ASSESSMENT REPORT OF DIAMOND DRILLING, GROUND AND AIRBORNE GEOPHYSICAL SURVEYS, ROCK AND SILT SAMPLING ON THE

NICKEL MOUNTAIN PROPERTY
(E & L 1-28, 30-40, 41FR MINERAL CLAIMS)

LIARD MINING DIVISION

NTS 104B/10E

LAT/LONG 56° 35'N/130° 40'W

by

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APPENDIX

MAPS

1. INTRODUCTION

This report covers the 1990 work programme carried out on the Nickel Mountain Property (E & L claims.). The claims, owned and operated by Silver Standard Resources Inc., are under option to Lexington Resources Ltd.

1.1 Location and Access

The claims are located on Nickel Mountain in the Iskut River district of northwest British Columbia. They extend along the eastern side of Snippaker Creek and are centred four kilometres north-northeast of Julian Lake.

Access is by aircraft. For this programme a camp was established at the Snippaker airstrip, located four kilometres west of the claims. Equipment and personnel were trucked to the Bob Quinn airstrip on highway 37, 49 kilometres northeast of the claims, and then flown to Snippaker airstrip by Otter aircraft. Access to the claims from Snippaker airstrip is by helicopter. Helicopters based at Bronson airstrip, Bob Quinn airstrip and at Bell II on highway 37 were used.

A road, built by Silver Standard Mines Ltd. in 1965, extends from Snippaker airstrip to an adit located at 1,535 metres elevation on the claims. This road is not useable at the present time as it is overgrown and the bridges over Snippaker Creek and its tributaries are in poor repair or washed-out.

Topography on the claims is rugged. Elevations range from 800 metres to 2,000 metres. The northern edge of the claims is ice covered.

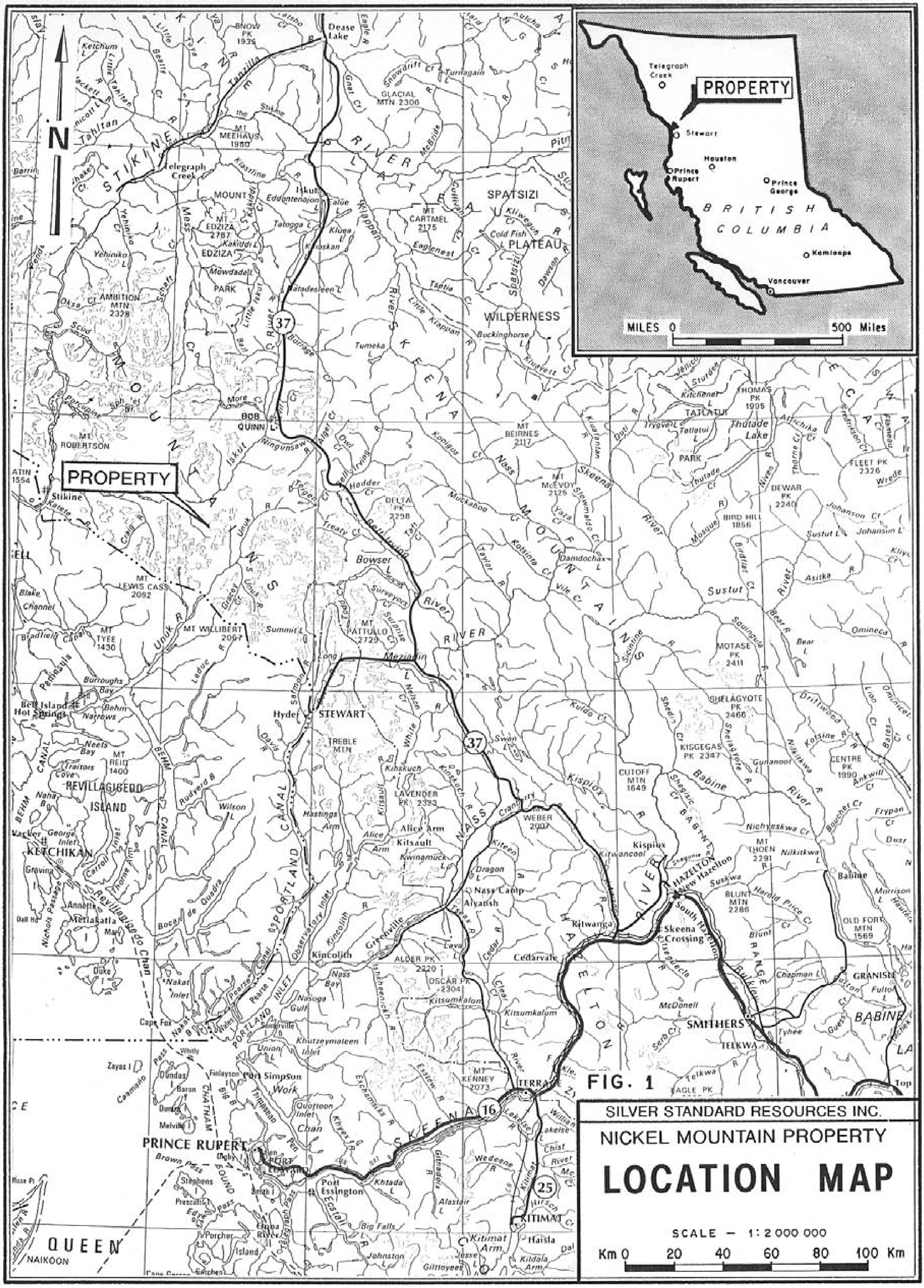


FIG. 1

SILVER STANDARD RESOURCES INC.

NICKEL MOUNTAIN PROPERTY

LOCATION MAP

SCALE — 1: 2 000 000

Km 0 20 40 60 80 100 Km

Vegetation is typically dense coastal forest at lower elevations, ranging to alpine shrubs at intermediate levels to no vegetation on higher ridges.

1.2 History

The original copper-nickel showing was discovered by Silver Standard Mines Ltd. prospectors Ed and Lela Freeze for the BIK Syndicate (Silver Standard Mines/McIntyre Porcupine Mines/Anglo-Huronian/Dalhousie Oil) in 1958.

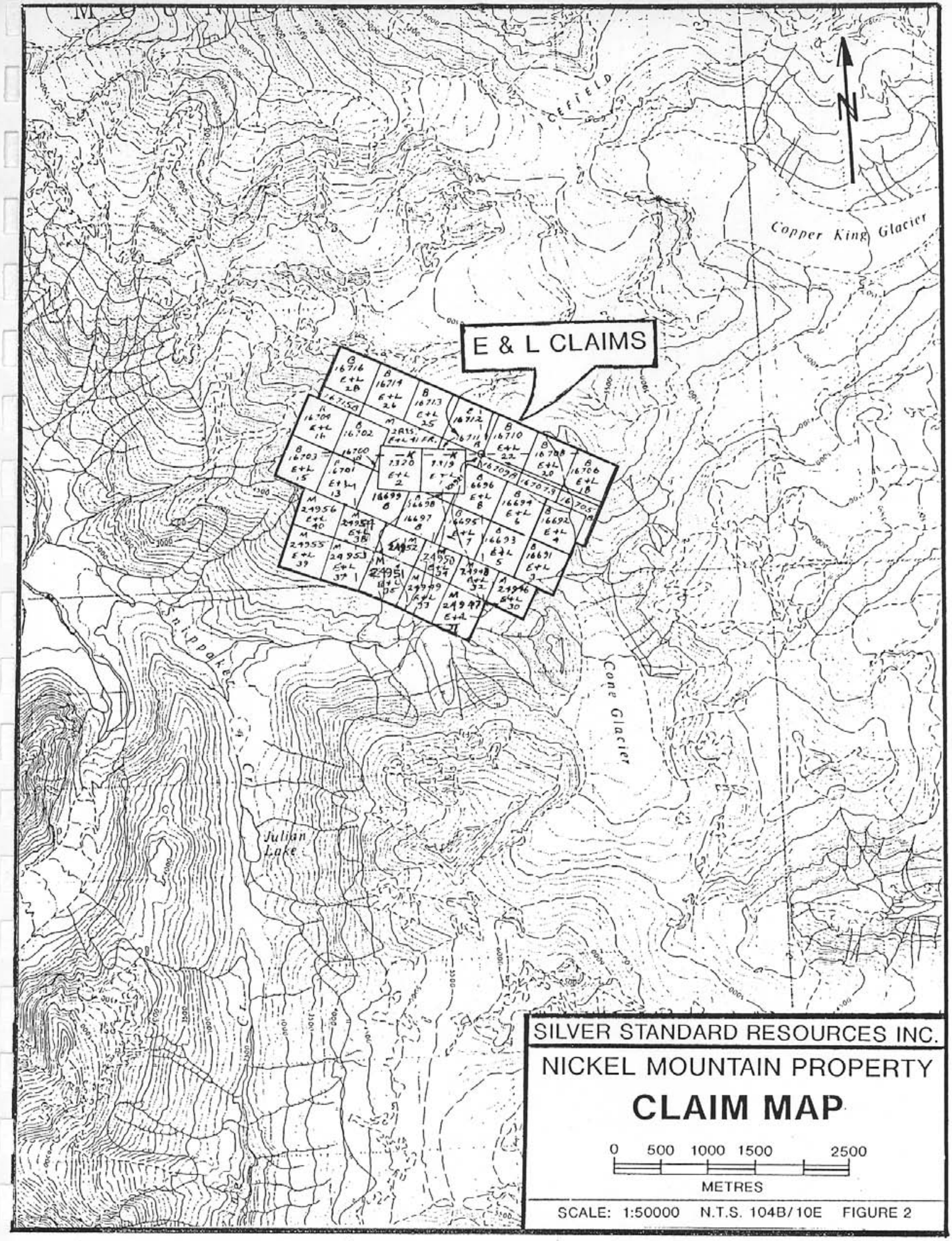
From 1958 to 1965 geological mapping, geochemical sampling and hand trenching were carried out, and seven x-ray holes totalling 84 metres were drilled. In 1966 five diamond drill holes totalling 380 metres were drilling on the N.W. and S.E. mineralized zones. In 1967 a tote road was pushed from Snippaker airstrip to the adit site. In 1970 and 1971 Sumitomo Metal Mining Canada Ltd. drove a 450.5 metre drift, drilled nine underground holes totalling 2,260.4 metres and conducted a surface magnetic survey over the showings and on the icefield north and east of the showings. In 1986 rock sampling and further magnetic surveying were carried out. An airborne magnetic and VLF-EM survey was flown in 1987.

1.3 Claims

The property consists of 40 claims grouped as the Nickel Mountain group.

Claims	Anniversary	Record Nos.	Expiry*
E & L 1-2	26 August	7319-20	2001
E & L 3-28	17 February	16691-716	2001
E & L 30-40	30 September	24946-56	2001
E & L 41Fr.	22 September	24957	2001

*Based upon assessment credits for work reported upon herein.



SILVER STANDARD RESOURCES INC.

NICKEL MOUNTAIN PROPERTY

CLAIM MAP

0 500 1000 1500 2500

METRES

SCALE: 1:50000 N.T.S. 104B/10E FIGURE 2

1.4 1990 Work Programme

The 1990 on site field programme began September 25 and was completed November 25. Veteran prospector A.R.C. Potter began rock sampling and examination of two large aeromagnetic anomalies on September 25, four days after financing was finalized. The remainder of the crew mobilized to the property shortly after that date.

The field programme consisted of rock and silt sampling, ground magnetic surveying, diamond drilling and a helicopter-borne magnetic, four-frequency electromagnetic and VLF-EM survey. An orthophoto mosaic of the claims area was made by Eagle Mapping Services Ltd.

Originally the programme was to follow-up, by rock sampling, mapping and drilling of two large aeromagnetic anomalies and VLF-EM conductors discovered by a 1987 airborne magnetic and VLF-EM survey of the claims. Initial geological reconnaissance indicated that the aeromagnetic anomalies were caused by a high magnetic component in basalt and diabase, and the focus of the programme was modified.

The possibility of further underground diamond drilling was then investigated. Examination of the adit showed that the workings remain in good condition. A drill contractor, who drilled during the 1970 and 1971 underground programmes, visited the site and agreed to drill holes from the first drill station towards the downdip extensions of the previously drill-indicated copper-nickel mineralized zones. However, when costs estimates were compiled, funds were insufficient to combat the winter surface conditions.

At that time it was decided that a surface drill programme would be undertaken to intersect a lineament cutting intermediate to acidic Betty Creek Formation Ltd. volcanics.

An apparently safe drill site was chosen in consultation with the drilling contractor. This site was located just upstream from silt sample EL 11, that contained 140 ppm copper. Diamond drilling was undertaken by Falcon Drilling Ltd. from November 7 to November 14, 1990.

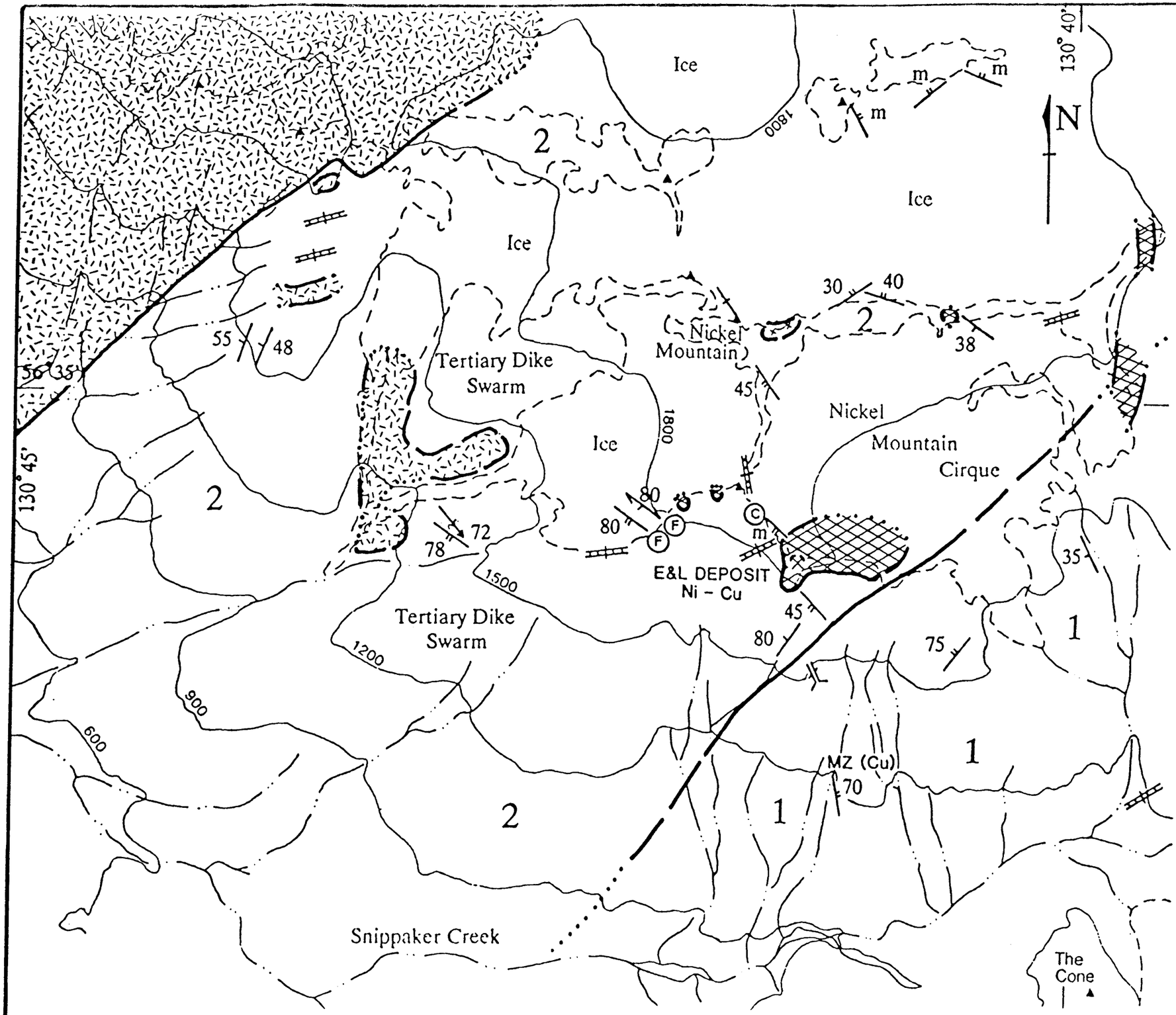
A total of 140 line-kilometres of VLF-EM magnetic and 4-frequency electromagnetic surveying was carried out by Aerodat Ltd. between November 23 and 25, 1990.

2. GEOLOGY

2.1 Regional Geology

The regional geology (Figure 3) was most recently described by K.D. Hancock in B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1989, Paper 1990-1, pages 337-341. Stratified rocks in the region are Lower Jurassic Hazelton Group. Hancock reports they trend northeast and dip steeply northwest.

Hancock has divided Hazelton Group rocks that trend through the property into two formations: the Betty Creek Formation and the overlying Salmon River Formation. The Lower Jurassic Betty Creek Formation is a thick sequence of intermediate volcanics, primarily dacitic ash tuffs and lapilli tuffs, and thin interbedded sediments, usually black thin-bedded fine sandstone and siltstone. Hancock was not able to subdivide the Betty Creek Formation in this area and, thus, has made no distinction between the Betty Creek and Mount Dilworth formations. The Lower to Middle Jurassic Salmon River Formation strata are black, evenly laminated, rusty weathering, very fine-grained argillaceous sandstones, siltstones and mudstones.



LEGEND

TERTIARY

Medium-grained, grey diorite dikes and small plugs (?), 1 to 10 metres across.

MIDDLE JURASSIC TO MIDDLE CRETACEOUS

NICKEL MOUNTAIN GABBRO

Medium to coarse-grained olivine gabbro; composed of plagioclase, pyroxene and olivine. Orbicular textures are present in both pyroxene and plagioclase.

JURASSIC

LEHTO PORPHYRY

Medium to coarse-grained quartz monzodiorite; composed of white plagioclase, pink potassium feldspar, grey quartz, black hornblende and minor biotite. Locally, the potassium feldspar phenocrysts are up to 3 centimetres long. The border phase is commonly a grey/green diorite.

LOWER TO MIDDLE JURASSIC

SALMON RIVER FORMATION

2 — Rusty weathering, black, well-laminated, very fine grained argillaceous sandstones, siltstones and mudstones. Locally contains small lenses of limestone-chip breccia. The basal calcareous grit and limestone are not present. Ammonoid fossils are present but not abundant.

BETTY CREEK FORMATION

1 — Felsic to intermediate volcanics; light to medium green, dacitic ash tuffs and lapilli tuffs, commonly plagioclase porphyritic. Contains interbeds of black siltstone and very fine grained sandstone. Also contains some hematitic clastic layers.

SYMBOLS

- Contact (known, approximate, assumed)
- Bedding (tops known, tops unknown, vertical)
- Mineral prospect
- Mineralized showing
- Macrofossil sample location
- Conodont sample location
- Adit
- Stream
- Contour (in metres)
- Peak
- Permanent snow/ice boundary

MZ (Cu) · F · C · m · 1200

SILVER STANDARD RESOURCES INC.

NICKEL MOUNTAIN PROPERTY

LIARD MINING DIVISION
BRITISH COLUMBIA

REGIONAL GEOLOGY

0 500 1000
metres

N.T.S. 104B/10E FIGURE 3

A Jurassic porphyritic quartz monzodiorite, the Lehto porphyry pluton, lies northwest of Nickel Mountain. This pluton truncates Salmon River Formation sedimentary strata.

The Nickel Mountain gabbro intrusions of Middle Jurassic to Middle Cretaceous age are exposed in a northeast trending belt. These gabbro intrusions consist of four small plugs and a dyke swarm. One gabbro body hosts the known copper-nickel mineralization at Nickel Mountain.

Tertiary diorite dykes crosscut all other units in the area. They are medium-grained, rusty weathering, dark grey and their intrusion appears to have been controlled by Tertiary deformation.

2.2 Property Geology

The following description is primarily from W.M. Sharp's 1966 geological report on the property, with modifications based upon later work including the 1990 programme.

The Nickel Mountain copper-nickel deposit is hosted by olivine gabbro. The deposit is exposed in three zones with indicated reserves of 1,734,000 tonnes and inferred reserves of 1,194,000 tonnes both grading 0.80% Ni, 0.62% Cu, 0.34 gm Au/t and 6.8 gm Ag/t.

The Betty Creek Formation volcanic assemblage as exposed on the property varies from pillow basalt through andesitic tuffs and breccias to dacitic and possibly rhyodacitic tuffs, lapilli tuffs and agglomerates. Sharp reported that strikes were generally northeasterly with steep to vertical southwesterly dips. Most outcrops of the Betty Creek Formation examined in 1990 were dacitic to rhyodacitic except for the pillow basalts found 400 metres to 500 metres east of the adit.

Salmon River Formation sediments consist of soft, incompetent argillites and firm brittle cherts - the latter occurring within or adjacent to bodies of intrusive rocks. The argillites have been folded and crumpled both broadly and locally. Bedding trends northwesterly and, according to Sharp, to dip southwesterly.

Fracture systems trend both northeasterly, and northerly to northwesterly. The northeasterly trending fractures tend to dip steeply northeast, while the other set tends to dip near vertically. Gabbro intrusions appear to be structurally controlled by the northeasterly trending fracture systems.

The olivine gabbros intrude Salmon River sediments. These gabbro bodies are composed of ophitic textured olivine gabbro to hornblende diabase. The most obvious difference between the barren gabbros and the body hosting the Nickel Mountain deposit is that the copper-nickel mineralized body has undergone strong alteration, especially within fracture zones and near related mineralization. Oligoclase plagioclases have been altered to anorthite.

All known copper-nickel mineralization is found on the margins of one gabbro stock. Mineralization consists of disseminated and massive pyrrhotite, pentlandite and chalcopyrite. Mineralization is exposed on surface and has been intersected in drill holes to 120 metres below surface. Further downdip extensions were sought in an underground drilling programme in 1970 and 1971 from the adit, located 300 metres below the showings, but results were inconclusive. While a horizontal hole was drilled far enough to intersect the projected location of the mineralization the breaking of the wireline, by chance, and subsequent sliding out of the hole of the corebarrel, by itself, suggests that this unsurveyed hole deviated and may not have tested the downward extension of the mineralization.

An eight centimetre wide quartz-sulphide vein cutting dacitic plagioclase porphyritic ash-lapilli tuffs of the Betty Creek Formation was reported by the B.C. Department of Mines, in 1989, to occur in the creek about 180 metres to 190 metres below the adit. Mineralization in the vein was reported as massive and disseminated chalcopyrite, pyrite and tetrahedrite. A two metre along strike chip sample assayed 0.15% Ag, 3.15% Cu and 82 ppb Au. This vein was not found during the 1990 programme.

3. 1990 SURFACE WORK

The 1990 programme began very late in the season. Initially the work programme was to follow-up by surface mapping, rock sampling, magnetic and VLF-EM surveys and diamond drilling two large aeromagnetic anomalies and VLF-EM conductors discovered in the 1987 airborne magnetic and VLF-EM survey of the E & L claims. While fieldwork began only four days after financing was finalized the onset of snow hampered the programme and forced modifications to the programme.

Geological reconnaissance of the two large aeromagnetic anomalies, one to the east and one to the west of the adit suggested that they were caused by pillow basalt and diabase, respectively. While the area of the aeromagnetic anomaly east of the adit is too rugged for a multi-line ground geophysical survey reconnaissance magnetic surveying confirmed the higher magnetic nature of the basalt. The areal extent of the basalt was not determined but it is extensive enough to cause the aeromagnetic anomaly.

The aeromagnetic anomaly west of the adit, as plotted in the 1987 survey, is centred on a diabase outcrop. This diabase is quite magnetic, especially compared to the surrounding intermediate to felsic volcanics. Ground magnetic surveying confirmed that a magnetic anomaly is associated with the diabase and, at that time, it was concluded that

the diabase was the cause of the western aeromagnetic anomaly. However, subsequent to this, the 1990 airborne survey was flown. This survey again detected the two large aeromagnetic anomalies but the western anomaly is plotted 200 metres to 250 metres north of its 1987 plotted position. As the 1990 survey has much more accurate ground control this revised location is considered more likely. The revised location is just north of the 1990 ground magnetic survey and geological reconnaissance area, therefore, the cause of the western aeromagnetic anomaly requires reinvestigation.

Investigation of the Sumitomo adit revealed that with a minimum of rehabilitation the adit could be used for further underground diamond drilling. While the fieldcrew readied the adit and surface area near the portal for further work drilling contractors were contacted. One contractor, who had drilled during the 1970 and 1971 underground drilling programmes, made a site visit and was prepared to carry out the work. Tentative approval from the District Mines Inspector in Smithers to conduct an underground drill programme was received and the contractor made preparations to carry out the drilling. Meanwhile a large amount of snow fell, resulting in avalanches in the vicinity of the adit. When the costs were calculated to helicopter-in the equipment necessary to provide a safe working and living environment to conduct the underground drilling, it was found that not enough funds were available to overcome the hazards posed by the continuing snowfall. This necessitated another change in the programme.

It was decided that a surface diamond drill hole would be drilled, from an apparently safe location, to intersect a lineament cutting felsic volcanics of the Betty Creek Formation. Falcon Drilling Ltd. was contacted and they were able to move on site promptly. They began drill pad construction on November 7 and drilling on November 9. Unfortunately on November 12 an avalanche destroyed the drill water supply pump and other ancillary equipment and injured one of the drill crew. Due to the hazard posed by further

avalanches the surface exploration programme was terminated at that time. Drill hole 90-1 totalled 135.33 metres (444 feet).

During the surface exploration stream sediment samples were collected from tributaries to Snippaker Creek. While silt samples were previously collected in the early 1960's, analytical techniques have greatly improved since that time period with the result of much lower detection limits for precious metals and platinum group elements.

3.1 Ground Magnetic Reconnaissance

Ground magnetic reconnaissance surveys were conducted by mining technologist, K. Chubb using an EDA Omni Plus magnetometer. A seven line survey was conducted over the 1987 location of the west aeromagnetic anomaly located southwest of the adit (see Figure 4 for location and Figure 5 for survey results). This survey confirmed that a magnetic anomaly is associated with a strongly magnetic diabase. As reported above, the subsequent 1990 airborne magnetic survey results now indicate that the western aeromagnetic anomaly is positioned north of the 1990 ground surveyed area and, hence, remains unexplained.

The east aeromagnetic anomaly, located east of the adit, is in an area too rugged for a multi-line survey but a reconnaissance survey across what was accessible confirmed that a magnetic bearing pillow basalt causes the magnetic anomaly (see Figure 4 for location and Figure 6 for survey results).

A reconnaissance line was run along the ridgeline where the copper-nickel showings outcrop. The purpose of this reconnaissance line was to determine the associated magnetic signature with a modern magnetometer. Readings directly on the showings

indicate up to a 1,000 nanoTesla increase in total field magnetic values over the copper-nickel mineralization (see Figure 4 for location and Figure 7 for surveying results). No surveying was possible on the icefield to the north and east of the showings due to the hazard of many open crevasses.

3.2 Rock Sampling

Rock samples collected during investigations of the aeromagnetic anomalies and during geological reconnaissances of felsic volcanic members of the Betty Creek Formation generally contained low gold, copper, nickel or platinum group elements (see Figure 4 for locations). The best sample 173101, which upon further examination proved to be float that probably originated from cliffs near the original showings, was strongly silicified and contained 5% weathered pyrite grains. It assays 897 ppm Cu, 327 ppm Ni, 19 ppb Au, 10 ppb Pt and 13 ppb Pd. The only other sample that contained even trace gold was sample 173051 (9 ppb Au) collected from a rusty patch with 0.5% pyrite as disseminations and fracture fillings in a dacitic tuff.

3.3 Silt Sampling

Silt samples were collected from tributaries of Snippaker Creek. They were analyzed by Min-En Labs for gold and by 31 element I.C.P. Three samples contained anomalous levels of gold; samples EL No.1, 3 and 4 with 65, 16 and 29 ppb Au, respectively (see Figure 4 for locations). Two silt samples EL No. 11 and 14 contained 104 and 279 ppm Cu, respectively.

Silt sample EL 11 (104 ppm Cu) was collected immediately downstream of diamond drill hole 90-1. The drill hole did not intersect any feature considered significant enough to

cause this anomalous copper value. The quartz-sulphide vein (see section 2.2) located in 1989 and reported upon by the B.C. Department of Mines is located upstream on this creek and may be the cause of the anomalous copper in silts in this stream.

A correlation of anomalous silt sample values with the airborne geophysical results may be found in section 5.

4. DIAMOND DRILLING

One diamond drill hole was drilled to test a lineament cutting felsic volcanics of the Betty Creek Formation. Falcon Drilling Ltd. of Prince George was able to mobilize a drill on site within one week of being contacted. They cut the drill site on November 7 and began drilling on November 9. Unfortunately an avalanche on November 12 destroyed the water supply pump and ancillary equipment. Drilling was halted that day due to the continuing avalanche hazard.

Drill hole, 90-1 was drilled at -45° on a bearing of 340° (see Figure 4 for location and Appendix 1 for drill log). This diamond drill hole intersected a series of tuffs, lapilli tuffs and agglomerates of andesitic to dacitic and possibly rhyodacitic composition. The only mineralization of note, other than pyrite, were traces of chalcopyrite. A 93 centimetre zone containing 60% quartz-calcite veins assayed 117 ppm copper. A 93 centimetre zone of agglomerate with trace chalcopyrite in fracture fillings assays 140 ppm copper. Hematitic alteration is common in the drilled section.

5. AIRBORNE GEOPHYSICAL SURVEY

Aerodat Ltd. was contracted to carry out a 140 kilometre helicopter-borne magnetic, VLF-EM and four frequency electromagnetic survey of the property. The survey was carried out from November 23 to 25, 1990 and reported upon in February 1991. A complete description of the survey and results can be found in the Aerodat report by Richard Yee. Comparison of this geophysical survey results with the 1990 programme results indicates a number of features worthy of follow-up.

Electromagnetic conductor G probably lies at the contact of Betty Creek volcanics and Salmon River sediments. Silt sample EL 14 with 279 ppm copper was taken downstream from conductor G.

Electromagnetic conductor J is upstream of silt samples EL 3 and 4 with 16 ppb and 29 ppb gold, respectively.

Electromagnetic conductor N is upstream of silt sample EL 1 with 65 ppb gold.

The magnetic survey has outlined the same two large aeromagnetic anomalies which the 1987 survey revealed. The eastern anomaly is located at the same place as the 1987 survey and is undoubtedly caused by pillow basalt. The western anomaly is centred 200 metres to 250 metres north of its apparent position in the 1987 survey. This indicates that the diabase found in 1990 and considered to be the cause of the western magnetic anomaly is not the cause of this anomaly. The source of the western aeromagnetic anomaly is now considered to be unresolved.

Three small magnetic anomalies lying south of the western large anomaly and a linear zone of magnetic highs near the western edge of the survey area require investigation.

A most interesting feature of this magnetic survey is that the known copper-nickel mineralization or its associated gabbro has been detected by the detail east-west survey lines. The magnetic highs at UTM co-ordinates 6271410N-396140E and 6271380N-396215E coincide with the known mineralization. A magnetic anomaly 200 metres to the east, centred at UTM co-ordinates 6271390N-396420E is located under the icefield but near the southern edge of the ice. This magnetic anomaly is considered the most important geophysical feature to be followed up. Its location near the known copper-nickel mineralization and the fact that it appears to be a local high within a larger magnetic feature that includes the two anomalies associated with the mineralization, indicates a high probability that it associated with a gabbro body and possibly with copper-nickel mineralization.

Another small aeromagnetic anomaly to the north at UTM coordinates 6272100N-396540E lies under the icefield. Its location is quite far from any rock exposure and will, therefore, be difficult to follow-up.

Two other aeromagnetic anomalies at the northeast side of the survey area are also of interest. The first, centred at UTM co-ordinates 6271550N-397250E, extends along a ridge northward onto the icefield. Its source is quite likely exposed along the ridge. The second anomaly, centred at 6271950N-397450E is located near the eastern side of the icefield. This anomaly will be harder to follow-up as in this area only two small expanses of outcrop or moraine are visible on the orthophoto mosaic.

The magnetic highs along Snippaker Creek are more than likely caused by recent mafic volcanics exposed in the creek valley.

7. CONCLUSIONS AND RECOMMENDATIONS

It is concluded that:

- The source of one of the two large aeromagnetic anomalies (east anomaly) detected in the 1987 and 1990 airborne geophysical surveys is a pillow basalt. The source of the second aeromagnetic anomaly (west anomaly) lies outside the area investigated in 1990.

- The diamond drill hole drilled in 1990 did not intersect significant base or precious metal mineralization, nor did it explain the anomalous copper in a stream silt sample EL 11, collected downstream of the drill site.

- Rock samples collected in 1990 did not contain significant base or precious metal.

- Three silt samples detected anomalous gold values, samples EL 1, 3, and 4 with 65, 16 and 29 ppb Au, respectively. Two silt samples detected anomalous copper values, samples EL 11 and 14 with 104 and 279 ppm Cu, respectively.

- The airborne magnetic, electromagnetic and VLF-EM survey detected electromagnetic conductors and magnetic anomalies of interest and worthy of follow-up exploration. Electromagnetic conductor J is upstream of silt samples EL 3 and 4 with 16 and 29 ppb Au, respectively. Electromagnetic conductor N is upstream of silt sample EL 1 with 65 ppb Au. Electromagnetic conductor G is upstream of silt sample EL 14 with 279 ppm Cu. Conductor G probably marks the contact of Betty Creek Formation felsic volcanics with Salmon River Formation sediments; a favourable environment for massive sulphide deposition.

- The 1990 aeromagnetic survey appears to have detected the known copper-nickel mineralization. As well, it has detected the two large aeromagnetic anomalies to the east and west of the adit and a number of smaller anomalies. The small anomaly 200 metres east of the known mineralization lies within a larger magnetic feature that includes the anomalies associated with the known mineralization. As such there is a strong probability that it is associated with a gabbro body and possibly with copper-nickel mineralization.

It is recommended that:

- The electromagnetic and aeromagnetic anomalies detected in the 1990 airborne geophysical survey be followed-up by geological mapping, rock sampling, and ground magnetic and VLF-EM surveying. To avoid the problems and high costs associated with fall and winter work in this mountainous area this follow-up should be carried out in the summer. Any ground magnetic and VLF-EM surveying in the vicinity of the known copper-nickel mineralization should be conducted in the early summer or even in the spring. At that time the crevasses should be snow covered, thereby allowing a more comprehensive survey in an area that is not workable late in the season.

- To test for downdip extensions to the previously drill-indicated copper-nickel mineralization underground drilling could be undertaken from the first drill station. A drill hole at 336° with a +53° dip and length of approximately 400 metres would intersect the N.W. Zone immediately below the previous drilled intercepts. Further drill holes from the same site could follow the zone downdip.

7. COST STATEMENT

Salaries		$37,908.00
M. Holtby - Geologist Supervision, geological reconnaissance, project management, and report preparation. September 19-21, 24-30, October 1-19, 22-24, 28-31; November 1-2, 5-25, December 4 days, January 6 days for a total of 68 days at $245 per day benefits included.	$16,660.00	
A. Potter - Prospector Silt sample collection, rock sample collection, geological reconnaissance and labour. September 19-20, 23-30, October 1-31, November 1-19 for a total of 60 days at $150 per day.	$9,000.00	
K. Chubb - Mining Technologist Geophysical operator and labour. September 25-39, October 1-29 for a total of 35 days at $144 per day benefits included.	$5,040.00	
J. Bacon - Labour and Cook October 3-31, November 1-24 for a total of 53 days at $136 per day benefits included.	$7,208.00.	
Food and Accommodation 230 field man-days, including drill crew at $31 per man-day.		$7,130.00
Base Map-Orthophoto Eagle Mapping Services Ltd.		$6,105.00
Geophysical Instrument Rental (EDA Omni-Plus) September 29 to October 27, 1990, 29 days at $200 per day including computer.		$5,800.00

Radio and Telephone		$1,009.95
Spilsbury Communications	$313.35	
Traeger Distributors	$601.76	
B.C. Telephone	$ 94.84	
Aircraft		$59,470.10
Northern Mountain Helicopters	$47,058.00	
Vancouver Island Helicopters	$ 1,693.70	
Central Mountain Airlines	$10,718.40	
Diamond Drilling Contractor		$29,048.63
Falcon Drilling Ltd.		
Freight		$2,079.46
Bandstra Transportation	$1,633.66	
Canadian Airlines	$ 290.00	
Greyhound	$ 155.80	
Helicopter-Borne Magnetic/Electromagnetic/VLF-EM Survey		$23,300.00
Aerodat Ltd.		
Expediting		$1,587.21
Jaycox Industries		
Maps and Prints		$331.50
Vancal Reproductions Group	$181.50	
Eagle Mapping Services	$150.00	
Travel		$8,391.14
Truck Rentals:		
Redhawk 4-Wheel Drive	$4,150.82	
Smithers Truck Rental	$ 880.31	
A. Potter	$1,511.75	
Gasoline	$1,283.26	
Airfares:		
J. Bacon, Prince George - Vancouver	$ 246.00	
K. Chubb, Prince George - Vancouver	$ 319.00	
Bulk Fuel - for camp, drilling and helicopters		$4,049.56
ICG Propane	$730.55	
Diesel, gasoline and jet-B	$3,319.00	

Camp Suppliers - Equipment & Repair		$9,824.60
Westcoast Drilling Supplies	$1,940.00	
Glacier Hardware	$1,314.57	
Neville Crosby Industries	$ 498.94	
Windsor Plywood	$1,199.12	
Jaycox Industries	$ 435.88	
Deakin Equipment	$2,446.46	
Smithers Lumber	$ 60.92	
Lis Equipment & Tools	$ 340.60	
Trac & Trail	$ 56.71	
Action Rental Equipment	$ 477.00	
Miscellaneous suppliers	$1,054.40	
Assays		$ 669.75
Acme Analytical Laboratories Ltd.		
14 core samples for Au, Pt, Pd and 30 element I.C.P. @ $15.25	$213.50	
5 rock samples for Au, Pt, Pd and 30 element I.C.P. @ $13.75	$ 68.75	
Min En Laboratories:		
10 rock samples for Au and 31 element I.C.P. @ $17.00	$170.00	
15 silt samples for Au and 31 element I.C.P. @ $14.50	$217.50	
TOTAL		**$196,704.90**

ASSESSMENT COST DIVISION

Helicopter-borne 4 frequency electromagnetic, magnetic, VLF-EM Survey Aerodat Ltd.	$23,300.00

Diamond Drilling		$63,337.74
Drill Contractor	$29,048.63	
Assays	$ 213.50	
Helicopter (Drill & men moves)	$23,575.61	
Geologist-Supervision, core logging	$ 1,800.00	
Labourer - Core splitting, etc.	$ 800.00	
Fuel	$ 800.00	
Meals & Cook	$ 2,100.00	
Proportion of Camp-Supplies and Set-up and Removal Costs	$ 5,000.00	

Ground Magnetic Surveys		$16,180.00
Geophysics Operator	$2,880.00	
Equipment Rental (EDA Omni-Plus)	$5,800.00	
Helicopter	$3,500.00	
Meals and Cook	$1,000.00	
Proportion of Camp-Supplies and Set-up and Removal Costs	$3,000.00	
Geology and Geochemistry		$19,456.25
Geologist and sampler salaries	$4,500.00	
Meals and Cook	$2,000.00	
Helicopter	$4,500.00	
Assays 15 rocks	$ 238.75	
15 silts	$ 217.50	
Proportion of Camp-Supplies, Set-up and Removal Costs	$8,000.00	
TOTAL		**$122,273.99**

8. REFERENCES

Hancock, K.D. (1990): Geology of Nickel Mountain and the E & L Nickel-Copper Prospect (104B/10E); BC. Ministry of Energy, Mines and Petroleum Resources, Geological Field Work 1989, Paper 1990-1, pages 337-341.

Hermary, R.G. and White, E.E. (1988): Geophysical Report on an Airborne Magnetic and VLF-EM Survey, E & L claims: B.C. Ministry of Energy, Mines and Petroleum Resources, Assessment Report 17059, 23 pages, plus maps.

Hirata, Y. (1972): Exploration of E & L Property of Nickel Mountain Mines Ltd., Part II: Geology; unpublished report from Sumitomo Metal Mining Corporation, B.C. Ministry of Energy, Mines and Petroleum Resources, Property File 104B-006, 11 pages.

Jeffery, W.G. (1966): E & L; Annual Report, pages 31-34.

Quartermain, R.A. (1987): Trench Sampling on the E & L Claims, Liard Mining Division, Iskut River Area, British Columbia; unpublished report for Consolidated Silver Standard Mines Limited, 11 pages, plus maps.

Sharp, W.M. (1965): Report on the Geological Investigation of the E & L Nickel-copper Prospect and Vicinity near Snippaker Creek, Iskut River Area; B.C. Ministry of Energy, Mines and Petroleum Resources, Assessment Report 741, 24 pages, plus maps.

(1966): Current Geological Evaluation, E & L Nickel-Copper Deposits, Snippaker Creek, Iskut River District, unpublished report for Silver Standard Mines Ltd., 29 pages, plus maps.

Yee, R. (1991): Report on a Combined Helicopter-Borne Magnetic, Electromagnetic and VLF Survey, Nickel Mountain Property, B.C. by Aerodat Ltd., 37 pages, plus maps.

9. STATEMENT OF QUALIFICATIONS

I, Max H. Holtby, residing at 103 - 1026 Queens Avenue, New Westminster, B.C. hereby certify that:

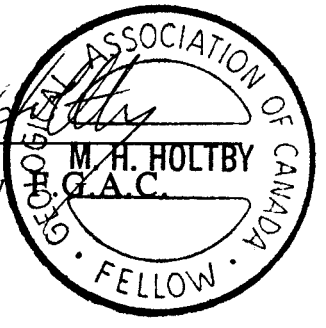
1. I graduated from the University of British Columbia in 1972 with a B.Sc. in Honours Geology.

2. I am a Geological Association of Canada Fellow and Geological Society of Malaysia Member in good standing.

3. The work described herein was done under my direct supervision.

4. I have worked since 1971 as an exploration geologist and in mine management in Canada, U.S.A., Malaysia and Liberia, West Africa.

Max H. Holtby



APPENDIX 1

Diamond Drill Hole Log

SILVER STANDARD RESOURCES INC.

DRILL HOLE LOG

HOLE NO. 90-1

SHEET 1 OF 6

PROPERTY: Nickel Mountain

LOCATION: E+L 33 M.C.

ELEVATION: 1075 m

COORDINATES: UTM 6270040N
396327E

LENGTH: 135.33m (444 feet)

	BEARING	INCLINATION
COLLAR	340°	-45°

CORE SIZE: BQ

COMMENCED: November 9, 1990

COMPLETED: November 12 1990

LOGGED BY: M. HOLTBY

SAMPLED BY: J. BACON

CORE STORED AT: Snippaker Airstrip Camp.

FROM m	TO m	DESCRIPTION	RECOVERY RUN	RECOVERY %	SAMPLES NO.	SAMPLES FROM m	SAMPLES TO m	SAMPLES LENGTH m	ASSAYS Cu ppm	ASSAYS Ni ppm	ASSAYS Zn ppm	ASSAYS Au ppb	ASSAYS Ag ppm
0	1.52	Casing - No core											
1.52	25.45	Dacite to Rhyodacite Tuff			173054	5.79	8.84	3.05	11	22	131	9	1.1
		Medium grey in color, with light green tint in sections with more mafics											
		Rounded to subhedral irregular shaped fragments, avg. 1mm, up to 1.5mm											
		Feldspar fragments - occassional sections 1%-3%											
		Mafics - 5% to 8%, chloritized and sericitized (?) very tiny grains.											
		Pyrite - trace to spotty 0.1% disseminated - occassional 0.25% fracture fillings with quartz, hairline											
		Core very broken up, rusty on fractures											
		5.45-5.56m - fault											
		15.34-21.00m - extremely broken core, few pieces greater than 3cm.											
		after 18.28m - occassional patches pervasive hematite alteration, increasing down hole to											

CONSOLIDATED SILVER STANDARD MINES LTD.

DRILL HOLE LOG

HOLE NO. 90-1

SHEET 2 OF 6

FROM m	TO m	DESCRIPTION	RECOVERY RUN	RECOVERY %	SAMPLES NO.	SAMPLES FROM m	SAMPLES TO m	SAMPLES LENGTH m	ASSAYS Cu ppm	ASSAYS Ni ppm	ASSAYS Zn ppm	ASSAYS Au ppb	ASSAYS Ag ppm
		22.28 m where core is purple due to hematite after 21.00 m core is quite competent, but still only sections of 7 to 10 cm.											
		22.28 m - 25.45 m - purple, pervasive hematite, very hard, little or no pyrite											
25.45	92.45	Dacite Tuff											
		75% of core - patches of pervasive hematite alteration											
		25% of core - a little more mafic than 1.52 m - 25.45 m, still hard.											
		No pyrite.											
		26.41 m - 26.72 m - alteration nature of hematite is obvious as fracture fillings and pervasive in matrix			173055	26.41	26.72	0.31	2	7	76	2	0.1
		36.27 - 39.32 m - strong hematite alteration, short sections (up to 15 cm) have brecciated tuff appearance (fragments up to 2 cm).			173056	36.27	39.32	3.05	6	6	86	3	0.1
		42.0 - 51.00 m - core very broken up, rusty on fractures.											
		51.00 - 53.62 m - dyke (?) - very fine grained - 10% hematite as patches, also 1% - 2% as fracture fillings.											
		71.84 - 73.05 m - dyke (?), same as 51.0 - 53.62 m											

CONSOLIDATED SILVER STANDARD MINES LTD.

DRILL HOLE LOG

HOLE NO. 90-1

SHEET 3 OF 6

FROM m	TO m	DESCRIPTION	RECOVERY RUN	RECOVERY %	SAMPLES NO.	SAMPLES FROM m	SAMPLES TO m	SAMPLES LENGTH m	ASSAYS Cu ppm	ASSAYS Ni ppm	ASSAYS Zn ppm	ASSAYS Au ppb	ASSAYS Ag ppm
		82.60 - 87.60 m - extremely broken up, fragments less than 1 cm, poor core recovery (20% - 25%)											
		91.55 - 92.45 m - increasing clay alteration - alteration is light cream to pale greenish white color.											
92.45	94.00	Lapilli Tuff											
		Red, soft			173057	92.45	94.00	1.55	14	2	14	2	0.1
		fragments - average 6 mm - 8 mm, up to 1.5 cm. - angular to subhedral. - 25% of fragments - pale greenish white to cream alteration (100% clay). - 40% red hematitic fragments											
		groundmass - red, hematitic											
94.00	100.28	Lapilli Tuff											
		Green											
		fragments - average 2 mm - 3 mm, commonly 0.5 cm to 1 cm and occasionally up to 4.5 cm. - largest fragments red, hematitic											
		pyrite - trace to 0.1% disseminated											
		95.82 m - 8 mm quartz + 10% calcite vein, 40° to core axis 2 specks chalcopyrite			173058	95.70	96.20	0.50	28	35	134	2	0.1
		sample 173058 - includes quartz vein at 95.82 m											

CONSOLIDATED SILVER STANDARD MINES LTD.

DRILL HOLE LOG

HOLE NO. 90-1

SHEET 4 OF 6

FROM	TO	DESCRIPTION	RECOVERY		SAMPLES				ASSAYS				
			RUN	%	NO.	FROM	TO	LENGTH					
		and fragments of a calcite vein at 96.17m.											
		last 40 cm gradually turning dark grey to blackish.											
100.28	103.45	Lapilli Tuff											
		Black, soft											
		Lapilli - only 5%, average 5mm-8mm, rarely up to 2.5cm											
		- most lapilli are green to greenish grey.											
		Matrix - black, fine grained, softish.											
		pyrite - trace in matrix and occasionally in lapilli.											
		102.34m - 1.5 cm calcite - quartz vein, -10° to core axis.											
		- fault gouge at upper contact.											
		last 20 cm - gradually changing color to grey and fewer lapilli, matrix becoming coarser.											
103.45	108.47	Tuff											
		Grey.											
		- average fragments less than or equal to 1mm, occasional a few cm with fragments up to 2mm.											
		softish - portions scratchable											

CONSOLIDATED SILVER STANDARD MINES LTD.

DRILL HOLE LOG

HOLE NO. 90-1

SHEET 5 OF 6.

FROM m	TO m	DESCRIPTION	RECOVERY RUN	RECOVERY %	SAMPLES NO.	SAMPLES FROM m	SAMPLES TO m	SAMPLES LENGTH m	ASSAYS Cu ppm	ASSAYS Ni ppm	ASSAYS Zn ppm	ASSAYS Hg ppb	ASSAYS Ag ppm
		pyrite - traces disseminated, mainly towards end of section.											
108.47	111.57	Agglomerate			173059	108.47	109.42	0.95	140	49	156	3	0.6
		Clay.			173060	109.42	110.51	1.09	63	66	255	4	1.0
		fragments - up to 7cm, a few light greenish grey mainly grey and siliceous, angular and rounded			173061	110.51	111.57	1.06	44	55	264	3	0.3
		pyrite - 0.1% to 0.25% total. - fracture fillings, and in matrix as halos rimming siliceous fragments - disseminated in siliceous fragments											
		chalcopyrite - trace, especially with pyrite fracture fillings at beginning of section											
		111.57m contact - 30° to core axis, sharp.											
111.57	120.69	Tuff											
		Greenish grey											
		30cm to 60cm sections of lapilli tuff.											
		115.75 - 116.35m - starts as lapilli tuff and over next 26cm changes to fine grained tuff			173062	115.76	116.35	0.60	2	53	169	2	0.1
		pyrite - rounded patches 2mm - 5mm - 0.1%											
		117.98 - 118.90m - 60% quartz vein with minor calcite, shallow angle to core axis, gradually 5cm to 13cm thick, trace chalcopyrite and pyrite			173063	117.98	118.90	0.92	117	19	155	2	1.2

CONSOLIDATED SILVER STANDARD MINES LTD.

DRILL HOLE LOG

HOLE NO. 90-1

SHEET 6 OF 6

FROM m	TO m	DESCRIPTION	RECOVERY RUN	RECOVERY %	SAMPLES NO.	SAMPLES FROM m	SAMPLES TO m	SAMPLES LENGTH m	ASSAYS Cu ppm	ASSAYS Ni ppm	ASSAYS Zn ppm	ASSAYS Au ppb	ASSAYS Ag ppm
		in vein.											
		40% tuff and gouge.											
		120.69m - contact 140° to core axis, sharp, gouge along contact.											
120.69	135.33	Dacitic Tuff											
		Dark grey, quite siliceous											
		fragments - angular, average 1.5-2mm											
		occasional sections of lapilli tuff - fragments up to 2.5 cm.											
		occasional trace pyrite											
		124.06 - 124.59m - black matrix - quartz veining at shallow angle to core axis, up to 2cm wide, trace pyrite			173064	124.06	124.59	0.53	22	11	35	3	0.7
		135.33m (444 feet) END OF HOLE.											

APPENDIX 2

Assay Certificates and Analytical Techniques

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Silver Standard Resources Inc. PROJECT C1014 File # 90-6010

400 - 1199 W. Hastings St, Vancouver BC V6E 3T5 Submitted by: M. HOLTBY

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb	Pt** ppb	Pd** ppb
173051	1	11	27	131	1.1	22	10	892	11.47	2	5	ND	1	6	.2	4	8	87	.41	.108	2	55	2.80	21	.19	2	3.35	.07	.04	1	9	1	2
173052	3	79	8	34	.1	99	15	609	12.41	2	5	ND	1	81	.2	2	2	92	1.28	.075	3	23	.79	69	.09	2	1.34	.13	.03	2	3	3	2
173053	1	74	2	57	.1	58	16	645	5.61	2	5	ND	1	301	.2	2	10	121	3.74	.170	12	51	1.99	64	.28	4	4.79	.53	.08	1	3	1	2
173054	2	18	18	72	.4	8	2	418	3.19	7	5	ND	2	27	.2	2	9	41	.32	.082	11	15	.82	115	.16	4	1.21	.07	.09	1	5	1	2
173055	2	2	7	76	.1	7	1	457	3.07	3	5	ND	2	7	.2	2	11	56	.27	.054	10	14	1.21	46	.17	3	1.09	.06	.11	1	1	2	2
173056	1	6	10	86	.1	6	4	582	3.11	4	5	ND	2	12	.2	2	7	43	.37	.092	13	12	1.57	44	.13	2	1.40	.05	.13	1	2	1	3
173057	1	14	2	14	.1	2	2	499	1.99	2	5	ND	2	24	.2	2	2	39	1.03	.338	11	18	.18	241	.02	6	1.11	.02	.51	1	1	1	2
173058	1	28	5	134	.1	35	16	1430	4.19	2	5	ND	1	40	.2	2	2	48	1.57	.137	11	41	1.68	297	.01	4	2.28	.05	.19	1	1	1	2
173059	4	140	19	156	.6	49	32	2171	4.43	20	5	ND	1	30	.4	2	2	59	1.75	.100	7	41	1.54	14	.01	2	1.74	.06	.11	1	3	1	2
173060	1	63	36	255	1.0	66	45	2429	6.90	20	5	ND	1	33	.4	4	2	66	1.85	.103	8	41	2.13	27	.01	2	2.37	.05	.07	1	4	3	2
173061	1	44	7	264	.3	55	33	2716	8.12	4	5	ND	1	34	.2	2	2	84	1.94	.118	8	45	3.43	111	.01	2	3.91	.03	.06	1	3	1	2
173062	1	2	12	169	.1	53	26	1531	5.73	6	5	ND	1	27	.6	4	2	55	.91	.143	8	52	3.83	19	.01	6	3.73	.02	.16	1	1	2	2
173063	28	117	88	155	1.2	19	23	1759	2.45	10	5	ND	1	46	4.6	2	2	14	2.04	.046	2	18	.61	13	.01	4	.77	.01	.10	1	5	2	2
173064	4	22	23	35	.7	11	10	3027	2.38	11	5	ND	1	230	.7	3	2	8	11.35	.027	5	14	.54	36	.01	2	.64	.01	.15	1	8	2	3

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORE AU** PT** PD** BY FIRE ASSAY & ANALYSIS BY ICP FROM 20 GM SAMPLE.

DATE RECEIVED: NOV 21 1990 **DATE REPORT MAILED:** Nov 30/90 **SIGNED BY.....** D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Silver Standard Resources Inc. PROJECT C1014 File # 90-5449

400 - 1199 W. Hastings St, Vancouver BC V6E 3T5 Submitted by: M. HOLTBY

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb	Pt** ppb	Pd** ppb
D 173101	1	897	9	75	1.1	327	21	1214	5.17	3	5	ND	5	22	.2	2	2	99	.95	.069	6	31	1.18	37	.12	2	2.40	.11	.05	1	19	10	13
D 173102	1	22	19	93	.3	15	8	295	3.17	4	6	ND	4	22	.2	2	2	45	9.45	.060	3	17	.02	2	.12	2	1.98	.01	.01	1	2	3	2
D 173103	1	54	9	52	.4	27	15	1528	6.01	7	5	ND	3	38	.2	2	2	74	.59	.075	3	21	1.00	55	.11	2	2.48	.11	.13	1	2	2	2
D 173104	1	15	9	53	.1	8	6	396	2.24	4	5	ND	2	99	.2	4	2	21	.79	.050	19	8	.95	214	.01	2	1.00	.02	.12	1	6	2	2
D 173105	1	52	9	75	.4	24	13	1966	6.75	11	5	ND	2	28	.2	2	2	76	.66	.065	3	21	1.26	60	.12	2	2.97	.11	.10	1	4	2	12

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK AU** PT** PD** BY FIRE ASSAY & ANALYSIS BY ICP/GRAPHITE FURNACE.

DATE RECEIVED: OCT 23 1990 DATE REPORT MAILED: Oct 26/90 SIGNED BY ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

COMP: SILVER STANDARD RESOURCES
PROJ: C-1014
ATTN: A.R.C. POTTER

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 0S-0707-RJ1
DATE: 90/10/24
* ROCKS * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPB
173106	.8	9680	50	7	114	.1	3	3790	.1	8	21	21780	820	2	9940	372	4	580	32	580	21	1	7	1	1	37.6	67	1	2	3	162	2
173107	2.3	31560	1	3	7	.1	4	24300	.1	15	46	35220	280	3	9200	1217	1	430	20	870	12	1	1	1	1	94.7	54	3	1	1	55	1
173108	2.8	39780	17	2	41	.1	4	32560	.1	15	125	33050	320	5	9610	1090	1	110	23	660	19	1	1	1	1	72.0	58	2	1	2	123	1
173109	2.9	49800	1	1	39	.1	6	35420	.1	17	64	40790	290	4	12250	1291	1	90	22	690	16	1	1	1	1	114.2	44	2	1	1	77	1

COMP: SILVER STANDARD RESOURCES
PROJ:
ATTN: A.R.C. POTTER

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 0S-0666-RJ1
DATE: 90/10/11
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPB
333286	3.7	18410	1	4	33	.1	7	19350	16.9	25	97	55000	920	7	19550	798	2	510	1	1210	1292	1	1	1	1	159.8	1331	2	1	1	61	16
333287	3.5	19450	1	3	35	.1	7	17530	.3	25	21	54480	920	7	20810	880	1	470	2	1290	92	1	1	1	1	163.9	309	3	1	2	70	12
333288	.8	6520	1	3	60	.5	1	1440	.1	19	40	57650	1290	1	1130	34	1	790	5	20	52	1	18	1	1	24.8	24	1	2	1	23	8
333289	1.6	6530	40	1	189	.7	1	1840	.4	5	13	19630	3180	1	670	29	7	150	1	490	112	1	5	1	1	6.0	163	1	1	1	44	7
333290	1.2	3360	19	1	294	.1	4	430	.1	5	13	13470	1950	1	300	28	4	620	1	190	19	1	8	1	1	9.6	45	1	1	1	88	7
333291	1.0	2700	1	1	57	.1	4	430	.1	6	13	14190	1520	1	200	21	4	860	1	50	11	1	3	1	1	14.5	7	1	1	1	105	10

COMP: SILVER STANDARD RESOURCES
PROJ: C-1014
ATTN: A.R.C. POTTER

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 0S-0707-RJ2
DATE: 90/10/24
* SEDIMENT * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	U PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU PPB
E.L. NO. 1	2.9	27340	1	8	104	.3	4	10070	.1	19	69	47900	1640	12	15460	905	1	630	33	800	19	1	9	1	1	82.5	101	1	1	1	12	65
E.L. NO. 2	2.3	24020	1	7	101	.1	5	18130	.1	20	45	45290	1360	8	16820	932	1	740	32	1050	16	1	11	1	1	85.0	83	1	1	1	14	1
E.L. NO. 3	1.8	25680	1	6	96	.1	5	12500	.1	21	51	47620	1410	10	16160	906	1	680	19	830	15	1	9	1	1	88.6	86	2	1	1	13	16
E.L. NO. 4	2.0	27170	1	7	139	.1	4	9490	.1	22	68	51980	1420	11	16830	900	1	660	17	920	18	1	7	1	1	95.7	105	1	2	1	13	29
E.L. NO. 5	1.8	28560	1	6	272	.4	5	12840	.1	21	76	44330	1820	12	13950	857	1	1080	16	1680	23	1	24	1	1	84.7	123	3	1	1	15	6
E.L. NO. 6	2.9	29610	1	5	157	.1	8	10460	.1	28	46	56910	1590	7	15990	977	1	2010	14	1320	16	1	27	1	1	110.9	102	1	1	1	13	2
E.L. NO. 7	2.1	23090	1	5	116	.1	5	9530	.1	25	46	49030	1280	8	17730	1002	2	620	19	1450	22	1	13	1	1	113.1	82	1	1	1	14	1
E.L. NO. 8	3.4	30160	1	5	139	.1	8	14640	.1	29	42	55300	2120	7	19150	1031	1	3420	9	1390	9	1	36	1	1	128.1	78	2	1	2	17	5
E.L. NO. 9	4.3	38540	1	6	226	.1	11	16180	.1	43	33	71880	1820	9	34310	1116	1	3780	27	1390	9	1	44	1	1	143.8	93	1	1	1	22	1
E.L. NO. 10	1.7	23300	1	4	344	.3	4	8660	.1	24	90	50340	1960	7	12670	1791	1	480	44	1410	38	1	12	1	1	87.1	99	1	1	1	7	3
E.L. NO. 11	2.9	19900	1	4	560	.2	3	18500	.1	23	104	50710	2430	6	13100	1734	1	330	60	960	28	2	15	1	1	71.6	104	2	1	1	11	1
E.L. NO. 12	2.6	26120	1	3	104	.1	6	10610	.1	23	39	47000	1450	8	16610	926	1	1700	21	1060	10	1	25	1	1	99.2	106	2	1	1	13	1
E.L. NO. 13	2.5	27600	1	3	192	.1	7	11210	.1	26	78	49630	1700	7	18370	1003	1	1960	26	1140	18	1	27	1	1	107.6	99	1	1	1	17	2
E.L. NO. 14	3.2	30460	1	5	362	.4	5	14250	.1	33	279	61970	1700	10	19120	2114	1	720	51	1150	30	1	21	1	1	109.2	130	1	3	1	24	4
E.L. NO. 15	1.7	26600	1	6	174	.7	4	11220	.1	23	62	53480	2630	13	11480	2675	1	390	27	1180	37	1	11	1	1	58.2	123	1	1	1	1	2

APPENDIX 3

Geophysical Instrument Specifications

OMNI IV "Tie-Line" Magnetometer

EDA

Specifications

Dynamic Range	18,000 to 110,000 gammas. Roll-over display feature suppresses first significant digit upon exceeding 100,000 gammas.
Tuning Method	Tuning value is calculated accurately utilizing a specially developed tuning algorithm
Automatic Fine Tuning	± 15% relative to ambient field strength of last stored value
Display Resolution	0.1 gamma
Processing Sensitivity	± 0.02 gamma
Statistical Error Resolution	0.01 gamma
Absolute Accuracy	± 1 gamma at 50,000 gammas at 23°C ± 2 gamma over total temperature range
Standard Memory Capacity	
Total Field or Gradient	1,200 data blocks or sets of readings
Tie-Line Points	100 data blocks or sets of readings
Base Station	5,000 data blocks or sets of readings
Display	Custom-designed, ruggedized liquid crystal display with an operating temperature range from –40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors.
RS 232 Serial I/O Interface	2400 baud, 8 data bits, 2 stop bits, no parity
Gradient Tolerance	6,000 gammas per meter (field proven)
Test Mode	A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)
Sensor	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.
Gradient Sensors	0.5 meter sensor separation (standard), normalized to gammas/meter. Optional 1.0 meter sensor separation available. Horizontal sensors optional.
Sensor Cable	Remains flexible in temperature range specified, includes strain-relief connector
Cycling Time (Base Station Mode)	Programmable from 5 seconds up to 60 minutes in 1 second increments
Operating Environmental Range	–40°C to +55°C; 0–100% relative humidity; weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid battery cartridge or belt; rechargeable NiCad or Disposable battery cartridge or belt; or 12V DC power source option for base station operation.
Battery Cartridge/Belt Life	2,000 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings
Weights and Dimensions	
Instrument Console Only	2.8 kg, 238 x 150 x 250mm
NiCad or Alkaline Battery Cartridge	1.2 kg, 235 x 105 x 90mm
NiCad or Alkaline Battery Belt	1.2 kg, 540 x 100 x 40mm
Lead-Acid Battery Cartridge	1.8 kg, 235 x 105 x 90mm
Lead-Acid Battery Belt	1.8 kg, 540 x 100 x 40mm
Sensor	1.2 kg, 56mm diameter x 200mm
Gradient Sensor (0.5 m separation - standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0 m separation - optional)	2.2 kg, 56mm diameter x 1300mm
Standard System Complement	Instrument console; sensor; 3-meter cable, aluminum sectional sensor staff, power supply, harness assembly, operations manual.
Base Station Option	Standard system plus 30 meter cable
Gradiometer Option	Standard system plus 0.5 meter sensor

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E D A Instruments Inc.
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(303) 422 9112

Printed in Canada

OMNI PLUS VLF/Magnetometer System

EDA

Specifications*

Frequency Tuning Range	15 to 30 kHz, with bandwidth of 150 Hz; tuning range accommodates new Puerto Rico station at 28.5 kHz
Transmitting Stations Measured	Up to 3 stations can be automatically measured at any given grid location within frequency tuning range
Recorded VLF Magnetic Parameters	Total field strength, total dip, vertical quadrature (or alternately, horizontal amplitude)
Standard Memory Capacity	800 combined VLF magnetic and VLF electric measurements as well as gradiometer and magnetometer readings
Display	Custom designed, ruggedized liquid crystal display with built-in heater and an operating temperature range from −40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal strength status monitor and function descriptors.
RS232C Serial I/O Interface	2400 baud rate, 8 data bits, 2 stop bits, no parity
Test Mode	A. Diagnostic Testing (data and programmable memory) B. Self Test (hardware)
Sensor Head	Contains 3 orthogonally mounted coils with automatic tilt compensation
Operating Environmental Range	−40°C to +55°C; 0 – 100% relative humidity; Weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid 18V DC battery cartridge or belt; 18V DC disposable battery belt; 12V DC external power source for base station operation only.
Weights and Dimensions	
Instrument Console	2.8 kg, 128 x 150 x 250 mm
Sensor Head	2.1 kg, 130 dia. x 130 mm
VLF Electronics Module	1.1 kg, 40 x 150 x 250 mm
Lead Acid Battery Cartridge	1.8 kg, 235 x 105 x 90 mm
Lead Acid Battery Belt	1.8 kg, 540 x 100 x 40 mm
Disposable Battery Belt	1.2 kg, 540 x 100 x 40 mm

*Preliminary

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Printed in Canada

E & L NO. 28
E & L NO. 26
E & L NO. 27
E & L NO. 16
E & L NO. 14
E & L NO. 41 FR.
E & L NO. 24
E & L NO. 22
E & L NO. 23
E & L NO. 2
E & L NO. 1
E & L NO. 15
E & L NO. 13
E & L NO. 21
E & L NO. 20
E & L NO. 18
E & L NO. 19
E & L NO. 5
E & L NO. 10
E & L NO. 11
E & L NO. 17
E & L NO. 6
E & L NO. 9
E & L NO. 7
E & L NO. 4
E & L NO. 40
E & L NO. 38
E & L NO. 39
E & L NO. 36
E & L NO. 37
E & L NO. 34
E & L NO. 3
E & L NO. 35
E & L NO. 32
E & L NO. 33
E & L NO. 30
E & L NO. 31

SHOWINGS AREA GROUND MAGNETIC SURVEY LINES

WEST AEROMAGNETIC ANOMALY-GROUND SURVEY LINES

EAST AEROMAGNETIC ANOMALY-GROUND SURVEY LINES

173051 11. 9
173052 79. 3
173053 74. 3
173101 897. 19
173102 22. 2
173103 54. 2
173104 15. 6
173105 52. 4
173106 21. 2
173107 46. 2
173108 125. 1
173109 64. 1

EL1 69. 65
EL2 45. 1
EL3 51. 16
EL4 68. 29
EL5 76. 6
EL6 46. 2
EL7 46. 1
EL8 42. 5
EL9 33. 1
EL10 90. 3
EL11 104. 1
EL12 39. 1
EL13 78. 2
EL14 279. 4
EL15 62. 2

DDH 90-1

6272000 N
6271500 N
6271000 N
6270500 N
6270000 N
6269500 N
6269000 N

394500 E
395000 E
395500 E
396000 E
396500 E
397000 E
397500 E
398000 E

GEOLOGICAL BRANCH
ASSESSMENT REPORT
21,256
Part 1 of 2

LEGEND

- EL5 ○ 76. 6 — SILT SAMPLE (Number, Cu ppm, Au ppb)
- 173053 ▲ 74. 3 — ROCK SAMPLE (Number, Cu ppm, Au ppb)
- GROUND MAGNETIC SURVEY LINES
- DIAMOND DRILL HOLE

CONTOUR INTERVAL 20m

0 100 200 300 400 500

N

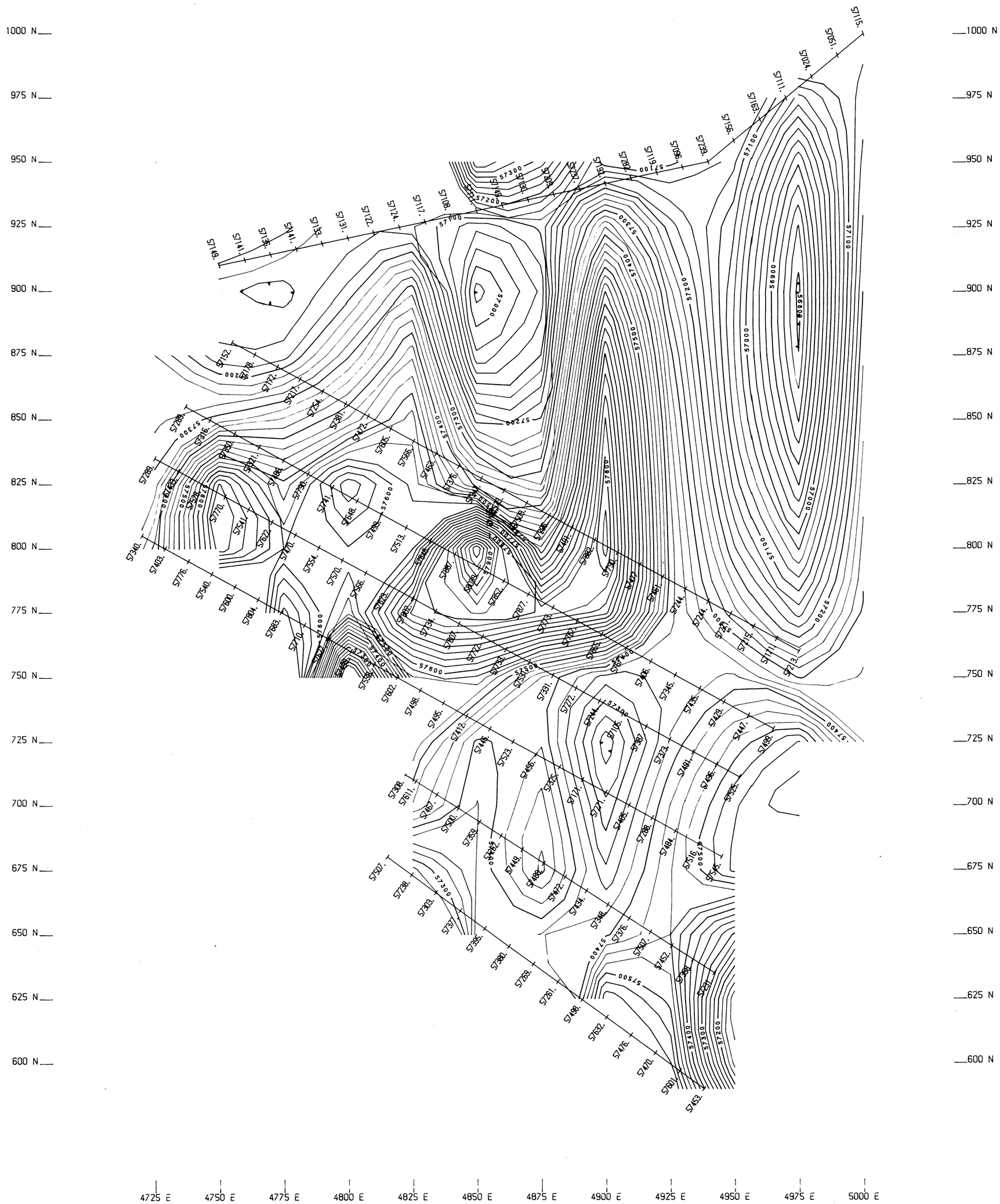
SILVER STANDARD RESOURCES INC.
NICKEL MOUNTAIN PROPERTY
(E & L CLAIMS)

1990 PROGRAMME

ROCK and SILT SAMPLES
DIAMOND DRILL HOLE
GROUND MAGNETIC SURVEY LOCATIONS
and SAMPLE ASSAYS

SCALE 1:5000 | N.T.S. 104B/10E | Figure: 4

EAGLE MAPPING SERVICES LTD. (90-76)



GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,256

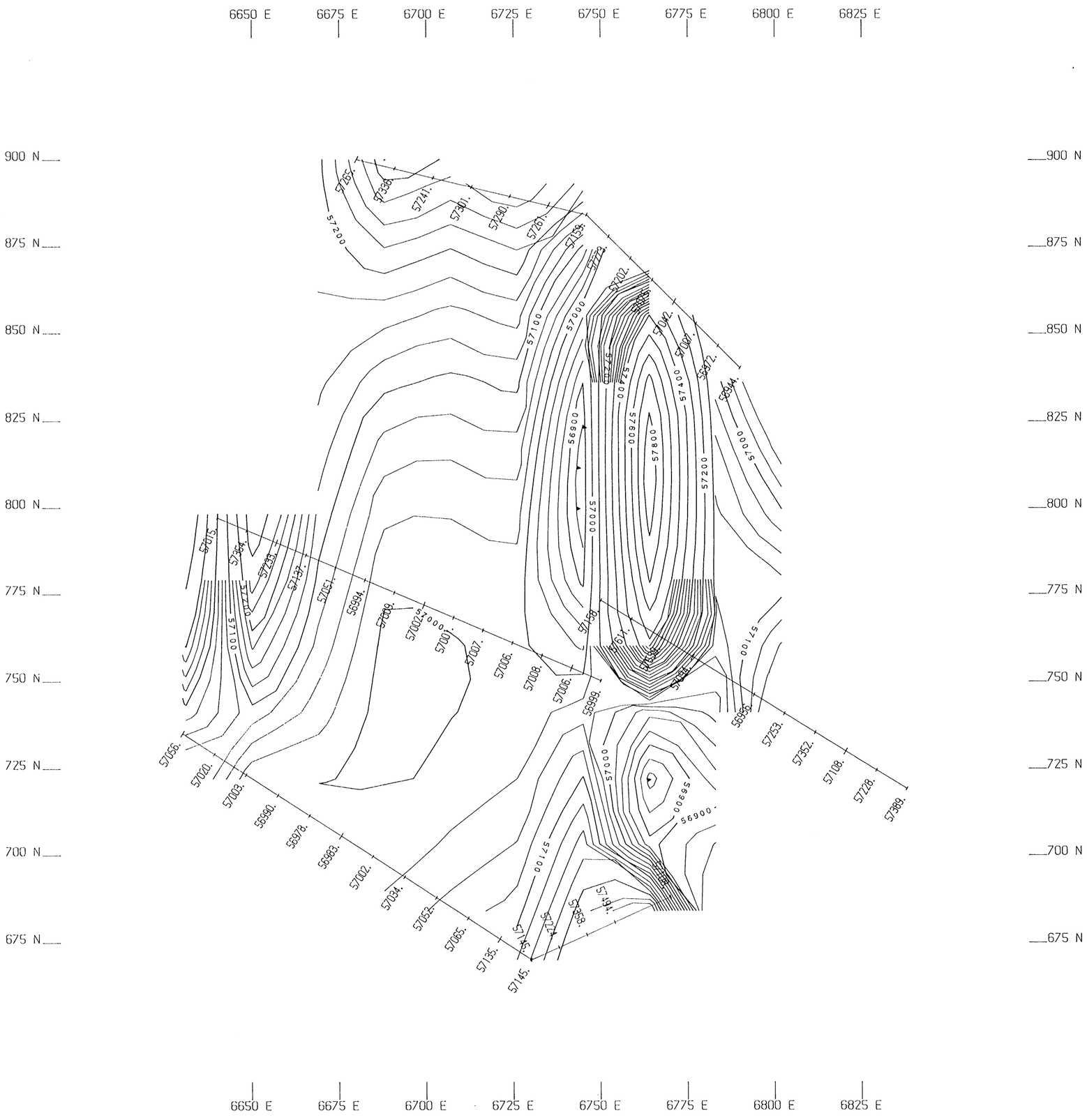
Scale 1:1000

10 0 10 20 30 40 50
(metres)

WEST AEROMAGNETIC ANOMALY

Part 1 of 2

SILVER STANDARD RESOURCES INC.
NICKEL MOUNTAIN PROPERTY E & L CLAIMS
TOTAL FIELD MAGNETIC CONTOURS AND DATA POSTINGS FIGURE 5 OCTOBER 1990
SILVER STANDARD RESOURCES INC.



Part 1 of 2

Scale 1:1000

10 0 10 20 30 40 50
(metres)

EAST AEROMAGNETIC ANOMALY

GEOLOGICAL BRANCH
ASSESSMENT REPORT

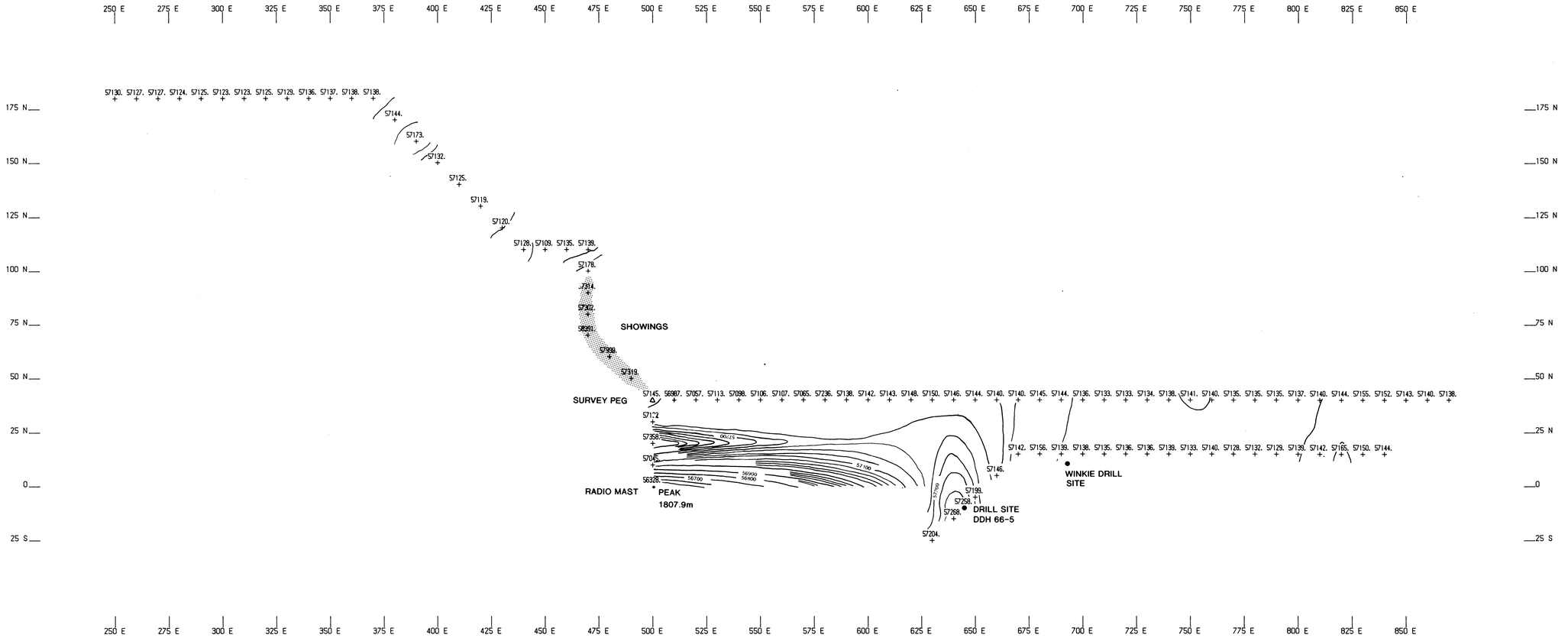
21,256

SILVER STANDARD RESOURCES INC.

NICKEL MOUNTAIN PROPERTY
TOTAL FIELD MAGNETICS

EAST AEROMAGNETIC ANOMALY
RECONNAISSANCE LINES
OCTOBER 1990 FIGURE 6

SILVER STANDARD RESOURCES INC.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,256

Part 1 of 2

Scale 1:1000

10 0 10 20 30 40 50
(metres)

SHOWINGS AREA

SILVER STANDARD RESOURCES INC.
NICKEL MOUNTAIN PROPERTY TOTAL FIELD MAGNETICS
SHOWINGS AREA RECONNAISSANCE LINES OCTOBER 1990 FIGURE 7
SILVER STANDARD RESOURCES INC.