill Drill	Hole Hole Hole Hole Hole Hole	PX91 PX91 PX91 PX91 PX91 PX91 PX91 PX91	L-0] L-02 L-03 L-04 L-05 L-05	L: 2: 3: 5: 5:		• • • •	•	• • • •	• • • •		• • • •	• • • •	• • • •	• • • •	• • • • •	• • • •	• • • •	• • • •	• • • •		Page	9 9 10 10 11 11
CONCL	LUSION	s	• •		•	•	•	•	•	•	•		•	•	•	•	•	•		•	•	Page	12
LIST	OF REI	FEREN	CES	• •	•	•		•	•	•	•	•	•	•	•	•		•		•		Page	14

APPENDICES

APPENDIX 1 . . Diamond Drill Logs APPENDIX 2 . . Laboratory Procedures APPENDIX 3 . . Statement of Costs APPENDIX 4 . . Author's Statement of Qualifications

TABLES

TABLE	1	·	•	•	Claims	List	: (following	Page 2)		
TABLE	2	•		•	Drill	Hole	Parameters	(following	Page	8)

FIGURES

FIGURE	1	•	•	•	Provincial Scale Location Map (following Page 1)
FIGURE	2		•	•	1:250,000 Location Map (following Page 1)
FIGURE	3	•			Regional Geology (following Page 4)

PLATES (in pocket)

PLATE	1	•			Claim Map (1:10,000 - W 1/2)
PLATE	2				Claim Map $(1:10,000 - E 1/2)$
PLATE	3			•	Drill Hole Location Map (1:2,500 - sheet 5.2.1)
PLATE	4		•	•	Drill Hole Location Map (1:2,500 - sheet 2.3.4)
PLATE	5	•	•		Cross-Section (1:250 - Drill Holes PX91-01, 02)
PLATE	6	•	•	•	Cross-Section (1:250 - Drill Hole PX91-03)
PLATE	7				Cross-Section (1:250 - Drill Hole PX91-04)
PLATE	8	•			Cross-Section (1:250 - Drill Hole PX91-05)
PLATE	9	•			Cross-Section (1:250 - Drill Hole PX91-06)
PLATE	10				Cross-Section (1:250 - Drill Hole PX91-09)
PLATE	11				Cross-Section (1:250 - Drill Hole PX91-10)

INTRODUCTION

The Snowshoe Group of claims consists of 93 units (crown granted claims, two-post claims and modified grid claims) and is part of the larger Phoenix property located near Greenwood in south-central British Columbia (see Figure 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.

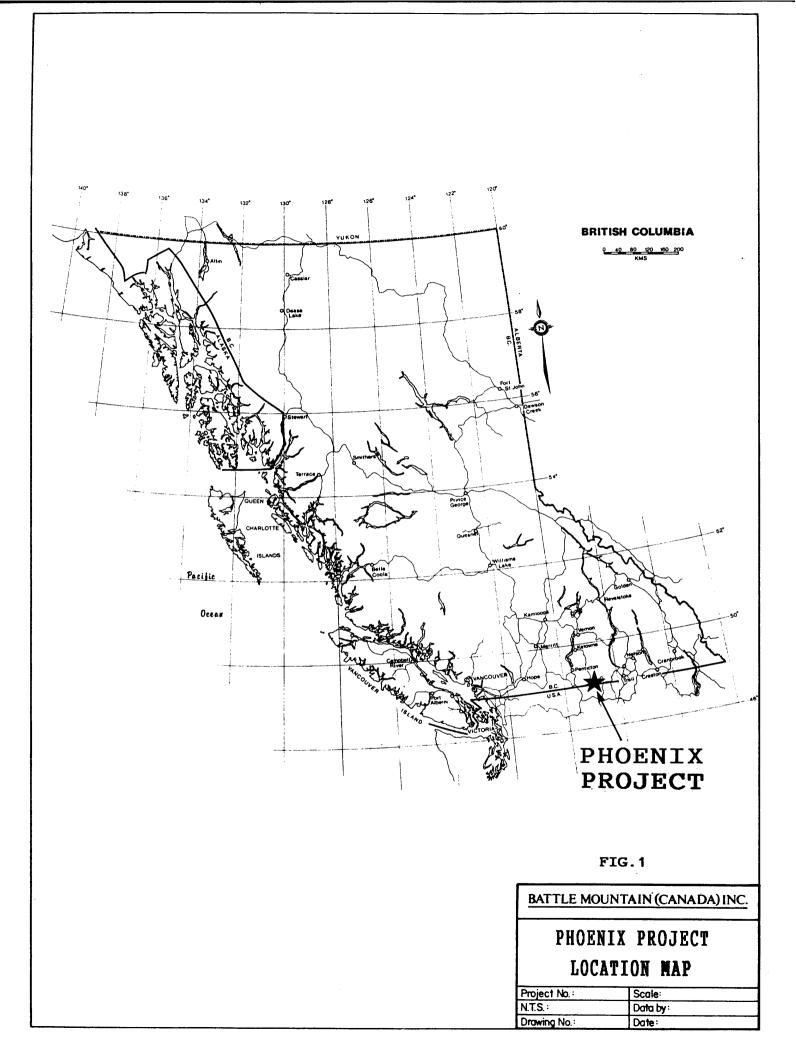
Field work completed during 1991 on claims within the Snowshoe Group includes eight NQ diamond drill holes totalling 763 metres. Drilling was completed during April and May. Drill core was logged and split for assay at Battle Mountain (Canada) Inc.'s Greenwood field office. Analysis for Au and Cu was 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.

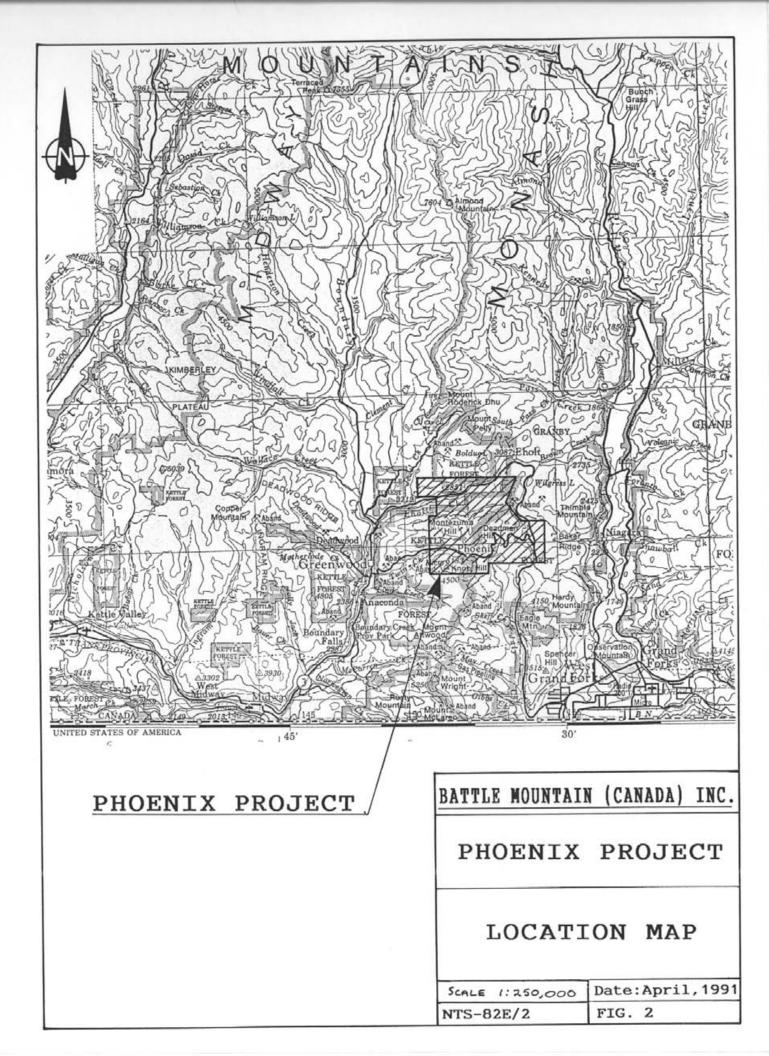
LOCATION, TOPOGRAPHY, CLIMATE

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 82E/2 at latitude 49°06' north and longitude 118°35' west (see 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 approximately 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 comprises a rolling upland. Old tailings ponds and mine dumps are abundant in the area, particularly near the Phoenix open pit. Numerous 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 timber are found in wetter areas, particularly on northerly facing slopes above the Eholt Valley.

PROPERTY

Following is a list (Table 1) of claims included in the Snowshoe Group that are held by Battle Mountain (Canada) Inc. under option from Kettle River Resources Ltd. or are staked in the name of Battle Mountain (Canada) Inc. These claims lie within the Greenwood Mining Division on map sheet 82 E/2 and consist of 15 crown granted claims, 54 two-post claims and 2 modified grid system claims of 12 units each.

TABLE 1 - CLAIMS LIST (SNOWSHOE GROUP)

CLAIM NAME	NEW TITLE NUMBER	OLD TITLE NUMBER	UNITS	CLAIM TYPE	EXPIRY DATE
BANK OF ENGLAND		1235	1	CG	
NUGGET		1257	1	CG	
YELLOW JACKET		1327	1	CG	
FAIRPLAY FR		1328	1	CG	
MIDNIGHT		1809	1	CG	
PHILLIPSBURG FR		1842	1	CG	
ALMA FR		2125	1	CG	
SNOWSHOE FR		3002s	1	CG	
ETHEL VERNE FR		3170	1	CG	
MONARCH		701	1	CG	
PHEASANT		864	1	CG	
SNOWSHOE		891	1	CG	
RAWHIDE		892	1	CG	
CURLEW		893	1	CG	
GOLD DROP		899	1	CG	
SIMPSON	215985	6121	12	L	12/10/2001
BART	215984	6120	12	L	12/13/2001
RAWHIDE FRACTION	216313	14548	1	L	6/12/2001
VAL # 1	216320	16010	1	L	2/20/2001
VAL # 2 FR	216321	16011	1	L	2/20/2001
PAC 1	216322	16130	1	${f L}$	4/03/2001
PAC 2	216323	16131	1	L	4/03/2001
WENDY NO 15 FR	216326	18057	1	L	10/26/2001
VAL # 3 FR	216327	18075	1	L	12/01/2001
PAC NO 9 FR	216328	18259	1	L	6/21/2001
PAC No 10	216329	18260	1	L	6/21/2001
PAC No 11	216330	18261	1	L	6/21/2001
PAC No 12	216331	18262	1	L	6/21/2001
PAC 13	216332	18346	1	L	9/08/2001
PAC 14	216333	18347	1	L	9/08/2001
PAC 15	216334	18348	1	L	9/08/2001
PAC 16	216335	18349	1	L	9/08/2001
BOBCAT No 1	216346	19118	1	L	6/13/2001
BOBCAT No 2	216347	19119	1	L	6/13/2001
BOBCAT No 3	216348	19120	1	L	6/13/2001
BOBCAT No 4	216349	19121	1	L	6/13/2001
PAC # 17	216386	21714	1	L	6/25/2001
PAC # 18	216387	21715	1	L	6/25/2001
PAC # 19 PAC # 20	216388	21716 21717	1 1	L	6/25/2001
PAC # 20 PAC # 21	216389 216390	21718	1	L	6/25/2001 6/25/2001
PAC # 22	216390	21719	1	L L	6/25/2001
PAC # 23	216392	21720	1	L	6/25/2001
PAC # 25	216392	21722	1	L	6/25/2001
PAC # 27	216396	21724	ī	L	6/25/2001
PAC # 29	216398	21726	ī	L	6/25/2001
PAC # 33 FR	216402	21730	ī	Ĺ	6/25/2001
PAC $\#$ 34 FR	216402	21731	ī	L	6/25/2001
BOBCAT # 5	216403	21759	ī	L	7/07/2001
BOBCAT # 6	216405	21760	ĩ	L	7/07/2001
BOBCAT #11 FR	216410	21765	1	L	7/07/2001
			-	-	, , = =

CLAIM NAME	NEW TITLE NUMBER	OLD TITLE NUMBER	UNITS	CLAIM TYPE	EXPIRY DATE
BOBCAT # 12 FR	216411	21766	1	L	7/07/2001
PAC # 35	216412	21767	1	L	7/07/2001
PAC # 41	216426	22144	1	L	11/02/2001
PAC # 44 FR	216429	22147	1	\mathbf{L}	11/02/2001
PAC # 45	216430	22148	1	L	11/02/2001
PAC # 46	216431	22149	1	L	11/02/2001
PAC # 47	216432	22150	1	L	11/02/2001
PAC # 48	216433	22151	1	L	11/02/2001
PAC # 57	216436	24893	1	L	12/19/2001
PAC # 58	216437	24894	ī	L	12/19/2001
VAL 4 FR	214578	3102	1	L	6/18/2001
PAC 60	216643	36625	1	L	6/20/2001
PAC 49	215603	5739	ī	L	4/05/2001
PAC 50	215604	5740	1	L	4/05/2001
PAC 51	215605	5741		L	4/05/2001
PAC 52	215606	5742	1	L	4/05/2001
PAC 53	215607	5743	1	L	4/05/2001
PAC 54	215608	5744	1	L	4/05/2001
PAC 55	215609	5745	ī	L	4/05/2001
PAC 56	215610	5746	ī	L	4/05/2001
			_		-,,

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 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 was begun, 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.

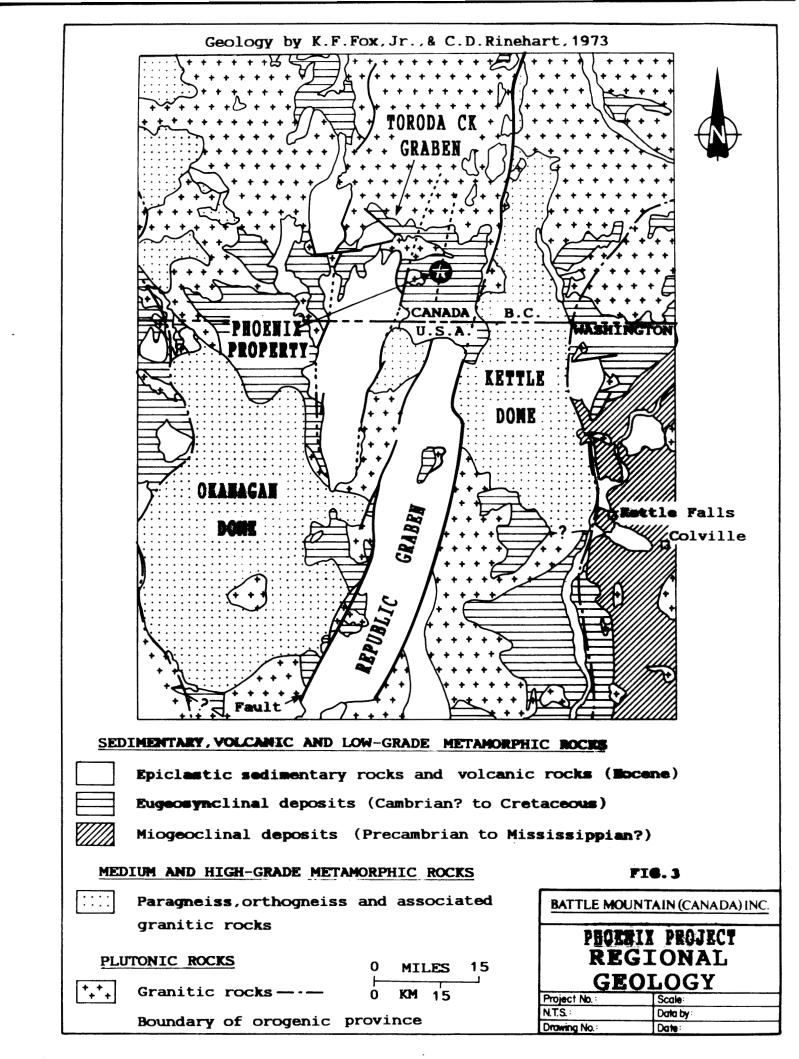
In 1987, Skylark Resources attempted to mine the Sylvester K Zone but abandoned the operation after mining only a few hundred tons of ore.

During 1989 - 1990, Kettle River Resources Ltd. acquired 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.

SUMMARY GEOLOGY AND MINERAL DEPOSITS

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

Palaeozoic 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 Palaeozoic 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 are also included within the Brooklyn formation.

Sparse narrow monzonite to granodiorite dykes may be Cretaceous in age and belong to the regionally extensive Nelson Intrusions. These dykes 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 hypabyssal 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 in the Phoenix 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 throughout the area, 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 sulphides (possibly volcanogenic), to veins and possibly to thrust faults.

The majority of past production at Phoenix has reportedly been from skarns. Total production from Phoenix to date is about 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 sulphide mineralization at Phoenix is represented by the Sylvester K - Marshall area. This area, located a few hundred metres northwest of the Ironsides open pit, contains discontinuous massive pyrite and pyrrhotite lenses near a contact zone between limestone and tuffaceous sediments. These sulphide lenses locally contain as much as 1 opt Au.

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

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

Page 6

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.

1991 DRILLING PROGRAM

A limited program of diamond drilling was carried out during April and May of 1991. Ten diamond drill holes were completed during this program; eight of these holes were collared on claims included within the Snowshoe Group of 93 units (see Plate 1 for drill hole locations).

Purpose:

Diamond drilling at Phoenix was carried out primarily to evaluate soil geochemical anomalies recognized during the 1990 field program (J.R. Deighton et al, Assessment Report - April, 1991). These particular anomalies fall into two classes; those primarily anomalous in gold plus copper, and those primarily anomalous in gold alone. Drill holes PX91-01, PX91-02, PX91-03, PX91-04, PX91-05, PX91-06 and PX91-10 were drilled to test gold plus copper anomalies, while PX91-09 was drilled to test a gold anomaly.

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, a four-wheel-drive water truck and a fourwheel-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. A foreman plowed roads and provided additional support.

Drill Holes:

The following list (Table 2) summarizes pertinent data for each drill hole, including hole number, location coordinates, collar elevation, azimuth, dip and length.

Logging and Sampling Procedures:

Drill core was transported from the drill site to Battle Mountain (Canada) Inc.'s field office in Greenwood for logging and sampling. The core was first measured for core recovery calculations and was then logged in detail by one or more geologists 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 waterbath diamond saw. As a general rule, alternate one metre samples were selected for sampling and geochemical analysis. However, clear lithologic and alteration breaks 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, sulphides and oxides were visually estimated and all 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 and/or 2500 ppm Cu 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).

TABLE 2	(Drill Hole	Parameters)

.

Hole Na.	Coordinates		Claim	Elevation	Length	Dip	Azimuth	Core
	N	E	 	(m)	(m)			Size
	T				r · · · · · · · · ·			
PX91-01	8891.0	10528.5	Snowshoe	1396	92.96	55	270	NQ
PX91-02	8900.0	10449.4	Snowshoe	1420	92.40	55	270	NQ
PX91-03	8743.4	10527.8	Snowshoe	1417	93.30	60	270	NQ
PX91-04	8400.0	10133.0	Monarch	1520	107.30	55	210	NQ
PX91-05	8400.0	10325.0	Monarch	1487	83.84	55	210	NQ
PX91-06	8425.0	9970.0	Monarch	1676	106.70	55	210	NQ
PX91-09	8030.0	10075.0	Wendy No 15 Fr	1475	96.04	55	210	NQ
PX91-10	8470.0	10566.0	Rawhide	1408	91.50	90		NQ

Core Storage:

Drill core from these holes is currently 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 eight holes were drilled almost entirely within Triassic Brooklyn Formation sediments and their altered equivalents, together with local Tertiary dykes.

DISCUSSION OF RESULTS

Drill Hole PX91-01: (see cross-section - Plate 2)

This hole was drilled to test a strong surface rock geochemical anomaly (up to 7.7 grams per tonne Au over 8 metres) coincident with the northern portion of a strong copper-gold soil anomaly. After 3.35 metres of overburden, the hole encountered 5.35 metres of epidote-chlorite and hematite-chlorite skarn, followed by 81.46 metres of sharpstone (chert pebble) conglomerate with lesser interbedded argillaceous siltstone and one biotitefeldspar dyke. The skarn interval near the top of the hole contained locally strong pyrite, chalcopyrite and specularite and was highly anomalous in both gold and copper, containing 2,010 ppb Au and 10,338 ppm Cu (weighted averages) over 5.35 metres. Gold and copper analyses for the remainder of the hole were insignificant.

Drill Hole PX91-02: (see cross-section - Plate 2)

This hole, located a short distance to the west of hole PX91-01, was drilled to test the northern portion of a strong copper-gold soil anomaly possibly related to sulphide-bearing retrograde altered skarn lying in the footwall of a west-dipping fault. After 2.74 metres of overburden, the hole encountered sharpstone (chert pebble) conglomerate, together with lesser argillaceous siltstone and sandstone, for 89.66 metres. Several hornblende porphyry dykes were also intersected. This hole was largely unmineralized with insignificant gold and copper throughout.

```
Drill Hole PX91-03: (see cross-section - Plate 3)
```

This hole, located to the south of holes PX91-01 and PX91-02 along the west side of the Snowshoe pit, was drilled to test a strong surface rock geochemical anomaly (up to 3.0 grams per tonne Au over 4 metres) along the eastern side of a strong copper-gold soil anomaly. After 0.61 metres of overburden, the hole encountered 5.42 metres of chlorite-epidote-quartz skarn, followed by 87.27 metres of interbedded argillite, argillaceous siltstone and sharpstone (chert pebble) conglomerate. The skarn interval near the top of the hole contained pyrite and chalcopyrite and was moderately anomalous in both gold and silver, containing 450 ppb Au and 3,451 ppm Cu (weighted averages) over 5.42 metres.

Drill Hole PX91-04: (see cross-section - Plate 4)

This hole, located about 150 metres east of the old Monarch pit and stopes, was drilled to test the downdip projection of a copper-gold soil geochemical anomaly coupled with a small ground magnetics low. Percussion drilling in 1968 indicated that skarn updip (south or southwest) from hole PX91-04 contained local intersections of 0.50% to 0.67% Cu over 10 to 20 foot widths. After 1.83 metres of overburden, the hole encountered 30.07 metres of epidote-chlorite-garnet skarn, 0.70 metres of magnetite-sulphide skarn and 74.70 metres of sharpstone (chert pebble) conglomerate with local porphyritic and mafic dykes. The skarn interval at the top of the hole contained strong hematite and low sulphides throughout with only weakly anomalous copper and gold.

Page 10

Drill Hole PX91-05: (see cross-section - Plate 5)

This hole, located east of hole PX91-04 near the old Rawhide workings, was drilled to test a copper-gold soil geochemical anomaly. After 4.27 metres of overburden, the hole encountered 79.07 metres of sharpstone (chert pebble) conglomerate with minor hornblende porphyry dykes. The sharpstone contained weak pyrite and rusty fractures throughout and had low copper and gold analyses with the exception of one narrow (0.30 metre) clay-altered interval containing 7,341 ppb Au and 2,151 ppm Cu.

Drill Hole PX91-06: (see cross-section - Plate 6)

This hole, located just to the west of the old Monarch pit, was drilled to test a copper-gold soil geochemical anomaly and nearby anomalous rock geochemistry (up to 7,200 ppb Au and 10,487 ppm Cu in a grab sample). After 0.60 metres of overburden, the hole encountered 15.20 metres of mixed skarn (diopsideepidote-chlorite-garnet), followed by 90.90 metres of sharpstone (chert pebble) conglomerate with minor sandy argillite, diopside skarn and altered intrusive. An interval of 3.05 metres at the top of the hole contained 615 ppb Au and 8,868 ppm Cu (weighted averages). The remainder of the hole contained low copper and gold values, except for one semi-massive pyrite interval in sharpstone which contained 5,160 ppb Au over a width of 0.15 metres.

Drill Hole PX91-09: (see cross-section - Plate 7)

This hole, located approximately 350 metres south of the old Monarch pit, was drilled to test a gold soil geochemical anomaly. After 2.40 metres of overburden, the hole encountered 93.64 metres of weakly altered sharpstone (chert pebble) conglomerate with hornblende-feldspar porphyry dykes up to 13 metres thick. The sharpstone generally contained low amounts of sulphide (pyrite) with corresponding insignificant copper and gold geochemical analyses. However, four pyritic shear zones or semi-massive pyrite-hematite veins were encountered. These four intervals ranged from 0.40 to 1.00 metres in length and contained a maximum of 14.67 grams per tonne Au, together with 9,490 ppm Cu.

```
Drill Hole PX91-10: (see cross-section - Plate 8)
```

This hole, located about 300 metres south of the Snowshoe pit, was drilled to test a possible low-angle fault or thrust underlying the old Snowshoe and Rawhide workings. After 2.74 metres of overburden, the hole encountered 88.76 metres of bleached and clay-altered sharpstone (chert pebble) conglomerate with fairly abundant hornblende-feldspar porphyry dykes and local intervals of siltstone or argillite. The postulated lowangle fault was not encountered in drilling. Sulphide content in this hole was very low throughout and only insignificant copper and gold analyses were returned.

CONCLUSIONS

Holes completed during this drilling program generally encountered thick intervals of poorly mineralized sharpstone (chert pebble) conglomerate, overlain by much thinner zones of mineralized skarn. Previous mapping suggested that skarn intervals might be expected to be thicker, and might be underlain by significant thicknesses of argillite or argillaceous siltstones, in addition to sharpstone conglomerate. Fine argillaceous sediments were often lacking in the present drilling, and, where encountered, were usually thin and discontinuous.

In general, copper plus gold soil geochemical anomalies could be directly related to sulphide-mineralized skarn encountered in drilling. However, both sulphide mineralization and related anomalous copper and gold were discontinuous and erratically distributed throughout skarn intercepts and not all skarn encountered was mineralized to a significant degree. Copper and gold grades from drill core in the area of copper plus gold soil anomalies (tested by drill holes PX91-01, 02, 03, 04, 05, 06, 09) tended to be very similar in tenor to those seen in surface soil and rock geochemistry, and, in fact, were very similar to historic production grades from the area.

Gold-only soil geochemical anomalies (tested by drill hole PX91-09) were likely related to pyritic shears and semi-massive pyrite veins hosted within sharpstone (chert pebble) conglomerate. These veins

and shears were generally narrow and widely spaced, and did not appear to be controlled by lithology or related to alteration to any significant degree.

Surface soil and rock geochemical anomalies in the area of the present work have been tested in considerable degree by this drilling campaign. Results were not highly encouraging and additional drilling in this particular area is not being considered at the present time.

LIST OF REFERENCES

- Church, B.N., 1986, Geological Setting and Mineralization in the Mount Attwood - Phoenix Area of the Greenwood Mining Camp, BC MEMPR Paper 1986-2
- Deighton, J.R., Caron, M.E., Howell, W.A., Hoffman, S.J., 1991, Geological, Geophysical and Geochemical Report for the Phoenix Property,, BC Assessment Technical Report
- Fyles, J.T., 1990, Geology of the Greenwood Grand Forks Area, British Columbia, BC MEMPR Open File 1990 - 25
- Little, H.W., 1983, Geology of the Greenwood map-area, British Columbia, GSC Paper 79-29
- Peatfield, G.R., 1978, Geological History and Metallogeny of the "Boundary District", Southern British Columbia and Northern Washington, Queens University Ph.D thesis

APPENDIX 1

HOLE: PX-91-01

• • •

PAGE: 1 of 6

PROPERTY	Phoenix	DATE LOGGED LOGGED BY	W. A. Howell	EASTING NORTHING	10528.5 8891.0
STARTED COMPLETED PURPOSE	April 18, 1991 April 19, 1991 To test <u>Snowshoe</u> soil and rock		Beaupre's	ELEVATION LENGTH UNITS	1396 92.96 metres
COMMENTS	gold anomaly	CORE LOCATION	KRR Core Storage	CORE SIZE	NQ

DEPTH	AZIMUTH	DIP
Collar 60.96 93.00	270	55 55 55

•

		SUMMA	RY LOG		ASSA	Y SUMMAR	Y
INTER From	VAL To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au ppb Cu ppm
0.00 3.35 5.20 8.70 11.50 21.60 26.02	3.35 5.20 8.70 11.50 21.60 26.02 26.43	CASING EPIDOTE-CHLORITE SKARN <0.5% pyrite. 3.35 - 3.65 Rubble. 4.90 - 5.20 Broken, rusty. 5.20 Small fault. HEMATITE-CHLORITE SKARN 5% pyrite + chalcopyrite. 7.88 - 7.92 Small fault, minor malachite. SHARPSTONE CONGLOMERATE <0.5% pyrite, chloritized. ARGILLITE/ARGILLACEOUS SILTSTONE Maroon and green. 19.40 - 21.60 Sheared and brecciated. BIOTITE-FELDSPAR PORPHYRY ARGILLACEOUS SILTSTONE Brecciated, abundant calcite.	92.96	41.82 - 41.92 Calcite-quartz-(scapolite?) vein. 43.59 - 43.61 Sheared. 49.25 - 49.50 Sheared. 60.04 - 60.12 3 cm quartz veins. END OF HOLE	5.20 6.75 6.75 8.70	1.55 1.95	3872 18745 1848 9521
26.43	92.96	SHARPSTONE CONGLOMERATE <0.5% pyrite, chloritized.					

HOLE: PX-91-01

.

PAGE: 2 of 6

INTE	RVAL	DESCRIPTION				SAN	1PLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Сu (%)
0.00	3.35	CASING									
3.35	8.70	EPIDOTE-CHLORITE SKARN									
		 3.35 - 5.20 Occasional clasts of maroon hematitic argillite, siliceous grey patches in epidote-rich groundmass. Epidote ≈ 75%, minor pyrite. 3.35 - 3.65 Rubble. 4.90 - 5.20 Broken, rusty fractures at 45° tca. 5.20 Minor fault at 15° tca. Minor calcite stringers at ± 45° tca 	36776	3.35	5.20	1.85	epidote-chlorite skarn	621		4155	0.41
		5.20 - 8.70 throughout. Maroon hematite - chlorite skarn with minor epidote, fractured and healed with calcite and quartz, hematite pervasively disseminated as	36777	5.20	6.75	1.55	hematite-chlorite skarn, 5% pyrite + chalcopyrite	3872	4.15	18745	1.91
		 well as along rims of relict clasts. Local wispy banding of silica and epidote may be bedding at 70° tca. Abundant specularite as blades and rosettes to 1 cm. Larger quartz-calcite veins brecciated. Blebs and fine disseminated grains of pyrite and chalcopyrite throughout, often along silica-epidote altered relict bedding. Total sulphides = 5%. chalcopyrite:pyrite 1:1. Sawed core shows clastic texture, clasts are predominantly epidote, similar to section 3.35 -5.20, with hematite found primarily in matrix. 7.88 - 7.92 Small fault with hematitic gouge plus minor malachite. 	36778	6.75	8.70	1.95	5% pyrite + chalcopyrite, small fault	1848	0.72	9521	0.98
8.70	11.50	SHARPSTONE CONGLOMERATE Rounded to subangular heterolithic clasts, grain size varies from fine sand to >3 cm. Clasts include fine sediments, argillites and chert. Matrix is pale to medium green and is largely composed of chlorite and fine-grained chloritized clasts. Very minor fracture coatings of hematite. Very minor 1 cm x 3 cm lens-shaped pods of concentrically banded calcite and quartz.	36779 36780	8.70 10.60	10.60 11.50	1.90 0.90	sharpstone conglomerate, trace sulphides	11 18		305 88	

HOLE: PX-91-01

PAGE: 3 of 6

RVAL	DESCRIPTION	_			SAN	1PLE		ASSA	YS	
то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Сu (%)
21.60	ARGILLITE / ARGILLACEOUS SILTSTONE Distinctive maroon and green, clasts of argillite and siltstone to 10 cm diameter. Clasts are locally coarser grained.									
	 11.50 Maroon argillite. 15.20 Mixed maroon and green argillite. 15.20 - 16.76 Coarser grained, less maroon colour. 16.76 Correctore fine studetone with week meroor patches. Indicting 	36783 36784	13.00 14.10 15.20	14.10 15.20 16.76	1.50 1.10 1.10 1.56	argillite/siltstone	35 6 7 9		52 7 9 6	
	bedding about 30-60° tca. Fractures and clast margins throughout the interval have clay-epidote coatings. Weakly to moderately calcareous, abundant small stringers and tensional gashes filled with calcite, randomly oriented. Maroon colour due to hematite.	36786	18.27	19.81	1.54	fault gouge	5		2	
	 19.40 Chlorite-clay gouge on fault at 12° tca. Gouge is 1 cm thick with slickensides at 65° tca. 20.85 -21.60 Contact alteration zone with underlying dyke, paler, mottled with clots of chlorite, crude foliation at 60° tca. Brecciated between 19.40 and 21.60. Chloritic shears adjacent and parallel to the dyke contact. 				1.04 0.75	contact alteration zone (with dyke)	8		6 15	
26.02	GREY BIOTITE-FELDSPAR-PORPHYRY DYKE Indistinct euhedral altered (saussuritized?) plagioclase phenocrysts, relict hornblende crystals totally chloritized, feldspar crystals are commonly outlined by thin blades of fresh brown biotite (secondary). Upper contact at 33° tca. Contact is chilled and contains relict hornblende phenocrysts. Feldspars are locally slightly pink (orthoclase or hematite staining). Dyke chilled at lower contact at 45° tca. The lower contact is offset along a chloritized fracture at 7° tca.	36856	23.00	24.50	1.40 1.50 1.52	biotite-feldspar-porphyry dyke, secondary biotite	5 5 5		44 44 42	
	TO 21.60	 TO 21.60 ARGILLITE / ARGILLACEOUS SILTSTONE Distinctive maroon and green, clasts of argillite and siltstone to 10 cm diameter. Clasts are locally coarser grained. 11.50 Maroon argillite. 15.20 Mixed maroon and green argillite. 15.20 Argon argillite. 16.76 Coarser grained, less maroon colour. 16.76 - 20.85 Grey-green fine sandstone with weak maroon patches. Indistinct bedding about 30-60° tca. Fractures and clast margins throughout the interval have clay-epidote coatings. Weakly to moderately calcareous, abundant small stringers and tensional gashes filled with calcite, randomly oriented. Maroon colour due to hematite. 19.40 Chlorite-clay gouge on fault at 12° tca. Gouge is 1 cm thick with slickensides at 65° tca. 20.85 -21.60 Contact alteration zone with underlying dyke, paler, mottled with clots of chlorite, crude foliation at 60° tca. Brecciated between 19.40 and 21.60. Chloritic shears adjacent and parallel to the dyke contact. 26.02 GREY BIOTTTE-FELDSPAR-PORPHYRY DYKE Indistinct euhedral altered (saussuritized?) plagioclase phenocrysts, relict hornblende crystals totally chloritized, feldspar crystals are commonly outlind by thin blades of fresh brown biotite (secondary). Upper contact at 33° tca. Contact is chilled and contains relict hornblende phenocrysts. Feldspars are locally slightly pink (orthoclase or hematite staining). Dyke chilled at lower contact at 45° tca. The 	TO NO. 21.60 ARGILLITE / ARGILLACEOUS SILTSTONE Distinctive maroon and green, clasts of argillite and siltstone to 10 cm diameter. Clasts are locally coarser grained. 36781 11.50 Maroon argillite. 36781 15.20 Mixed maroon and green argillite. 36781 15.20 Mixed maroon and green argillite. 36784 15.20 Mixed maroon and green argillite. 36785 16.76 Coarser grained, less maroon colour. 36786 16.76 20.85 Grey-green fine sandstone with weak maroon patches. Indistinct bedding about 30-60° tca. Fractures and clast margins throughout the interval have clay-epidote coatings. Weakly to moderately calcareous, abundant small stringers and tensional gashes filled with calcite, randomly oriented. Maroon colour due to hematite. 36787 19.40 Chlorite-clay gouge on fault at 12° tca. Gouge is 1 cm thick with slickensides at 65° tca. 36788 20.85 -21.60 Contact alteration zone with underlying dyke, paler, mottled with clots of chlorite, crude foliation at 60° tca. Brecciated between 19.40 and 21.60. Chloritized, feldspar crystals are commonly outlined by thin blades of fresh brown biotite (secondary). Upper contact at 33° tca. Contact is chilled and contains relict hornblende phenocrysts. Feldspars are locally slightly pink (se857 (orthoclase or hematile staining). Dyke chilled at lower contact at 45° tca. The	TO NO. FROM 21.60 ARGILLITE / ARGILLACEOUS SILTSTONE Distinctive maroon and green, clasts of argillite and siltstone to 10 cm diameter. Clasts are locally coarser grained. 36781 11.50 11.50 Maroon argillite. 36781 11.50 15.20 Mixed maroon and green argillite. 36781 11.50 15.20 Mixed maroon and green argillite. 36782 13.00 15.20 15.20 forg-green fine sandstone with weak maroon patches. Indistinct bedding about 30-60° tca. Fractures and clast margins throughout the interval have clay-epidote coatings. Weakly to moderately calcareous, abundant small stringers and tensional gashes filled with calcite, randomly oriented. Maroon colour due to hematite. 36787 19.81 20.85 -21.60 Chlorite-clay gouge on fault at 12° tca. Gouge is 1 cm thick with slickensides at 65° tca. 36788 20.85 26.02 GREY BIOTITE-FELDSPAR-PORPHYRY DYKE Indistinct euhedral altered (saussuritized?) plagioclase phenocrysts, relict hornblende crystals totally chloritized, feldspar crystals are commonly outlined by thin blades of fresh brown biotite (secondary). Upper contact at 33° tca. Contact is chilled and contains relict hornblende phenocrysts. Feldspars are localty slighty pink (orthoclase or hematite staining). Dyke chilled at lower contact at 45° tca. The 36856 23.00	TO NO. FROM TO 21.60 ARGILLITE / ARGILLACEOUS SILTSTONE Distinctive maroon and green, clasts of argillite and siltstone to 10 cm diameter. Clasts are locally coarser grained. 36781 11.50 13.00 36782 13.00 14.10 36783 14.10 15.20 15.20 Mixed maroon and green argillite. 15.20 Maroon argillite. 36781 11.50 13.00 36782 13.00 14.10 36783 14.10 15.20 36784 15.20 16.76 15.20 Mixed maroon and green argillite. 36781 11.50 13.00 36782 13.00 14.10 36783 14.10 15.20 36784 15.20 16.76 16.76 - 20.85 Grey-green fine sandstone with weak maroon patches. Indistinct bedding about 30-60° tca. Fractures and clast margins throughout the interval have clay-epidote coatings. Weakly to moderately calcareous, abundant small stringers and tensional gashes filled with calcite, randomly oriented. Maroon colour due to hematile. 36787 19.81 20.85 36786 18.27 19.81 19.40 Chlorite-clay gouge on fault at 12° tca. Gouge is 1 cm thick with slickensides at 65° tca. 36788 20.85 21.60 20.85 -21.60 Contact alteration zone with underlying dyke, paler, mottled with clost of chlorite, crude foliation at 60° tca. Brecciated between 19.40 and 21.60. Chloritics dense adjacent and parallel to the dyke contact. 36789 21.60 23.00 26.02 GREY BIOTTTE-FELDSPAR-PORPHYRY DYKE Indistinct euhedral altered (saussuritized?) plagicolase phenocrysts, relict hornblende crystals totally chloritized, feldspar crystals are commonly outlined by thin blades of fresh brown biotite (secondary). Upper contact at 33° tca. Contact is chilled and contains relict hornblende phenocrysts. Feldspars are localty slightly pink (orth	TO NO. FROM TO Length 21.60 ARGILLITE / ARGILLACEOUS SILTSTONE Distinctive maroon and green, clasts of argillite and siltstone to 10 cm diameter. Clasts are locally coarser grained. 36781 11.50 13.00 1.50 36782 13.00 14.10 1.10 36783 14.10 15.20 1.10 36784 15.20 16.76 1.56 11.50 13.00 1.50 36785 16.76 18.27 1.51 36785 16.76 18.27 1.51 36786 18.27 19.81 1.54 15.20 Mixed maroon and green argillite. 15.20 - 16.76 Coarser grained, less maroon colour. 16.76 - 20.85 Grey-green fine sandstone with weak maroon patches. Indistinct bedding about 30-60° tca. Fractures and clast margins throughout the interval have clay-epidote coatings. Weakly to moderately calcarcous, abundant small stringers and tensional gashes filled with calcite, randomly oriented. Maroon colour due to hematite. 36787 19.81 20.85 1.04 36787 19.81 20.85 1.04 36788 20.85 21.60 0.75 26.02 GREY BIOTTTE-FELDSPAR-PORPHYRY DYKE Indistinct euhedral altered (saussuritized?) plagioclase phenocrysts, relict hornblende crystals totally chloritized, feldspar crystals are commonly outlined by thin blades of fresh brown biotite (secondary). Upper contact at 33° tca. Contact is chilled and contains relict hornblende phenocrysts. Feldspars are localty slighty pink (orthoclase or hematite staining). Dyte chilled at lower contact at 45° tca. 36789 21.60 23.00 1.40 36856 23.00 24.50 1.50	TO NO. FROM TO Length DESCRIPTION 21.60 ARGILLITE / ARGILLACEOUS SILTSTONE Distinctive maroon and green, clasts of argillite and siltstone to 10 cm diameter. Clasts are locally coarser grained. 36781 11.50 1.00 1.50 argillite/siltstone 11.50 Maroon argillite. 36781 11.50 13.00 1.50 36782 13.00 1.50 15.20 Mixed maroon and green argillite. 36781 11.0 15.20 10.6 36782 13.00 1.50 16.76 20.85 Correy-green fine sandstone with weak maroon patches. Indistinct bedding about 30-60 tca. 36781 12.0 16.76 18.27 1.51 36785 16.76 18.27 1.51 36785 16.76 18.27 1.51 abundant smail stringers and tensional gashes filled with calcite, randomly oriented. Maroon colour due to hematite. 36787 19.81 20.85 1.04 20.85 -21.60 Contact alteration zone with underlying dyke, paler, mottled with clouts of chlorite, crude foliation at 60° tca. Greex alteration zone with weak are comonaly outlined by thin blades of fresh brown bloitie (secondary). Upper contact at 33° tca. Contact alteration zone (with dyke) 36789 21.60 23.00 1.40 26.02 GREY BIOTTE-FELDSPAR-PORPHYRY DYKE Indistinct whedral altered (sussuritized?) plagicc	TO NO. FROM TO Length DESCRIPTION Au (ppb) 21.60 ARGILLITE / ARGILLACEOUS SILTSTONE Distinctive maroon and green, clasts of argillite and siltstone to 10 cm diameter. Clasts are locally coarser grained. 36781 11.50 S00 1.50 argillite/siltstone 35 11.50 Maroon argillite. 36781 11.50 13.00 1.50 argillite/siltstone 35 15.20 Mixed maroon and green, class maroon colour. 36782 14.10 1.10 36784 15.20 1.00 7 16.76 20.85 Grey-green fine sandstone with weak maroon patches. Indistinct bedding about 30-607 tcc. Fractures and class margins throughout the interval have clay-epidote coating. Weakly to moderately calcarcous, abundant small stringers and tensional gashes filled with calcite, randomly oriented. Maroon colour due to hematite. 36787 19.81 2.085 1.04 fault gouge 5 20.85 21.60 Chlorite-clay gouge on fault at 12° tca. Gouge is 1 cm thick with silckensides at 65° tca. 36788 20.85 21.60 0.75 contact alteration zone (with dyke) 6 26.02 GREY BIOTITE-FELDSPAR-PORPHYRY DYKE Indistinc teubedral altered (saussuritized?) plagioclase phenocrysts, relict hornblende crystals totally cholorite, clekdspar crystals are commonily outlined by thin blades o	TO NO. FROM TO Length DESCRIPTION Au (ppb) Au (ppb) Au (ppb) 21.60 ARGILLITE / ARGILLACEOUS SILTSTONE Distinctive marcon and green, clasts of argillite and siltsone to 10 cm diameter. Clasts are locally coarser grained. 36781 11.50 13.00 1.50 11.50 Marcon argillite. 36781 11.50 13.00 1.50 argillite/siltstone 35 15.20 Mixed marcon and green argillite. 36781 13.00 1.50 36782 13.00 1.50 15.20 Mixed marcon and green argillite. 36784 15.20 16.76 1.56 9 15.20 16.76 20.85 Capser grained, less marcon colour. 36784 15.20 16.76 1.56 16.76 20.85 Capser grained. 36784 15.20 16.76 1.56 9 36784 15.20 16.76 18.27 1.51 36786 18.27 1.51 36785 16.76 18.27 1.51 36786 18.27 1.54 40 20.85 -21.60 Colorite-clay gouge on fault at 12° tca. Gouge is 1 cm thick with solickensides at 65° tca. 367	TO NO. FROM TO Length DESCRIPTION Au Cu (ppb) (gr) (pr) (pr)

HOLE: PX-91-01

PAGE: 4 of 6

INTE	RVAL	DESCRIPTION				SAN	APLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Си (ррт)	Cu (%)
26.02	26.43	ARGILLACEOUS SILTSTONE Similar to lower part of interval 11.50 - 19.85. Lower contact irregular against underlying sharpstone conglomerate. Brecciated, abundant tension gashes and interstitial infilling with calcite. Possible soft sediment deformation (clast contacts).	36790	26.02	26.43	0.41	argillaceous siltstone	9		33	
26.43	92.96	 SHARPSTONE CONGLOMERATE Similar to interval 8.70 - 11.50. Local interbeds of finer sediments (sandstones - siltstones) at 70° - 80° tca. Scour and fill along bedding often seen. Matrix moderately to strongly chloritized with very minor fine grained pyrite. Local flooding of matrix with calcite and small amounts of silica. Small chloritized fractures with very fine-grained pyrite (up to 10%). 41.82 - 41.92 Creamy white calcite-quartz vein. Minor hematite (possible pale yellow scapolite). 43.59 - 43.61 Quartz-chlorite shear zone at 15° tca. Local pyrite on slip faces. 44.45 - 44.65 Brittle maroon fine siltstone. 49.25 - 49.50 Chloritic shears at 15° tca. 	36791 36792 36793 36794 36795 36796 36797 36798 36799 36800 36801 36802 36803 36804 36804 36805 36806 36807 36808 36809 36810	27,95 29,50 31,00 32,50 34,00 35,50 37,00 38,50 40,00 41,50 43,00 44,50 44,50 44,50 44,50 44,50 46,00 50,50 52,00 53,50	27.95 29.50 31.00 32.50 34.00 35.50 37.00 38.50 40.00 41.50 43.00 44.50 44.50 44.50 45.00 50.50 52.00 53.50 55.00 56.50	1.52 1.55 1.50 1.50 1.50 1.50 1.50 1.50 1.50	sharpstone conglomerate, trace sulphides 10 cm quartz-calcite vein	9 5 5 6 14 10 24 30 32 24 48 14 8 5 9 46 5 5 5		152 25 28 23 60 66 58 52 81 70 84 8 13 23 14 56 19 17 34 58	

HOLE: PX-91-01

.

.

PAGE: 5 of 6

INTE	RVAL	DESCRIPTION				SAN	APLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu _(%)
		 58.60 1 cm white quartz vein. 60.04 - 60.12 3 (1 cm) quartz veins - weak pinkish colour. Selvages chloritic, locally finer-grained. 	36811 36812 36813 36814 36815 36816 36817 36818 36819 36820 36821 36822 36823 36824 36825 36826 36827 36828 36829 36830 36831 36833 36834 36835	58.00 59.50 61.00 62.50 64.00 65.50 67.00 68.50 70.00 71.50 73.00 74.50 76.00 74.50 76.00 77.50 79.00 80.00 81.50 83.00 84.50 83.00 84.50 86.00 87.50 89.00 90.50	58.00 59.50 61.00 62.50 64.00 65.50 67.00 68.50 70.00 71.50 73.00 74.50 76.00 77.50 79.00 80.00 81.50 83.00 84.50 84.50 84.50 84.50 84.50 89.00 90.50 92.00 92.96	1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	several 1 cm quartz veins	5 5 8 19 5 5 17 13 5 5 5 11 13 11 10 24 6 24 11 16 11 5 8 25		18 13 107 65 100 34 31 37 13 24 80 27 95 100 17 38 45 62 41 21 19 70 30 51 61	
	92.96	END OF HOLE									

HOLE: PX-91-01

PAGE: 6 of 6

•

FROM	ТО	RECOVERY (in %)	FROM	то	RECOVERY (in %)	FROM	TO	RECOVERY (in %
0.00	3.35	0.00	42.68	43.60	100.00			
3.35	3.66	100.00	43.60	44.21	100.00			
3.66	4.27	100.00	44.21	44.66	78.72			
4.27	4.42	91.84	44.66	47.26	96.08			
4.42	6.40	90.83	47.26	50.30	100.00			
6.40	7.62	86.10	50.30	53.35	100.00			
7.62	8.69	61.85	53.35	56.40	100.00			
8.69	9.45	45.92	56.40	59.45	98.40			
9.45	10.67	95.94	59.45	62.50	100.00			
10.67	11.59	100.00	62.50	65.55	98.40			
11.59	11.89	98.40	65.55	68.14	100.00			
11.89	12.20	95.12	68.14	69.97	100.00			
12.20	13.26	77.78	69.97	71.65	100.00			
13.26	14.94	100.00	71.65	74.70	99.38			
14.94	16.77	92.93	74.70	77.74	100.00			
16.77	19.82	98.40	77.74	79.57	97.31			
19.82	22.87	100.00	79.57	80.79	100.00	ĺ		
22.87	25.91	100.00	80.79	83.84	100.00			
25.91	28.96	100.00	83.84	86.89	100.00			
28.96	32.01	100.00	86.89	89.94	100.00			
32.01	33.54	98.40	89.94	92.96	98.73			
33.54	35.06	100.00						
35.06	38.11	100.00						
38.11	41.16	96.76						
41.16	42.68	97.09	1			1		

HOLE: PX-91-02

PROPERTY	Phoenix	DATE LOGGED		EASTING	10449.4
		LOGGED BY	W. A. Howell	NORTHING	8900.0
STARTED	April 19, 1991	SIGNED BY		ELEVATION	1420
COMPLETED	April 20, 1991	DRILLED BY	Beaupre's	LENGTH	92.40
PURPOSE	To test Snowshoe soil gold	SURVEYED BY		UNITS	metres
	anomaly	CORE LOCATION	KRR Core Storage	CORE SIZE	NQ
COMMENTS	-		_		

DEPTH	AZIMUTH	DIP
Collar	270	55
92.00		55

		SUMM	IARY LOG		ASSA	Y SUMMAR	: Y
INTER From	VAL To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au ppd Cu ppr
0.00 2.74	2.74 3.35	CASING SHARPSTONE CONGLOMERATE	28.50 92.40	SHARPSTONE CONGLOMERATE <0.5% pyrite, chloritized. 37.30 - 37.34 Fault.	5.11 5.60	0.49	510 20
3.35	5.11	Chloritized, clay-altered. ARGILLITE / ARGILLACEOUS SILTSTONE Altered to hematite and chlorite.		51.10 - 51.85 Rubble, (fault?). 60.00 Shear.			
5.11	8.70	SHARPSTONE CONGLOMERATE Trace pyrite, local secondary biotite.		61.80 - 62.80 Rubble and broken rock. 64.16 - 64.30 Quartz-calcite vein in shear.			
8.70	11.20	HORNBLENDE PORPHYRY Chloritized, minor orthoclase and biotite.		78.25 - 87.20 0.5 - 1% pyrite. 86.70 - 86.90 Sheared.			
11.20	11.80	SANDSTONE / MINOR SHARPSTONE CONGLOMERATE		88.252 cm quartz-calcite vein.88.441 cm quartz-calcite vein.88.602 7 cm quartz-calcite vein.			
11.80	14.95	Chloritized. HORNBLENDE PORPHYRY Chloritized, calcite veins, <0.5% pyrite.		88.800.7 cm quartz-calcite vein.90.80 - 90.82Chlorite-quartz in shear.			
14.95	15.68	14.94 Shear along lower contact. SHARPSTONE CONGLOMERATE <0.5% pyrite, chloritized.	92.40	END OF HOLE			
15.68 16.50	16.50 28.50	HORNBLENDE PORPHYRY SANDY ARGILLITE					

PAGE: 1 of 7

PAGE: 2 of 7

INTERVAL DESCRIPTION ASSAYS SAMPLE FROM то NO. FROM TO Length DESCRIPTION Au Au Cu Cu (ppb) (g/t) (ppm) (%) 0.00 2.74 CASING 2.74 3.35 SHARPSTONE CONGLOMERATE 5 54 Coarse sandy heterolithic grit, angular to subrounded clasts of fine sediments, cherts 36836 2.74 3.35 0.61 sharpstone conglomerate, matrix altered to chloriteand argillites. About 20% white to pale creamy coloured, remainder are darker. Sparse brick red clasts. Matrix altered to chlorite - weak calcite ± quartz. Some calcite-quartz clasts with diffuse chloritic alteration rims, others with distinct edges. About 10% of clasts clay-altered. Lower contact sharply defined on hematitic fracture at 47° tca. 3.35 5.11 **ARGILLITE / ARGILLACEOUS SILTSTONE** 15 3 maroon to green argillite / Maroon, pale and dark green. Maroon colour in finer-grained sediments due to 36837 3.35 5.11 1.76 hematite. Green colour related to chlorite \pm epidote and found mostly in siltstones siltstone to very fine sandstones. Rare pyrite on fractures. Bedding at 32° tca. Fracture at 4.67 at 10° tca marks transition to green argillite. Lower contact at 5.11 at 80° tca. No visible sulphides. Strongly fractured at 80° tca, 25° tca and 45° tca. 8.70 5.11 SHARPSTONE CONGLOMERATE 510 20 Similar to sections 2.74 - 3.30. Very rare disseminated pyrite and rare secondary 36838 5.11 5.60 0.49 sharpstone conglomerate biotite in matrix. 7.01 sharpstone conglomerate with 5 69 5.60 - 5.60 Some intervals grading finer upwards to sharp contacts with coarser 36855 5.60 1.41 beds. Locally fractured with quartz-calcite in fracture fillings and finer sections, quartz-calcite locally in matrix. Matrix = chloritized fine sediments. Clasts range in veining size from sand to small pebbles with occasional clasts up to 5 -7 cm. sharpstone conglomerate, 5 21 36839 7.01 8.70 1.69 limonite stained, weak pyrite This interval contains about 20% white to grey chert clasts. Lower contact at 8.70 oxidized and broken along fractures at 80 - 85° tca, very minor limonite staining.

HOLE: PX-91-02

PAGE: 3 of 7

INTE	RVAL	DESCRIPTION				SAN	1PLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
8.70	11.20	GREY HORNBLENDE-PORPHYRY DYKE Very small plagioclase crystals (saussuritized?) with sparse 1 - 2 mm pink (orthoclase?) feldspars and glassy quartz. 3 - 5 % totally chloritized 2 - 5 mm hornblende phenocrysts. Tight, hairline fractures are carbonate filled. Rare biotite along hairline fractures.	36840 36858		10.20 11.20	1.50 1.00	hornblende-porphyry dyke	5 5		42 38	
11.20	11.80	SANDSTONE / MINOR SHARPSTONE CONGLOMERATE Chloritized, weakly flooded with calcite, occasional calcite patches.									
		11.60 - 11.80 Coarse grit to 1 cm. Composition is similar to 2.74 - 3.30.	36841	11.20	11.80	0.60	sandstone	22		16	
11.80	14.95	GREY HORNBLENDE-PORPHYRY DYKE Similar to 8.70 - 11.20 finer-grained matrix and well developed secondary biotite. Relict hornblende phenocrysts are totally chloritized and partially replaced by calcite. Lower contact from 14.70 - 14.95 is chilled and sheared at 70° tca. Weakly fractured sub-parallel tca near lower contact, fractures filled with calcite. Maximum fracture width approximately 0.3 mm.	36859 36860		13.41 14.95	1.61 1.54	hornblende-porphyry dyke	5 5		39 42	
14.95	15.68	SHARPSTONE CONGLOMERATE Sandy to coarse grit with clasts up to 2.5 mm, poorly defined bedding at 70° tca. Chloritized matrix, minor local alteration of matrix to unidentified tan amorphous mineral (H \approx 3.5). Pyrite weakly disseminated and as occasional rims on clasts. Total sulphides <0.5%. Minor small stringers and fractures subparallel tca are calcite-filled. Matrix is weakly calcareous. Lower contact sheared and more strongly chloritized.	36842	14.95	15.69	0.74	sharpstone conglomerate, < 1/2% pyrite, narrow calcite veinlets	18		22	

HOLE: PX-91-02

PAGE: 4 of 7

INTE	RVAL	DESCRIPTION				SAN	IPLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
15.68	16.50	GREY HORNBLENDE-PORPHYRY DYKE Similar to section 11.80 - 14.95. Blebs and stringers of calcite. Lower contact chilled, sheared at 55° tca.	36843	15.69	16.50	0.81	hornblende-porphyry dyke	5		44	
16.50	28.50	SANDY ARGILLITE Medium green, chloritized throughout, narrow (<50 cm) interbeds of coarse sandy to pebble-sized sharpstone. Poorly developed bedding at 35 - 40° tca.	36844	16.50	17.45	0.95	chloritized sandy argillite and minor sharpstone conglomerate	5		20	
			36845	17.45	19.05	1.60	0	25		141	
			36846	19.05	20.54	1.49		44		120	
			36847	20.54	22.05	1.51		15		54	
		·	36848	22.05	23.45	1.40		5		4	
		23.50 - 23.60 1.5 - 2 cm quartz-hematite vein along chloritic shear at 10° tca.	36849	23.45	25.00	1.55	section contains 2 cm quartz- hematite vein	103		44	
			36850	25.00	26.50	1.50		15		6	
			36851	26.50	28.00	1.50		20		13	
28.50	92.40	SHARPSTONE CONGLOMERATE									
		Matrix is chloritized. Strong chlorite along shears, calcareous matrix, calcite in small tension fractures. Bedding at $35 - 40^{\circ}$ tca. Sulphide content is $<<0.5\%$. Sparse fractures with weak hematite or calcite.	36852	28.00	29.50	1.50	chloritized sharpstone conglomerate with calcite in fractures	7		39	
			36853	29.50	31.00	1.50		6		8	
	1		36854	31.00	32.50	1.50		5		15	
	1		36861	32.50	34.00	1.50		5		11	
			36862	34.00	35.50	1.50		5		12	
			36863	35.50	37.00	1.50		25		88	
		37.30 - 37.34 Weak fault, chloritic fractures at 55° tca.	36864	37.00	38.50	1.50	small fault	5		18	
		39.00 - 39.30 Locally increased calcite in strongly fractured zone.	36865	38.50	40.00	1.50	small calcite-filled fault zone	7		84	
			36866	40.00	41.50	1.50		5		41	

HOLE: PX-91-02

HOLE: PX-91-02

PAGE: 5 of 7

INTE	RVAL	DESCRIPTION				SAN	1PLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
			36867	41.50	43.00	1.50		13		67	
		44.50 Bedding at 55° tca.	36868	43.00	44.50	1.50		5		42	
			36869		46.00	1.50		9		25	
		•	36870		47.50	1.50		5		10	
			36871		49.00	1.50		, g		4	
			36872	49.00	50.50	1.50		8		64	
		51.10 - 51.85 Rubble.	36873	50.50	52.00	1.50	rubbly fault zone	5		83	
			36874	52.00	53.50	1.50	-	5		86	
]		36875	53.50	55.00	1.50		22		20	
		55.17 - 55.80 Pyrite = 0.5%, possible silicification.	36876	55.00	56.50	1.50		10		58	
			36877	56.50	58.00	1.50		5		44	
			36878	58.00	59.50	1.50		10		88	
		59.50 - 60.32 Increasing silicification, decreased chlorite. Pale tan. Sulphide content <<0.5%.	36879	59.50	60.32	0.82	small fault	66		22	
		60.00 Small fault at 45° tca.									
		60.32 - 61.80 Very hard, siltstone to fine sandstone, khaki green.	36880	60.32	61.90	1.58		5		16	
		60.70 - 60.80 Coarser pebble zone, strong silicification, occasional fractures with glassy smooth surface (silica?) and minor pyrite.									
		61.80 - 62.80 Rubble.	36881	61.90	63.40	1.50	rubbly (possible fault)	5		32	
			36882		64.16	0.76		5		65	
		64.16 - 64.30 Quartz-calcite vein at 45° tca, contacts sheared and chloritized. Vein			64.30	0.14	quartz-carbonate vein	5		809	
	1	composed of quartz pods and crystalline intergrowths filled with		64.30	65.00	0.70	· · · · · · · · · · · · · · · · · · ·	5		20	
		calcite. Chalcopyrite and minor pyrite as small interstitial blebs.	36885	65.00	66.50	1.50		5		150	
		Sulphide content is $<0.5\%$, chalcopyrite > pyrite.	36886	66.50	68.00	1.50		5		36	
			36887	68.00	69.50	1.50		5		45	
			36888	69.50	71.00	1.50		12		76	
			36889	71.00	72.50	1.50		8		30	

HOLE: PX-91-02

PAGE: 6 of 7

INTE	RVAL	DESCRIPTION				SAM	<u>íple</u>		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		72.50 - 73.00 Slightly bleached and silicified chloritic clasts (destruction of chlorite). Sulphide content <<0.5%.	36890	72.50	74.00	1.50		5		213	
		75.60 - 77.25 Harder (increased silica), somewhat paler green (diopside?) 78.25 - 78.35 10% fine to medium-grained pyrite along strongly chloritized fracture	36891 36892 36893	75.60	75.60 77.25 78.75	1.60 1.65 1.50	chloritized, pyritized shear	6 5 182		161 42 16	
		or shear at 45° tca. 78.75 - 81.20 Bleached, tan (clay?). Matrix less calcareous. Clasts locally have relict chloritic cores with chalky rims. 0.5 - 1% pyrite.	36894	78:75	79.66	0.91	bleached, clay-altered	8		14	
:			36895		81.20	1.54		18		27	
			36896		82.70	1.50		5		28	
			36897 36898		84.30 85.80	1.60 1.50		5		16 14	
		86.70 - 86.90 Shearing at 45° tca with quartz-chlorite and minor local brecciation.	36899		87.30	1.50		6		27	
		88.25 2 cm quartz-calcite vein at 55° tca.	36900		88.80	1.50	2 cm quartz-carbonate vein	27		31	
		88.44 1 cm quartz-calcite vein at 60° tca.	36901		90.35	1.55		5		21	
		88.80 0.7 cm quartz-calcite vein at 45° tca.									
		90.80 - 90.82 Tightly heated shear with brecciated quartz and chlorite similar to 86.70 - 86.90.	36902	90.35	91.40	1.05		5		13	1
		92.00 - 92.20 Large clast of grey quartzite with 10 - 15% jasper grains (<1mm). Clast contains calcite stringers and minor disseminated pyrite.	36903	91.40	92.40	1.00		5		16	
	92.40	END OF HOLE									

HOLE: PX-91-02

PAGE: 7 of 7

-			COI	RE REC	COVERY TABLE			
FROM	то	RECOVERY (in %)	FROM	то	RECOVERY (in %)	FROM	то	RECOVERY (in %)
0.00	2.74	0.00	47.26	49.70	98.75	85.98	86.89	100.00
2.74	3.35	85.00	49.70	51.83	95.71	86.89	89.94	95.00
3.35	4.57	92.50	51.83	53.35	98.00	89.94	92.40	100.00
4.57	5.34	96.00	53.35	55.18	88.33			
5.34	·7.01	90.91	55.18	56.40	100.00			
7.01	7.62	90.00	56.40	58.38	95.38			
7.62	10.67	100.00	58.38	59.45	100.00	1		
10.67	13.41	96.67	59.45	62.20	84.44			
13.41	15.40	98.46	62.20	62.96	88.00			
15.40	16.77	100.00	62.96	64.18	92.50			
16.77	19.82	100.00	64.18	65.09	100.00			
19.82	22.87	99.00	65.09	66.62				
22.87	25.91	100.00	66.62	68.45	100.00			
25.91	28.96	97.00	68.45	70.58	100.00			
28.96	29.88	96.67	70.58	71.65	81.43			
29.88	32.01	94.29	71.65	72.41				
32.01	32.47	100.00	72.41	74.24	93.33			
32.47	35.06	100.00	74.24	74.70				
35.06	38.11	97.00	74.70	75.61	100.00			
38.11	41.16	98.00	75.61	76.83				
41.16	42.07	83.33	76.83	77.44	95.00			
42.07	42.84	92.00	77.44	80.49				
42.84	44.21	97.78	80.49	83.54				
44.21	46,34	92.86	83.54	84.30				
46.34	47.26	100.00	84.30	85.98				

.

HOLE: PX-91-03

PAGE: 1 of 8

PROPERTY	Phoenix	DATE LOGGED LOGGED BY	W. A. Howell	EASTING NORTHING	10527.8 8743.4
STARTED	April 20, 1991	SIGNED BY		ELEVATION	1417
COMPLETED PURPOSE	April 21, 1991 To test Snowshoe soil and rock	DRILLED BY SURVEYED BY	Beaupre's	LENGTH UNITS	93.30 metres
TORIOSE	gold anomaly	CORE LOCATION	KRR Core Storage	CORE SIZE	NQ
COMMENTS			-		

DEPTH	AZIMUTH	DIP
Collar 93.00	270	60 60

		SUMM	IARY LOG				ASSA	Y SUMMAR	Y	
INTER From	RVAL To	DESCRIPTION	INTER From	VAL To	DESCRIPTION	INTEF From		LENGTH in metres	AVER Au ppb	
0.00 0.61 6.03	0.61 6.03 10.67	CASING CHLORITE-EPIDOTE-QUARTZ SKARN 1 - 1.5% chalcopyrite plus pyrite. GREEN ARGILLITE / SANDY SILTSTONE	27.40 30.30	30.30 31.50	MAROON ARGILLITE <0.5% pyrite, local specularite. 30.15 Fault. SHARPSTONE CONGLOMERATE	3.00 4.50	4.50 6.03	1.50 1.53	850 494	2972 5000
10.67 12.50	12.50 14.93	Local minor pyrite and hematite. MAROON ARGILLITE Local specularite. GREEN ARGILLITE / ARGILLACEOUS	31.50	39.30	Chloritized, minor pyrite. SANDY GREEN ARGILLITE Locally bleached. 33.50 Fault with 10 - 15% pyrite.	37.60	39.30	1.70	629	12
14.93	21.04	SILTSTONE Chloritized, local weak diopside. SHARPSTONE CONGLOMERATE <0.5% pyrite.	39.30 50.00	50.00 52.12	SHARPSTONE CONGLOMERATE Locally brecciated, chlorite + hematite in matrix. 42.50 Chloritic shear. SANDY GREEEN ARGILLITE					
21.04 22.30	22.30 22.40	GREEN ARGILLITE Local hematite + epidote, minor pyrite. FAULT RUBBLE	52.12	93.30	Trace pyrite. SHARPSTONE CONGLOMERATE More siliceous, <0.5% pyrite and trace chalcopyrite.					
22.40 25.00	25.00 27.40	MAROON ARGILLITE 23.40 Small fault. GREEN ARGILLITE Chlorite, local minor diopside, <1% pyrite.		93.30	END OF HOLE					

HOLE: PX-91-03

PAGE: 2 of 8

INTEF	RVAL	DESCRIPTION				SAN	1PLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
0.00	0.61	CASING									
0.61	6.03	CHLORITE-EPIDOTE-QUARTZ-CALCITE \pm MAGNETITE SKARN Brecciated, hematitic. Quartz - calcite stringers and veinlets, dark grey to maroon clasts composed of specularite, quartz, calcite, very fine-grained magnetite and chalcopyrite plus pyrite (disseminated and in blebs). Sulphide content 1 - 1.5%,	36951	0.61	1.50	0.89	chlorite-epidote-quartz-calcite- magnetite skarn, 1.5% pyrite + chalcopyrite, hematite	191		2607	0.26
{		chalcopyrite > pyrite. Small silicified clasts with brick red jasper cores. Hematite	36952	1.50	3.00	1.50		160		2850	0.28
		and sulphide content related to brecciation and veining. Less brecciated and fractured rock is more chloritic, with relict texture of sharpstone conglomerate.	36953	3.00 4.50	4.50 6.03	1.50 1.53		850 494		2972 5000	0.30 0.52
		5.85 - 6.03 Bedding(?) at 45° tca. Small pale green clots of chlorite plus quartz and carbonate frequently with red jasper cores. Small (0.1 - 0.2 mm) calcite veinlets. Lower contact sharp against a small shear at 45° tca and may be parallel to bedding.									
6.03	10.67	GREEN ARGILLITE / SANDY SILTSTONE Fine-grained green argillite and lesser sandy siltstone. Bedding at 60° tca. Fractured	36955	6.03	7.35	1.32	green argillite, local hematite	67		87	
		and cut by quartz-calcite veinlets (less intense than in overlying interval). Locally	30933	0.05	1.55	1.52	no sulphides	07		07	
		composed of fine siltstone and mudstone clasts in a pale green argillaceous,	36956		8.45	1.10	-	18		257	
		calcareous matrix. Diffuse banding (diopside along bedding?) in the lower 2 m of the interval. Lower 1 m contains hematite within the matrix of coarser interbeds as well as along fractures. Rare pyrite grains with hematite. Lower contact sheared at 40° tca.	36957	8.45	10.67	2.22		10		24	
10.67	12.50	MAROON ARGILLITE Similar texture to 6.03 - 10.67, colour due to hematite. Local 0.5 - 3.0 cm pods of	36958	10.67	11.35	0.68	maroon argillite, specularite	80		15	
		fine-grained, bladed specularite in fine-grained quartz - calcite groundmass. Poorly exposed bedding at 40 - 45° tca.	36959	11.35	12.50	1.15	clots, no sulphides	5		5	

HOLE: PX-91-03

PAGE: 3 of 8

INTE	RVAL	DESCRIPTION				SAN	(PLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
12.50	14.93	 GREEN ARGILLITE / ARGILLACEOUS SILTSTONE Finer-grained equivalent of the underlying sharpstone conglomerate. 13.90 - 14.93 Weak hematite and calc-silicate (diopside?), minor quartz - calcite veining. 14.60 Bedding at 30° tca. Minor local brecciation, dark coarse-grained chlorite in breccia matrix. Minor pyrite (<0.5% total sulphides) associated with chlorite. 	36960	12.50	14.93	2.43	green argillite/siltstone, minor hematite and pyrite	5		20	
14.93	21.04	SHARPSTONE CONGLOMERATE				:					:
		 17.20 Well developed bedding at 60° tca. 21.04 Bedded contact at 60° tca. Total sulphides <0.5%; pyrite > chalcopyrite. 	36961 36962 36963 36964 36965	16.00 17.50 19.00	16.00 17.50 19.00 20.50 21.04	1.07 1.50 1.50 1.50 0.54	sharpstone conglomerate, < 1/2% pyrite	11 9 5 5 12		12 44 196 45 9	
21.04	22.30	GREEN ARGILLITE Similar to 12.50 - 14.93. Local pale hornfels and weak epidote alteration, local patches (0.5 - 3.0 cm) with weak hematite. Very minor sulphides associated with hematite.	36966	21.04	22.30	1.26	green argillite, minor pyrite	7		4	
22.30	22.40	RUBBLE Small fault at 10° tca. Maroon clasts contain calcite and minor epidote.									

.

HOLE: PX-91-03

.

PAGE: 4 of 8

INTE	RVAL	DESCRIPTION				SAM	IPLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
22.40	25.00	MAROON ARGILLITE Similar to interval 10.67 - 12.50. Bedding at 70° ica. Well developed 0.3 - 2.0 cm clots of specularite. Less maroon colour at bottom of interval (24.5 - 25.0) where pale green diffuse bands along bedding are seen (green colour is due to very fine- grained chlorite with increased calcite in matrix plus small calcite veinlets). <0.5% pyrite as very thin films on sparse narrow fractures.									
		23.40 Small fault at 65° tca.	36967 36968	-	23.80 25.00	1.50 1.20	rubbly fault zone, no sulphides maroon argillite, very minor pyrite	58 24		4 4	
25.00	27.40	GREEN ARGILLITE Broken, locally brecciated, rubble in lower part of interval (26.35 - 27.4)	1				рупце				
		 25.00 - 26.35 Weak calc-silicate hornfels. Chlorite on fractures and within breccia matrix. Pyrite locally abundant, up to 5% in interval 25.0 - 25.2. <1% very fine-grained pyrite within breccia matrix and along very fine hairline fractures. 25.50 - 25.60 Quartz + calcite with dark green chlorite along shears and fractures at 75° and 35° tca. 	36969 36970		26.35 27.40	1.35 1.05	green argillite, minor pyrite	78 79		7 95	
27.40	30.30	MAROON ARGILLITE Colour not as strong as higher intervals (less hematite). <0.5% with pyrite, mostly along fractures.									
		 27.40 - 29.10 Weakly developed specularite clots similar to those described previously (10.67 - 12.50). 28.60 - 29.12 4 cm brecciated, hematitic shear at 10° tca contains interstitial calcite and carbonate clasts. Minor pyrite along shear planes. 			28.90 30.30	1.50 1.40	maroon argillite, minor pyrite	16 5		12 5	

HOLE: PX-91-03

.

PAGE: 5 of 8

INTE	RVAL	DESCRIPTION				SAM	1PLE		ASSA	AYS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
30.30	31.50	 29.40 - 30.30 Weakly hematitic, progressively more green with depth in this interval. 30.15 - 30.25 Rubble, strongly broken (possible fault). 30.30 Sharp bedded contact at 65° tca. Silty, green, chloritic. SHARPSTONE CONGLOMERATE Interbedded with overlying silty argillite. Matrix is chloritic and moderately hard. Clasts often have chloritic rims, sparse pyrite grains or blebs in matrix. Total sulphides <<0.5%.	36973	30.30	31.50	1.20	sharpstone conglomerate, chloritic matrix, minor pyrite	5		40	
31.50	39.30	 SANDY GREEN ARGILLITE Hematite in wispy bands and along fracture coatings. Coarser interbeds. Bedding is fairly consistent at about 60° tca. Minor bleached zones are found throughout the interval. 33.50 - 33.65 Fault at 10 - 15° tca with 10 - 15% pyrite in a few coarser chips. 38.30 - 39.30 Interbedded sharpstone conglomerate and sandy argillite. Total sulphides <0.5%. 	36974 36975 36935 36936 36937	33.00 34.45	33.00 34.45 36.00 37.60 39.30	1.50 1.45 1.55 1.60 1.70	green sandy argillite fault zone, 10 to 15% pyrite	6 5 9 22 629		3 3 3 17 12	
39.30	50.00	 SHARPSTONE CONGLOMERATE Minor sandy, silty and argillaceous interbeds, locally brecciated. Breccia matrix contains chlorite ± hematite. Trace sulphides. Lower contact is rubble, brittle, fractured at 15° tca, with hematite and pyrite on fracture surfaces (fault?). 40.10 - 42.00 Locally increased calcite along fractures and in matrix. Trace disseminated pyrite. 	36938 36939		40.80 42.30	1.50 1.50	sharpsione conglomerate, trace pyrite	17 6		6 11	

HOLE: PX-91-03

.

PAGE: 6 of 8

DESCRIPTION				SAN	APLE		ASSA	YS	
	NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
42.50 Small chloritic shear at 15° tca. Sparse hematitic fractures at 45° tca.	36940 36941 36942 36943 36944	43.80 45.35 46.80	45.35 46.80 48.30	1.50 1.55 1.45 1.50 1.70	chloritized shear, trace pyrite	5 5 33 14 11		5 10 232 16 48	
				1.50 0.62	green sandy argillite	120 5		26 8	
 SHARPSTONE CONGLOMERATE More siliceous than above intervals. Pale grey, clasts slightly bleached. Occasional larger clasts (2 - 5 cm) are white marble containing brick red clots of hematite to 1 cm near the margins Total sulphide <0.5%, trace chalcopyrite. Sulphides increase slightly with depth. 62.65 - 63.00 Silicified limestone or marble clast with dark green coarse chlorite rims and fracture fillings and occasional hematite clots near clast margins. 68.80 - 70.70 Finer, sandy, minor quartz - calcite veining. 	36948 36949 36950 128926 128927 128928 128929 128930 128931 128932 128932 128933	53.62 55.12 56.60 58.10 59.60 61.10 62.50 64.00 65.50 64.00 65.50 64.00 65.50 64.00 65.50 64.00	55.12 56.60 58.10	1.50 1.48 1.50 1.50 1.50 1.40 1.50 1.50 1.50 1.50 1.50 1.50 1.50	sharpstone conglomerate, trace pyrite + chalcopyrite	80 13 5 5 5 5 5 5 17 5 5 19 9 35		53 140 127 56 10 24 4 11 248 36 7 20 112	
	 42.50 Small chloritic shear at 15° tca. Sparse hematitic fractures at 45° tca. SANDY GREEN ARGILLITE Similar to section 31.5 - 39.3 but no hematite. Bedding at 60° tca. Occasional diffuse tan banding along bedding. Weakly brecciated with minor hematite along clast boundaries. Trace disseminated pyrite. SHARPSTONE CONGLOMERATE More siliceous than above intervals. Pale grey, clasts slightly bleached. Occasional larger clasts (2 - 5 cm) are white marble containing brick red clots of hematite to 1 cm near the margins Total sulphide <0.5%, trace chalcopyrite. Sulphides increase slightly with depth. 62.65 - 63.00 Silicified limestone or marble clast with dark green coarse chlorite rims and fracture fillings and occasional hematite clots near clast margins. 	42.50 Small chloritic shear at 15° tca. Sparse hematitic fractures at 45° tca. 36940 36941 36941 36942 36943 36943 36944 SANDY GREEN ARGILLITE Similar to section 31.5 - 39.3 but no hematite. Bedding at 60° tca. Occasional 36945 diffuse tan banding along bedding. Weakly brecciated with minor hematite along 36945 clast boundaries. Trace disseminated pyrite. 36946 SHARPSTONE CONGLOMERATE 36947 More siliceous than above intervals. Pale grey, clasts slightly bleached. Occasional 36947 larger clasts (2 - 5 cm) are white marble containing brick red clots of hematite to 1 36948 cm near the margins Total sulphide <0.5%, trace chalcopyrite. Sulphides increase	42.50 Small chloritic shear at 15° tca. Sparse hematitic fractures at 45° tca. 36940 42.30 42.50 Small chloritic shear at 15° tca. Sparse hematitic fractures at 45° tca. 36941 43.80 36941 43.80 36942 45.35 36943 46.80 36944 48.30 SANDY GREEN ARGILLITE Similar to section 31.5 - 39.3 but no hematite. Bedding at 60° tca. Occasional diffuse tan banding along bedding. Weakly brecciated with minor hematite along clast boundaries. Trace disseminated pyrite. 36945 50.00 SHARPSTONE CONGLOMERATE More siliceous than above intervals. Pale grey, clasts slightly bleached. Occasional larger clasts (2 - 5 cm) are white marble containing brick red clots of hematite to 1 cm near the margins Total sulphide <0.5%, trace chalcopyrite. Sulphides increase slightly with depth.	42.50Small chloritic shear at 15° tca.Sparse hematitic fractures at 45° tca.3694042.3043.8042.50Small chloritic shear at 15° tca.Sparse hematitic fractures at 45° tca.3694143.8045.353694143.8045.353694245.353694245.353694346.8048.303694448.303694448.303694550.0051.5051.5052.123694651.5052.123694651.5052.123694752.1253.6251.2052.123694752.1253.623694752.1253.623694752.1253.6251.123694853.6255.123694853.6255.123694955.1256.603694955.1256.603695056.6038.103694955.1256.603695056.6058.103694955.1256.6036.1012892658.103694955.1256.6036.1012892658.103694955.1256.6036.1012892656.603694955.1256.6036.1012892861.103694955.1256.6036.1012892861.103694955.1256.6038.1012892965.5067.00368.8070.70Finer, sandy, minor quartz - calcite veining.12893368.5070.00	NO.FROMTOLength42.50Small chloritic shear at 15° tca.Sparse hematitic fractures at 45° tca. 36940 42.30 43.80 1.50 36941 43.80 45.35 1.55 36942 45.35 46.80 1.45 36943 46.80 48.30 1.50 36944 48.30 50.00 1.70 SANDY GREEN ARGILLITESimilar to section 31.5 39.3 but no hematite.Bedding at 60° tca.OccasionalGifuse tan banding along bedding.Weakly brecciated with minor hematite along 36945 50.00 51.50 52.12 0.62 SHARPSTONE CONGLOMERATEMore siliceous than above intervals.Pale grey, clasts slightly bleached.Occasional 36946 53.62 55.12 1.50 More siliceous than above intervals.Pale grey, clasts slightly bleached.Occasional 36948 53.62 55.12 1.50 36948 53.62 55.12 1.50 36948 53.62 55.12 1.50 36949 55.12 56.60 1.48 36950 56.60 88.10 1.50 128926 58.10 59.60 1.50 128926 58.10 1.50 128926 61.10 1.50 128926 64.00 65.50 1.50 128926 61.00 65.50 1.50 128930 64.00 65.50 1.50 128926 61.00 65.50 1.50 128930 65.00 65.50 1.50	NO.FROMTOLengthDESCRIPTION42.50Small chloritic shear at 15° tca.Sparse hematilic fractures at 45° tca.3694042.3043.801.503694143.8045.3546.801.453694143.801.503694248.3050.001.70SANDY GREEN ARGILLITESimilar to section 31.5 - 39.3 but no hematite.Bedding at 60° tca.Occasionaldiffuse tan banding along bedding.Weakly brecciated with minor hematite along3694550.0051.501.50diffuse tan banding along bedding.Weakly brecciated with minor hematite along3694550.0051.501.50SHARPSTONE CONGLOMERATEMore siliceous than above intervals. Pale grey, clasts slightly bleached. Occasional3694752.1253.621.50More siliceous than above intervals. Pale grey, clasts slightly bleached. Occasional3694752.1253.601.483694555.0051.5052.121.503694853.6251.211.50slightly with depth.3694555.121.501.5012892752.121.5062.65 - 63.00Silicified limestone or marble clast with dark green coarse chlorite rims and fracture fillings and occasional hematite clots near clast margins.12892864.0065.501.5012893165.5070.001.5012893365.5070.001.5012893365.5070.001.5012893365.501.5012893365.5070.0	NO.FROMTOLengthDESCRIPTIONAu (ppb)42.50Small chloritic shear at 15° tca.Sparse hematitic fractures at 45° tca.3694042.3043.801.50chloritized shear, trace pyrite53694245.3546.8048.301.503694245.351.45333694346.8048.301.503694448.301.503143694448.3050.001.701111SANDY GREEN ARGILLITESimilar to section 31.5 - 39.3 but no hematite.Bedding at 60° tca.Occasional diffuse tan banding along bedding. Weakly brecciated with minor hematite along clast boundaries. Trace disseminated pyrite.3694550.0051.5052.120.62SHARPSTONE CONGLOMERATE More siliceous than above intervals. Pale grey, clasts slightly bleached. Occasional alarger clasts (2 - 5 cm) are white marble containing brick red clots of hematite to 1 cm near the margins Total sulphide <0.5%, trace chalcopyrite. Sulphides increase slightly with depth.3694752.1253.621.50sharpstone conglomerate, trace pyrite + chalcopyrite8062.65 - 63.00Silicified limestone or marble clast with dark green coarse chlorite rimi and fracture fillings and occasional hematite clos near clast margins.3694065.501.501.5068.80 - 70.70Finer, sandy, minor quartz - calcite veining.12893265.5070.001.50568.80 - 70.70Finer, sandy, minor quartz - calcite veining.12893365.5070.001.509	NO.FROMTOLengthDESCRIPTIONAuAu(ppb)(gt)42.50Small chloritic shear at 15° tca.Sparse hematilic fractures at 45° tca.3694042.3043.801.50chloritized shear, trace pyrite53694143.801.503694143.801.50chloritized shear, trace pyrite53694245.351.45333694448.301.50111SANDY GREEN ARGILLITESimilar to section 31.5 - 39.3 but no hematite.Bedding at 60° tca.Occasional3694550.001.70111SANDY GREEN ARGILLITESimilar to section 31.5 - 39.3 but no hematite.Bedding at 60° tca.Occasional3694550.0051.5052.120.62SHARPSTONE CONGLOMERATEMore siliceous than above intervals. Pale grey, clasts slightly bleached.Occasional3694752.1253.621.50sharpstone conglomerate, trace80atight with depth.15055.1255.601.4855512892655.121.50562.65 - 63.00 Silicified limestone or marble clast with dark green coarse chlorite rims and fracture fillings and occasional hematite clots near clast margins.12893665.501.505512892962.5064.001.50555555555555555555555555555555<	NO. FROM TO Length DESCRIPTION Au Cu (ppb) Au Cu (ppt) 42.50 Small chloritic shear at 15° tca. Sparse hematilic fractures at 45° tca. 36940 42.30 43.80 1.50 chloritized shear, trace pyrite 5 5 42.50 Small chloritic shear at 15° tca. Sparse hematilic fractures at 45° tca. 36940 42.30 43.80 1.50 chloritized shear, trace pyrite 5 5 10 36942 45.35 46.80 43.00 1.50 33 232 14 16 SANDY GREEN ARGILLITE Similar to section 31.5 - 39.3 but no hematite. Bedding at 60° tca. Occasional 36945 50.00 51.50 1.50 green sandy argillite 120 26 SHARPSTONE CONGLOMERATE More siliceous than above intervals. Pale grey, clasts slightly bleached. Occasional 36947 52.12 53.62 1.50 starpstone conglomerate, trace pyrite 80 53 SHARPSTONE CONGLOMERATE More siliceous than above intervals. Pale grey, clasts slightly bleached. Occasional 36949 53.12

HOLE: PX-91-03

PAGE: 7 of 8

INTE	RVAL	DESCRIPTION				SAN	IPLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		78.10 Well developed bedding at 60° tca.	12893 12893 12894 12894 12894 12894 12894 12894 12894 12894 12894	7 74.50 8 76.00 9 77.50 0 79.00 1 80.50 2 82.00 3 83.50 4 85.00 6 88.00 7 89.50 8 91.00 9 92.50	76.00 77.50 79.00 80.50 82.00 83.50 85.00 86.50 88.00 89.50 91.00 92.50 93.30	1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50		5 10 15 5 25 175 20 7 5 5 5 5 16 19		11 62 7 9 54 64 23 17 28 19 43 41 27	
	93.30	END OF HOLE									

HOLE: PX-91-03

PAGE: 8 of 8

				KE KEU	OVERY TABLE			<u></u>
FROM	ТО	RECOVERY (in %)	FROM	то	RECOVERY (in %)	FROM	то	RECOVERY (in %)
0.00	0.61	0.00	46.04	47.56	100.00			
0.61	4.88	83.57	47.56	48.93	100.00			
4.88	7.93	100.00	48.93	50.61	96.36			
7.93	8.69	96.00	50.61	53.35	94.44	[
8.69	10.98	100.00	53.35	56.55	96.19			
10.98	14.02	96.00	56.55	58.84	100.00			
14.02	16.92	98.95	58.84	59.76	96.67	1		
16.92	19.21	100.00	59.76	62.50	100.00			
19.21	20.12	100.00	62.50	64.02	96.00			
20.12	21.34	95.00	64.02	65.70	100.00			
21.34	22.41	85.71	65.70	68.75	100.00			
22.41	22.87	100.00	68.75	71.80	100.00			
22.87	23.32	100.00	71.80	72.87	100.00			
23.32	23.48	100.00	72.87	75.00	97.14			
23.48	26.22	90.00	75.00	75.46	100.00			
26.22	26.83	95.00	75.46	78.05	100.00			
26.83	27.59	92.00	78.05	81.10	100.00			
27.59	29.27	100.00	81.10	84.15	100.00			
29.27	32.01	100.00	84.15	87.20	100.00			
32.01	35.06	100.00	87.20	90.24	97.00			
35.06	38.26	80.00	90.24	93.30	100.00			
38.26	39.33	97.14	1			1		
39.33	41.46	100.00						
41.46	44.51	100.00						
44.51	46.04	100.00						

HOLE: PX-91-04

PAGE: 1 of 9

PROPERTY	Phoenix	DATE LOGGED LOGGED BY	M.Caron/W.Howell	EASTING NORTHING	10133.0 8400.0
STARTED	April 21, 1991	SIGNED BY		ELEVATION	1520
COMPLETED	April 23, 1991	DRILLED BY	Beaupre's	LENGTH	107.30
PURPOSE	To test Monarch soil and rock	SURVEYED BY	•	UNITS	metres
	gold anomaly	CORE LOCATION	KRR Core Storage	CORE SIZE	NQ
COMMENTS					

DEPTH	AZIMUTH	DIP
Collar 56.00 107.30	210	55 54 54

		SUMMAI	RY LOG			ASSA	Y SUMMAR	Y	
INTER From	VAL To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTER From	RVAL To	LENGTH in metres	AVER Au ppb	
31.90 32.60 86.35	1.83 31.90 32.60 86.35 87.47 99.10	CASING EPIDOTE-CHLORITE-GARNET SKARN Strong hematite, 1% pyrite + chalcopyrite, local diopside and idocrase(?). MAGNETITE SKARN 12% pyrite + chalcopyrite, strong fracture calcite. SHARPSTONE CONGLOMERATE Chloritized, locally silicified and clay-altered, minor pyrite. 32.60 - 32.80 Shear. 41.31 - 41.50 Strong epidote alteration. 48.30 - 48.50 Small rusty shear. 49.80 - 49.90 Small rusty shear. 49.80 - 49.90 Small rusty shear. 55.40 Small rusty shear. HORNBLENDE-FELDSPAR PORPHYRY Dark grey, fine-grained. SHARPSTONE CONGLOMERATE Chloritized, <0.5% pyrite. 87.47 - 90.50 Vuggy fractures with quartz+pyrite	99.10 99.95 99.50 107.30 107.30	MAFIC DYKE Very fine grained, chlorite-actinolite-quartz. SHARPSTONE CONGLOMERATE Chloritized, <0.5% pyrite. 101.50 - 102.10 Rubble (fault?). END OF HOLE	31.90 44.20	32.60 45.70	0.70	430 354	250

HOLE: PX-91-04

PAGE: 2 of 9

INTEI	RVAL	-	DESCRIPTION				SAN	APLE		ASSA	YS	
FROM	то			NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
0.00	1.83	CASING							•			
1.83	31.90		LORITE-GARNET SKARN fractures and disseminated throughout. About 1% pyrite and less roughout.									
•		1.83 - 4.60	Rubble. Calcareous throughout. Narrow calcite veinlets throughout. <0.5% chalcopyrite as 1 - 3 mm blebs. Minor	128965	1.83	3.66	1.83	epidote-chlorite-garnet skarn, 1-2% pyrite, minor chalcopyrite	5		343	
			malachite. Local chalcopyrite in calcite veinlets. Medium green garnet. Sandy protolith, finer with depth. Abundant epidote retrograde after garnet.	128966	3.66	5.10	1.44		51		426	
		4.60 - 4.81	Massive fine-grained calcite vein, white to light pink. Graphic texture. Veinlets of late dark green chlorite and veinlets of steely grey specularite plus red hematite at 65° tca.									
		4.81 - 6.60	Possible very fine-grained diopside in finer grained portion of skarn. Fine to medium-grained amber idocrase(?) with fine-grained tan garnet. Stringer pyrite up to 1%. Siltstone protolith?	128967	5.10	6.60	1.50		33		74	
		6.60 - 14.10	Skarn fractured amd healed with calcite. Fairly abundant fine to medium-grained tan garnet cut by later phase of coarser red-brown			8.08 9.40	1.48 1.32		36 21		1059 128	
		9.66 - 10.36	garnet. <1% pyrite in clots (possibly clasts?). Hornfelsed argillite (diopside?). Calcite veinlets, some dark chlorite patches.) 9.40 10.90	10.90 12.40	1.50 1.50		67 137		185 135	
			I	128972	2 12.40	13.90	1.50		170		247	
		14.10 - 24.90	Massive skarn, primarily fine-grained tan garnet. Locally abundant		13.90	15.40	1.50		9		73	
	1		dark green chlorite and retrograde epidote (after garnet). Later		15.40	16.90	1.50		30		364	
			phase of coarser honey-coloured garnet. Irregular calcite veins to	12897	5 16.90	18.40	1.50		39		290 505	
			2-3 cm. Some narrow calcite veinlets. More or less brecciated appearance throughout. Up to 10% patchy pyrite over narrow		18.40 19.87	19.87 21.30	1.47 1.43	1	30 53		505 108	
1		1	appearance unoughout. Op to 10% patting pyfile over narrow	33111	12.01	61,30	1.40		,,,		100	

HOLE: PX-91-04

.

PAGE: 3 of 9

INTE	RVAL		DESCRIPTION				SAN	IPLE		ASSA	YS	
FROM	то			NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
	•	24.90 - 26.36 26.36 - 27.10 27.10 - 28.39 28.39 - 29.70 29.70 - 30.63	widths (5-10 cm). Total sulphides $\approx 0.5\%$. Possibly some fine - grained light green diopside. Irregular garnet clots set in a matrix of fine- grained green diopside and chlorite. Irregular dark green chlorite stringers throughout. Cut by later quartz-calcite veins. Calcareous throughout. Late hematite \pm specularite veinlets. Some epidote. Disseminated and stringer pyrite <1%. Strongly chloritized and epidotized. Massive. 3 - 6% fine-grained disseminated pyrite. Some remnant tan garnet. Medium-grained tan to brown garnet, some patchy diopside, cut by chlorite-calcite-hematite stringers. 1 - 3% disseminated pyrite. Massive medium-grained epidote and chlorite skarn. 5 - 10% disseminated pyrite. Calcareous throughout. Local fracture- controlled hematite. Massive garnet skarn. Tan to brown fine-grained garnet. Local chlorite. Abundant hematite on fractures and in matrix. Later phase of coarser honey coloured garnet. Local patches of up to 5% fine-grained pyrite. Total sulphides <1%.	33779 33780 33781 33782 33783	22.87 24.40 25.90 27.40 28.90	22.87 24.40 25.90 27.40 28.90 30.40	1.57 1.53 1.50 1.50 1.50	5-10% pyrite locally	48 35 19 52 56 77		107 90 56 232 222 295	
31.90	32.60	pyrite and chal shear planes.	Epidote-chlorite skarn with abundant fracture-filling calcite. 5-10% patchy pyrite. (Note: sulphide content is significantly higher in epidote and chlorite skarn [retrograde?] than in garnet skarn.) SKARN etite with blebs and small pods (1 - 5 mm) of fine grained granular copyrite. Sulphides also form wispy bands along fractures and small Calcite ubiquitous as small (<0.5 mm - 3 mm) grains and clots and and fracture planes. Total sulphides = 12%. Pyrite > chalcopyrite.	33784	30.40	31.90	1.50	5% pyrite locally	28		417	

HOLE: PX-91-04

PAGE: 4 of 9

INTE	RVAL	DESCRIPTION				SAN	1PLE		ASSA	AYS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
32.60	86.35	 31.90 Upper contact rubble, possible shearing at 10 - 15° tca. 32.40 - 32.60 Brecciated, matrix = sulphide and calcite. 32.60 Lower contact faulted at 45° tca. SHARPSTONE CONGLOMERATE Heterolithic clasts from fine sand to 10 cm. Clasts consist of fine-grained sedimen ts, shales and cherts. Clasts are subangular to subrounded and show crude bedding. Finer-grained intervals show reliable bedding attitudes with some scour and fill features. Matrix is similar finer grained material, generally altered to minor clay, silica, epidote and chlorite. Larger clasts have reaction rims. Pyrite associated with dark green chlorite ± epidote. Hematite mostly along fractures and in fault breccias. Not all fractures hematitic. Generally poorly mineralized, with <<0.5% sulphides as weak disseminations and minor fracture coatings. Occasional clasts contain pyrite. 	33785	31.90	32.60	0.70	magnetite skarn, 12% pyrite and minor chalcopyrite	430		2506	0.29
		32.60 - 32.80 Rubble, sheared, chloritized.	33786	32.60	33.70	1.10	Sharpstone conglomerate, <0.5% pyrite	30		21	
		 33.23 - 36.10 Epidote in matrix, smaller fragments strongly epidote-altered, epidote = 20%. Minor fractures and shears at 45° tca (parallel to bedding) are weakly hematitic. Epidote decreases to 5 - 10% near bottom of interval. 33.50 - 36.60 Sandy interbed. 40.39 - 41.00 Sandy interbeds. 5% epidote. 41.31 - 41.50 20% epidote. 41.31 - 52.20 More sandy material in matrix. Bedding at 45° tca. 	33788 33789 33790 33791 128950 128951 128952	33.70 35.20 36.70 38.20 39.70 41.20 42.70 44.20 45.70	35.20 36.70 38.20 39.70 41.20 42.70 44.20 45.70 47.20	1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	strong epidote sandy interbeds locally strong epidote	5 5 65 9 5 5 354 13		48 10 13 274 12 8 6 11 11	

HOLE: PX-91-04

PAGE: 5 of 9

INIE	RVAL	DESCRIPTION				SAN	<u>IPLE</u>		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		48.30 - 48.50 Small rusty shear at 20° tca. 49.80 - 49.90 Weakly oxidized (rusty) small shear at 15° tca.		48.70 50.20 51.70	48.70 50.20 51.70 53.20 54.70	1.50 1.50 1.50 1.50 1.50	small rusty shear small rusty shear	5 19 10 148 12		6 13 11 9 10	
		 54.80 - 55.10 Sandy interbed. 55.40 Small, weakly oxidized shear at 20° tca. 36.20 - 57.95 Weak calcite along margins of larger clasts and in sparse calcite-filled fractures. 46.62 - 57.95 Weak epidote alteration of fine-grained material. Dark green chlorite occasionally along clast margins. Bedding at 45° tca. Calcite very minor, along clast margins and in minor late fractures. 	128960		56.25 57.70 59.20	1.55 1.45 1.50	small rusty shear	29 5 95		150 82 99	
		 59.75 Small, weakly oxidized fracture plane at 30° tca. 60.05 - 63.05 Occasional limestone clasts with clots (0.5 - 1.0 cm) of chalcopyrite and pyrite. Limestone clasts are coincident with increased epidote in the matrix and also have dark green chlorite along margins, as fracture 	128962 128963		60.70 61.80	1.50 1.10		32 73		106 333	i
		 fillings and in small (1 - 1.5 cm) clots. 61.00 4 cm limestone clast with 1 - 4 mm honey-coloured and red garnet and 1 - 10 mm chlorite clots and minor pyrite. 61.05 Small hematitic-chloritic fracture at 45° tca. 67.20 Weak hematite and chlorite along a small shear. 70.25 Minor tan clay-alteration of fine-grained siltstone. Bedding at 45° tca. 71.95 Weak clay-alteration of fine-grained sediments, bedding at 45° tca. 72.85 - 73.00 Carbonate clast with strong dark greeen chlorite along margin and local 8-10% pyrite. Small (1 - 2 mm) clots of chalcopyrite within the 	36920 36921 36922 36923 36924 36924	64.80 66.30	63.20 64.80 66.30 67.80 69.30 70.80 71.30 73.80	1.40 1.50 1.50 1.50 1.50 1.50 0.50 2.50		5 18 15 5 32 17 5 30		21 71 12 25 107 29 55 743	

HOLE: PX-91-04

PAGE: 6 of 9

INTE	RVAL	DESCRIPTION				SAN	APLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		clast, minor fracture hematite. Total sulphides <0.5%; pyrite > chalcopyrite.									
		74.40 - 74.50 Calcite vein, with hematite after garnet and minor pyrite.	36927	73.80	75.30	1.50		25		232	
			36928	75.30	76.80	1.50	sharpstone conglomerate, weak clay alteration	5		15	
		77.70 - 77.80 Local en echelon tension gashes filled with calcite.	36929		78.30	1.50		5		35	
					79.80	1.50		31		104	
		79.80 - 79.90 10 cm limestone clast with dark green chlorite along fractures.	36931		81.30	1.50		5		78	
		Increased epidote and garnet replaced by hematite near clast margin.		+ +	82.50	1.20		5		11	
		83.70 2 cm calcite with minor hematite vein at 45° tca.			84.00	1.50		2		40	
		84.41 - 84.47 Banded calcite-quartz vein with dark chlorite along fractures at $\approx 45^{\circ}$ tca.	30934	84.00	85.25	1.25		/		103	
		84.53 - 84.61 Hematite-carbonate-chlorite along shears and fractures.									
		57.95 - 86.35 Total sulphides <0.5%; pyrite > chalcopyrite.	36904	85.25	86.35	1.10		122		135	
		75.30 - 86.35 Weak clay(?) alteration of the matrix and clasts, pale yellow cast.									
86.35	87.47	HORNBLENDE-FELDSPAR PORPHYRY Dark grey, fine grained, hornblende-feldspar porphyry.									
		86.35 Upper contact irregular, about 5-10° tca. 86.68 - 87.27 Chilled interval at $\approx 35^\circ$ tca.	36905	86.35	87.47	1.12	fine-grained mafic dyke	5		48	
		87.47 Lower contact irregular, chilled at 30 - 40° tca. Relicts of plagioclase phenocrysts (1-2 mm) are mostly replaced by chlorite. Dark chloritized hornblende phenocrysts are most obvious in the chilled margins but are present throughout. Calcite filled fractures at 15° and 30° tca.									

P.

HOLE: PX-91-04

PAGE: 7 of 9

INTE	RVAL	DESCRIPTION				SAN	IPLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		87.47 - 90.50 Sparse vuggy fractures lined with quartz and coated with orange-brown limonite and fine-grained disseminated pyrite. Matrix is strongly chloritized. Fractures generally 25-30° tca. Total sulphides <0.5%.	36906	87.47	89.00	1.53	sharpstone conglomerate	6		49	
		89.50 1.5 cm vein with terminated quartz crystals, 15° tca. 2 · 3 cm selvages with fine pyrite, strong chlorite + epidote.	36907	89.00	90.50	1.50		104		83	
		90.50 - 99.10 <0.5% pyrite with minor chalcopyrite.	36908	90.50	91.60	1.10		15		69	
		17 17 10	36919	91.60	93.00	1.40		11		33	
			36909	93.00	94.50	1.50		65		159	
		94.60 - 94.75 Locally brecciated with hematitic coatings on fracture surfaces.	36910	94.50	96.00	1.50		5		39	
		96.00 - 99.10 Increased clay along fractures, weak limonite staining on local fractures.	36911	96.00	97.50	1.50		5		38	
		97.75 Carbonate clast with hematite clots with fine-grained disseminated pyrite.	36912	97.50	99 .10	1.60		11		117	
99.10	99.50	BLACK DYKE				0.05				16	
		Very fine-grained. Upper contact at 45° tca. Fine hairline fractures and small tension gashes are calcite-filled. Lower contact is broken and irregular at 35° tca with a chilled contact. Uncertain composition. Groundmass is a fine felted mass of chlorite(?), quartz, and tremolite-actinolite(?). Occasional faint relicts of chloritiz ed hornblende(?).	36913	99.10	99.95	0.85	fine-grained mafic dyke	5		16	
99.95	106.70	SHARPSTONE CONGLOMERATE Similar composition and texture to sections 32.60 - 86.35 and 87.10 - 99.10. Chlorite moderately strong. Fractures within clasts and clast margins often filled with dark chlorite.									
		101.50 - 102.10 Rubble with limonite stained surfaces. Shear = 15° tca.		99.95 101.50		1.55 1.50	sharpstone conglomerate	5 24		29 88	

.

÷.

HOLE: PX-91-04

.

PAGE: 8 of 9

INTE	RVAL		DESCRIPTION				SAN	(PLE		ASSA	AYS	
FROM	то			NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
	106.70	102.60 - 102.80 104.00 - 105.60 END OF HOLE	Chloritic matrix and fractures. 8 cm pink, fine-grained, rounded cobble with 0.5 - 0.8 cm garnet clots showing retrograde alteration of garnets (quartz-calcite-pyrite-hematite margins, strong chlorite halos). Alteration of tremolite- actinolite to quartz-chlorite-clay in another clast. Local weak silicifiation of both matrix and some clasts.	36916 36917	103.00 104.50 106.00	106.00	1.50 1.50 0.71	weak silicification	5 6 42		48 45 93	

HOLE: PX-91-04

PAGE: 9 of 9

		······································						
FROM	TO	RECOVERY (in %)	FROM	TO	RECOVERY (in %)	FROM	TO	RECOVERY (in %)
0.00	1.83	0.00	35.67	36.43	68.00	77.74	79.12	97.78
1.83	3.66	80.00	36.43	38.11	98.18	79.12	80.49	97.78
3.66	4.27	90.00	38.11	39.94	95.00	80.49	81.25	100.00
4.27	5.03	72.00	39.94	40.40	100.00	81.25	82.01	92.00
5.03	6.10	100.00	40.40	41.31	100.00	82.01	83.08	100.00
6.10	7.62	58.00	41.31	44.21	100.00	83.08	83.84	100.00
7.62	8.08	13.33	44.21	47.26	100.00	83.84	86.13	100.00
8.08	8.38	100.00	47.26	49.09	100.00	86.13	86.89	100.00
8.38	10.06	70.91	49.09	50.30	87.50	86.89	88.57	98.18
10.06	10.67	100.00	50.30	53.35	100.00	88.57	89.94	97.78
10.67	13.72	100.00	53.35	56.25	98.95	89,94	91.92	95.38
13.72	15.85	100.00	56.25	59.30	100.00	91.92	92.99	97.14
15.85	16.62	100.00	59.30	61.43	100.00	92.99	94.36	93.33
16.62	17.84	100.00	61.43	62.50	100.00	94.36	95.43	100.00
17.84	19.82	100.00	62.50	63.72	97.50	95.43	96.04	100.00
19.82	20.88	100.00	63.72	64.63	100.00	96.04	97.26	100.00
20.88	22.87	100.00	64.63	65.55	100.00	97.26	99.09	100.00
22.87	25.61	98.89	65.55	67.68	100.00	99.09	102.13	97.00
25.61	28.66	100.00	67.68	68.60	100.00	102.13	105.18	99.00
28.66	30.03	97.78	68.60	70.73	100.00	105.18	106.71	100.00
30.03	31.86	100.00	70.73	71.65	100.00			
31.86	32.01	100.00	71.65	72.71	85.71			
32.01	33.23	100.00	72.71	74.70	100.00			
33.23	35.06	100.00	74.70	76.52	100.00			

HOLE: PX-91-05

PROPERTY Phoenix DATE LOGGED EASTING 10325.0 LOGGED BY W. A. Howell NORTHING 8400.0 April 24, 1991 STARTED SIGNED BY ELEVATION 1487 April 25, 1991 COMPLETED **DRILLED BY** Beaupre's LENGTH 83.84 To test Monarch soil and rock SURVEYED BY gold anomaly CORE LOCATIO PURPOSE UNITS metres KRR Core Storage CORE LOCATION **CORE SIZE** NQ COMMENTS

.

DEPTH	AZIMUTH	DIP
Collar	210	55
83.00		53

.

		SUM	MARY LOG		ASSA	Y SUMMAR	Y
INTERVA From T	AL Го	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au ppb Cu ppm
	4.27 3.84	CASINGSHARPSTONE CONGLOMERATEChloritized, pyrite locally >1%.4.27 - 12.80Limit of strong weathering.7.70 - 8.08Rusty rubble, small fault?8.60 - 10.00Rusty shear.10.60 - 10.67Rusty shears.11.50 - 11.60Rusty fractures.12.35Rusty rubble 15° tca.15.50 - 15.80Strong chlorite-hematite, alter garnets.21.90Rusty fracture.21.90Pebble dyke.26.60 - 32.00Fault.33.20 - 34.60Hornblende porphyry dyke.38.95 - 39.13Rusty shear.79.50 - 80.27Hornblende porphyry dyke.	red		25.00 25.30	0.30	7341 2151
83	3.84	END OF HOLE					

PAGE: 1 of 6

HOLE: PX-91-05

.

PAGE: 2 of 6

INTE	RVAL	4	DESCRIPTION				SAN	APLE		ASSA	YS	
FROM	то			NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
0.00	4.27	CASING										
4.27	83.84	Top portion ru weathered rust subrounded cla size varies fror mostly chlorite argillite interbo sediments. Mi	CONGLOMERATE bble of argillite, sandy argillite, sharpstone conglomerate and strongly y clasts (some of which may be exotic). Heterolithic subangular to sts including cherts, fine sediments and fine-grained volcanics. Grain n sand to 10 - 15 cm, with 1 - 4 cm clasts most abundant. Matrix and chloritized fine clasts. Sandy to sandy argillite and occasional xds. Finer grained sediments usually grade downwards to the coarser nor pyrite throughout disseminated within matrix and on fractures ts. >1% pyrite is always related to fracturing or brecciation.									
		4.27 - 12.80	Extent of strong surficial weathering. Minor rusty fractures below		4.27	5.49	1.22	sharpstone conglomerate,	5		7	
			this depth. Sandy beds at 35° tca. Occasional large (5-10 cm) limy clasts with green chlorite on clast margins and along fractures. Pyrite associated with dark green chlorite. Limy clasts often contain small garnets and clots of hematite. Dark chlorite moderately pervasive. Hematite as weak coatings on clasts. Clasts occasionally have iron-rich carbonate cores with white siliceous cores passing outwards to chlorite. Other clasts are a felted mat of clusters of radiating crystals (tremolite) and tan clays(?).	36502	5.49	6.90	1.41	< 1% pyrite	5		21	
	1	7.70 - 8.08	Rubble, rusty.	36503	6.90	8.40	1.50	rubbly, strong iron oxides	5		10	
		8.41 8.60	Limy clast, chloritic rims, pyritic.	36504	8.40	9.90	1.50		12		40	
		9.90 10.00 10.60 - 10.67	Quartz-carbonate veinlet along fracture at 35° tca. Carbonate clasts - strong chlorite, minor pyrite. Rusty fracture/shear at 35° tca. Broken, rusty surfaces, sheared at 15-30° tca.	36505	9.90	11.40	1.50	rusty shear	27		34	

HOLE: PX-91-05

PAGE: 3 of 6

INTEF	RVAL		DESCRIPTION				SAN	APLE		ASSA	YS	
FROM	то			NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		11.50 - 11.60	Rusty fractures with minor hematite at 30-35° tca. Local small limy clasts contain hematite patches (after garnet), in dark chloritic matrix.	36506	11.40	12.80	1.40	12.8 = limit of strong surficial weathering	7		25	
		12.35	Broken, rusty, sheared at 15° tca.			14.30	1.50		5		62	
				128887		15.50	1.20		5		14	
		15.50 - 15.80	Limy interval - strong chlorite/hematite. Minor retrograde		15.50	15.80	0.30		36		48	
			alteration of garnet to hematite, quartz, and carbonate.	36509		17.30	1.50		13		34	
		12.80 - 18.20	Sandy interval - bedding at 35° tca.		17.30	18.80	1.50		5		15	
		19.30 - 19.70	Sandy interval - bedding at 60-80° tca.		18.80	20.40	1.60		5		8	
1		21.90	Rusty fracture at 10° tca.		20.40	21.90	1.50		5		11	
		21.90 - 22.00	Pebble dike - milled, subrounded to angular siliceous clasts in hard, very fine-grained, buff matrix.	36513	21.90	23.30	1.40	increased clay in matrix	5		42	
		22.00 - 25.00	Increased clay in matrix. Minor calcite along occasional fractures	36514	23.30	25.00	1.70		12		25	
			and clast rims. Bottom 0.2 m is more sandy.	128888	25.00	25.30	0.30	coarser sharpstone conglomerate dark chlorite, clay	7341	6.51	2151	
		25.00 - 25.30	Coarser, more siliceous. Clasts have thin carbonate rims. Dark	36515	25.30	26.10	0.80		5		219	
1			chloritic, clay-altered with clay at 26.6 m.	128889	26.10	26.70	0.60	fault with clay-altered selvages	39		53	
1		26.60 - 32.00	Fault, subparallel tca. Increased clay content between 25.80 and	36516	26.70	27.80	1.10		17		41	
·			26.60 in narrow selvage zone. Fracture chlorite and chloritic cores	36517	27.80	29.40	1.60		5		23	
			in clasts are frequent. Sparse limy clasts with hematitic clots. Less	36518	29.40	30.80	1.40		5		52	
			clay below 32.00.	36519	30.80	32.50	1.70		9		25	
		33.20 - 33.38	Hornblende-porphyry dyke. Upper contact sheared at 20° tca. Lower contact irregular at = 55° tca.	36520	32.50	34.00	1.50	small hornblende-porphyry dyke	19		78	
		33.38 - 33.60	Brecciated and recemented with intrusive dyke material. Higher									
			clay in matrix, lower chlorite.	36521	34.00	35.50	1.50	small hornblende-porphyry dyke	5		60	
1					35.50	36.95	1.45		. 9		34	
		36.95 - 37.30	Mixed hornblende-porphyry and sharpstone conglomerate, upper contact strongly sheared and chloritized at 20° tca. Lower contact		36.95	38.55	1.60	small hornblende-porphyry dyke	5		35	

HOLE: PX-91-05

PAGE: 4 of 6

INTE	RVAL		DESCRIPTION				SAN	(PLE		ASSA	YS	
FROM	то		·· · · · · · · · · · · · · · · · · · ·	NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
			brecciated and irregular with carbonate and hematite filling fractures and interstices.									
		38.11 - 38.28 38.95 - 39.13	Fine to medium-grained sandy interbed, graded contact with coarser material below. Upper contact is sharp at 45° tca.	36524	38.55	40.00	1.45		5		65	
		41.25 - 42.00	Rusty fracture or shear at 10° - 20° tca. Sandy interbed, upper contact is clay-altered argillite grading	26525	40.00	42.50	2.50		5		61	
		41.20 - 42.00	downwards to coarser sharpstone. Weakly calcareous. Strong			44.00	1.50		12		66	
ĺ			chlorite in matrix. Clasts are partially hornfelsed to calc silicate			45.50	1.50		5		54	
1			(diopside?).			47.00	1.50		5		38	
						48.50	1.50		15		35	
				127830	48.50	50.00	1.50		13		90	
				127831	50.00	51.50	1.50		38		56	
1						53.00	1.50		7		57	
1		56.00 - 62.00	Weakly increased epidote \pm clay alteration.			56.00	1.50		5		113	
						59.00	1.50		18		73	
		62.35 - 62.50	Chloritic fracture or shear at 15° tca.			62.00	1.50		7		27	
		62.50 - 63.50	Small shears are strongly chloritized with variable amounts of pyrite.			65.00	1.50				30 25	
			Harder, competent, slightly increased epidote(?). Chlorite throughout. Minor calcite stringers cut all fractures. Sparse clasts			68.00 71.00	1.50 1.50		31		229	
			of fine grained diopside hornfels.			74.00	1.50	locally brecciated, calcite-pyrite	-31		82	
		73.30 - 78.70	Locally brecciated, carbonate-filled, weakly pyritized fractures at 10 -	12/040	12.30	74.00	1.50	along fractures	5		02	
	1	12.20 - 10.10	15° tca.	12784	3 75.50	77.00	1.50	arong matteries	8		49	
			74. eren		78.50	79.15	0.65		5		90	
						80.27	1.12	hornblende-porphyry dyke	Š		32	
		79.50 - 80.27	Hornblende-porphyry dyke. Upper contact is sheared and rusty at $\approx 40^{\circ}$ tca. Strong rusty sheared faces are also 10-15° tca within the dyke. Dyke is sheared, shattered, broken, and chloritized to 79.6, chilled below this depth at 35° tca.		. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	55.27						

HOLE: PX-91-05

PAGE: 5 of 6

INTE	RVAL	4	DESCRIPTION				SAN	(PLE		ASSA	YS	
FROM	то		······································	NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		81.30 - 81.90	Small silicified clay-rich pebble dykes with subrounded (milled?) siliceous clasts up to about 1 cm. Pale tan matrix with weak chlorite. Small offsets along late calcite veinlets.	128182 127552	2 81.55 2 82.15	82.15 83.84	0.60 1.69	small milled pebble dykes in sharpstone	15 5		181 51	
	83.84	END OF HO	LE									

HOLE: PX-91-05

.

.

PAGE: 6 of 6

CORE RECOVERY TABLE												
FROM	то	RECOVERY (in %)	FROM	TO	RECOVERY (in %)	FROM	то	RECOVERY (in %)				
0.00	4.27	0.00	35.06	38.11	99. 00							
4.27	4.57	100.00	38.11	41.16	100.00							
4.57	5.49	50.00	41.16	42.99	98.33							
5.49	6.10	35.00	42.99	44.21	100.00							
6.10	6.86	84.00	44.21	44.66	100.00							
6.86	7.62	100.00	44.66	47.26	100.00	1						
7.62	8.08	100.00	47.26	50.30	47.00							
8.08	9.30	100.00	50.30	52.29	100.00							
9.30	10.67	86.67	52.29	52.90	95.00							
10.67	12.50	100.00	52.90	54.73	100.00							
12.50	13.72	100.00	54.73	56.40	100.00							
13.72	14.94	97.50	56.40	59.45	97.00							
14.94	16.16	100.00	59.45	62.50	100.00							
16.16	17.99	98.33	62.50	64.79	100.00							
17.99	18.29	100.00	64.79	67.84	100.00							
18.29	18.75	100.00	67.84	68.60	100.00							
18.75	19.21	86.67	68.60	71.65	100.00							
19.21	19.82	80.00	71.65	74.70	100.00	1						
19.82	22.71	100.00	74.70	77.74	99.00	1						
22.71	25.30	100.00	77.74	78.66	100.00							
25.30	27.74	96.25	78.66	80.03	100.00							
27.74	28.96	100.00	80.03	80.49	100.00							
28.96	30.18	100.00	80.49	80.95	66.67							
30.18	32.01	100.00	80.95	83.84	100.00							
32.01	35.06	100.00										

HOLE: PX-91-06

1 .

PROPERTY	Phoenix	DATE LOGGED		EASTING	9970.0
		LOGGED BY	J. Deighton	NORTHING	8425.0
STARTED	April 25, 1991	SIGNED BY	-	ELEVATION	1676
COMPLETED	April 26, 1991	DRILLED BY	Beaupre's	LENGTH	106.70
PURPOSE	To test Monarch soil and rock	SURVEYED BY	-	UNITS	metres
	gold anomaly	CORE LOCATION	KRR Core Storage	CORE SIZE	NQ
COMMENTS	-		-		

.

DEPTH	AZIMUTH	DIP
Collar	210	55
106.00		55

	SUM	MARY LOG			ASSA	Y SUMMAR	Y
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTEF From		LENGTH in metres	AVERAGE Au ppb Cu pp
0.00 0.60 0.60 1.67 1.67 2.04 2.04 2.78 2.78 3.26 3.26 8.00 8.00 13.10 13.10 15.80 15.80 21.20 21.20 23.70 23.70 27.30	CASING DIOPSIDE-EPIDOTE-GARNET SKARN 5% chalcopyrite + pyrite. MASSIVE PYRITE DIOPSIDE-EPIDOTE-GARNET SKARN 20% chalcopyrite + pyrite. MASSIVE PYRITE EPIDOTE-DIOPSIDE-GARNET SKARN 1 - 2% pyrite + chalcopyrite. DIOPSIDE-EPIDOTE-GARNET SKARN EPIDOTE-GARNET-CHLORITE SKARN 1% pyrite. SANDY ARGILLITE / SHARPSTONE CONGLOMERATE Chloritized, epidotized, <0.5% pyrite. SHARPSTONE CONGLOMERATE 2-3% pyrite. DIOPSIDE SKARN	27.30 60.15 60.15 62.50 62.50 106.70 106.70	SHARPSTONE CONGLOMERATE <0.5% pyrite.	1.67 1.93 2.78 3.26 31.50	1.93 2.78 3.26 4.26 31.65	0.26 0.85 0.48 1.00 0.15	512 940 447 10577 1112 4879 412 3514 5160 522

PAGE: 1 of 10

HOLE: PX-91-06

PAGE: 2 of 10

INTE	RVAL	DESCRIPTION				SAN	APLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
0.00	0.60	CASING									
0.60	1.67	DIOPSIDE-EPIDOTE-GARNET SKARN Light green, fine grained, diopside 50%, epidote 40%, garnet 5%, sulphides 5%. Sulphides = chalcopyrite > pyrite. Calcareous throughout. Calcite-hematite veinlets, hematite-stained fractures. Rubble near lower contact.	33792	0.61	1.67	1.06	diopside-epidote-garnet skarn	230		7965	0.84
1.67	2.04	MASSIVE PYRITE Coarse-grained, minor calcite-quartz intergrowths. Lower contact irregular.	33793	1.67	1.93	0.26	massive pyrite	512		940	
2.04	2.78	DIOPSIDE-EPIDOTE (GARNET?) SKARN Light to medium green, fine-grained. Pyrite and chalcopyrite ~ 20%; chalcopyrite > pyrite. Coarse crystalline pyrite clast with irregular contacts. Disseminated pyrite in calcite veins and coating fractures. Disseminated chalcopyrite. Calcite veinlets with hematitic margins and sparse pyrite. <1% disseminated magnetite.	33794	1.93	2.78	0.85	diopside-epidote-garnet skarn	447		10577	1.13
2.78	3.26	MASSIVE PYRITE Coarse grained, sparse calcite crystals (or highly altered carbonate clasts?). Coarse epidote crystals. Chalcopyrite at margin of massive pyrite at lower contact (irregular). Lower contact also has discontinuous calcite veins and minor skarn.	33795	2.78	3.26	0.48	massive pyrite	1112	1.30	4879	0.51
3.26	8.00	EPIDOTE-DIOPSIDE-GARNET SKARN Light to medium green, very fine-grained. Irregular veins of calcite, calcite-hematite, chlorite, hematite up to 1 cm. Diopside 35%, epidote 35%, garnet 10%, sulphides 1-2%, hematite + specularite 1-2%.									
		Chalcopyrite disseminated and in veins with pyrite and magnetite. Pyrite disseminated, as fracture fillings and with calcite-hematite veins. Chalcopyrite >									

÷

PAGE: 3 of 10

INTE	RVAL_	DESCRIPTION				SAN	1PLE		ASS/	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		pyrite. Calcite and hematite in local breccias.	33796	3.26	4.26	1.00	epidote-diopside-garnet skarn	412		3514	0.36
		 4.50 5 cm garnet skarn, sharp margins. 4.60 1 cm garnet skarn, broken. 	33797	4.26	4.72	0.46		377		10863	1.18
		7.20 8 cm garnet skarn with sharp margins, 4% chalcopyrite.	33798 33799 33800 36551 36552	5.21 5.99 6.56	5.21 5.99 6.56 7.62 8.54	0.49 0.78 0.57 1.06 0.92		5 8 235 31 5		58 50 1791 16 32	
8.00	13.10	 DIOPSIDE-EPIDOTE-GARNET SKARN 80% diopside, very fine-grained, light green with pink spots (garnet?). Local dark green chlorite present. Veinlets of calcite ± hematite and sparse hematitic fractures. Hematite + calcite veining not as strong as previous interval. 11.50 - 11.75 Pyrite with dark green chlorite and epidote (after garnet). <0.5%, pyrite with minor chalcopyrite. 	36556	9.55 10.21 10.85	9.55 10.21 10.85 11.90 13.00	1.01 0.66 0.64 1.05 1.10		5 5 5 5 5		6 8 4 3 4	
13.10	15.80	EPIDOTE-GARNET-CHLORITE SKARN Light apple green, brecciated. Very fine-grained. Calcareous throughout. Veins and veinlets of calcite and/or hematite. 1% pyrite. Sulphides associated with calcite, chlorite and epidote, disseminated or in clots.		13.00 14.00 15.00	14.00 15.00 16.00	1.00 1.00 1.00	epidote-garnet-chlorite skarn	5 20 5		4 5 3	

HOLE: PX-91-06

HOLE: PX-91-06

PAGE: 4 of 10

INTER	VAL	DESCRIPTION				SAN	IPLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
15.80	21.20	SANDY ARGILLITE / SHARPSTONE CONGLOMERATE Grading to sharpstone conglomerate at 16.3 m. Sharpstone conglomerate contains angular to rounded, pebble to cobble-sized clasts of chert, shale, siltstone, volcanic s, limestone and jasper in a sandy to fine-grained matrix. Thin argillite to sandy argillite interbeds. Bedding at $45 \cdot 60^{\circ}$ tca. Veinlets of calcite, and sparse hematit e veinlets, calcareous throughout. Matrix is locally altered to dark green chlorite. Argillite clasts altered to clays. Epidote (after garnet) as small clots, sometimes containing chlorite + calcite cores. Sulphides <0.5%, mainly fine disseminated pyrite. Epidote content = 2-3%.	36562 36563 36564 36565	18.00 19.00 20.00	17.00 18.00 19.00 20.00 21.00 21.52	1.00 1.00 1.00 1.00 1.00 0.52	sharpstone conglomerate, locally fine grained	5 5 5 5 111		3 2 2 3 18	
21.20	23.70	SHARPSTONE CONGLOMERATE As 15.80 - 21.70, except epidote increased to 5-10% and sulphides increased to 2- 3%. Brecciated appearance with veins and veinlets of calcite and sparse hematite. Discontinuous epidote inth matrix and clasts as irregular veins and knots. Pyrite with epidote and chlorite along fractures and in calcite clots or veins. Chlorite in irregular fracture planes or shears. Fractures and shears locally rusty. Calcareous throughout. Pyrite > chalcopyrite.			22.50 23.70	0.98 1.20		14 9		6 3	
23.70	27.30	DIOPSIDE SKARN Medium green, fine-grained argillite to sandy argillite. Sparse light cream coloured garnet(?) bands at 75° tca. Calcareous throughout with occasional veinlets and larger veins of calcite. Sparse calcite-hematite and hematite veins. <0.5% pyrite.	36570	25.20	25.20 26.70 27.30	1.50 1.50 0.60	diopside skarn	13 5 17		2 2 1	
27.30	60.15	SHARPSTONE CONGLOMERATE Rounded to angular heterolithic clasts varying in size from fine sand to 5 cm. Thin interbeds of argillite to sandy argillite. Clasts include cherts, fine sediments, argillites, jasper and volcanics. Matrix is pale to medium green and largely composed of chlorite and fine-grained chloritized clasts. Upper contact at 35° tca									

HOLE: PX-91-06

.

PAGE: 5 of 10

INTE	RVAL	DESCRIPTION		SAMPLE						ASSAYS			
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)		
		(chlorite shear?). Fracture controlled calcite veins (± pyrite). 0.5% pyrite with very minor chalcopyrite.											
		27.30 - 31.50 Patches of epidote up to 30% of core over 10 cm widths. 5-7%			28.80	1.50	sharpstone conglomerate	14		38			
		epidote throughout. Epidote patches have heavily chloritized margins. Remainder of core slightly chloritized and calcareous throughout. Minor calcite veining with sparse hematitic fractures. Clots of calcite, limestone and calcite veins with disseminated chalcopyrite and pyrite and sparse grains of specularite. Garnet, chlorite and hematite also within calcite clots. Hematite contains very fine pyrite. Hematite content <0.5%. Total sulphides 0.5%; pyrite > chalcopyrite.	-		30.30 31.50	1.50 1.20	strong epidote strong epidote	5 14		51 38			
		31.50 - 31.65 Semi-massive sulphides; = 60% pyrite. Remainder is chlorite, calcite	36575	31.50	31.65	0.15	semi-massive pyrite	5160	5.38	522			
		and quartz, possible shear.		31.65 33.00	33.00 34.50	1.35 1.50		19 9		28 4			
		34.80 - 35.10 About 10% epidote, 0.5 - 1% disseminated pyrite.35.601 cm rusty calcite vein at 20° tca.	36528	34.50	36.00	1.50	strong epidote	5		28			
		36.00 - 36.30 Sandy argillite.36.90Large chert clast or irregular quartz vein containing disseminated	36529	36.00	37.50	1.50		5		25			
		 (0.5%) pyrite. 38.60 - 38.70 Epidote (in vein?). Calcite veins with disseminated pyrite and 3 - 5% epidote. Local patches of dark green chlorite. 	36530	37.50	39.00	1.50		5		48			
				39.00	40.50	1.50		6		15			
		41.00 - 42.00 Slight increase in epidote (2 - 3%) in matrix and local clasts.		40.50	41.00	0.50	1	5		11			
		41.60 - 42.00 Sandy argillite, bedding at = 90° tca. Calcite and hematite veinlets.		41.00	42.00	1.00	1	14		30 63			
		Minor diopside-garnet banding cross-cutting bedding.		42.00 43.50	43.50 45.00	1.50 1.50		5		5			
				45.00	46.50			5		4			

HOLE: PX-91-06

•

PAGE: 6 of 10

INTE	RVAL	DESCRIPTION		4		SAN	IPLE	1	ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		 47.90 Hard creamy-white alteration (or aplite?) over 1 cm at 35° tca. 49.00 - 49.20 3% epidote. 51.70 - 52.10 Increase in epidote 3 - 5%, increase in pyrite to 0.5 - 1% (associated with calcite and/or limestone clasts). 31.65 - 56.05 Sharpstone conglomerate, calcareous throughout. <0.5% disseminated pyrite. <0.5% earthy hematite in matrix. Sparse calcite veinlets. Moderately chloritized matrix. 57.00 - 57.10 Chlorite-calcite veins or small shears with large calcite crystals at 53° tca. Pyrite, chalcopyrite, specularite and hematite associated with calcite and chlorite. Sulphides = 1 - 1.5%, pyrite > chalcopyrite. 56.00 - 60.15 Increase in chlorite in matrix and clasts plus slight increase in pyrite to <1/2%. Fracture coatings of chlorite-hematite and occasionally calcite-hematite. Calcareous throughout. Epidote 1% throughout as fine interstitial material in matrix. 	36538 36539 36540 36541 36542 36543 36543	46.50 48.00 49.50 51.00 52.50 54.00 56.00 57.50 59.00	48.00 49.50 51.00 52.50 54.00 56.00 57.50 59.00 60.15	1.50 1.50 1.50 1.50 2.00 1.50 1.50 1.15		5 15 12 5 5 10 44 17 5		8 27 292 13 6 6 6 119 30 12	
60.15 62.50	62.50 106.70	ALTERED INTRUSIVE Mafic minerals completely altered to chlorite. Feldspars altered to clays (saussuritized). Rock has granitic texture. No visible quartz, calcareous throughout. 1-2% disseminated pyrite associated with chlorite. Minor epidote, <1/2%. Upper contact indistinct with sharpstone conglomerate at approximately 70° tca. Lower contact is sheared and broken at = 55° tca. 2 SHARPSTONE CONGLOMERATE Rounded to angular heterolithic clasts varying in size from fine sand to 5 cm. Clast composition includes cherts, fine sediments, argillites, volcanics and jasper. Matrix is pale to medium green and largely composed of chlorite and fine-grained	36547	60.15 61.25		1.10 1.25	intrusive - chloritized, clay-altered, 1-2% pyrite	6 5		25 25	

HOLE: PX-91-06

PAGE: 7 of 10

INTE	RVAL	DESCRIPTION	SAMPLE						ASSAYS			
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)	
		chloritized clasts. Thin interbeds of sandstone, sandy argillite and argillite. <0.5% disseminated pyrite. Calcareous throughout. Interval is more chloritized than 27.3 to 60.15. Widely spaced calcite veins and veinlets throughout. Occasional calcite clot surrounded by dark green chlorite.										
		 63.30 - 63.75 Sandstone. Possible bedding at 50° tca. 64.25 3 cm bleached and brecciated calcite-chlorite vein. Some clay alteration of matrix and small clasts. 67.05 5 cm calcite-chlorite brecciated vein at = 45° tca. 68.00 - 68.20 Chloritized and saussuritized dyke with granitic texture. Similar to larger dyke at 60.15 to 62.5. Minor amounts of hematite in matrix. Contacts are sheared and contain chlorite, calcite and a small amount of clay gouge. 68.70 - 69.02 3 cm bleached zone at = 70° tca. Increased dark green chlorite and epidote to 5-10%. 76.90 - 78.50 Increased epidote (15% in top 15 cm). Remainder of interval contains 2-3% epidote and possible diopside. = 0.5% pyrite. Sparse hematite patchs and calcite-hematite veins. 80.50 - 81.00 5% epidote. Strong chlorite alteration. Sulphides 0.5%; pyrite > pyrite. 	36549 36550 127553 127554 127555 127556 127556 127566 127566 127566 127566 127566	64.00 65.50 66.00 67.50 68.00 668.20 7 68.70 8 69.00 9 70.25 9 72.00 1 73.50 2 75.00 3 76.90 4 78.50 5 80.00 6 81.50	64.00 65.50 66.00 67.50 68.20 68.70 69.00 70.25 72.00 73.50 75.00 76.90 78.50 80.00 81.50 83.00	1.50 1.50 0.50 0.20 0.50 0.20 0.50 1.25 1.75 1.50 1.50 1.50 1.50 1.50 1.50	sharpstone conglomerate syenite (?) dyke sharpstone conglomerate strong epidote strong epidote	5 5 5 17 7 5 17 7 5 5 17 7 5 5 11 5 5 5 12		4 21 4 5 31 59 63 8 50 42 18 52 54 35 56 81		
		 81.00 - 84.50 Sparse epidote-calcite-hematite veins. Hematite-chlorite on fractures. Minor clay alteration of small clasts. 84.90 - 85.00 2 cm epidote-calcite-garnet (red and brown) veins with chloritic 	12756	7 83.00 8 84.50	84.50 86.00	1.50 1.50		5		125		

HOLE: PX-91-06

.

PAGE: 8 of 10

INTE	RVAL	-	DESCRIPTION				SAN	ASSAYS				
FROM	то			NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
			margins. Disseminated pyrite and chalcopyrite. 2% chalcopyrite, 0.5% pyrite. Epidote impregnates wall for 10 cm on top. Vein at 55° tca.			86.90	0.90		5		45	
			30 cm white siliceous (quartz-feldspar?) dyke with dark green chloritic fractures. Chalcopyrite and pyrite $\approx 1/2\%$, disseminated along fractures. Pyrite > chalcopyrite. Upper contact sharp at 35° tca. Lower contact sharp at 55° tca.			87.20 88.70	0.30 1.50	quartz-feldspar dyke sharpsione conglomerate	8 5		98 45	
		88.20	8 cm white siliceous dyke similar to that described 86.90 - 87.20. Chloritic crackle breccia. Sulphides disseminated and associated with chlorite. 1% pyrite. Upper contact sharp at 70° tca (chloritized shear?). Lower contact sharp but irregular with thin bed of sandy conglomerate at approximately 45° tca. Epidote-diopside impregnation for 20 cm above dyke.	127572	88.70	90.20	1.50		8		133	
		89.10	8 cm white quartz vei. 8 cm white quartz vei. large clast?). Upper and lower contacts fractures with chlorite-pyrite at 65° tca. Sulphides = 2% pyrite. Rock broken and brecciated for 25 cm below interval. Calcite-chlorite veins. Sulphides 1%; chalcopyrite > pyrite.									
		90.20 - 91.50	Yellowish colour, but no identifiable difference in mineralogy.			91.70 93.20	1.50 1.50	strongly chloritized	5		23 51	
			0.5 cm shear with chlorite and pyrite at 65° tca. Pyrite and calcite- pyrite-hematite veins impregnate rock for 5 cm either side of shear.	127575 128876	93.20 94.70	94.70 96.20	1.50 1.50		45 5		27 21	
	Ì	96.10 97.30	1 cm calcite-chlorite vein at 70° tca. 1 cm calcite-chlorite shear at 45° tca.	128877	96.20	97.50	1.30		5		5	
			Siliceous quartz-feldspar dyke with chlorite along fractures and chlorite after mafics. Pyrite disseminated in chloritic fractures up to 0.5%. Similar dyke to 86.9 - 97.2 with more granitic texture.	128879	3 97.50 97.70 98.93	97.70 98.93 100.00	0.20 1.23 1.07	quartz-feldspar dyke sharpstone conglomerate	229 16 17		46 22 15	
		92.70 - 100.0	Highly chloritized plus chlorite and calcite on fractures that show evidence of shearing. Shearing and chloritic fractures generally at 45°									

HOLE: PX-91-06

.

PAGE: 9 of 10

INTE	RVAL	DESCRIPTION	SAMPLE						ASSAYS			
FROM	TO		NO.	FR	M	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		tca. Some fractures contain disseminated pyrite. 100.0 - 100.9 Sharpstone conglomerate with local garnet skarn. Garnets altered to chlorite and quartz.	12888	1 100.9	001	00.90	0.90		5		37	
		 103.0 - 106.7 Breccia. Calcite, calcite-hematite, hematite-chlorite, chlorite-quartz veins and veinlets cut both dark green chloritic matrix and clasts. Clasts altered to diopside and/or epidote, as well as 5-10% epidote in matrix. Hematite after garnet(?) in calcite (limestone?) clasts. Sulphides <0.5%. Some evidence of shearing on chloritic fractures. Non- calcareous. 	12888 12888 12888 12888 12888	3 101. 4 103. 5 104.	10 1 20 1 50 1	03.00 04.50 05.90	0.50 1.60 1.50 1.40 0.80		5 13 5 9 6		31 18 53 92 42	
	106.70	END OF HOLE					·					

HOLE: PX-91-06

.

PAGE: 10 of 10

		<u></u>	COI	RE REC	OVERY TABLE	······		
FROM	то	RECOVERY (in %)	FROM	то	RECOVERY (in %)	FROM	TO	RECOVERY (in %)
0.00	0.61	0.00	53.35	56.40	100.00	96.49	98.93	97.50
0.61	3.20	88.24	56.40	59.45	100.00	98.93	101.37	100.00
3.20	4.57	97.78	59.45	62.50	100.00	101.37	104.42	100.00
4.57	6.71	100.00	62.50	63.72	100.00	104.42	106.70	100.00
6.71	·7.62	100.00	63.72	65.55	100.00			
7.62	10.21	98.82	65.55	67.07	92.00			
10.21	13.26	100.00	67.07	68.60	100.00			
13.26	16.31	100.00	68.60	69.05	100.00			
16.31	19.51	100.00	69.05	71.19	98.57			
19.51	21.65	100.00	71.19	71.65	100.00			
21.65	22.87	100.00	71.65	74.54	100.00	1		
22.87	25.91	100.00	74.54	76.37	100.00			
25.91	28.96	98.00	76.37	77.74	93.33			
28.96	32.01	100.00	77.74	80.79	100.00			
32.01	34.30	74.67	80.79	81.40	100.00			
34.30	35.06	100.00	81.40	82.01	90.00			
35.06	36.13	100.00	82.01	83.23	92.50			
36.13	38.11	90.77	83.23	83.84	95.00	1		
38.11	39.18	91.43	83.84	85.21	100.00			
39.18	41.16	100.00	85.21	86.89	100.00			
41.16	44.21	97.00	86.89	89.94	99.00	1		
44.21	46.49	100.00	89.94	92.99	100.00			
46.49	47.26	80.00	92.99	94.51	100.00	1		
47.26	50.30	100.00	94.51	96.04	94.00			
50.30	53.35	100.00	96.04	96.49				

HOLE: PX-91-09

10075.0 PROPERTY Phoenix DATE LOGGED EASTING J. Deighton LOGGED BY NORTHING 8030.0 STARTED April 29, 1991 SIGNED BY ELEVATION 1475 COMPLETED May 1, 1991 Beaupre's LENGTH 96.04 DRILLED BY PURPOSE To test Bank of England soil gold SURVEYED BY UNITS metres CORE SIZE KRR Core Storage NQ anomaly CORE LOCATION COMMENTS

•-

DEPTH	AZIMUTH	DIP
Collar	210	55
96.00		55

	SUMMA	ASSA	ASSAY SUMMARY					
INTERVAL From To	DESCRIPTION	INTERVAL From To	DESCRIPTION	INTERVAL From To	LENGTH in metres	AVERAGE Au ppb Cu ppu		
0.00 2.40 2.40 15.60 15.60 17.10 17.10 39.00 39.00 40.10 40.10 52.70 52.70 65.70 96.04	SHARPSTONE CONGLOMERATE Chloritized, hematitic matrix, 1% pyrite locally.FELDSPAR-BIOTITE-HORNBLENDE PORPHYRY Chloritized, clay-altered, 1% pyrite.SHARPSTONE CONGLOMERATE Hematitic matrix, chloritized, <0.5% pyrite.			21.20 21.60 38.30 39.00 52.00 52.70 63.00 64.00	0.40 0.70 0.70 1.00	10000 9490 7621 3830 3018 374 3032 366		

PAGE: 1 of 8

HOLE: PX-91-09

.

PAGE: 2 of 8

INTE	RVAL	4	DESCRIPTION	 			SAN	IPLE	ļ	ASSA	YS	
FROM	то			NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
0.00	2.40	CASING										
2.40	15.60	Heterolithic, andesites. Cla	E CONGLOMERATE rounded to angular clasts of cherts, fine sediments, argillites and ist size ranges from fine sand to 5 cm. Matrix is pale to medium green omposed of chlorite and fine-grained chloritized clasts. Calcareous									
	}	2.40 - 7.30	Strongly hematitic. Broken, rusty, occasional calcite vein. Hematite- stained pyrite crystals. Hematitic pyrite = 1%. Small	36426	2.40	4.00	1.60	sharpstone conglomerate, hematitic	5		8	
			garnets surrounded by clear crystalline quartz.	36427	4.00	5.00	1.00	small fault	5		4	
	ļ	5.00	Broken rock, fault.	36428		7.30	2.30		5		4	
		7.30 - 8.40 7.40 7.60 8.30	Sheared rusty zone. 2 cm shear at 25° tca. Mudstone interbed, bedding at = 8° tca. Mudstone interbed, bedding at = 10° tca.	36429	7.30	8.40	1.10	small fault or shear zone	42		8	
	1	8.40	Calcite vein (1 cm) at 20° tca.	36430	8.40	10.00	1.60		23		3	
		9.40	Rusty irregular shear at 25° tca.	36431	10.00	12.00	2.00		5		3	
	1	9.70	Rusty gouge, shattered rock at 20 and 70° tca.	36432	12.00	14.00	2.00	1	19		5	
		7.30 - 15.60 13.40 - 15.60 14.70	Sections with chloritic matrix over 10 - 20 cm widths, alternating with hematite-stained sections and sections that are clay-altered or bleached. Chloritic sections contain up to 1% disseminated pyrite. Bleached sections contain about 0.5% pyrite.		6 14.00	15.60	1.60		10		4	
		15.60	Broken rock, fault.									

HOLE: PX-91-09

.

PAGE: 3 of 8

INTE	RVAL	DESCRIPTION			· · · · · ·	SAN	IPLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
15.60	17.10	FELDSPAR-BIOTITE-HORNBLENDE PORPHYRY Chloritized and clay altered, calcite \pm hematite veined. Pyrite in veins (locally) and with chlorite clots. Very finely disseminated pyrite throughout section (approximately 1%) with 10% pyrite at 15.6 over 2-3 cm width. Lower contact sharp at 45° tca.	128183	15.60	17.10	1.50	feldspar-biotite-hornblende porphyty	125		21	
17.10	40.00	SHARPSTONE CONGLOMERATE As described 2.40 - 2.30 m (hematitic matrix sharpstone) but slightly less hematite (<0.5%). Pyrite $<0.5%$. Occasional calcite, calcite-chlorite, chlorite-pyrite veins or mineralized fractures. Pyrite also occurs as disseminations or in small <1 cm clots with chlorite or in quartz clasts.	127902	2 17.10	19.20	2.10	sharpstone conglomerate, hematitic	21		24	
		19.30 1/2 - 1 cm chlorite-calcite-pyrite vein at 10° tca. 21.20 - 21.60 Strong pyrite with minor chalcopyrite. Shear with quartz veins,			21.20 21.60	2.00 0.40	shear with pyritic quartz veins	52 10000	14.67	63 9490	1.06
		interlaced with pyrite and chlorite. Sulphides 20%. 21.70 2 cm massive pyrite vein with contacts at 20 - 50° tca. Chlorite on margins. 21.60 - 23.30 Green chloritic sharpstone, <0.5% sulphides. 23.30 - 35.25 Hematite-stained, reddish coloured sharpstone as described 2.40 - 7.60. Occasional section up to 20 cm with no hematite (bleached or clay- altered).	128185	5 21.60	24.60	3.00	2 cm massive pyrite vein	73		118	
		25.60 Rusty fractures over 10 cm.	128187	7 27.60	27.60 29.60 31.50	3.00 2.00 1.90	rusty fractures	27 5 5		33 8 12	
		 33.20 - 34.20 Rusty fractures. 35.25 - 37.00 Less hematitic with only minor hematite staining. Clay alteration or bleaching with minor chlorite in matrix. Pyrite content <0.5%. 	36434	31.50 33.50	33.50 35.50	2.00 2.00	rusty fractures	555		9 7	
		35.50 - 36.00 Sheared at 15° tca. Sericite and clay altered.	128189	35.50	36.00	0.50	clay-sericite shear	5		5	

HOLE: PX-91-09

PAGE: 4 of 8

INTE	RVAL	DESCRIPTION				SAN	(PLE	····	ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		37.00 - 37.50 Rusty fractures. 37.50 Shear at 80 - 90° tca.	36436	36.00	38.30	2.30	rusty fractures, shear	116		75	
		38.30 - 39.00 Massive to semi-massive pyrite with one small patch of chalcopyrite. Minor calcite with quartz in shear at 20 - 30 tca.	128191	38.30	39.00	0.70	massive pyrite, local chalcopyrite	7621	8.54	3830	0.41
		 39.00 - 40.00 Hornblende-feldspar porphyry. Chloritized and saussuritized. Crackle breccia with chlorite and calcite veins. Dark green chlorite along fracture margins. Pyrite (<0.5%) associated with chlorite. 2 cm calcite-pyrite vein at 90° tca at 39.5. 39.90 - 40.00 Brecciated, cut by chlorite-calcite veins containing pyrite. 	36437	39.00	40.10	1.10	hornblende-feldspar porphyty, local breccia, pyrite + calcite veins	170		140	
		40.00 Brecciated and sheared over 3 cm. Pyritized fault contact with 10% pyrite at 55° tca.									
40.00	52.70	SHARPSTONE CONGLOMERATE Heterolithic, rounded to angular clasts of cherts, fine sediments, argillites and andesites. Clast size ranges from fine sand to 5 cm. Matrix is pale to medium green and largely composed of chlorite and fine-grained chloritized clasts. Locally									
		calcareous matrix. This sandstone or sandy argillite interbeds. Fine chlorite, calcite \pm hematite on fractures or in veins. Sulphides total <0.5% and usually occur with	36438	40.10	42.00	1.90	sharpstone conglomerate, < 1/2% pyrite	205		79	
		the chloritic veins or clots. Minor hematite alteration of matrix in sections.	128190	42.00	43.00	1.00		35		8	
					44.50	1.50		5		26	
		44.50 - 44.80 Calcite-quartz-chlorite plus massive magnetite with calcite. Pyrite (<2%) in calcite-chlorite-quartz vein and in the 10 cm of massive magnetite as disseminations and small clusters. Contacts of vein at 45°		44.50	44.80	0.30	quartz-chlorite-calcite vein with magnetite and pyrite	77		7	
		tca.	36441	44.80	47.00	2.20		5		16	
		47.85 2 cm calcite vein at 45° tca.		47.00	48.00	1.00	1	69		88	
		48.20 - 48.30 Chlorite zone with about 1% pyrite. Shear plane at 50° tca.		48.00	49.00	1.00		5		10	
	1		36444		50.50	1.50		5		71	
		50.00 - 50.40 Rusty fractures and shears at 20° tca.	36445	50.50	52.00	1.50		27		84	

HOLE: PX-91-09

PAGE: 5 of 8

INTER	VAL	DESCRIPTION				SAM	IPLE		ASSA	YS	· · ·
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
52.70	65.70	 S1.90 Rusty, broken rock over 10 cm. Calcite veins 1-2 mm. Shear at 50° tca. S2.50 Rusty fractures at 45° tca. Fractures filled with calcite. S2.60 - 52.70 Strongly pyritized shear, = 50% pyrite. HORNBLENDE-FELDSPAR PORPHYRY Dark to medium grey, hornblende phenocrysts altered to biotite near edges of dyke, dyke is fine to medium-grained diorite in central portion. Sparse calcite veins and rusty fractures. Lower contact has chilled margin for 2 cm at 70° tca. Upper contact at 45° tca. 58.00 - 58.80 Rusty fractures, broken, rubbly. 63.70 18 cm pyrite-hematite vein along shear at 70° tca. Pyrite = 80%, hematite 10 - 15%, calcite-chlorite 5-10%. Pyrite impregnates core for additional 10 cm above vein as fracture fillings. 3 - 4 cm chlorite-pyrite-hematite brecciated vein at 80 - 90° tca at 63.40 m. 	12819	2 52.00 3 58.00 4 63.00	52.70 59.00 64.00	0.70 1.00 1.00	pyritic shear hornblende-feldspar porphyry (diorite), broken, rusty pyrite-hematite vein	3018 19 3032	3.63 3.36	374 38 366	
65.70	96.04	 SHARPSTONE CONGLOMERATE Heterolithic, rounded to angular clasts of cherts, fine sediments, argillites and andesites. Clast size ranges from fine sand to 5 cm. Matrix is pale to medium green and is largely composed of chlorite and fine-grained chloritized clasts. Calcareous matrix. Conglomerate is hard and silicified or hornfelsed, locally chloritized and contains minor epidote. Pyrite <0.5% with minor chalcopyrite. Occasional rusty or hematitic fractures. 68.51 2 cm calcite vein with hematite-chlorite partings at 40 - 50° tca. 	264.0	5 65.70	68.00	2.30	sharpstone conglomerate,	5		21	

PAGE: 6 of 8

INTER	RVAL	DESCRIPTION				SAN	IPLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/1)	Cu (ppm)	Cu (%)
			36447	68.00	70.00	2.00		5		39	
			36448		72.00	2.00		5		59 65	
		73.60 5 cm calcite-garnet-chlorite-quartz vein with pyrite and minor	36449		74.00	2.00		14		90	
		73.60 5 cm calcite-garnet-chlorite-quartz vein with pyrite and minor chalcopyrite disseminated in chloritic margins of the vein.	30449	72.00	74.00	2.00		14		70	
		75.60 - 76.20 Rusty calcite coated fractures at 15° tca.	26450	74.00	76.00	2.00	rusty fractures	Ę		66	
		75.00 × 70.20 Nusty calche coaled fractures at 15 fea.	36450		78.00	2.00	fusty fractures	5		5	
			36452		80.00	2.00		5		30	
					82.00	2.00		Š		11	
					84.00	2.00		5		10	
		85.50 - 86.00 Rusty fractures and broken core, fault zone?			86.00	2.00	rusty fractures, fault?	80		22	
		86.00 Calcite-chlorite vein with sparse specularite and pyrite.		-	88.00	2.00	rusty fractures, narrow	30		34	
		86.70 4 cm wide epidote-calcite-quartz-pyrite-specularite vein (10%)	00400	00.00	00.00	2.00	epidote-calcite-quartz-pyrite				
		specularite, 3% pyrite) at approximately 45° tca.					veins				
		86.90 Rusty fractures, occasional grain of specularite.									
		87.30 Chloritized, rusty shear at 25° tca.									
		88.50 - 89.30 Calcite veining (1-2 mm), subparallel tca. Increase in dark green	36456	88.00	90.00	2.00		5		93	
		chlorite. Some brecciation. Large calcite-quartz-chlorite vein 15 - 60°			,			-			
		tca at 89.30 containing specularite and pyrite. Some pink dolomite (?)					}				
		or calcite. Shear plane 15° tca with pyrite and chlorite.									
		90.00 - 92.00 Patchy epidote-magnetite-specularite-hematite associated with calcite	36457	90.00	90.50	0.50	epidote altered with magnetite,	125		58	
		and chlorite-rich zones. Epidote 2-5%, magnetite 2-5%, pyrite 1-2%.					specularite and hematite				
	1	Weakly sheared, slickensides have curved fracture planes.	128195	90.50	91.50	1.00		37		65	
		92.20 - 92.70 Chlorite and clay-altered. Rusty fractures with calcite coating, 10 -		91.50	92.50	1.00		81		24	
	1	15% tca. Badly broken ground. Fault?		92.50	94.00	1.50	i l	33		160	
		94.40 - 94.60 Broken ground, fault? Rusty fractures, ground core.		94.00	96.04	2.04	possible alunite along rusty	5		11	
	}	95.15 Alunite (?) fracture coating at 30° tca.				-	fractures				
	1	96.04 Rusty fracture.									

HOLE: PX-91-09

HOLE: PX-91-09

PAGE: 7 of 8

INTE		DESCRIPTION				SAN	<u>APLE</u>		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
	96.04	END OF HOLE									
							•				I
			2								

HOLE: PX-91-09

PAGE: 8 of 8

FROM	TO	RECOVERY (in %)	FROM	то	RECOVERY (in %)	FROM	то	RECOVERY (in %)
0.00	2.44	0.00	39.94	41.16	80.00	85.98	86.89	90.00
2.44	3.96	80.00	41.16	42.23	100.00	86.89	88.11	100.00
3.96	5.03	77.14	42.23	44.21	100.00	88.11	89.94	100.00
5.03	5.64	100.00	44.21	47.26	100.00	89.94	90.85	100.00
5.64	6.55	90.00	47.26	50.30	100.00	90.85	91.62	100.00
6.55	7.62	100.00	50.30	52.13	95.00	91.62	92.99	100.00
7.62	10.67	100.00	52.13	53.35	100.00	92.99	94.51	100.00
10.67	12.20	100.00	53.35	56.40	100.00	94.51	94.82	100.00
12.20	13.72	100.00	56.40	58.23	96.67	94.82	96.04	92.50
13.72	16.77	100.00	58.23	58.84	60.00			
16.77	17.84	91.43	58.84	59.45	100.00			
17.84	19.82	96.92	59.45	61.13	100.00			
19.82	21.34	100.00	61.13	62.50	100.00			
21.34	22.56	95.00	62.50	63.72	97.50			
22.56	25.61	100.00	63.72	65.55	100.00			
25.61	27.13	94.00	65.55	67.68	100.00			
27.13	28.96	100.00	67.68	68.60	100.00			
28.96	32.01	100.00	68.60	71.65	98.00			
32.01	33.84	91.67	71.65	74.70	99.00	i -		
33.84	35.06	100.00	74.70	75.76				
35.06	36.74	87.27	75.76	77.59	100.00			
36.74	37.80	100.00	77.59	80.64	100.00			
37.80	38.57	100.00	80.64	82.62	100.00			
38.57	38.87	80.00	82.62	83.84	100.00			
38.87	39.94	100.00	83.84	85.98				

HOLE: PX-91-10

EASTING 10566.0 PROPERTY Phoenix DATE LOGGED LOGGED BY J. Deighton NORTHING 8470.0 May 1, 1991 ELEVATION 1408 STARTED SIGNED BY May 2, 1991 Beaupre's 91.50 COMPLETED **DRILLED BY** LENGTH To test Curlew thrust SURVEYED BY UNITS metres PURPOSE CORE LOCATION KRR Core Storage CORE SIZE NO COMMENTS

AZIMUTH	DIP
	90
	AZIMUTH

		SUMMA	RY LOG				ASSA	Y SUMMAR	. Y
INTER From	VAL To	DESCRIPTION	INTER From	VAL To	DESCRIPTION	INTER From		LENGTH in metres	AVERAGE Au ppb Cu pp
0.00 2.74	2.74 7.50	CASING SHARPSTONE CONGLOMERATE Chloritized, <0.5% pyrite.	48.00		Clay + calcite-altered, <0.5% pyrite. SHARPSTONE CONGLOMERATE Chloritized, <0.5% pyrite.				
7.50 8.20	8.20 29.50	BIOTITE-HORNBLENDE PORPHYRY Chloritized, clay-altered. SHARPSTONE CONGLOMERATE	57.40 59.40		HORNBLENDE-BIOTITE-FELDSPAR PORPHYRY Clay + calcite-altered. SHARPSTONE CONGLOMERATE Chloritized, <0.5% pyrite.			-	
29.50	35.60	20.10 - 20.70 Silicified fault, 1% pyrite. BIOTITE-HORNBLENDE-FELDSPAR PORPHYRY Chloritized, clay-altered, strong calcite, <2% pyrite.	63.10 72.70	72.70 77.10	RAWHIDE SHALE HORNBLENDE-BIOTITE-FELDSPAR PORPHYRY				
35.60	38.50	SHARPSTONE CONGLOMERATE Chloritized, <0.5% pyrite.			Chlorite + clay-altered. 73.60 - 75.70 Fault.				
38.50	40.70	HORNBLENDE-BIOTITE-FELDSPAR PORPHYRY Chloritized, clay-altered, 0.5% pyrite.	77.10 79.20	79.20 79.50	RAWHIDE SHALE HORNBLENDE-BIOTITE-FELDSPAR PORPHYRY				
40.70	42.75	HORNBLENDE-FELDSPAR PORPHYRY Clay-altered, 10 - 15% pyrite.	79.50	82.30	Chlorite + clay + calcite-altered. RAWHIDE SHALE				
42.75	46.30	SHARPSTONE CONGLOMERATE Chloritized, 0.5% pyrite. 44.20 Brecciated, pyritic shear.	82.30 91.15	91.15 91.50	HORNBLENDE-BIOTITE-FELDSPAR PORPHYRY Chlorite + clay + calcite-altered. RAWHIDE SHALE				
46.30	48.00	HORNBLENDE-BIOTITE-FELDSPAR PORPHYRY		91.50	END OF HOLE				

PAGE: 1 of 8

PAGE: 2 of 8

INTE	RVAL	DESCRIPTION				SAN	IPLE		ASSA	YS	<u> </u>
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
0.00	2.74	CASING									
2.74	7.50	SHARPSTONE CONGLOMERATE Heterolithic, rounded to angular clasts including cherts, fine sediments, argillites, and andesites. Clast size ranges from fine sand to 5 cm. Matrix is pale to medium green and largely composed of chlorite and fine-grained chloritized clasts. Unit is non-calcareous except within 0.5 m of the underlying dyke. Unit is hard and silicified with only larger sedimentary clasts or finer grained interbeds softer and chloritic. Pyrite content <0.5% and slightly more abundant near the dyke contact. Rusty fractures throughout.	128501 128502		5.00 7.50	2.26 2.50	sharpstone conglomerate, silicified, <0.5% pyrite	S S		34 34	
7.50	8.20	BIOTITE-HORNBLENDE PORPHYRY Biotite completely altered to chlorite, feldspars and matrix altered to clay minerals. Calcite veins and veinlets occur throughout section. Upper contact at 60° tca. Lower contact at 45° tca. Both contacts are sharp fracture planes.	128503	7.50	8.20	0.70	biotite-hornblende porphyty, clay-altered	5		41	
8.20	29.50	7.80 1 cm calcite vein in rusty shear. SHARPSTONE CONGLOMERATE Rounded to angular heterolithic fragments varying in size from fine sand to 5 cm. Clast composition is variable and includes cherts, fine sediments, argillites, volcanics and jasper. Matrix is pale to medium green and largely composed of chlorite and fine-grained chloritized clasts. Conglomerate contains thin beds of sandstone, sandy argillites and argillites. Pyrite <0.5%, disseminated and on local fracture surfaces. Non-calcareous throughout. Core is siliceous and hard; chlorite alteration is restricted to occasional sheared and calcite-veined sections.	128504	8.20	10.00	1.80	sharpstone conglomerate	5		25	
		11.60 - 11.80 Chlorite and clay altered, broken and rusty fractures.	128505	10.00	12.00	2.00	broken, chloritized, clay-altered	5		31	

HOLE: PX-91-10

HOLE: PX-91-10

PAGE: 3 of 8

INTER	RVAL	DESCRIPTION			_	SAN	(PLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		 20.10 - 20.70 Silicified fault? Numerous hairline quartz veins and small open cavities lined with quartz crystals. Broken ground. Clay alteration noted on fractures. Minor apple green sericite. Quartz veins up to 10 cm wide at 30° tca. Pyrite 0.5 - 1%. 26.60 Graded bedding, tops up, 80 - 90° tca. 	128507 128508 128509 128197 128510 128511 128512	21.00 23.00	14.00 16.00 18.00 20.00 21.00 23.00 25.00 27.00 29.50	2.00 2.00 2.00 2.00 1.00 2.00 2.00 2.00	small silicified fault	5 5 40 22 21 26 5 5 5 5		23 26 147 25 13 30 22 25 21	
29.50	35.60	BIOTITE-HORNBLENDE-FELDSPAR PORPHYRY Biotite and hornblende completely altered to chlorite or clay and/or replaced by calcite. Feldspars altered to clay minerals. Matrix altered to chlorite or clay. Calcareous throughout, with calcite veinlets more prominent near contacts. Chilled margins for up to 1 m. Minor pyrite (up to 2%) in 10 cm sections. Most pyrite in areas of heavy calcite veining and chlorite alteration. Upper contact at 20° tca on calcite-chloritic fracture. Lower contact at 75° tca on chloritic fracture.			31.00 35.60	1.50 1.60	biotite-feldspar porphyry, < 0.5% pyrite	5 5		37 54	
35.60	38.50	SHARPSTONE CONGLOMERATE Rounded to angular heterolithic clasts varying in size from fine sand to 5 cm. Clasts include cherts, fine sediments, argillites, volcanics and jasper. Matrix is pale to medium green and largely composed of chlorite and fine-grained chloritized clasts. Conglomerate contains thin beds of sandstone, sandy argillites and argillites. Pyrite (0.5%) as disseminations and fracture coatings. Non-calcareous throughout.			37.50 38.50	1.90 1.00	sharpstone conglomerate, < 0.5% pyrite	5		21 24	
38.50	40.70	HORNBLENDE-BIOTITE-FELDSPAR PORPHYRY Biotite and hornbiende completely altered to clay minerals and calcite. Feldspars altered to clay minerals and/or replaced by calcite. Matrix altered to chlorite and	128518	38.5 0	40.20	1.70	hornblende-biotite-feldspar рогрhуту	5		43	

HOLE: PX-91-10

PAGE: 4 of 8

INTE	RVAL	DESCRIPTION				SAN	1PLE		ASSA	YS	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
		clay. No visible sulphides except 0.5% disseminated pyrite within 0.5 m of lower contact. Upper contact has 5 cm chilled margin and is sharp at 75° tca. Lower contact is diffuse and irregular along dyke margin at approximately 75° tca. Lower contact is slightly brecciated for $3 - 5$ cm. Calcite veins and veinlets parallel to lower contact (75° tca), well-developed for 40 cm above contact.									
40.70	42.75	HORNBLENDE-FELDSPAR PORPHYRY Light grey to white, non-calcareous, strongly altered to clay minerals (saussuritized), soft, relict phenocrysts of hornblende and occasional feldspar. Minor hairline calcite veinlets. Pyrite (10 - 15%) as disseminations and replacements along fractures subparallel to upper contact. Lower contact sharp at 50° tca.			41.40 42.70	1.20 1.30	hornblende-feldspar porphyry, 10 - 15% pyrite	29 66		31 50	
42.75	46.30	SHARPSTONE CONGLOMERATE Rounded to angular heterolithic clasts varying in size from fine sand to 5 cm. Clasts include cherts, fine sediments, argillites, volcanics and jasper. Matrix is pale to medium green and largely composed of chlorite and fine-grained chloritized clasts. Conglomerate contains thin beds of sandstone, sandy argillites and argillites. Pyrite (<0.5%) as disseminations and fracture coatings. Non-calcareous throughout. Sparse calcite veinlets. Locally silicified.		9 42.70 0 45.00	45.00 46.30	2.30 1.30	sharpstone conglomerate, < 0.5% pyrite	5		37 28	
46.30	48.00	44.20 Brecciated shear with pyrite and chlorite at 30° tca. HORNBLENDE-BIOTITE-FELDSPAR PORPHYRY Biotite, hornblende, and feldspar completely altered to clay minerals and/or replaced by calcite. Pyrite <0.5%, disseminated. Minor calcite veins, strongest near lower contact. Upper contact at 50° tca. Lower contact at 40° tca. Both contacts sharp with 1 -3 cm chilled margins.	12852	1 46.30	48.00	1.70	hornblende-bíotite-feldspar porphyty	5		48	

HOLE: PX-91-10

PAGE: 5 of 8

INTE	RVAL	DESCRIPTION	SAMPLE				ASSA	YS			
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)	Au (g/t)	Cu (ppm)	Cu (%)
48.00	57.40	SHARPSTONE CONGLOMERATE Rounded to angular heterolithic clasts varying in size from fine sand to 5 cm. Clasts include cherts, fine sediments, argillites, volcanics and jasper. Matrix is pale to	128522	48.00	50.00	2.00	sharpstone conglomerate, < 0.5% pyrite	5		23	
		medium green and largely composed of chlorite and fine grained chloritized clasts.		50.00	52.00	2.00		5		29	
		Conglomerate contains thin beds of sandstone, sandy argillites and argillites.		52.00	54.00	2.00		5		28	
		Sulphide content $<0.5\%$ pyrite as disseminations and occasional fracture coatings.		54.00	56.00	2.00		5		29 20	
		Non-calcareous throughout. Slightly different than previous sections as this section contains a larger proportion of black argillite or shale fragments, and a number of thin grey siltstone-argillite beds. Bedding at 75° tca.	128526	56.00	57.40	1.40		5		20	
57.40	59.40	HORNBLENDE-BIOTTTE-FELDSPAR PORPHYRY Biotite, hornblende, and feldspar completely altered to clay minerals and/or replaced by calcite. Upper contact sharp at approximately 50° tca. Lower contact sharp at 80° tca. Chilled margins, 1-2 cm. Chilled margins are relatively unaltered. Occasional calcite veins throughout.	128527	57.40	59.40	2.00	hornblende-biotite-feldspar porphyty	5		44	
59.40	63.10	SHARPSTONE CONGLOMERATE Rounded to angular heterolithic clasts varying in size from fine sand to 5 cm. Clasts	128528	59.40	61.00	1.60	sharpstone conglomerate,	5		32	
		include cherts, fine sediments, argillites, volcanics and jasper. Matrix is pale to medium green and largely composed of chlorite and fine-grained chloritized clasts. The conglomerate contains thin beds of sandstone, sandy argillites and argillites. Pyrite (<0.5%) as disseminations and occasional fracture coatings. Calcite veining, veinlets and vein-breccias occur throughout section. Contact with Rawhide Shale below is fairly sharp at 60° tca and shows some minor flame structures with associated calcite veining and brecciation. Calcite veins contain minor pyrite.	128529	9 61.00	63.10	2.10	< 0.5% pyrite	5		37	

.

HOLE: PX-91-10

PAGE: 6 of 8

INTE	RVAL	DESCRIPTION		SAMPLE						ASSAYS Au Cu Cu (g/t) (ppm) (%) 60 63 60 64 51 51		
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)				
63.10	72.70	RAWHIDE SHALE Soft brown to black siltstone to argillite with thin interbeds of sandstone, sandy argillite and sharpstone conglomerate. Scoured contacts between coarser and finer beds. Bedding approximately 70 to 90 tca. Calcite (veinlets to 1 cm veins) cuts core at various angles. Short sections (up to 5 cm) of silicification in areas of strong calcite veining. Very minor pyrite with calcite veins. Shale is non-calcareous.	128531 128532 128533	65.00 67.00 69.00	65.00 67.00 69.00 71.00 72.70	1.90 2.00 2.00 2.00 1.70	Rawhide Shale	5 5 7 5		63 60 64		
72.70	77.10	HORNBLENDE-BIOTTTE-FELDSPAR PORPHYRY Biotite, hornblende, and feldspar completely altered to clay minerals or chlorite. Occasional short interval or xenolith of Rawhide Shale. Broken with numerous small faults. Pyrite disseminated in highly altered (clay + chlorite) sections adjacent to faults. Upper contact sharp at 45° tca. Lower contact at 70° tca along fault?										
		 73.60 5 cm calcite vein along shear at 30° tca. Minor pyrite. 73.60 - 75.70 Faulted and sheared. Calcite veins. Minor alunite(?) coatings on some fractures. Disseminated pyrite <0.5%. Shearing at 30° tca. 		72.70 75.00	75.00 77.10	2.30 2.10	hornblende-biotite-feldspar porphyry	9 15		66 47		
77.10	79.20	RAWHIDE SHALE As described from 63.10 - 72.47. Contacts with dykes are slightly bleached. Minor calcite veining with local minor disseminated pyrite.	128537	77.10	79.20	2.10	Rawhide Shale	5		53		
		77.80 - 78.50 Hornblende-biotite-feldspar porphyry dyke follows core axis, strong calcite veining adjacent to dyke.										
79.20	79.50	HORNBLENDE-BIOTTTE-FELDSPAR PORPHYRY Mafics and feldspars completely altered to chlorite, clays and calcite. Matrix also altered to similar mineral assemblage. Minor pyrite in calcite veins.	12853	8 79.20	79.75	0.55	hornblende-biotite-feldspar porphyry	5		45		

HOLE: PX-91-10

.

PAGE: 7 of 8

INTERVAL		DESCRIPTION		SAMPLE						ASSAYS Au Cu Cu (g/t) (ppm) (%) 48 50 49 50 48 48 48	
FROM	то		NO.	FROM	то	Length	DESCRIPTION	Au (ppb)			
79.50	82.30	RAWHIDE SHALE As described from 63.10 - 72.70. Minor calcite veining with local minor pyrite.			81.00 82.30	1.25 1.30	Rawhide Shale	5 5			
82.30	91.15	 HORNBLENDE-BIOTITE-FELDSPAR PORPHYRY Mafics and feldspars altered to chlorite, clays and calcite. Matrix also altered to clay minerals and chlorite. Minor calcite veining. Upper contact sharp at 50° tca but is offset by small shear or fracture at 10° tca, and has calcite veins along contact. Minor pyrite (<0.5%) associated with calcite veins. Lower contact sharp at 45° tca and has calcite vein along contact. 86.00 - 86.15 Sliver of Rawhide Shale at 20° tca is cut off by fracture at 90° tca 86.00 m. Calcite along fractures. 89.10 - 91.50 Bleached to light brown. Strongly clay- altered. 89.70 - 89.85 50% of this interval is Rawhide Shale, probably a xenolith. Calcite (10%) as veins. 	128542 128543	84.00 86.00	84.00 86.00 88.00 90.00	1.70 2.00 2.00 2.00	hornblende-biotite-feldspar porphyry thin section of Rawhide Shale locally bleached and clay-altered	5 5 5 5		50 48	
91.15	91.50	RAWHIDE SHALE As described from 63.10 - 72.70. Minor calcite veins.	128545	90.00	91.50	1.50	thin section of Rawhide Shale	5		45	
	91.50	END OF HOLE									

.

HOLE: PX-91-10

PAGE: 8 of 8

				RE REC	OVERY TABLE			
FROM	то	RECOVERY (in %)	FROM	то	RECOVERY (in %)	FROM	то	RECOVERY (in %)
0.00	2.74	0.00	32.93	35.82	100.00	63.41	66.46	99.00
2.74	4.27	80.00	35.82	37.96	97.86	66.46	68.29	96.67
4.27	6.25	100.00	37.96	39.02	97.14	68.29	69.51	82.50
6.25	6.86	100.00	39.02	41.16	100.00	69.51	72.56	95.00
6.86	· 8.54	96.36	41.16	42.07	98.33	72.56	74.39	87.50
8.54	9.15	85.00	42.07	43.29	87.50	74.39	75.15	92.00
9.15	10.67	96.00	43.29	44.21	93.33	75.15	75.76	65.00
10.67	11.59	100.00	44.21	45.12	100.00	75.76	77.13	88.89
11.59	13.57	90.77	45.12	46.19	92.86	77.13	78.66	100.00
13.57	14.48	96.67	46.19	48.17	89.23	78.66	81.71	96.00
14.48	15.09	100.00	48.17	49.24	95.7 1	81.71	84.76	99.50
15.09	16.46	100.00	49.24	49.70	93.33	84.76	87.80	100.00
16.46	16.77	90.00	49.70	50.61	100.00	87.80	90.85	95.00
16.77	17.68	100.00	50.61	51.22	100.00	90.85	9 1.50	95.00
17.68	18.45	92.00	51.22	51.98	82.00			
18.45	19.05	90.00	51.98	53.05	97.14			
19.05	20.73	100.00	53.05	53.66	85.00			
20.73	21.49	88.00	53.66	54.27	100.00			
21.49	23.78	100.00	54.27	55.64	96.76			
23.78	26.07	94.67	55.64	56.40	80.00			
26.07	26.83	100.00	56.40	56.71	95.00			
26.83	28.35	90.00	56.71	57.32	100.00			
28.35	29.88	100.00	57.32	57.62	95.00			
29.88	30.49	80.00	57.62	60.37	98.89			
30.49	32.93	100.00	60.37	63.41	99.00			

APPENDIX 2

•

APPENDIX II

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. Silver is added to help in the collection of the gold. The samples are fused at 1950 deg. F until a clear melt is obtained. The 30 - 40 gram lead button that is produced contains the precious metals and is then separated from the slag. Heating in the cupellation furnace separates the lead 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 HNO_3 acid to dissolve the silver and the remaining gold is weighed.

As part of routine quality control, a duplicate 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.

ASSAY ANALYSIS FOR COPPER

Copper Assay by Atomic Absorption (all samples over 2500 ppm Cu on original analysis re-analyzed by this method):

A 0.5 gram sample is weighed into a beaker and digested with HNO3 and HCl on a hotplate. The sample is taken down to dryness and then HCl is added with water and sample is boiled into solution. The solution is transferred to an appropriate size flask. The sample is then run on an Atomic Absorption unit along with pulp and synthetic standards. Any sample over 15% Cu is rerun by titration methods.

Iodide (Titration) Method for Copper Determination:

A sample is digested in strong acids until dry. It is boiled into solution with bromine water. Ammonium acetate and ammonium hydrogen difluoride are added to complex the iron. Saturated Kl solution and starch are added to the solution and it is then titrated with standardized sodium thiosulphate. APPENDIX 3

hole	claim name	depth (ft) 	no. assays	
PX91-03 PX91-04 PX91-05 PX91-06	Snowshoe Snowshoe Monarch Gold Drop Monarch Wendy No 15 Fr Rawhide	305 303 306 352 275 350 315 300	62 67 68 75 48 98 55 48	
	total feet total assays	2506	521	
costs: 				
drilling:	2506 ft. drilling @ 139 core boxes @ 15 core box lids @ 11 dip tests @ k\$ 6 - 2 ft. pieces o EZ Mud - 3 pails @ 1 Casing Shoe @ \$	9 \$5.50 9 \$3.30 50.00 f casing @ \$42.00 9 \$125.01	D	\$42, 100.80 \$764.50 \$49.50 \$550.00 \$252.00 \$375.03 \$222.93
			subtotal:	\$44, 314.76
assays:	521 assays @ \$10	0.20		\$5,314.20
			total:	\$49,628.96

SNOWSHOE GROUP ASSESSMENT - DECEMBER, 1991

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

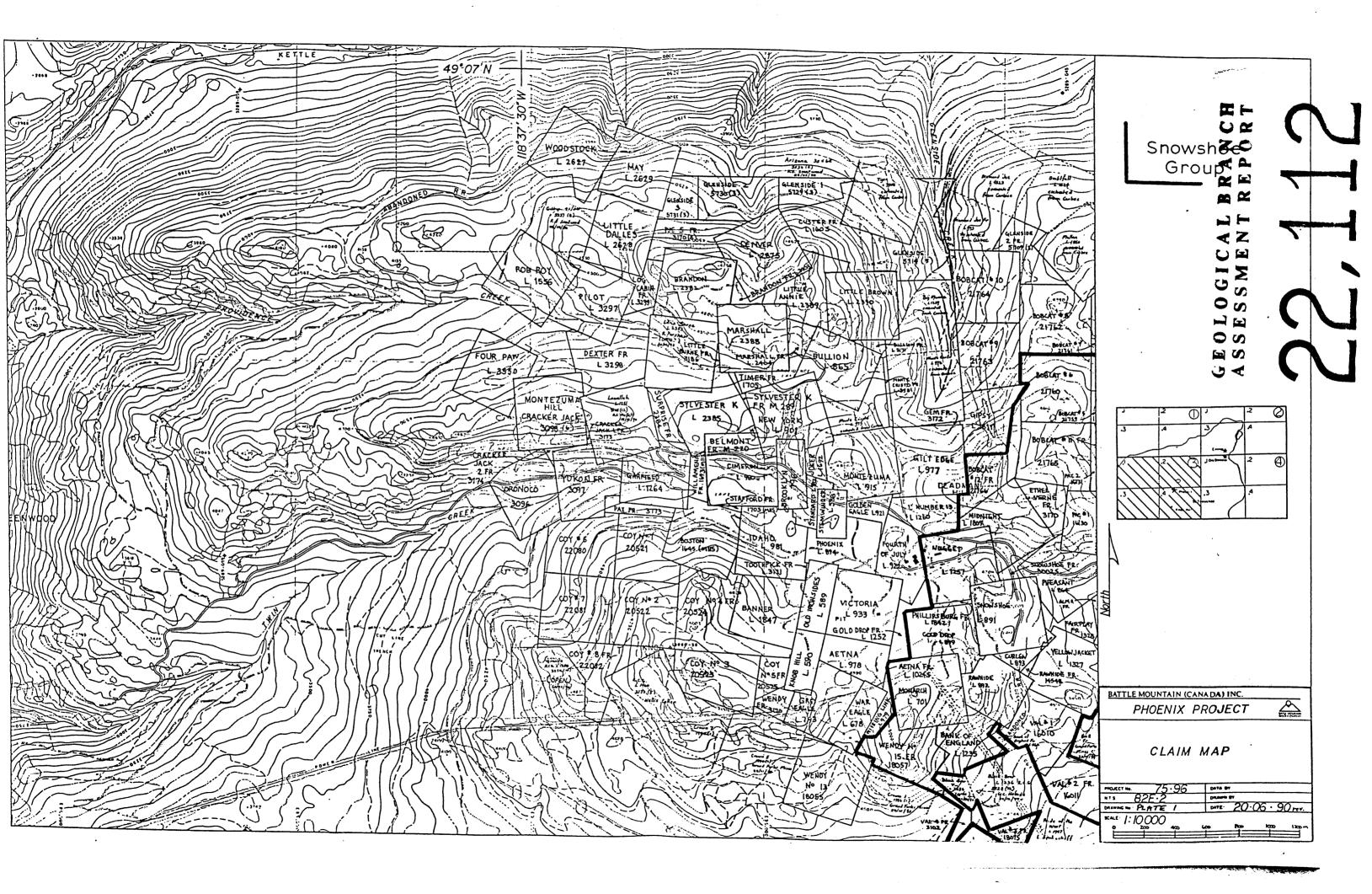
- 1974 to 1985 field geologist, Duval Corporation, extensive exploration work in the western and southeastern United States.
- 1985 to 1992 senior geologist, Battle Mountain Exploration Company, exploration carried out primarily in Nevada and British Columbia

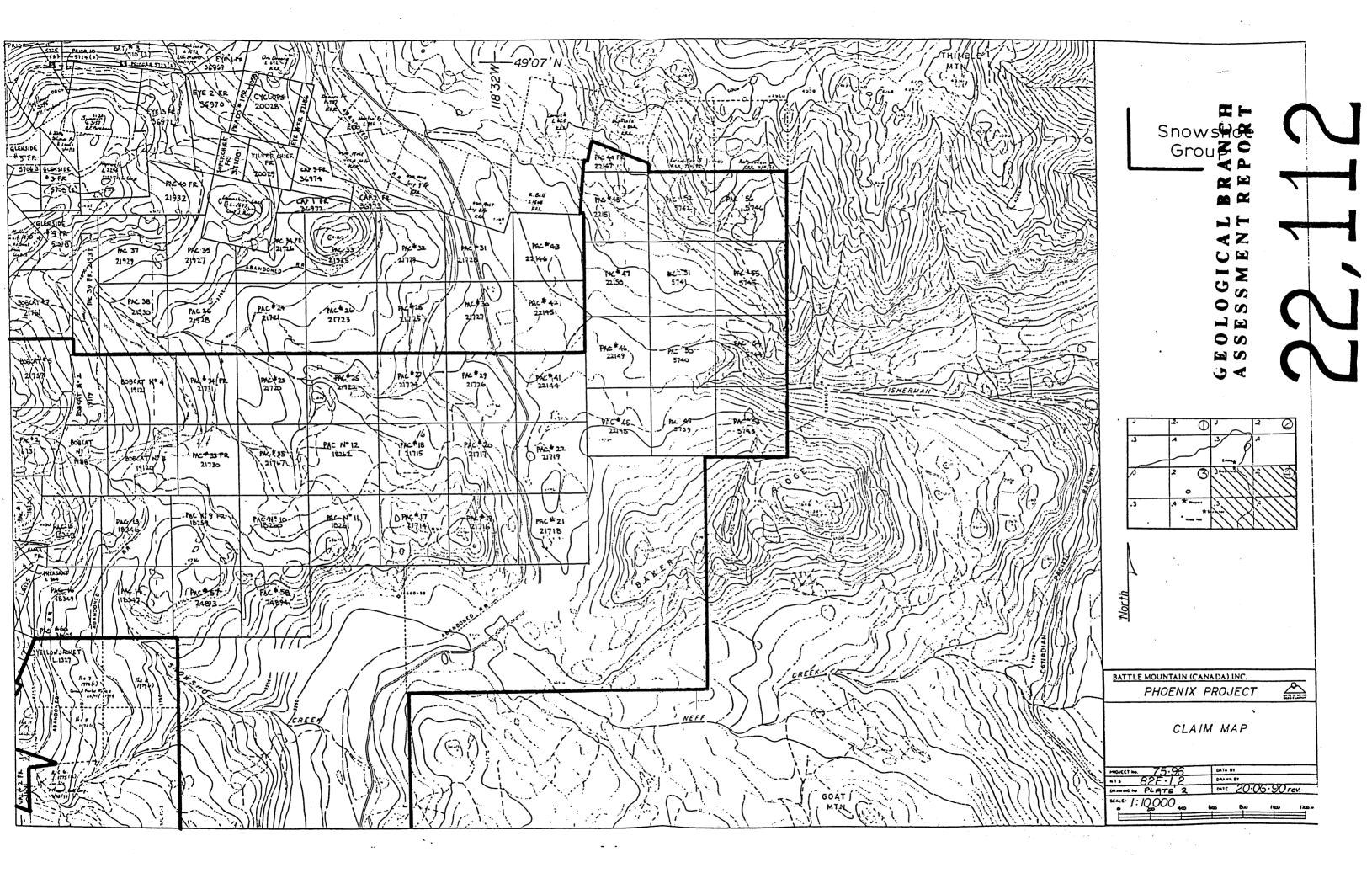
Professional Affiliation

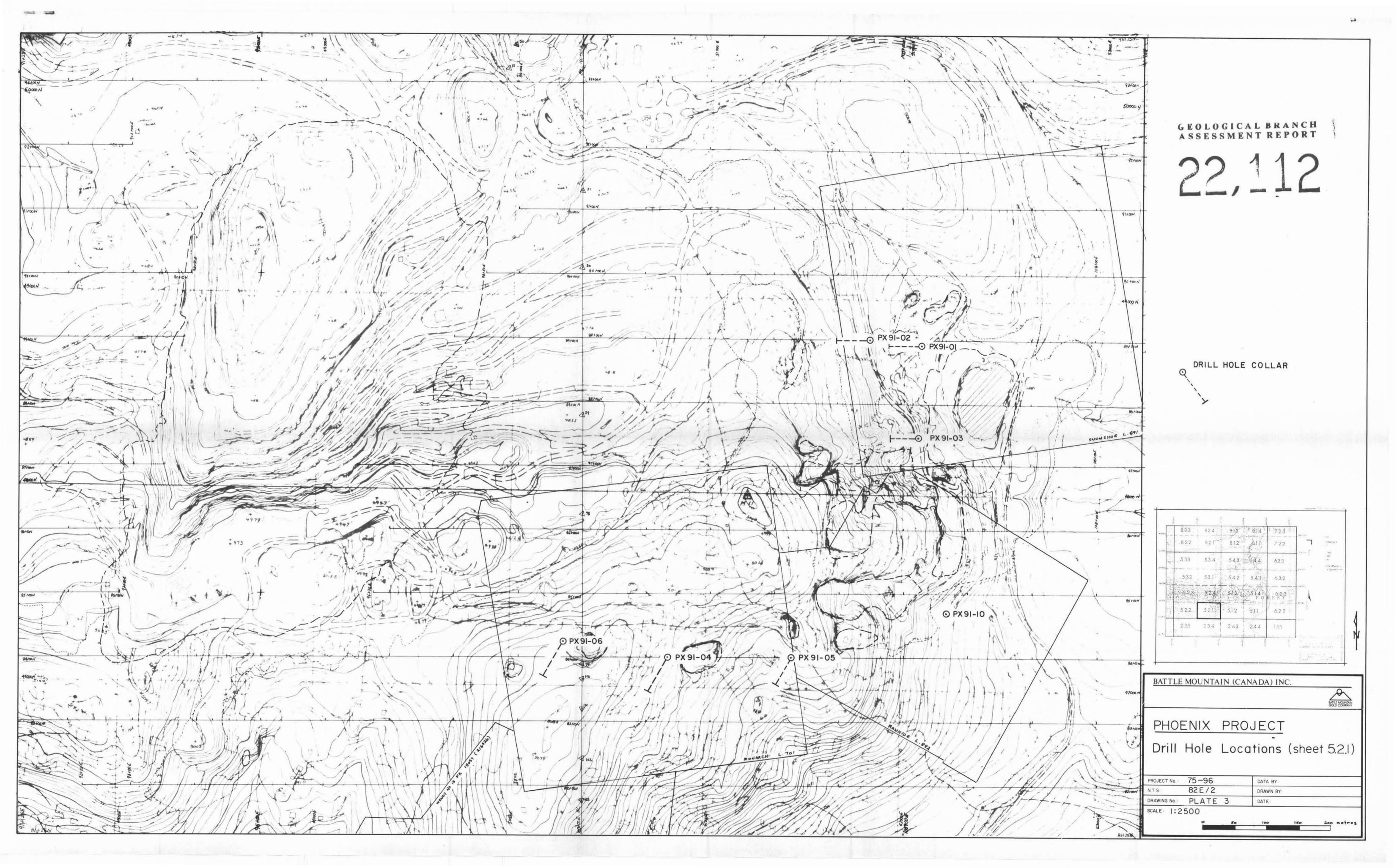
Professional Geoscientist, Association of Professional Engineers and Geoscientists of B.C., Certificate No. 18224

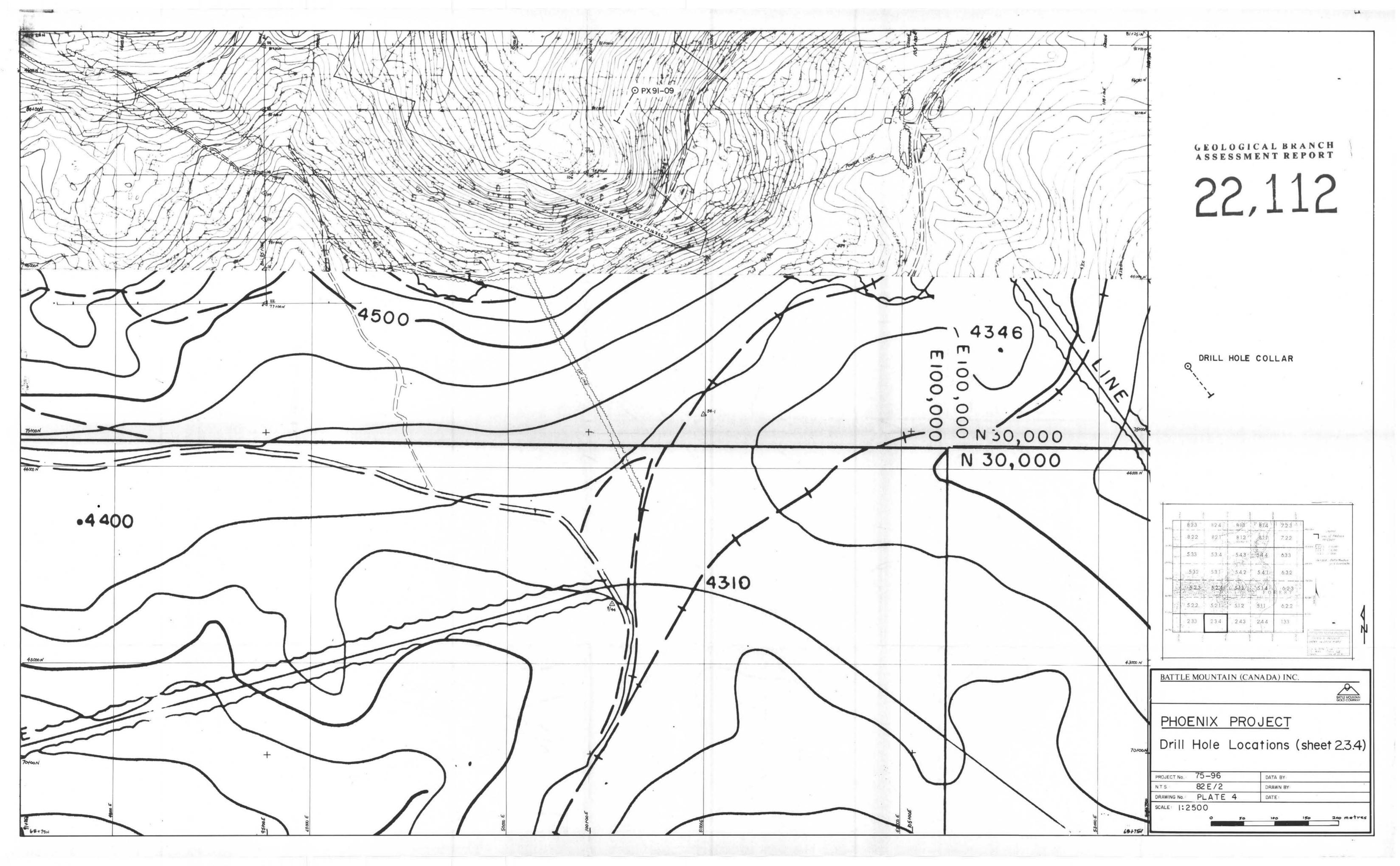


Michael E. Caron

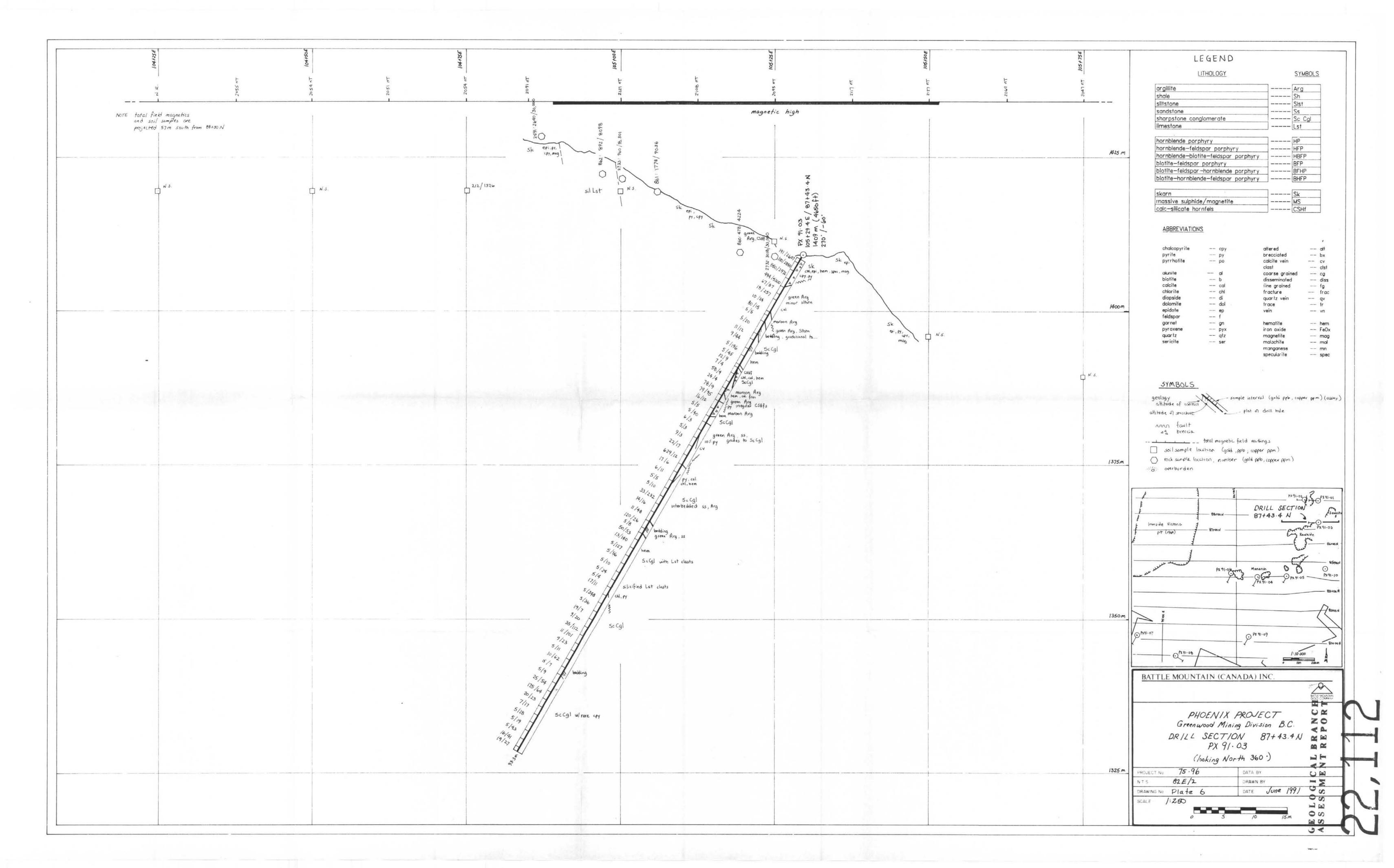


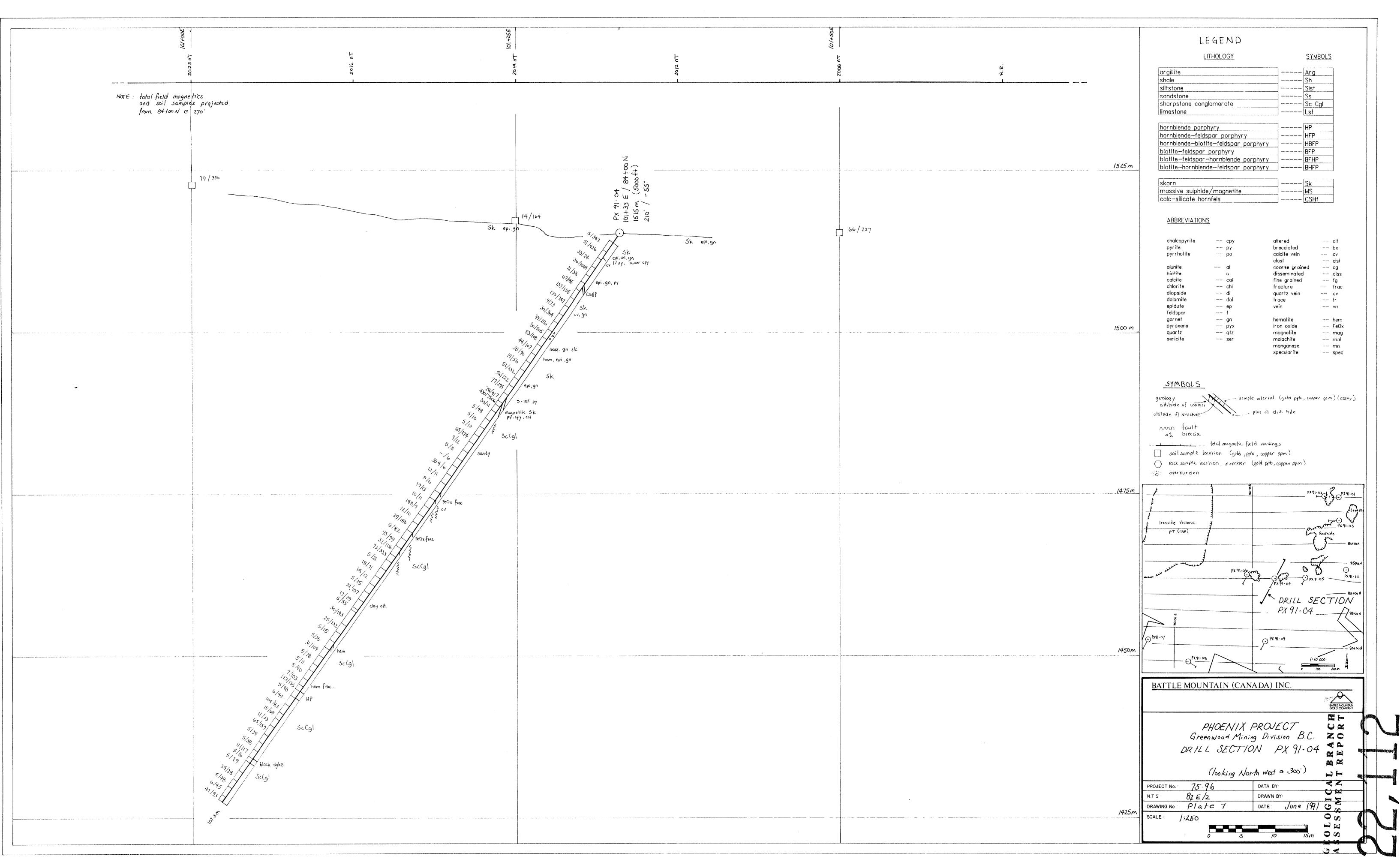






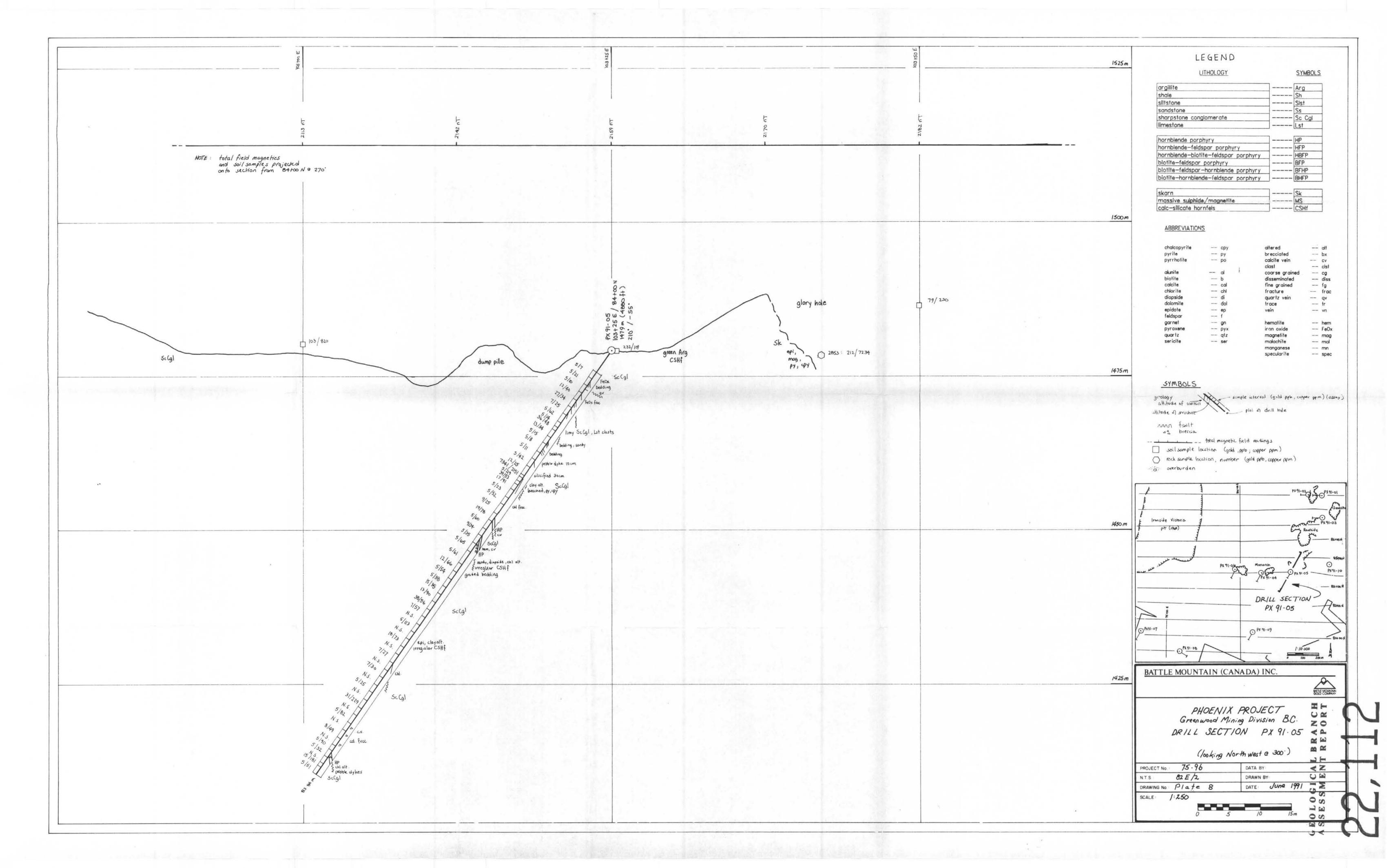


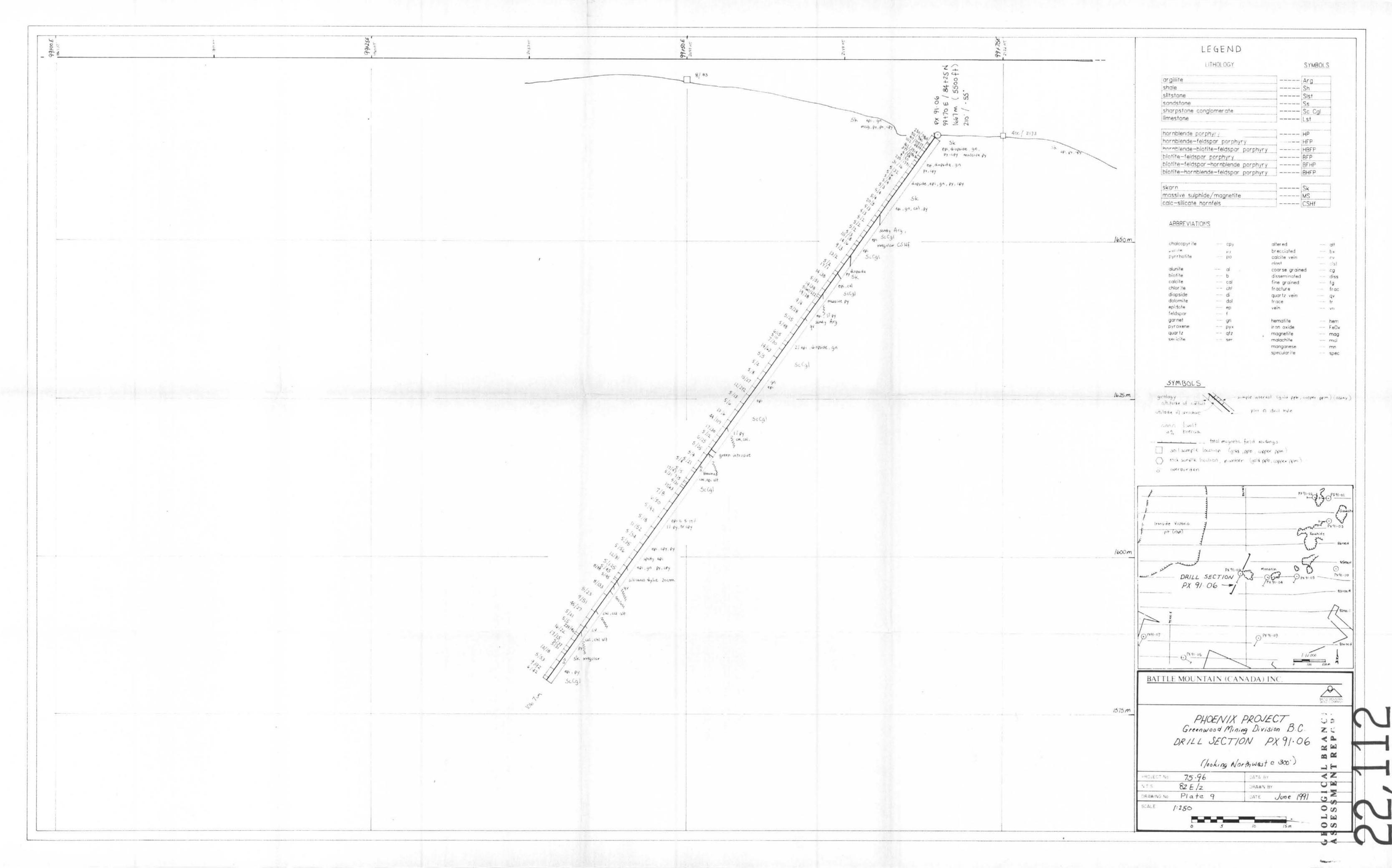


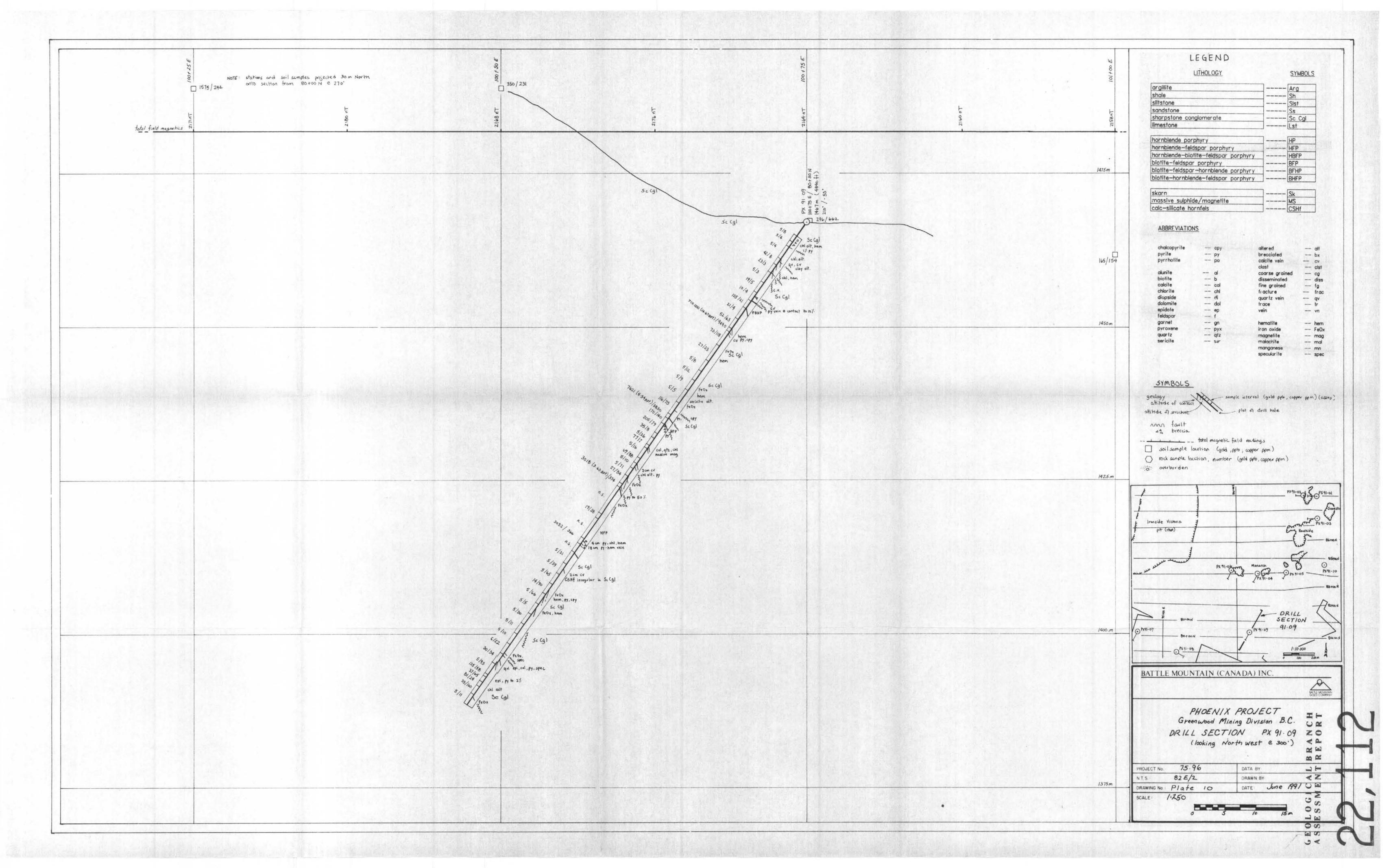


Server - - -

.







----NOTE: field magnetics and soil samples projected 30m south from 85+00 N N.5. LN.S. GS epi, py, cpy

