

24614

REPORT ON THE LEXINGTON PROPERTY 1994



GREENWOOD MINING DIVISION
BRITISH COLUMBIA

NTS: 82E/2E

LATITUDE 49°00'54" LONGITUDE 118°37'12"

FOR

BRITANNIA GOLD CORP.

GEOLOGICAL SURVEY BRANCH

17th FLOOR, 401 W. GEORGIA ST. MINING REPORT
VANCOUVER, B.C.

BY:

24,614

SEAN P. BUTLER, P. Geo.

December 13, 1994

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SUMMARY AND CONCLUSIONS

The Lexington claim group is located in British Columbia in the Greenwood Mining Division approximately ten kilometres southeast of the City of Greenwood, B.C. and 540 kilometres by road from Vancouver, B.C. The claims are on mapsheet 82E/2E. The southern boundary of the property is the International Boundary with the United States of America.

The major geological structure on the property is the Goosmus Shear, a roughly northwest trending zone with several bodies of serpentinite within it. The copper and gold mineralization is concentrated near the contact between a dacitic unit and an underlying body of altered serpentinite.

The project work done in 1994 included IP geophysics, orientation enzyme leach soil geochemistry, geological mapping and brushing out the existing gridlines. This work is in preparation for diamond drilling in areas of the Goosmus Shear that are previously unexplored or under-explored.

The Canadian Pawnee grid from 1986 was rehabilitated by brushing out the lines and reflagging the stations in preparation for the IP geophysics crew.

The IP survey, using the gradient array, covered a large portion of the Goosmus Shear with survey lines that are spaced 50m apart. Three different AB spacings were used in the area near the Main Zone to delineate the targets in this area and to get details of the response over this known zone. The survey outlined several chargeability highs in areas of known mineralization including the Main Zone and TG-81. It also included several other chargeability highs that require follow up IP geophysics work, especially in the Golden Cache area.

The geological mapping was extended into the surrounding rocks on the margin of the shear to confirm geophysical and geochemical anomalies. The geological mapping also confirmed that the highly prospective area on the hinge of the Goosmus Shear north of the Lexington Portal has no outcrops and that other methods of exploration will have to be determined for future projects.

The soil geochemistry orientation survey using enzyme leach analysis did not return any recognizable signature over the projection to surface of the Main Zone or in the Lexington Portal area. It is not recommended to continue with enzyme leach analysis on other parts of the property.

The recommendations for further exploration are to diamond drill in the areas southwest of the Main Zone. The chargeability highs in the Golden Cache area, need to be followed up with more detailed IP geophysics to develop sections.

Respectfully Submitted

A handwritten signature in cursive script that reads "Sean P. Butler".

Sean P. Butler, P. Geo.

INTRODUCTION

LOCATION AND ACCESS

(Figures #1 and #2)

The Lexington claim group is located in the Greenwood Mining Division, approximately 10 kilometres southeast of the City of Greenwood, B. C., and 540 kilometres by road from Vancouver, B.C. The geographic point latitude 49° 00' 54" and longitude 118° 37' 12" is near the center of the project area. The property is located on NTS map sheet 82E/2E. The main project area is within the drainages of Goosmus Creek and Gidon Creek, with claims extending into neighbouring drainages.

Access to the claim group from Grand Forks is by driving west on Highway #3 for 5 kilometres to the Gibbs Creek Road. This good gravel road (and its tributary gravel road the City of Paris Road, up Stacey Creek) climbs for about 5 kilometres to the Lone Star Haul Road. Continue driving south on the heavy duty gravel Lone Star Haul Road to the City of Paris Road.

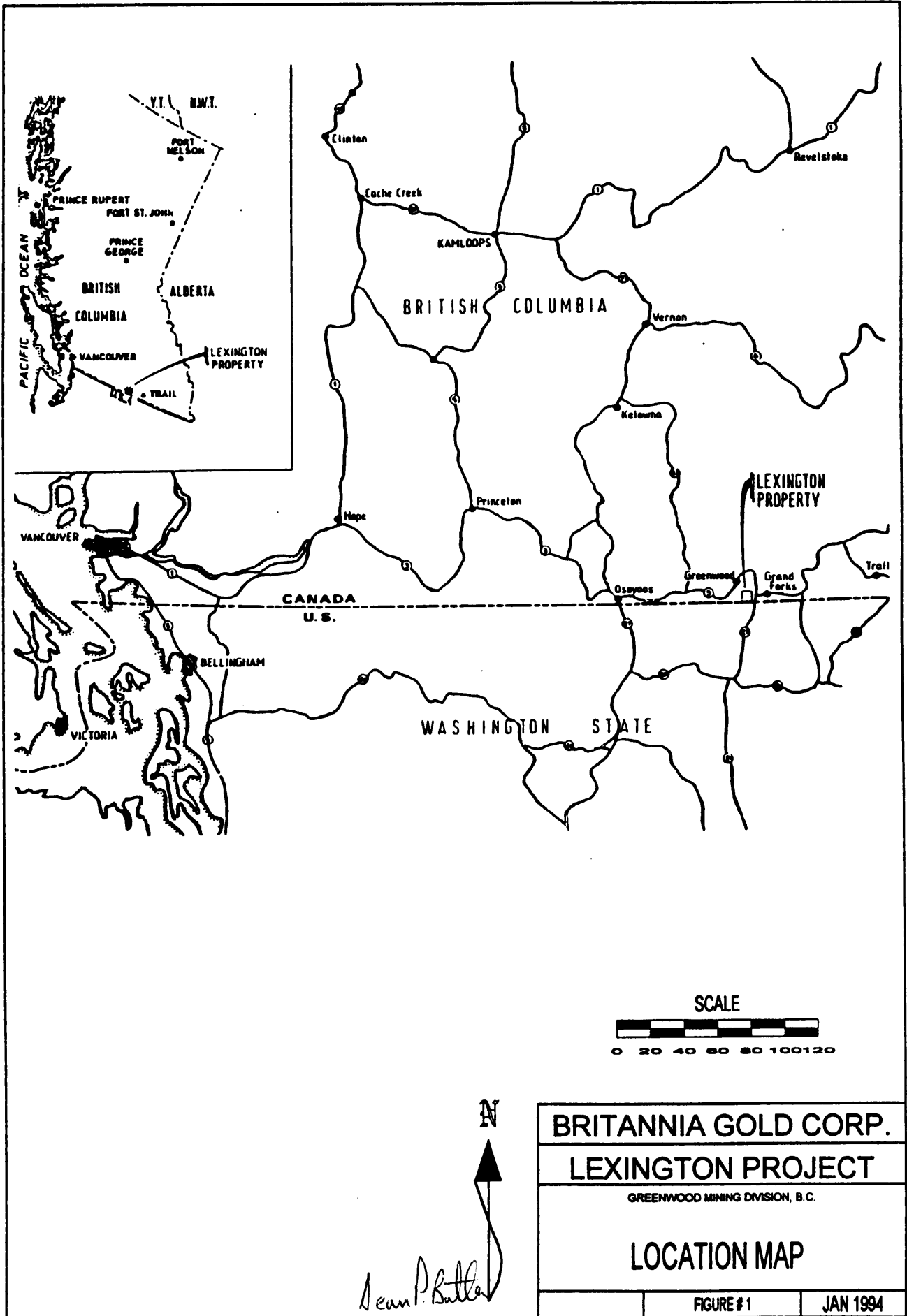
Access is available from Greenwood, west on Highway #3, for 3 kilometres then south on the McCarren Creek road to either the Gidon Creek Road or the City of Paris Road, both of which lead to the property re-joining each other between the Vacher and Golden Cache Zones. Optionally, the Lone Star Haul Road is accessed from Greenwood by driving out of town along the Phoenix Mine Road to the beginning of the haul road at the Phoenix Cenotaph, near the old open pit, and driving south.

Once on the claims there are many gravel and dirt roads that offer good access to most parts of the claim group. There is a natural gas pipeline and high voltage electrical power line in the McCarren Creek Valley just north of the claim group.

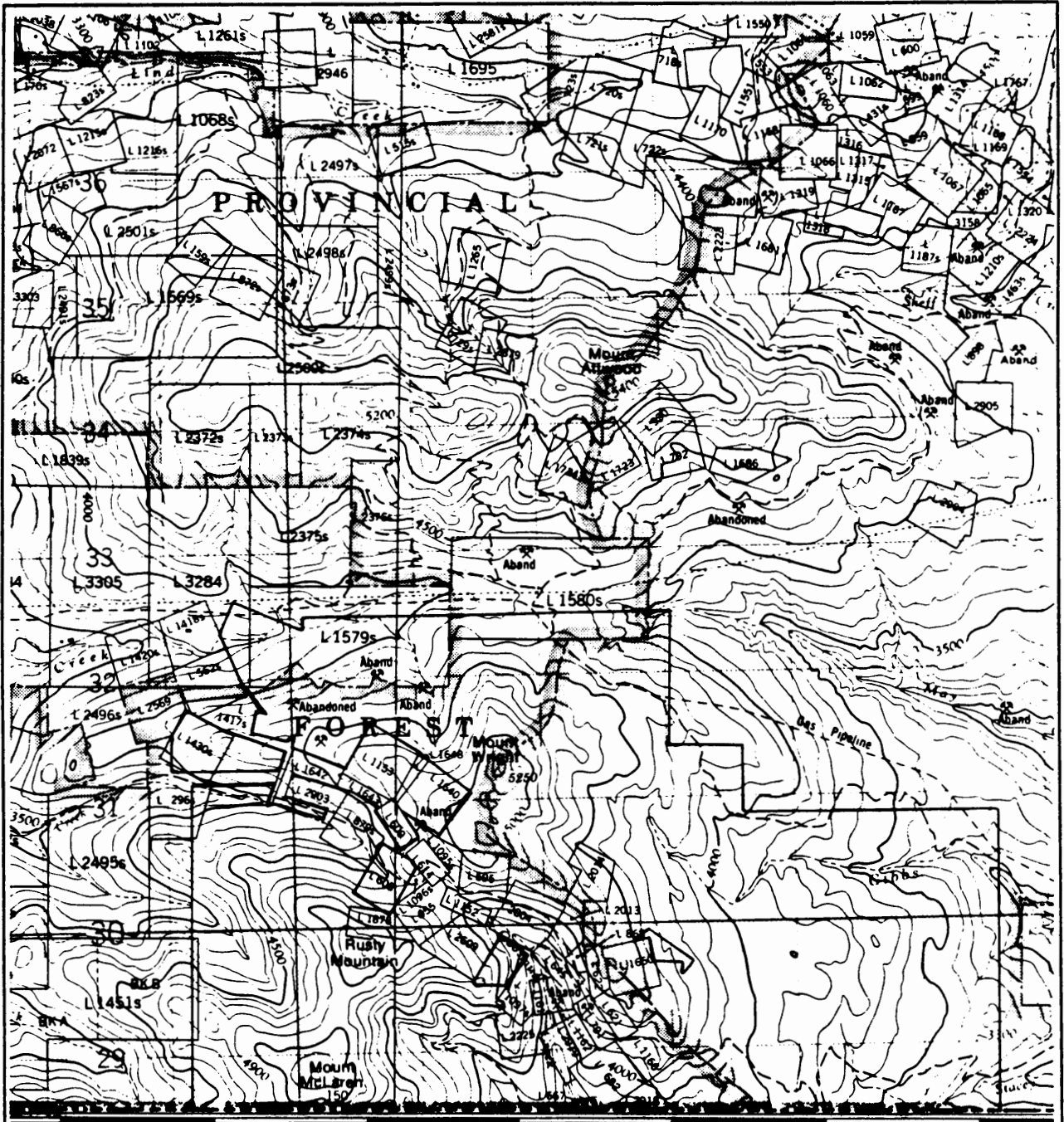
LIST OF CLAIMS

(Figure #3)

The following is a list of the mineral claims included in the Lexington Property. Expiry dates listed below are the present dates of expiry before applying the assessment credit for the work outlined in this report.



BRITANNIA GOLD CORP.	
LEXINGTON PROJECT	
GREENWOOD MINING DIVISION, B.C.	
LOCATION MAP	
FIGURE #1	JAN 1994



40' 79 80 81 82 83 84.35 85

SCALE (km)



0.0 0.5 1.0 1.5 2.0 2.5 3.0

BRITANNIA GOLD CORP.
LEXINGTON PROJECT
 GREENWOOD MINING DIVISION, B.C.
 NTS 82E/2E
TOPOGRAPHIC MAP

David P. Butler

SCALE 1:50,000 FIGURE #2 JAN 1994

Claim Name	Expiry Date	Record #	Comments
New St. Maurice.....		L682	Crown Granted
Richmond.....		L2918	Claims listed with
Golden Cache Fr.....		L955	Lot #s.
City of Paris.....		L622	
Lincoln.....		L621	
No. 4.....		L791	
City of Vancouver Fr.....		L2013	
Lexington.....		L645	
City of Denver.....		L1161	
Notre Dame des Mines Fr.....		L1095	
Oro.....		L614	
Oro Fr.....		L1096	
Puyallup.....		L1152	
Orphan.....	28-Jun-95	216289	Mining Lease 104
St. Joseph, etc.....	28-Jun-95	216290	Mining Lease 105
Beau 1.....	29-May-03	214906	All claims are one
Beau 2.....	29-May-03	214907	unit in size unless
St. Maurice Fraction.....	17-Dec-03	214521	otherwise noted.
No. 7-5.....	13-Jan-03	216667	
No. 7-6 Fr.....	13-Jan-03	216668	
No. 7-7.....	13-Jan-03	216665	
No. 7-8 Fr.....	13-Jan-03	216666	
OR 2.....	03-Feb-03	215207	
OR 3.....	03-Feb-03	215208	
OR 5.....	03-Feb-03	215209	
OR 6.....	03-Feb-03	215210	
OR 7.....	03-Feb-03	215211	
OR 8.....	03-Feb-03	215212	
OR 9.....	03-Feb-03	215213	
OR 10.....	03-Feb-03	215214	
OR 11.....	03-Feb-03	215215	
OR 12.....	03-Feb-03	215216	
Bing.....	30-Jun-03	214536	20 units
Bruce.....	30-Jun-03	214537	9 units
Iron King.....	29-Jul-03	214697	20 units
Dandy.....	30-Jul-03	214763	20 units
No. 7-1.....	15-Dec-03	216440	
No. 7-2.....	15-Dec-03	216441	
No. 7-3.....	15-Dec-03	216442	
No. 7-4.....	15-Dec-03	216443	
St. Lawrence.....	19-Apr-03	214165	
Cuba.....	19-Apr-03	214164	
New Jack of Spades.....	19-Apr-03	214163	
Jean Fraction.....	04-May-03	216438	
Jean 11.....	13-Jun-03	216439	
LSE 1.....	31-Jul-03	214193	
LSE 2.....	31-Jul-03	214194	
LSE 3.....	31-Jul-03	214195	
LSE 4.....	31-Jul-03	214196	
No. 5.....	26-Sep-03	214942	
Maria Stuart.....	26-Sep-03	214851	
Excelsior.....	16-Oct-03	214206	
Brit. 1.....	12-Aug-95	329897	
Brit. 2.....	12-Aug-95	329898	
Brit. 3.....	12-Aug-95	329899	

PHYSIOGRAPHY

The elevation varies from 1200 metres on the eastern side of the property in the July Creek valley to just over 1600 metres on the top of Mt. Wright. The topography is moderate, with local steep areas. The mountain tops are rounded, with long gentle ridges extending for several kilometres. The major drainage in the claim area is the southern flowing Goosmus Creek, that crosses into Washington State in the south center of the Lexington project area. There is a long ridge formed with Mount McLaren, Rusty Mountain, Mount Wright and Mount Attwood that divides the drainages on the property. There is another gentle ridge that descends south from Mount Wright, dividing the Goosmus and July Creek valleys, extending down to the Kettle River south of Danville, Wa. McCarren Creek drains the north end of the project area joining Boundary Creek, south of Greenwood.

The vegetation in the area consists of hemlock, tamarack, cedar, pine and some deciduous trees. There are locally areas of thick underbrush. The whole claim area is criss-crossed by numerous overgrown logging and mining trails and log cabin ruins are very common. The creek valleys are generally filled with glacial sediments, with the best rock exposure on ridges and mountain tops.

HISTORY

The early work in the area was on and around the City of Paris claim, with some work on the Lexington claim. The earliest significant work, in 1892, was development of two adjacent shafts and underground drifting on a pyrite-chalcopyrite rich quartz vein. Also in 1892, sinking a shallow shaft with limited drifting was done along a narrow tetrahedrite vein, on the Lincoln claim, 200 metres south of the two City of Paris shafts. By 1899 the City of Paris Gold Mining Company controlled the property and began major underground development. The company drove a 245 metre long cross-cut to the northeast to intersect the vein approximately 100 metres below surface. Development of a 180 metre long drift to the northwest generally followed the vein. Mining followed several different structures underground when they drifted 90 metres southeast toward the area underneath the Lincoln shaft. Work elsewhere on the property at this time included 75 metres of drifting on a pyrite-chalcopyrite zone on the Lexington claim 600 metres northwest of the City of Paris portal.

After a year of production ending in 1900, the City of Paris mine was dormant until 1922, when prospecting began again. There was minor production on the City of Paris claim in 1938. Total production from the City of Paris was 2100 tons grading 3.14% Cu, 0.40 oz/t Au and 2.1 oz/t Ag.

The next major work on the Canadian side of the border was in 1962 when King Midas Mines Ltd. consolidated the old crown-granted claims and did a reconnaissance geochemical and geophysical survey. A short northwesterly trending adit was developed on a tetrahedrite bearing quartz vein near the collar of the Lincoln shaft, yielding a few tons of argentiferous ore.

In 1967, Lexington Mines Ltd. acquired the claims covering what was later the Main Zone and the ground to the north and gradually increased their holdings to 132 claims and mineral leases in 1970. Lexington's initial work involved soil geochemistry, induced polarization and about 3050 metres of bulldozer trenching. From April 1969 to July 1970, Lexington Mines Ltd. completed 33 BQ and NQ diamond drill holes totaling 5,564m (18,225 feet) during which the copper-gold Main Zone was discovered.

Granby Mining optioned Lexington Mines' property in 1972 and drilled 37 percussion holes, for a total of 2,018m (6,620 feet). This drilling tested IP anomalies northwest of the Main Zone and attempted to outline open pit copper reserves between the Lexington Adit and the Main Zone.

In early 1974 Aalenian Resources optioned much of Lexington Mines' holdings, and drilled four additional diamond drill holes (totaling 1,103 feet, 336m) and 13 percussion holes (totaling 3,195 feet, 974m) in the Main Zone area. Aalenian dropped the option in 1975 and no further work was done until Grenoble Energy acquired the key claims in 1979.

Starting in May 1980 Grenoble Energy drove a 115m horizontal test adit into the area where the Main Zone subcrops on surface. A raise was mined up into the mineralized zone and 20 diamond drill holes were collared underground.

Teck Corp. optioned Grenoble's holdings in March 1981 and the ground south to the border from R.H. Seraphim and others in June 1981. Initially twenty-three NQ diamond drill holes were done in the Main Zone area (14,880 feet, 4,535m). In late 1982 to May 1983 Teck drilled 24 more NQ holes (for 3,228.7m), mostly northwest of the Main Zone toward the Lexington Adit and on the Richmond group of claims to the south owned by Seraphim and others.

The property was acquired by Canadian Pawnee Oil Corp. in July 1984 and other claims were added to the east and west in August 1986. Canadian Pawnee conducted a program including linecutting, soil geochemistry, geophysics (Pulse EM, ground magnetometer, VLF-EM, and SP) and diamond drilling in

the summer of 1986. The seven NQ diamond drill holes (2,104 feet, 641.3m) were centered near the Lexington portal area.

Nine diamond drill holes were completed in January and February of 1987 infilling areas of the Main Zone (3,410 feet, 1,039m). In 1988, ten NQ holes were drilled in the Main Zone, four in the Vacher Zone area and three in the Golden Cache area (totaling 2,780.21m).

During 1992, Britannia Gold Corp. drilled 6 BQ holes, completed several ground magnetometer surveys, had the grid rehabilitated and accomplished extensive surface geological mapping. Four of the diamond drill holes were in the Vacher Zone and two in the area of the Lincoln portal. Most of the 1986 Canadian Pawnee Grid (rehabilitated in 1992) was geologically mapped at 1:500 scale.

The 1993 project on Lexington was extensive and included drilling 13 BQ diamond drill holes, relogging of the core from 66 old diamond drill holes, extending the existing grid, adding to the geological mapping, underground geological mapping, digging 3 backhoe trenches, an induced polarization survey on part of the Main Zone and another in the TG-81 area, and two ground magnetometer surveys.

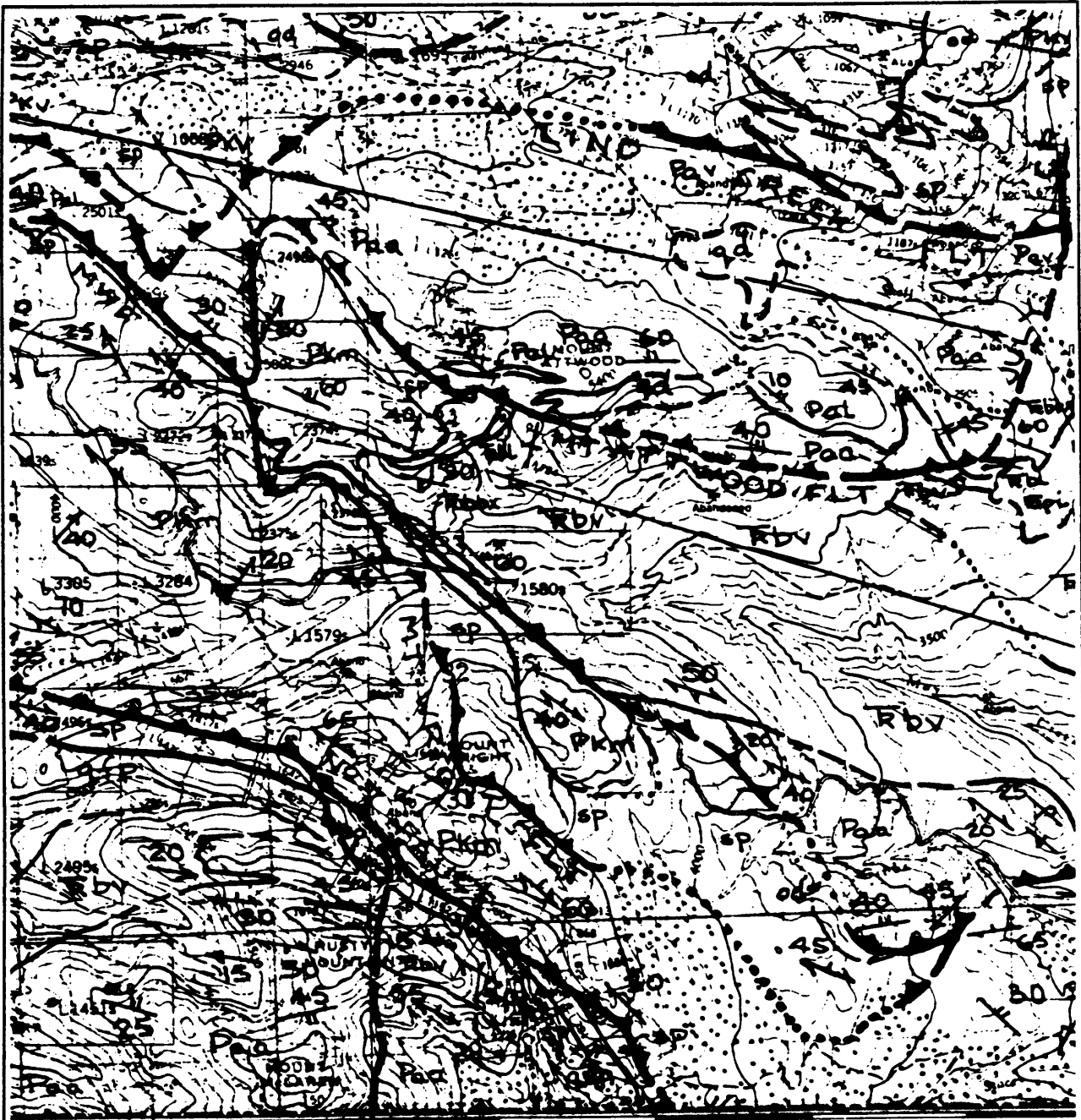
The Richmond group of claims are south of the Lexington group of claims, on the Canadian side of the border. Silver Standard Mines Ltd. held these claims by option in 1967, drilling five percussion holes. Two diamond drill holes were drilled along the border, in 1968, with disappointing results. Silver Standard completed a further 17 percussion holes in 1970. The ground was optioned by Teck in 1981, and diamond drilled in 1982, as mentioned above. Kassar Resources drilled six diamond drill holes in 1987. In early 1993, this ground was acquired by Britannia Gold Corp. and consolidated with its other regional holdings.

GEOLOGY AND GEOPHYSICS

REGIONAL GEOLOGY

(Figure #4)

The Lexington property occurs at the northwest corner of the Republic Graben. The Republic Graben is north-north-easterly trending, approximately 10 to 15 kilometres wide and about 120 kilometres long. The Tertiary aged Bacon Creek Fault forms the western boundary of the Republic Graben and is traced to



40' 78 79 80 81 82 83 84 35' 85 86

SCALE (km)



0.0 0.5 1.0 1.5 2.0 2.5 3.0

GEOLOGY FROM FYLES, 1990

Major Regional Geological Units

- Epi Pentiction Group-intrusives-Tertiary
- qfp Lexington Intrusions - Jurassic
- TRv Brooklyn Formation-volcanics - Triassic
- Pa Attwood Group-siltstone, phyllites - Carboniferous or Permian
- Pkm Knob Hill Group-schists, etc. - Carboniferous or Permian
- od Knob Hill Group-Old diorite - Carboniferous or Permian
- sp Knob Hill Group-serpentine - Carboniferous or Permian

- Faults
- Foliation



Dean P. Butler

BRITANNIA GOLD CORP.
LEXINGTON PROJECT
GREENWOOD MINING DIVISION, B.C.
REGIONAL GEOLOGY

SCALE 1:50,000	FIGURE #4	JAN 1994
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just southwest of the Lone Star pit, in Washington State. The vertical movement on this north-north-east trending fault has been transferred along a regional pattern of thrust faults (Fyles, 1990), including the Goosmus Shear Zone, that curve around the north end of the Tenas Mary Creek Metamorphic Complex (Knob Hill Group equivalent) and the rocks of the Attwood and Brooklyn Groups that flank the complex to the north. This fault system eventually turns south north of Midway. These faults join up with the north-south trending Bodie Mountain Fault, along the eastern side of the Toroda Creek Graben. The fault structure equivalent to the Bacon Creek Fault apparently carries on in the Rock Candy Creek area, north of the disruption of its continuity in the Phoenix-Lexington area.

The northwesterly trending Goosmus Shear Zone, bounds a set of northeasterly dipping serpentinite lenses (Upper and Lower Serpentinite), a quartz eye porphyry intrusive and other non-porphyrific flows and tuffs (the "dacite"), andesite dykes and porphyritic diorite dykes. The serpentinitized ultramafic rocks appear to be tectonically emplaced as two major lenses dipping from 30° to 50° to the east and northeast, with many smaller slices and wedges. The eastern boundary of the Goosmus Shear Zone is Fyles' (1990), No. 7 fault, a northeasterly dipping thrust fault. The western side of the Shear Zone is an undefined structure on the western slope of Goosmus Creek valley. The Lexington property, with its copper-gold mineralized zones, occurs over the Goosmus Shear Zone.

There are two principal structural elements in the Lexington area. The previously mentioned, locally northwest trending Goosmus Shear Zone is of pre-Tertiary age (with probable significant reverse movement in the Tertiary) and consists of stacked thrust sheets with ultramafic margins. Northerly trending, normal faults (average attitudes vary from N15°E to N35°E) of Tertiary age appear to be steep with recognized displacements of up to 900 feet (Pearson, 1967).

The regional gravity map included in Tempelman-Kluit (1989) indicates that a gravity low underlies the property. This is an indication of a large possible deep seated silicic intrusive body under the property.

The following table outlines the major rock units in the region on and surrounding the Lexington

Group of claims:

<p>Probable Age</p> <p>UNIT NAME</p> <p>(Alternate Names or correlative units)</p> <p>(Project Map Unit Number(s) on Figures 5 and 6)</p>	<p>Description</p>
<p>Upper Eocene — Oligocene</p>	
<p>DIORITE (Penticton Group, (Coryell Intrusions), Fyles, 1990) (Scatter Creek Intrusive Complex - US usage) (UNITS 14 and 15)</p>	<p>The diorites are medium grained, microporphyritic, non-foliated, medium coloured dykes. In thin section they consist of 1 to 4mm long plagioclase lathes with subhedral biotite and pyroxene (Church, 1970a).</p> <p>Several narrow diorite dykes in the center of the dacite body are sub-parallel to the serpentinite-dacite contact.</p> <p>Large, abundant diorite dikes disrupt mineralization in the southeast end of the Main Zone defining the termination of reserve blocks. These dykes appear to post date the andesites in the south end of the Main Zone, as seen in the City of Paris workings. Outcrops or drill core intercepts of the diorite crossing the andesite have not been seen.</p> <p>Scatter Creek Intrusives are common throughout the Republic Graben and Goosmus Shear.</p>
<p>Post Jurassic</p>	
<p>ANDESITE (Ebisch, 1990 correlates with Cretaceous Shasket Creek Complex) (Church, 1970a, correlates with Eocene Marron Formation (Penticton Group), post Diorite) (Fyles, 1990, correlates with Eocene Marron Formation, without distinguishing diorite or andesite as earliest unit) (UNIT 7)</p>	<p>The andesite consists of scattered, chloritized, greenish-brown hornblende lathes, 1 to 3 mm long, weakly to strongly aligned parallel to the local shear foliation. This is all in a fine grained matrix of randomly arranged plagioclase plates with minor interstitial magnetite and a few grains of quartz (Church, 1970a). This unit forms dykes and sills and disrupts mineralization along the lower dacite-serpentinite contact. Foliation is extensive in this unit and is strong enough that this unit is pre-Diorite.</p> <p>A fragmental andesite of similar composition contains small, fine grained, dark green, angular fragments of probable andesite origin. It has been suggested, without compelling evidence, that the fragmental andesite may correlate with the conglomerate described below.</p>
<p>CONGLOMERATE (No Outcrop on Maps)</p>	<p>This is an angular conglomerate containing fragments of bull quartz and elongated, light grey to whitish siltstone in a dark grey silty to sandy matrix. It is found at the top of the Upper Dacite in the Lone Star Pit and in the Richmond area. It resembles the Sharpstone Conglomerate of the Brooklyn Formation, but lacks the characteristic angular ribbon chert fragments.</p>

Cretaceous	
SHASKET CREEK ALKALIC COMPLEX (Same age as Nelson Calc-Alkalic Intrusives in the Greenwood area) (Possibly UNIT 2)	A light grey aplite and crowded syenite, some monzonite. This unit does not outcrop in Canada, but outcrops extensively on the east side of the Lone Star Property and further south.
Lower Jurassic	
DACITE (Lexington Porphyry) (Intermediate Volcanic) (UNITS 6a-e)	<p>Volcanics and related fine intrusives. Intrusive phases include quartz feldspar porphyry and quartz porphyry. Betmanis (1983) described andesitic to dacitic fragmental and welded tuffs. Typical porphyry phases contain subhedral quartz phenocrysts and composite quartz eyes 2-7 mm in diameter, set in a matrix of euhedral sodic plagioclase, chloritized biotite and interstitial fine grained quartz and feldspar. Sericite and chlorite alteration are common. Most of the dacite is moderately foliated and contains ¼-1% disseminated pyrite. In mineralized areas it contains 2-5 % disseminated pyrite with minor chalcopyrite. Malachite is frequent as fracture fillings and fine disseminations. Mylonitization has locally destroyed or reduced the size of phenocrysts, therefore leaving rocks resembling fine grained rhyolite or dacite (Parker and Calkins, 1964).</p> <p>An elongate, composite, quartz-feldspar-porphyry-felsite intrusion that follows the general course of Goosmus Creek. This is an extension of the largest body of Lexington Porphyry, located to the west of the property, near the junction of Gidon and McCarren Creeks.</p> <p>Church (1986) determined the age of the Lexington Porphyry using uranium-lead in zircons to be Early Jurassic, probably Sinemurian, with inherited Proterozoic or Archean lead.</p>
Triassic	
POSSIBLY THE BASALT DYKES (Brooklyn Formation) (Possibly UNIT 16)	Unconformably overlies the Knob Hill and Attwood groups. There are three main lithologies: chert breccia (Sharpstone Conglomerate), limestone and volcanics. The volcanics outcrop in the property area and include greenstone and green pyroclastic breccia and sub-volcanic microdiorite. There are several basalt and basalt like dykes in various places including the northwest grid and Lone Star pit area.
Carboniferous or Permian	
ARGILLITES AND POSSIBLY THE BASALT DYKES (Attwood Group) (UNITS 3 and 16 in the Southwest corner of northwest geology map of 1993 report)	<p>Mainly dark grey to black argillite, siliceous argillite, phyllite and slate with minor dark limestone, chert- and argillite-chip conglomerate and greenstone. The age from fossils is Carboniferous to Permian, comparable to Knob Hill Group, but stratigraphic relations are unknown. The rocks are tightly folded.</p> <p>A large body of mainly grey phyllite straddles the border on the southwest side of the property and is indicated to outcrop in the area of the northwest grid. Fyles map indicates a black siltstone and phyllite to be part of this unit. Church has three units in the property area, a black shale and greywacke unit, a metavolcanic (mostly meta basalts and andesites) and a unit that includes conglomerates, breccias and sandstones. The outcrops in the south portion of the northwest grid that are mapped as argillites and basalts are most likely part of the Attwood Formation.</p>

<p>SERPENTINITE (Ultramafic) (Talc Schist) (Listwanite) (UNITS 10,11,12 and 13)</p>	<p>This unit forms two elongate masses (the Upper and Lower Serpentinities), and several smaller lenses and off-shoots. It consists primarily of antigorite-rich serpentinite formed from a peridotite protolith. Foliated talcose rock (talc schist) is prominent in the serpentinite near the dacite footwall contact but is present on all contacts and locally in the center of serpentinite bodies. Talc schists also occur locally as narrow dykes or slices within the dacite. Other assemblages include talc and brucite ± carbonate, or carbonate-quartz ± mariposite (fuchsite?) rock, the latter mapped and logged as listwanite. Magnetite is abundant in the serpentinite and talc schist, as fine grained disseminations.</p> <p>Tectonically emplaced probably between the Mesozoic and Tertiary, from a disrupted ophiolite sequence of the Carboniferous or Permian Knob Hill Group (Fyles, 1990).</p>
<p>SCHISTS (ARGILLACEOUS, SILTY, CHLORITIC AND SERICITIC-QUARTZITIC VARIETIES) (Knob Hill Group) (Tenas Mary Creek Metamorphic Complex, US usage) (UNITS 1,3,4 and 5 on the northeast side of the mapping)</p>	<p>Two levels of deformation and metamorphism are defined for this formation by Fyles, 1990. They are a greenschist facies metamorphism and a sheared and deformed package.</p> <p>The sheared and deformed package is present on the northeast portion of the mapping area and described here. The rocks include green chlorite and chlorite-amphibole schists, grey quartz-mica schist and phyllite and grey quartz-mica gneiss which shows a penetrative foliation and one or more lineations. They appear from field specimens to generally be metamorphosed siltstones and argillites and have been mapped on the northeast side of the No. 7 Fault.</p>

PROPERTY GEOLOGY

(Figures #5, and #6)

The major rock units in the Lexington area within the Goosmus Shear, as identified in the 1993 work, are known as the "Lower Serpentinite," which is tectonically overlain by the "dacite" (a.k.a.: Upper Dacite). The "dacite," a group of fine grained intrusives and possibly related volcanics, is tectonically overlain by the "Upper Serpentinite". There is a dacite unit (a.k.a.: Lower Dacite) that structurally underlies the Lower Serpentinite, but it has rarely been intersected in drill core and is a low priority copper-gold mineral target. There is a slice of serpentinite, approximately 15m wide, within the dacite in the Lincoln portal area (known as the Lincoln Slice).

Mineralization in the Lexington area occurs in three major varieties, the quartz vein systems and the semi-massive sulphide/magnetite zones near the dacite-serpentinite contact and a low grade copper-gold mineralized system of fracture fillings with some similarities to porphyry copper deposits. The best mineral concentrations in the dacite-serpentinite contact areas often occur at locations of faulting or folding.

The main mineralized target, the magnetite-sulphide zone follows at or near the contact at the base of the dacite with the Lower Serpentinite. This contact zone, very frequently, has gouge and/or breccia and the

serpentinite is usually sheared strongly near the contact. The contact is clearly a tectonic break, which the mineralizing solutions have used as a horizon of movement and deposition. This mineralized zone is present at or near this contact in all the drill holes that intersect this contact. The intensity of this mineralization varies from narrow, low grade copper and gold to thick and heavily mineralized, but it is always recognizable. This is the horizon that the Main Zone, the TG-81 zone occur in and is the target zone of the 1993 project. The Lone Star pit zone and the Golden Cache zone are both on serpentinite-dacite contacts but it is not certain they are the same horizon as the Main Zone. From drilling on section 575NW (TG-81 area) and other structural contour work, it is apparent that locations with warping (folding or faulting?) of this horizon appear to be areas of enhanced copper-gold grades and widths. This structural break is a horizon favoured by the andesite dyke that can occasionally cross-cut the mineralization. Also if the dyke is above the zone and thicker than elsewhere that zone can appear to be locally folded down.

Samples of galena in quartz vein material, collected at the Lexington Shaft and the No. 7 Mine in 1992 were analyzed by lead isotope methods. The samples group with the Beaverdell Silver Veins of Tertiary age (Shearer, 1993) and not the Jurassic or Cretaceous age Phoenix mineral system. It is not known whether these vein samples are genetically related to the same mineralizing sources as the Main Zone and related mineralization.

1994 WORK

GEOLOGICAL MAPPING

(Figures #5, and #6)

Working in the field with the 1:1000 scale geology maps of the 1993 project as a base, geological data was added based on the collection of additional outcrop and structural geological data. This geological mapping was centered in the area northwest of the Lexington portal where there was a lack of recorded outcrop and extending out from this area. The area to the southwest of the Main Zone, in the area of the property boundary between the Lexington and Richmond properties (historically held by different owners), and downslope towards Goosmus Creek, was also geologically mapped to attempt to determine the contact between the serpentinite and the dacite, and to assist in the determination of possible drill targets.

There were no new outcrops located during several detailed traverses in the area northwest of the Lexington portal in the lower slopes of the Goosmus Creek valley. This area is the hinge area of the Goosmus Shear, and as such is favourable for the location of copper and gold mineralization.

To the west of the hinge area, on the northeast facing slope of Goosmus Creek, is a series of diorite outcrops that are part of a large dyke that bends from trending westerly, near the portal, to southerly in the area west of the Main Zone (Church, 1970b). Mapping was also done in the area north of the road, in the Knob Hill formation rocks. These consist mainly of argillaceous schists and metamorphosed cherty argillites. There are siliceous and chloritic schists with foliation that generally trends to the north and northeast. There are a number of hand pits and adits in this area that were developed to follow up on highly siliceous structures and horizons in the argillites.

GEOPHYSICS

(Figures #7 to #12)

The Induced Polarization - Resistivity survey was completed by Delta Geoscience Ltd. of Delta, B.C using a gradient electrode array. The survey in the Main Zone area (lines 2+00E to 7+00E at 50m separations) used three different AB separations, 1000m, 1500m and 2000m. This theoretically determines the IP and resistivity at different depths, deeper at increased AB current electrode spacings. These were plotted out in plan view. The rest of the survey area (west of the Main Zone) was completed using only the 1500m AB separation, gradient array and plotted as a plan for the whole survey from 7+00E to 9+50W within the region of the Goosmus Shear.

The results show that the Main Zone and the TG-81 area both occur on the inside edge of chargeability highs. The eastern end of the Main Zone in the Lincoln Portal area is on the southern edge of a chargeability high with a lowering of the chargeability high towards the western end. (The Main Zone extends as a long thin zone from near L5+00E, 2+50S to L2+00E, 1+25S). There is a small chargeability high with the extreme western end of the Main Zone on its northern side. This is part of a larger chargeability high that extends to the south that is down plunge on the regional structure from a magnetometer high in the 1986 survey.

The TG-81 area is near L1+50E, 0+50N and the known extent trends northeast for about 75m. This is near the edge of a chargeability high.

There is a large resistivity high, chargeability low in the area west of the Lexington Portal, (L2+50W to L4+50W) that correlates well with the surface exposure of diorite.

The Golden Cache zone is on the western end of the 1500m AB survey and shows up as a broad zone of chargeability high and resistivity low. More work is needed in this area to define the geology from the IP better.

The IP field survey was done from May 24 to June 7, 1994.

SOIL GEOCHEMISTRY

(Figure #5)

An orientation soil survey using enzyme leach geochemistry on four lines over the projected outcrop of known zones was done. Enzyme leach geochemistry involves the collection of conventional "B" horizon soil samples. The analysis method uses a technique that is partial to the dissolution of the manganese oxide coatings on the soil particles, releasing to the solution the elements adsorbed to the oxide coating. This method was used to determine if there was geochemical signature in the glacial tills over the known anomalous zones that subcrop on the property. Details on the analytical method are in Appendix I.

The analysis did not show any recognizable trends over the known zones. If this method had worked the survey would have been systematically extended over the rest of the property.

GRID REHABILITATION

The field grid originally cut in 1986 by Canadian Pawnee Corp. was brushed out, measured and re-flagged this year. Also the elevations at grid stations were collected at the time of line cutting using altimeters. This grid rehabilitation was completed by Rainbows and Sunshine Services of Grand Forks, B.C.

RECOMMENDATIONS

The following work is recommended to further develop this property:

- The diamond drilling of the area near the historical boundary between the Richmond and City of Paris (Lexington) to follow up on structural, IP and magnetometer anomalies.
- IP geophysics of the Golden Cache area at different electrode spacings and the development of IP sections to assist in the determination of the potential of this area and to better target drill holes.
- The diamond drilling of deep holes to determine the potential of copper gold mineralization on the underside of the Lower Serpentinite unit.

Sean P. Butler, P.Ge. December 13, 1994

Sean P. Butler


STATEMENT OF QUALIFICATIONS

SEAN P. BUTLER

I, Sean Patrick Butler, of 3252 Ganymede Dr., Burnaby, British Columbia, do hereby certify that:

1. I am a graduate of the University of British Columbia, with a Bachelor of Science in Geology (1982).
2. I have over ten years of experience in mineral exploration as well as open pit and underground mine geology experience, involving precious and base metals throughout the Canadian Cordillera, Washington state and Peru.
3. I am a member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia, registered as a Professional Geoscientist.
4. I am the author of the report titled "**REPORT ON THE LEXINGTON PROPERTY 1994**" for Britannia Gold Corp. dated December 13, 1994.
5. I have worked on the Lexington property, or data concerning the property and the adjoining Lone Star property in the U.S.A., from March to May of 1992 and throughout most of 1993 and 1994.
6. I have been employed directly by Britannia Gold Corp. as a geologist since April 1993.
7. I have an option to purchase shares in Britannia Gold Corp.

Dated at Vancouver, B.C. this 13 th day of December, 1994.


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SEAN P. BUTLER, P. Geo.

BIBLIOGRAPHY

- Butler, S.P. and Ronning, P.A. 1994. Report on the 1993 Lexington Project for Britannia Gold Corp., February 15, 1994.
- Cheney, E.S., Rasmussen, M.G. and Miller, M.G. 1992. Major Faults, Stratigraphy, and Identity of Quesnellia in Washington and Adjacent British Columbia, Department of Geology, University of Washington, October 24, 1992.
- Church, B.N. 1970a. Report on the Lexington Property in Geology, Exploration and Mining in British Columbia, 1970, B.C. Ministry of Energy, Mines and Petroleum Resources. pp. 413-427.
- Church, B.N. 1970b. Geology of the McCarren Creek, Goosmus Creek Area, Greenwood Mining Division, Preliminary Map No. 2, B.C. Ministry of Energy, Mines and Petroleum Resources.
- Church, B.N. 1971. Lexington, in Geology, Exploration and Mining in B.C., B.C. Ministry of Energy Mines and Petroleum Resources, pp.376-379.
- Church, B.N. 1985., Notes to accompany Preliminary Map No.59, Geology and Mineralization in the Mount Attwood - Phoenix Area Greenwood B.C., Ministry of Energy, Mines and Petroleum Resources.
- Church, B.N. 1986., Geological Setting and Mineralization in the Mount Attwood - Phoenix area of the Greenwood Mining Camp, Ministry of Energy, Mines and Petroleum Resources.
- Fyles, J.T., 1990. Geology of Greenwood - Grand Forks Area, British Columbia, NTS 82E/1&2, Open File 1990-25, British Columbia Ministry of Energy, Mines and Petroleum Resources.
- Little, H.W., 1957. Kettle River (East Half), Geological Survey of Canada, Map 6-1957.
- McDougall, J.J., 1993. Report on Lone Star Copper-Gold Property, Ferry Co., Washington, U.S.A., for Britannia Gold Corp., March 10, 1993. 25pp.
- McNaughton, D.A., 1945. Greenwood - Phoenix Area, British Columbia, Geological Survey of Canada, Paper 45-20. 24pp.
- Parker, R.L. and Calkins, J.A., 1964. Geology of the Curlew Quadrangle, Ferry County, Washington, Geological Survey Bulletin 1169, United States Geological Survey.
- Pearson R.C., 1967. Notes to accompany U.S.G.S. Map GQ-636, United States Geological Survey.
- Shearer, J.T. and McClaren M., 1991. Summary Report on the Lexington Project (City of Paris, Lexington and Lincoln Claims). Greenwood Mining Division, Private Report for Britannia Gold Corp., December 20, 1991. 52pp.
- Shearer, J.T. and Butler, S.P., 1992. Diamond Drilling and Trenching Report on Lexington Project, Vacher Zone, Lincoln/T-50 Area and Main Zone (City of Paris, Lexington and Lincoln Claims), Greenwood Mining Division, for Britannia Gold Corp., May 20, 1992.
- Shearer, J.T., 1993. Geological and Magnetometer Summary Report on the Lexington Project (City of Paris, Lexington and Lincoln Claims and Vacher Zone Lot 1095 Notre Dame Des Mines), Greenwood Mining Division for Britannia Gold Corp., April 1, 1993. 57pp.
- Tempelman-Kluit, D.J., 1989. Geological Map with Occurrences, Fossil Localities, Radiometric Ages and Gravity Field for Pentiction map area (NTS 82E), Southern British Columbia. Geological Survey of Canada, Open File 1969.
- Wortman, D., 1992. Britannia Gold Corp., Grenoble Project, Greenwood, B.C., Preliminary Mining Study, April 3, 1992.

APPENDIX I

GEOCHEMICAL RESULTS AND METHODS

ANALYTICAL METHOD - Enzyme Leach of B-horizon soil samples

A standard B-horizon soil sample was collected in a kraft paper bag. The soil samples were sent to Activation Laboratories (ACTLABS) in Ancaster, Ontario for preparation and analysis. This involves drying at temperatures below 40°C and sieving to minus 60 mesh.

The theory of this analytical method is that the anomalous elements from an ore deposit will migrate vertically through the overburden to the surface in fractures and solutions and adsorb to the manganese oxide coatings. The dissolution of the manganese oxide coating and adsorbed metals is accomplished using a dilute hydrogen peroxide solution. This dilute hydrogen peroxide solution is created and maintained at a low level (less than 40 $\mu\text{g}/\text{cm}^3$) from a dextrose solution by the glucose oxidase enzyme. The metals stay in the solution as gluconic acid complexes. The solution is then analyzed for 62 elements using inductively coupled plasma - mass spectrometry at the parts per billion (ppb) level.

References:

Clark, J.R., Enzyme-induced leaching of B-horizon soils for mineral exploration in areas of glacial overburden, Trans. Instn. Min. Metall. (Sect. B: Appl. earth sci), 102, Jan. - Apr. 1993.

Various brochures from ACTLABS.

Enzyme Leach Job #: 1177 Company: Britannia Gold Corp.
 Trace Element Values Are in Parts Per Billion.
 Values = 999999 are greater than working range of instrument.

Sample ID: Distance(m)	Li	Be	Cl	Sc	Ti	V
Line 1						
LXOR 1 0m	16	-10	-3000	-10	339	104
LXOR 2 5	24	-10	4935	-10	288	178
LXOR 3 10	14	-10	-3000	-10	382	204
LXOR 4 20(road@15m)	14	-10	-3000	-10	469	81
LXOR 5 25	11	-10	-3000	-10	460	90
LXOR 6 30	-10	-10	-3000	-10	593	127
LXOR 7 35	-10	-10	-3000	-10	575	138
LXOR 8 40	-10	-10	8746	-10	672	128
LXOR 9 45	-10	-10	5218	-10	668	106
LXOR 10 50	-10	-10	11114	-10	706	110
LXOR 11 55	-10	-10	6095	-10	855	103
LXOR 12 60	-10	-10	5831	-10	927	97
LXOR 13 65	-10	-10	16986	-10	720	128
LXOR 14 70	-10	-10	-3000	-10	513	128
LXOR 15 75	-10	-10	-3000	-10	436	84
LXOR 16 80m	10	-10	-3000	-10	284	109
Line 2						
LXOR 17 0m	11	-10	-3000	-10	611	44
LXOR 18 5	-10	-10	-3000	-10	442	77
LXOR 19 10	-10	-10	-3000	-10	415	66
LXOR 20 15	-10	-10	16055	-10	431	107
LXOR 21 20	-10	-10	4785	-10	543	81
LXOR 22 25	-10	-10	4727	-10	569	67
LXOR 23 30	19	-10	4617	-10	596	84
LXOR 24 40(road@35m)	-10	-10	11485	-10	643	115
LXOR 25 45	-10	-10	5918	-10	1108	149
LXOR 26 50	-10	-10	-3000	-10	843	122
LXOR 27 55	-10	-10	-3000	-10	645	123
LXOR 28 60	-10	-10	-3000	-10	613	129
LXOR 29 65	-10	-10	6367	-10	505	132
LXOR 30 70m	15	-10	-3000	-10	531	97
Line 3						
LXOR 31 0m	-10	-10	-3000	-10	735	56
LXOR 32 5	-10	-10	-3000	-10	604	70
LXOR 33 10	-10	-10	7633	-10	770	86
LXOR 34 15	-10	-10	4854	-10	705	100
LXOR 35 20	14	-10	3084	-10	711	78
LXOR 36 25	-10	-10	-3000	-10	603	57
LXOR 37 30	15	-10	8312	-10	541	88
LXOR 38 35	-10	-10	3664	-10	504	109
LXOR 39 40m	11	-10	6628	-10	550	170
Line 4						
LXOR 40 0m	12	-10	10402	-10	988	56
LXOR 41 10	-10	-10	11286	-10	971	81
LXOR 42 20	-10	-10	7115	-10	975	173
LXOR 43 30	11	-10	6016	-10	998	109
LXOR 44 40	-10	-10	5185	-10	1028	53
LXOR 45 50	-10	-10	6054	-10	1005	57
LXOR 46 60	-10	-10	7670	-10	638	79
LXOR 47 70m	-10	-10	12181	-10	1295	41

Li Be Cl Sc Ti V

Geologist: S.P. Butler Customer's Job #: LEX
 Negative Values Equal Not Detected at That Lower Limit.

Mn	Co	Ni	Cu	Zn	Ga	Ge	As	Se
10930	102	284	43	313	29	-1	72	-30
8896	133	337	51	273	14	-1	27	-30
3618	140	292	70	242	4	-1	44	31
5992	93	187	28	183	25	2	40	-30
5035	117	211	39	202	28	-1	20	-30
5041	113	191	61	207	20	-1	32	-30
7498	151	255	61	51	34	-1	37	-30
12503	129	285	87	44	12	1	51	-30
5873	131	122	91	43	26	2	28	-30
4950	65	152	195	70	25	-1	37	-30
6231	78	135	123	44	35	-1	39	-30
8375	87	176	106	53	33	1	34	-30
5690	82	141	62	44	30	1	34	-30
5483	142	165	113	58	11	1	41	-30
8658	101	135	41	52	48	2	30	-30
13798	165	206	31	35	32	1	26	-30
8443	91	188	63	76	26	14	25	-30
6811	73	117	47	35	22	-1	44	-30
9280	85	171	79	56	31	-1	36	-30
11052	101	190	102	59	22	1	40	-30
11752	79	155	62	69	23	-1	31	-30
9138	75	126	52	57	32	-1	48	-30
15573	106	172	69	117	29	-1	53	-30
7806	77	180	114	75	18	1	53	-30
3502	66	130	116	36	12	1	52	-30
7635	65	181	103	177	18	-1	58	-30
6459	68	194	128	209	20	-1	54	-30
10447	97	233	146	211	20	1	61	-30
10595	95	250	171	88	30	1	56	-30
8996	72	163	81	63	22	-1	42	-30
4884	29	41	67	35	6	-1	27	-30
9003	63	106	110	113	31	2	30	-30
3940	56	52	77	25	21	-1	25	-30
4831	54	98	122	41	28	-1	39	-30
3156	53	114	91	61	22	-1	27	-30
5602	62	104	47	32	13	-1	23	-30
10062	115	172	57	58	24	1	39	-30
6461	75	120	84	32	28	-1	35	32
8651	121	289	157	52	49	2	45	-30
7384	58	131	59	44	40	2	41	-30
8030	59	137	75	39	36	2	33	-30
7267	101	180	156	46	30	1	48	-30
6127	55	138	116	70	38	1	57	-30
6073	33	84	59	57	17	-1	35	-30
8759	45	130	56	101	24	-1	40	-30
15772	71	174	70	93	35	1	40	-30
15383	77	95	48	56	18	-1	44	-30

Mn Co Ni Cu Zn Ga Ge As Se

Br	Rb	Sr	Y	Zr	Nb	Mo	Ru	Rh	Pd
86	12	632	8	69	-1	13	2	-1	2
218	7	584	13	73	-1	16	1	-1	2
77	1	498	30	106	-1	8	-1	-1	3
192	4	510	8	86	1	31	2	-1	2
124	7	626	15	103	-1	10	-1	-1	2
274	2	698	17	99	1	28	1	-1	3
148	5	800	16	106	1	55	1	-1	3
345	5	1241	21	128	2	69	2	-1	3
148	3	732	21	138	1	34	1	-1	3
297	7	1003	17	107	2	30	-1	-1	3
119	6	865	18	132	2	58	1	-1	3
158	3	903	14	129	2	66	1	-1	3
173	5	851	15	105	2	24	-1	-1	3
305	4	611	27	120	1	9	1	-1	3
149	6	594	9	82	-1	23	1	-1	2
144	5	550	10	73	-1	21	1	-1	2
112	15	671	10	135	2	3	1	-1	3
120	4	700	6	86	1	16	2	-1	2
76	12	715	7	91	1	26	-1	-1	2
165	6	962	6	77	1	18	2	-1	2
97	10	806	4	83	1	18	1	-1	2
121	12	793	6	87	2	17	-1	-1	2
107	15	882	7	105	2	8	2	-1	2
261	5	1043	15	122	2	32	2	-1	3
254	11	710	25	122	2	22	-1	-1	3
235	10	945	18	129	2	57	1	-1	3
114	7	1000	16	119	2	37	2	-1	3
134	18	1049	16	124	2	36	2	-1	3
228	18	797	24	156	2	19	1	-1	3
133	6	657	11	104	2	21	-1	-1	3
116	35	1015	10	126	2	7	-1	-1	3
83	10	863	8	96	2	26	1	-1	2
129	5	976	8	130	2	15	1	-1	3
128	5	997	10	115	2	20	1	-1	2
94	12	928	19	173	2	17	2	-1	4
79	9	881	7	101	2	-1	2	-1	2
112	15	775	10	99	2	18	2	-1	2
176	9	786	12	100	1	16	1	-1	2
1193	6	1041	22	128	2	59	1	-1	3
68	37	1113	12	132	3	20	1	-1	3
174	19	966	16	162	2	15	2	-1	2
447	5	1091	26	168	3	34	1	-1	4
347	9	1198	17	132	3	43	1	-1	3
155	14	1109	10	109	2	8	1	-1	3
80	13	989	9	98	2	41	1	-1	3
218	5	1130	7	94	2	28	1	-1	2
157	22	949	6	94	3	28	2	-1	2

Br	Rb	Sr	Y	Zr	Nb	Mo	Ru	Rh	Pd
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Ag	Cd	In	Sn	Sb	Te	I	Cs	Ba	La
0.5	2.6	-0.2	-1	15	5	35	-1	1859	6
0.5	2.3	-0.2	-1	8	6	73	-1	1600	7
0.3	0.6	-0.2	-1	10	1	39	-1	791	13
0.3	1	-0.2	-1	6	3	31	-1	912	6
0.3	2.9	-0.2	-1	3	4	24	-1	1534	9
0.3	1.4	-0.2	-1	5	3	46	-1	881	12
-0.2	3.2	-0.2	-1	7	4	31	-1	1124	12
0.3	1.3	-0.2	-1	15	4	48	-1	1994	15
0.3	1	-0.2	-1	8	4	34	-1	1142	15
0.3	1.1	-0.2	-1	9	4	68	-1	2003	12
0.5	0.6	-0.2	-1	12	7	37	-1	2124	13
0.5	3.6	-0.2	-1	12	4	42	-1	1693	11
0.5	1	-0.2	-1	6	5	32	-1	1467	11
0.3	3.7	-0.2	-1	8	4	85	-1	1211	14
0.5	2.4	-0.2	-1	7	3	32	-1	1468	6
-0.2	1.5	-0.2	-1	7	5	41	-1	1446	6
0.3	3.7	-0.2	-1	5	-1	39	-1	2763	7
-0.2	1	-0.2	-1	11	6	23	-1	859	5
0.3	2.2	-0.2	-1	12	2	39	-1	1194	6
0.3	2.4	-0.2	-1	11	6	29	-1	1731	6
0.5	2.6	-0.2	-1	8	1	24	-1	1615	4
0.5	2.6	-0.2	-1	8	4	24	-1	1732	4
0.5	2.1	-0.2	-1	9	-1	21	-1	2741	6
0.5	1.8	-0.2	-1	10	7	42	-1	2138	10
0.7	0.6	-0.2	-1	9	5	77	-1	1520	19
0.8	1.8	-0.2	-1	13	7	53	-1	2103	12
0.7	3.2	-0.2	-1	11	4	44	-1	1650	11
-0.2	2.6	-0.2	-1	16	7	41	-1	1776	11
0.3	2.3	-0.2	-1	11	7	61	-1	2603	16
0.5	1.3	-0.2	-1	8	3	39	-1	2589	7
0.5	1	-0.2	2	6	4	32	-1	2947	8
0.3	1.3	-0.2	-1	9	-1	27	-1	2168	5
0.3	1.5	-0.2	-1	7	4	23	-1	1937	7
0.5	1.1	-0.2	-1	10	-1	37	-1	2125	7
0.5	2.6	-0.2	-1	5	2	32	-1	3142	14
0.3	1.9	-0.2	-1	4	4	19	-1	2249	5
0.3	1.8	-0.2	-1	10	3	18	-1	1822	7
0.3	1.1	-0.2	-1	10	5	34	-1	1589	8
0.3	2.4	-0.2	-1	13	3	226	-1	1452	13
0.7	1.1	-0.2	-1	7	5	25	-1	2682	10
-0.2	1.6	-0.2	-1	8	2	39	-1	2675	12
0.3	1.1	-0.2	-1	10	6	102	-1	2039	19
0.3	1.3	-0.2	-1	13	6	68	-1	2101	14
0.8	1.9	-0.2	-1	6	2	45	-1	1303	9
0.7	1	-0.2	-1	5	5	18	-1	2088	8
-0.2	3.9	-0.2	-1	10	7	28	-1	2465	7
0.3	1.6	-0.2	1	10	4	21	-1	1623	4

Ag	Cd	In	Sn	Sb	Te	I	Cs	Ba	La
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Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
28	2	7	2	2	2	-1	2	-1	-1
24	3	10	2	2	3	-1	3	-1	1
34	5	22	6	2	7	1	6	1	2
29	2	9	2	1	2	-1	2	-1	-1
32	3	12	3	2	4	-1	3	-1	1
36	4	15	4	2	4	-1	4	-1	1
43	4	14	3	2	4	-1	3	-1	1
58	5	19	4	3	7	-1	4	-1	2
45	5	18	4	2	5	-1	4	-1	2
33	4	14	3	3	4	-1	3	-1	1
39	4	16	5	2	4	-1	4	-1	1
37	4	13	3	2	3	-1	3	-1	1
32	4	13	3	2	4	-1	3	-1	1
39	6	22	5	2	6	-1	5	-1	2
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25	2	8	2	2	2	-1	2	-1	-1
24	3	9	2	2	3	-1	2	-1	-1
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21	2	8	2	2	2	-1	2	-1	-1
17	2	5	1	2	2	-1	1	-1	-1
18	1	5	-1	2	-1	-1	-1	-1	-1
15	2	4	1	1	2	-1	1	-1	-1
26	2	6	1	2	2	-1	2	-1	-1
28	4	11	3	2	4	-1	3	-1	-1
31	6	23	5	2	6	-1	5	1	2
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22	3	10	2	2	3	-1	2	-1	-1
58	5	20	5	3	6	-1	5	-1	2
31	3	11	2	2	3	-1	2	-1	-1
33	4	14	3	3	4	-1	3	-1	1
52	7	25	5	3	7	-1	5	1	2
42	5	18	2	2	4	-1	3	-1	1
26	3	9	2	2	2	-1	2	-1	-1
32	3	10	2	2	2	-1	2	-1	-1
31	2	8	1	2	2	-1	2	-1	-1
14	1	5	1	1	1	-1	1	-1	-1

Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
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Tm	Yb	Lu	Hf	Ta	W	Re	Os	Ir	Pt
-1	-1	-1	-1	-1	1	-0.1	-1	-1	-1
-1	1	-1	-1	-1	1	0.1	-1	-1	-1
-1	3	-1	2	-1	1	-0.1	-1	-1	-1
-1	1	-1	1	-1	1	0.1	-1	-1	-1
-1	1	-1	1	-1	1	-0.1	-1	-1	-1
-1	2	-1	1	-1	1	-0.1	-1	-1	-1
-1	2	-1	1	-1	1	-0.1	-1	-1	-1
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-1	2	-1	2	-1	1	-0.1	-1	-1	-1
-1	2	-1	2	-1	1	-0.1	-1	-1	-1
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-1	1	-1	1	-1	1	-0.1	-1	-1	-1
-1	3	-1	2	-1	1	-0.1	-1	-1	-1
-1	-1	-1	-1	-1	2	-0.1	-1	-1	-1
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-1	-1	-1	1	-1	3	-0.1	-1	-1	-1
-1	-1	-1	1	-1	2	-0.1	-1	-1	-1
Tm	Yb	Lu	Hf	Ta	W	Re	Os	Ir	Pt

Au	Hg	Tl	Pb	Bi	Th	U
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-0.1	-1	-1	5	-1	3	2
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-0.1	-1	-1	5	-1	4	2
-0.1	-1	-1	6	-1	3	2
-0.1	-1	-1	5	-1	4	2
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-0.1	-1	-1	8	-1	2	1
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-0.1	-1	-1	9	-1	2	1
-0.1	-1	-1	12	-1	2	1
-0.1	-1	-1	11	-1	2	1
Au	Hg	Tl	Pb	Bi	Th	U

APPENDIX II

EXPENDITURES

EXPENDITURES ON THE LEXINGTON PROJECT IN 1994

Wages and benefits

Sean P. Butler, P.Ge., Geologist\$11,985.00

51 days @ \$235/day. Project preparation, geological mapping, sampling,
field supervision, data analysis and report preparation.

April 18 to 22, 25 to 28 May 2, 4, 5, 6, 9-13, 17 to 20, May 24 to June
8, 10, 21, July 4, 5, 6, November 21 to 25, 29 December 6, 12.

Transportation (4X4 Truck and gas) 1386.03

22 days @ \$50/day plus gas and oil

Room and Board..... 1034.87

IP Geophysics

Delta Geosciences, May 24 to June 7 15 days at \$1750+GST/day..... 29,465.13

Room and board for geophysical crew 3,213.00

Delta Geosci., data processing & plotting, 4 days at \$375+GST/day..... 1,605.00

Gridline Brushing 4,970.00

Rainbows and Sunshine Services, Grand Forks, B.C. (two men and 4X4
truck rental @ \$355/day for 14 days) May 11 to 14, 17, 19, 21 to 24, 26,
27, 28, 30.

Geochemical Analysis (ACTLABS)..... 1,382.98

(47 samples @ \$27.50+GST each)

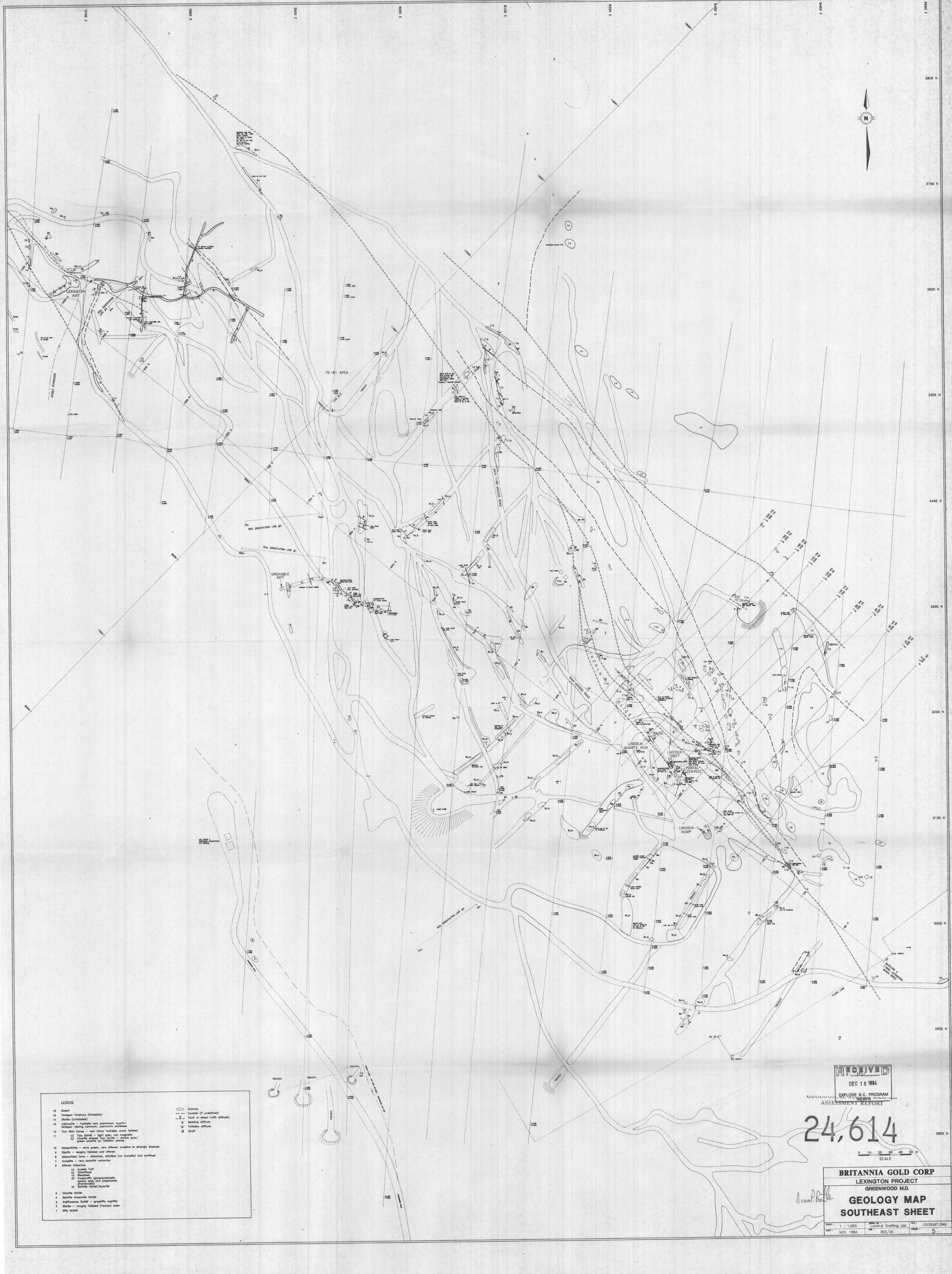
Report Drafting and Reproduction..... 243.43

Field Supplies, freight and expendables (estimated) 200.00

Communications (estimated)..... 100.00

TOTAL.....**\$55,585.44**

GST INCLUDED IN ABOVE EXPENDITURES EQUALS1397.14



LEGEND

16 Blast	Contours
15 Feldspar Porphyry (Feldspar)	Contour (7' undrilled)
14 Quartz (Unfractured)	Fault or shear (with attitude)
13 Sphalerite - thin, very prominent, coarse, irregular, varying common, commonly subhedral	Bedding surface
12 Talc Rich Zones - very minor, talc, more talc	Foliation surface
11 a) Fine Scale - light grey, non magnetic b) Chlorite altered top layer - dark grey/green, siliceous on foliation planes	Shall
10 Sphalerite - dark green, very altered, massive to strongly sheared	
9 Quartz - roughly foliated and altered	
8 Mineralized Zone - bleached, siliceous (no feldspar) and pyritic	
7 Andesite - very siliceous volcanics	
6 Altered Volcanics	
a) Crystal Tuff	
b) Chlorite	
c) Bleached	
d) Feldspar (porphyroblasts)	
e) Quartz (irregular)	
f) Sphalerite	
g) Sulfide Scales/veins	
5 Chlorite Scales	
4 Sulfide Mineralized Scales	
3 Amphibole Scales - granitic, argillite	
2 Quartz - roughly foliated (vein) older	
1 Silty Scales	

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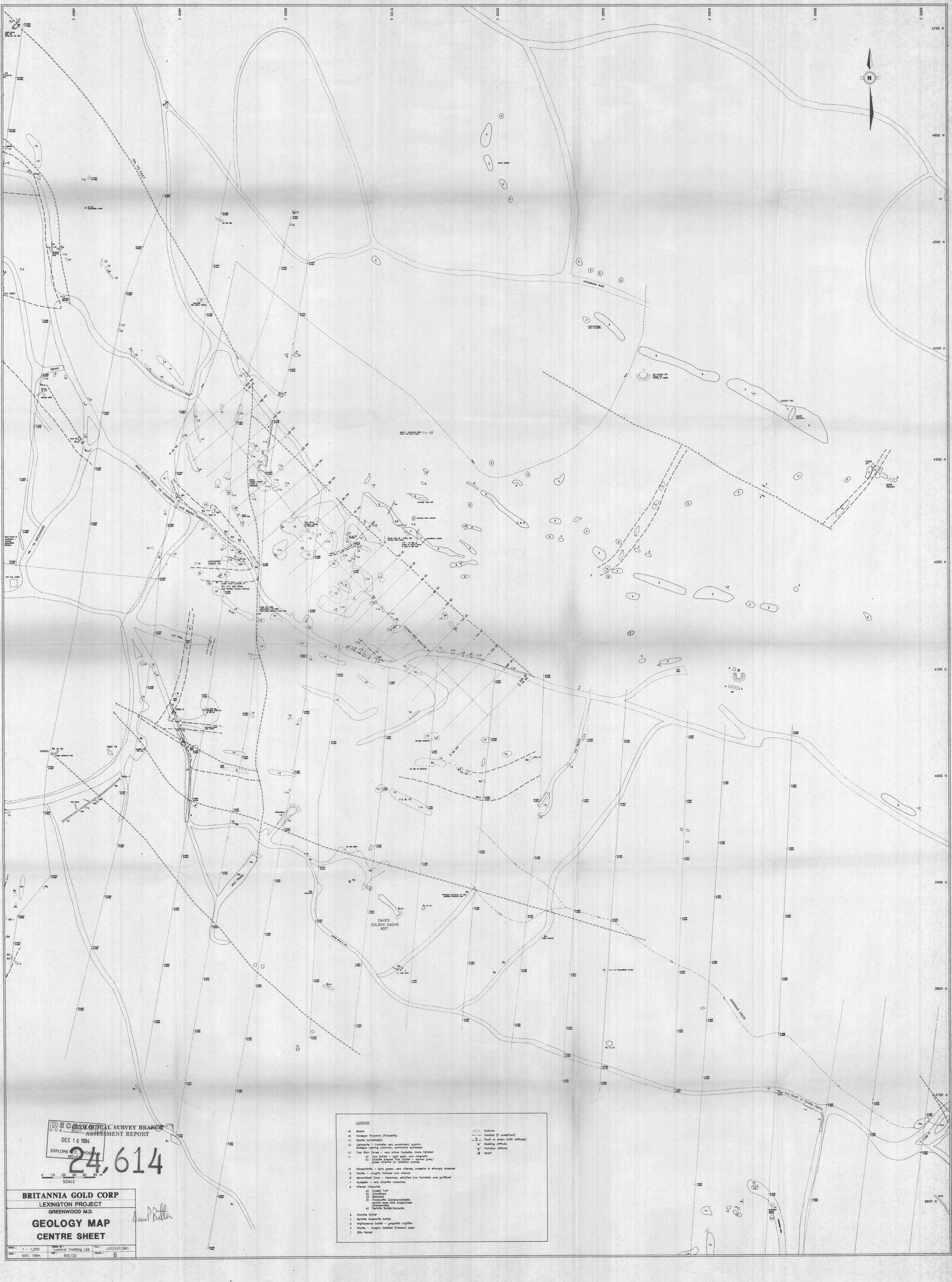
24,614

0 10 20 30 40 50
 SCALE

BRITANNIA GOLD CORP
 LEXINGTON PROJECT
 GREENWOOD MD.
GEOLOGY MAP
SOUTHEAST SHEET

Dean Butler

DATE: 1: 1,000
 NOV. 1994
 DRAWN BY: Liminal Drafting Ltd.
 82E/2E
 PROJECT: LEXINGTON
 SHEET: 5

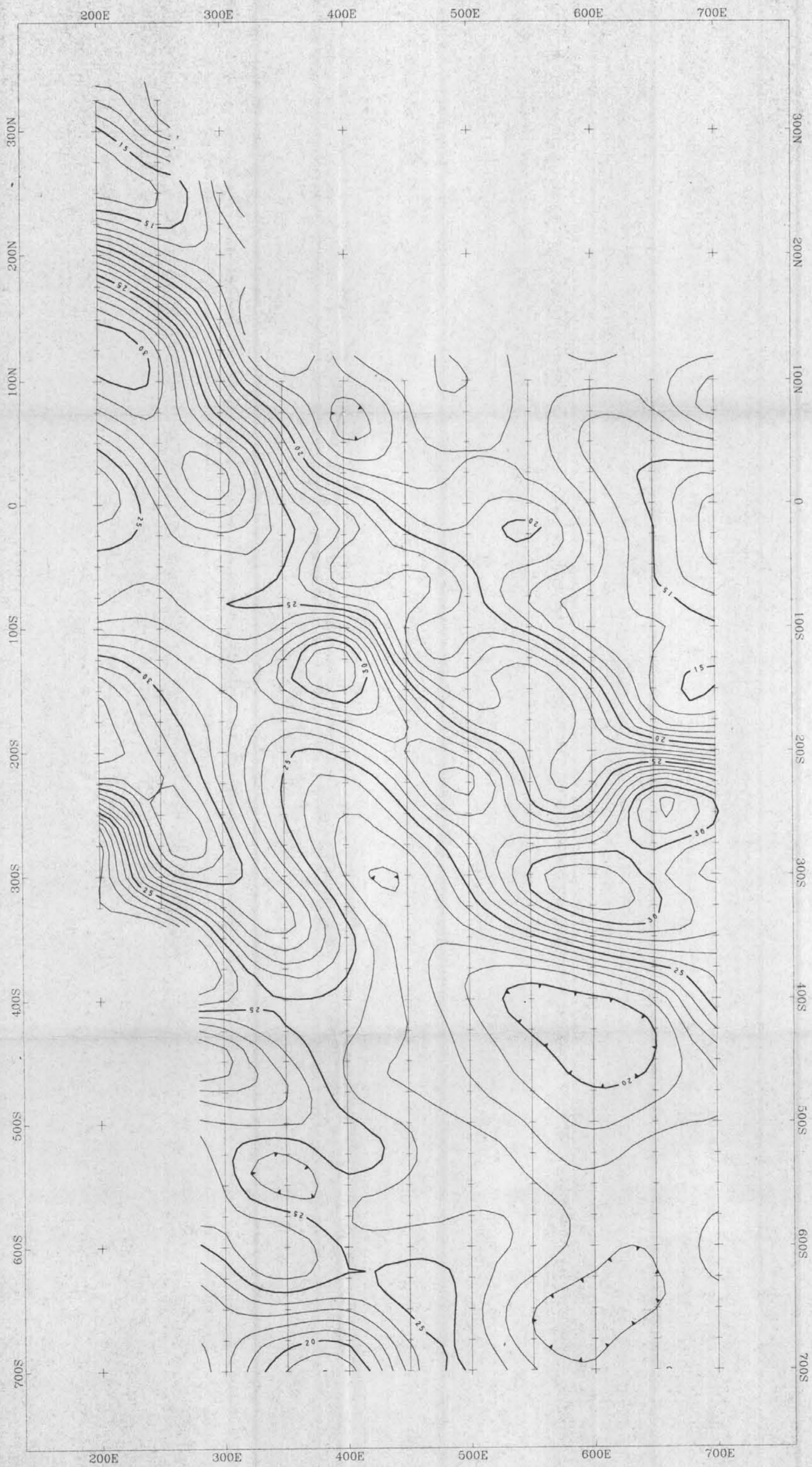


RECONSTRUCTION SURVEY BRANCH
 MINERAL ASSESSMENT REPORT
 DEC 16 1994
 EXPLORE C.C. PROGRAM
 MEAS. 24,614
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BRITANNIA GOLD CORP
 LEXINGTON PROJECT
 GREENWOOD M.D.
GEOLOGY MAP
CENTRE SHEET
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 SHEET: 82E/2E
 NUMBER: 6

LEGEND

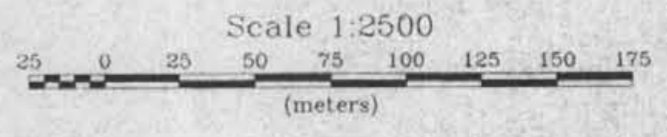
16 Basalt	Outcrop
15 Felspar Porphyry (Felsparite)	Contour (10m interval)
14 Quartz (unfoliated)	Fault or shear (with offset)
13 Lithophyllite - Felsparite very prominent, quartzite Felsparite replacing common, commonly well-sorted	Bedding difficult
12 Talc Blue Zones - very minor felsphite, more foliated	Felsphite common
11 Talc Schist - light grey, non magnetic 1) Quartz altered to talc 2) Quartz altered to talc 3) Quartz altered to talc	Sheaf
10 Serpentine - dark green, very altered, massive to strongly sheared	
9 Chlorite - highly foliated and sheared	
8 Altered Zone - basaltic, altered (in felsphite) and purified	
7 Andesite - very shaly volcanic	
6 Altered Volcanics	
5 Quartzite	
4 Amphibole (amphibolite)	
3 Amphibole (amphibolite)	
2 Amphibole (amphibolite)	
1 Silty Schist	



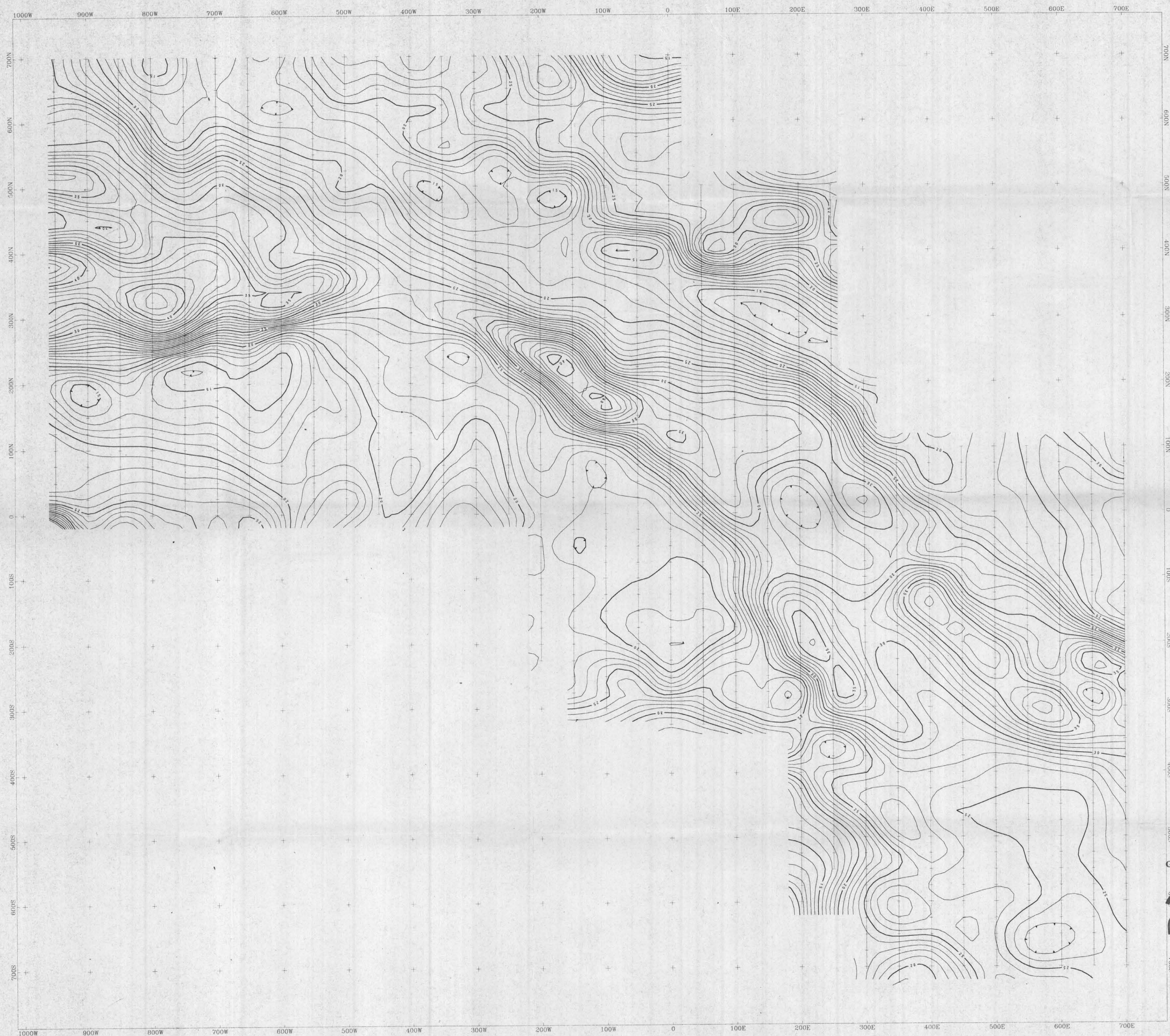
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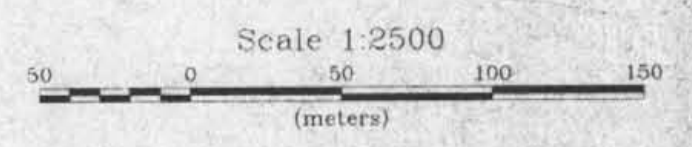
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CHARGEABILITY PLAN
 CITY OF PARIS PROJECT
 GRAND FORKS, BRITISH COLUMBIA
 Contour interval 1 msec
 Gradient array, AB = 1000 m, MN = 50 m
 BRGM instruments
 Nov, 1994
 DELTA GEOSCIENCE LTD



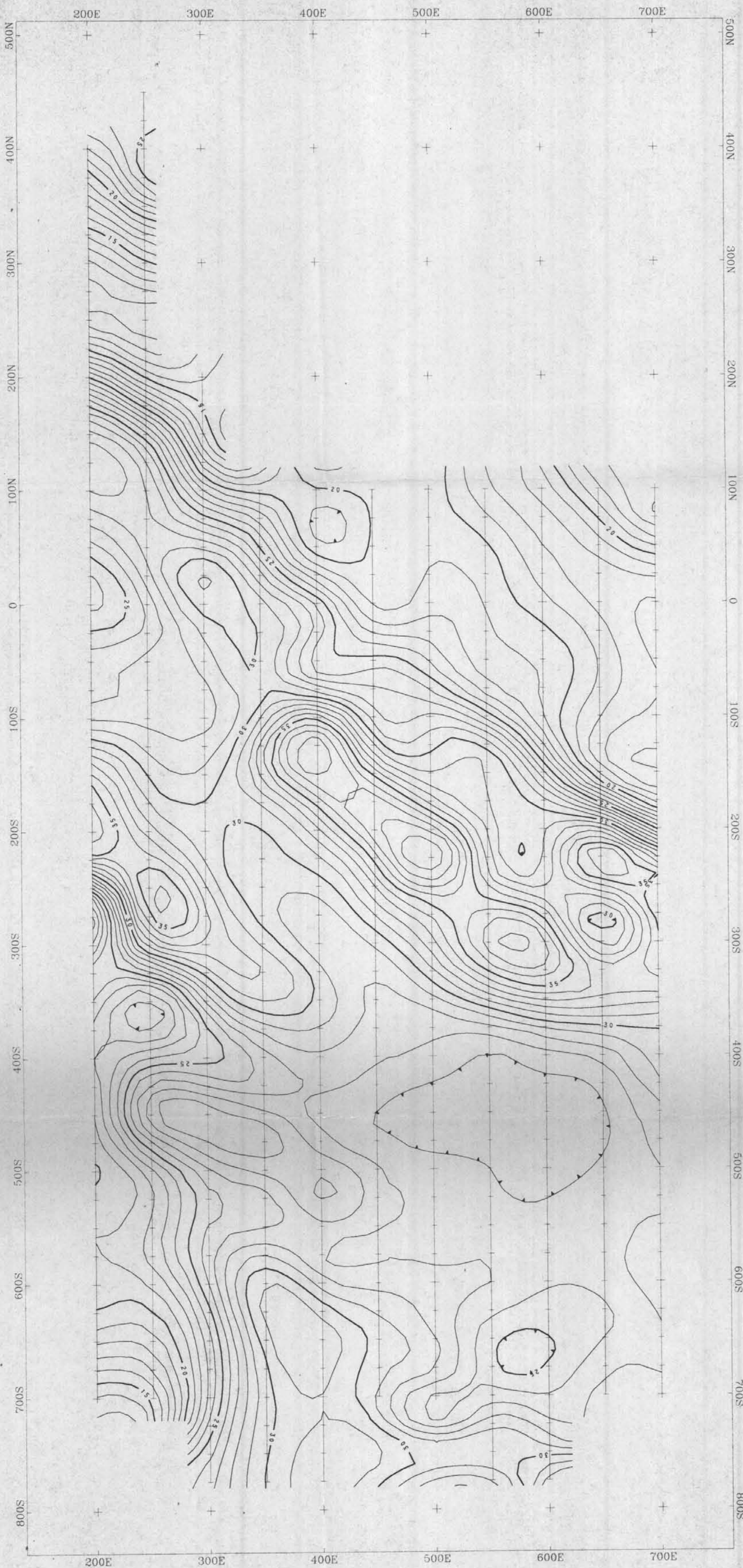
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CHARGEABILITY PLAN
CITY OF PARIS PROJECT
GRAND FORKS, BRITISH COLUMBIA
Contour interval 1 msec
Gradient array, AB = 1500 m, MN = 50 m
BRGM instruments
Nov, 1994
DELTA GEOSCIENCE LTD



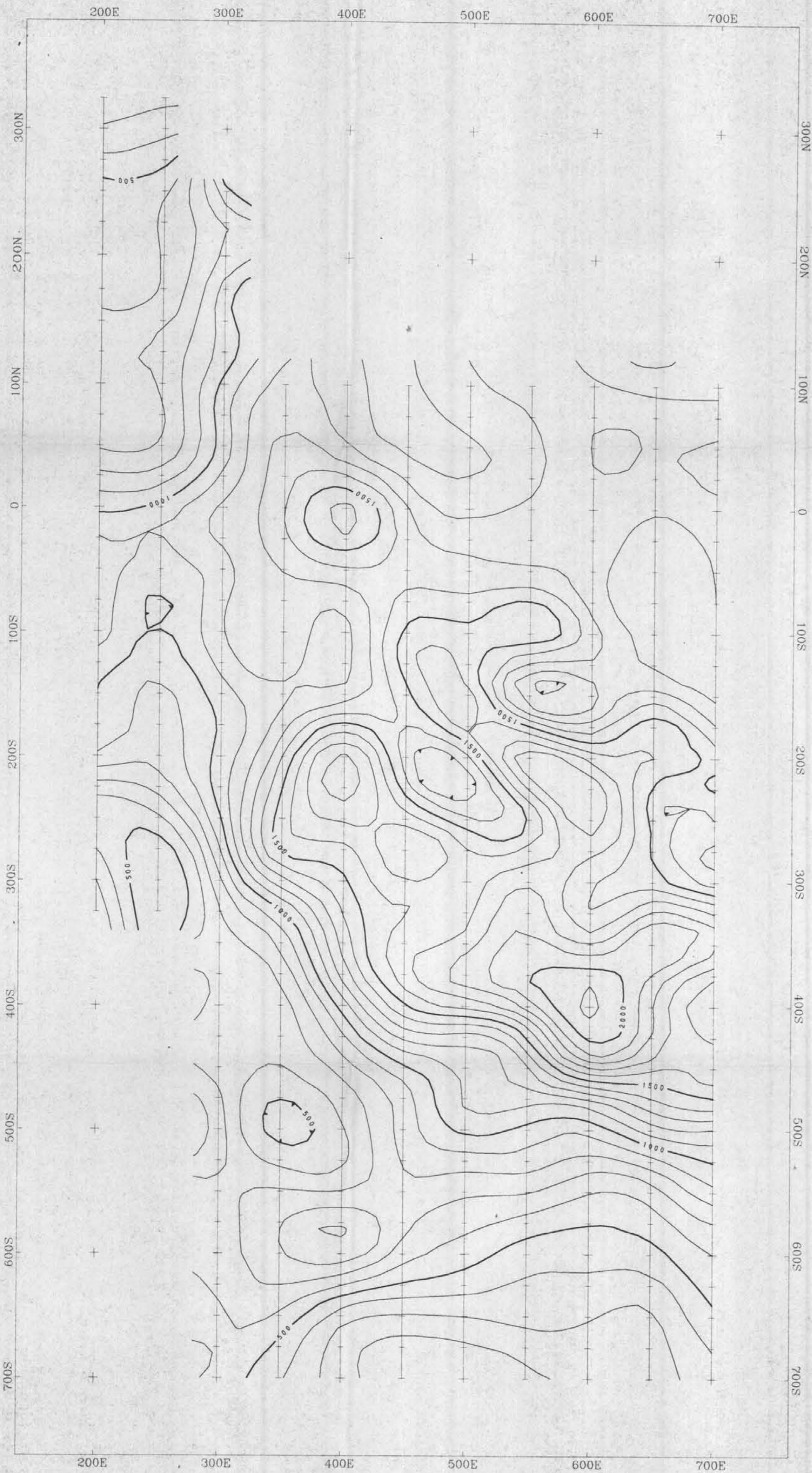
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Scale 1:2500
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 BRANCH
 ASSESSMENT REPORT

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BRITANNIA GOLD CORPORATION
 CHARGEABILITY PLAN
 CITY OF PARIS PROJECT
 GRAND FORKS, BRITISH COLUMBIA
 Contour interval 1 msec
 Gradient array, AB = 2100 m, MN = 50 m
 BRGM instruments
 Nov, 1994
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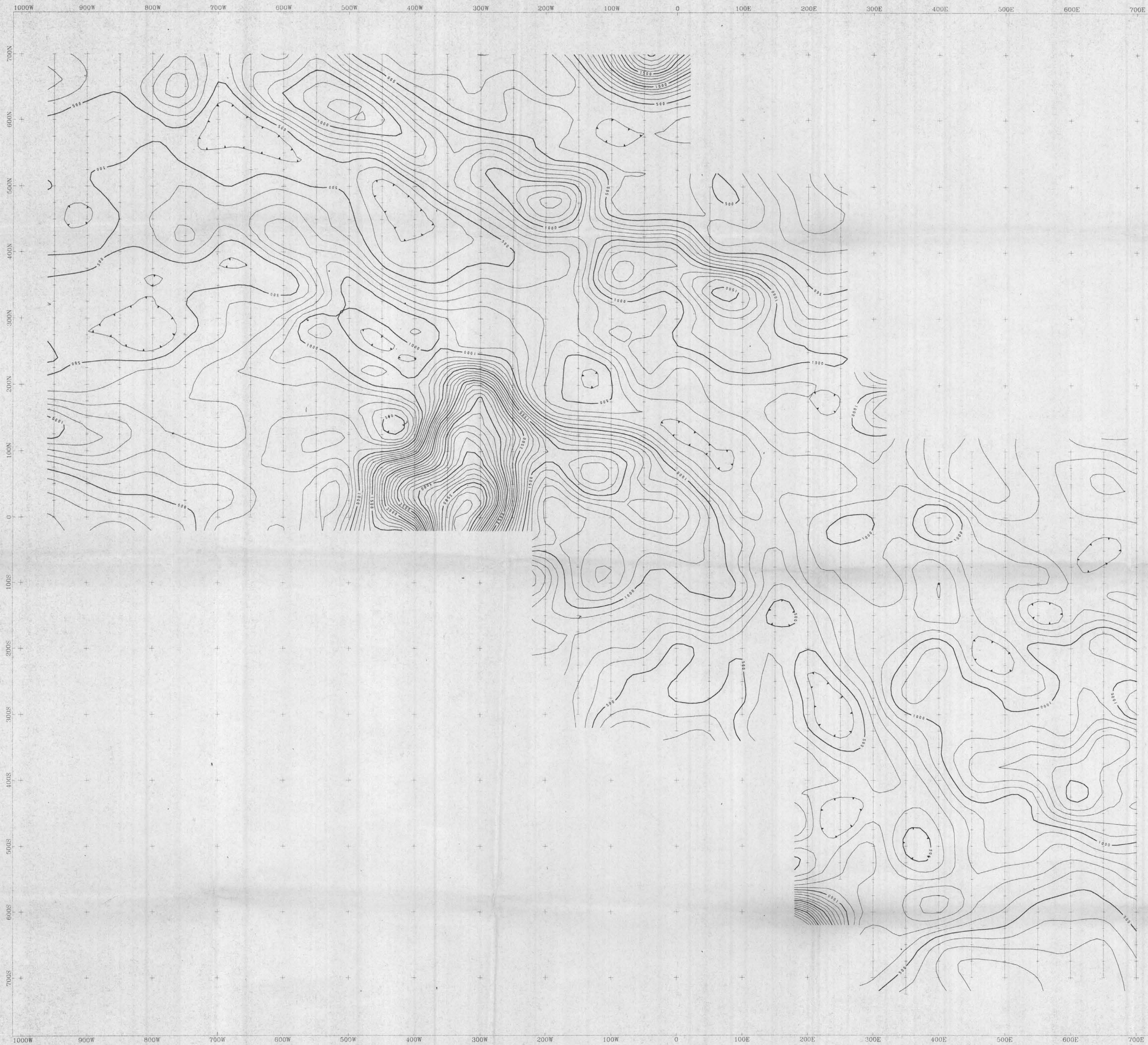
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**GEOLOGICAL SURVEY BRANCH
 ASSESSMENT REPORT**

24614
 BRITANNIA GOLD CORPORATION

RESISTIVITY PLAN
 CITY OF PARIS PROJECT
 GRAND FORKS, BRITISH COLUMBIA
 Contour interval 100 ohm-m
 Gradient array, AB = 1000 m, MN = 50 m
 BRGM instruments
 Nov, 1994

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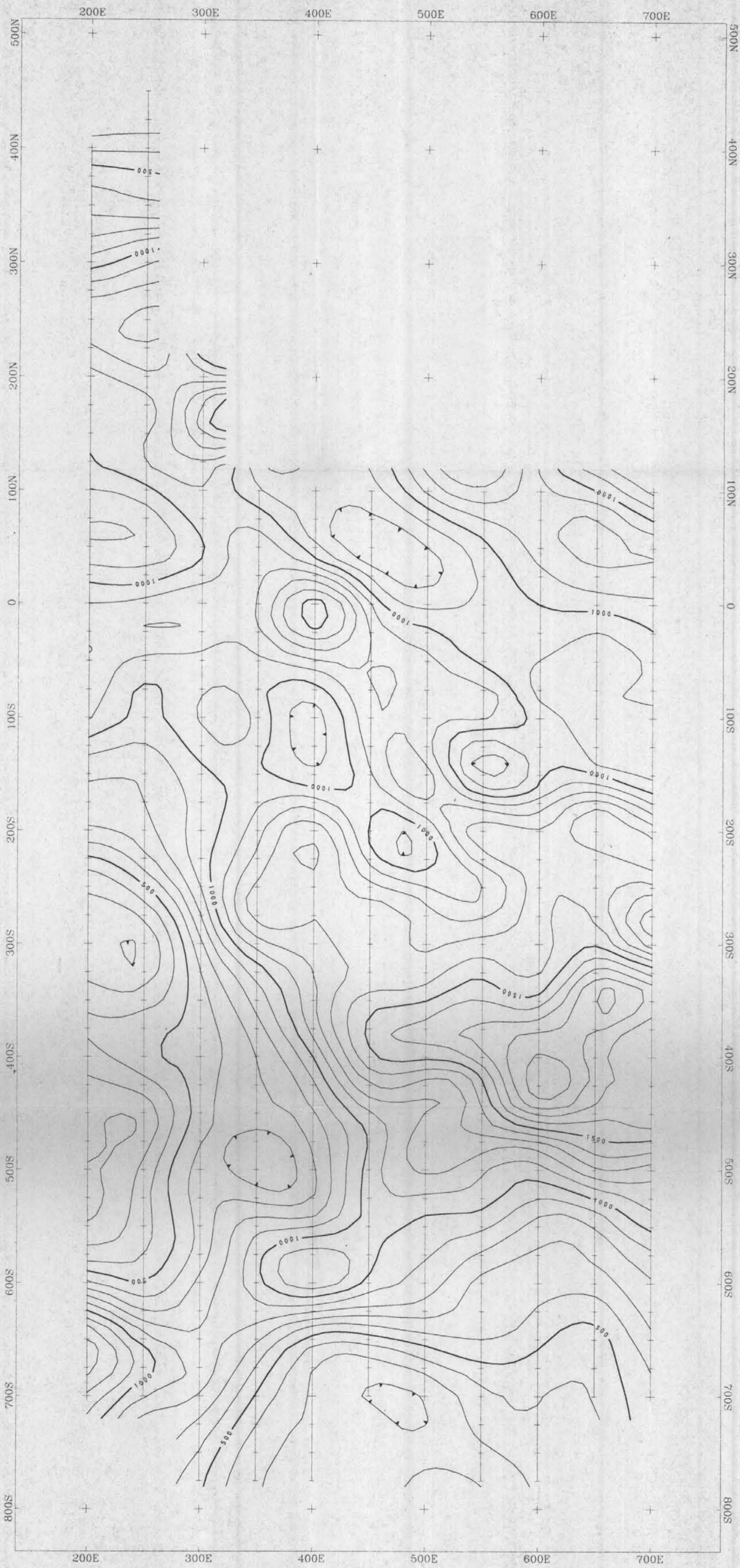
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BRITANNIA GOLD CORPORATION

RESISTIVITY PLAN
CITY OF PARIS PROJECT
GRAND FORKS, BRITISH COLUMBIA

Contour interval 100 ohm-m
Gradient array, AB = 1500 m, MN = 50 m
BRGM instruments
Nov, 1994

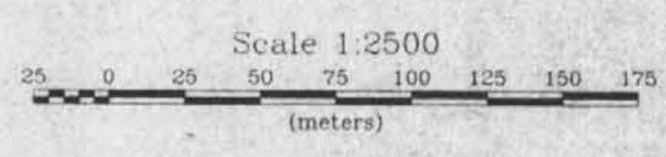
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RESISTIVITY PLAN
CITY OF PARIS PROJECT
GRAND FORKS, BRITISH COLUMBIA

Contour interval 100 ohm-m
Gradient array, AB = 2100 m, MN = 50 m
BRGM Instruments
Nov, 1994

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