BRITANNIA CLAIM

REPORT ON 1993 GEOCHEMICAL SAMPLING
BRITANNIA CLAIM
NELSON MINING DIVISION
NTS MAP SHEET 82 F/6W
49°25'30" NORTH 117°17'27" WEST

AUTHOR: R. JORDAN, P.ENG.

OPERATOR: R. JORDAN

OWNERS: R. JORDAN 50%, W.R. READER 50%

October 1993

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1.0 SUMMARY

The Britannia is a reverted two post crown granted claim purchased on March 15th 1990 by R. Jordan. A 50% interest was subsequently purchased by W.R. Reader. The claim is located on Toad Mountain 6 kilometers south of Nelson and is accessible from Highway 6 by 6 kms. of logging road.

Previous geochemical sampling in 1990 and 1991 found anomalous gold values in the southern half of the claim. Work in 1993 was concentrated on providing more accurate location control, and on providing addittional geochemical sampling.

2.0 INTRODUCTION

This report covers results of GPS surveying done on August 8/92 and on July 8/93, and geochemical sampling done by R. Jordan and W.R. Reader on July 8th 1993.

2.1 Location, access and physiography.

The claim is located on the north-east side of Toad Mountain at elevations between 1675 and 1825 meters. Summer access is available by logging roads from highway 6. A more complete description is included in AR 21277.

2.2 Claim description

The Britannia claim is located in the Nelson Mining Division map area 82F6/W. R. Jordan and W.R. Reader are co-owners.Record data is listed below:

CLAIM NAME	UNITS	REC.NO.	STAKING DATE	AQUISITION DATE
Britannia	1	234610	Sept.1, 1894	March 15, 1990

2.3 1993 exploration

After results of several GPS (global positioning system) readings, taken during a brief visit to the claim in August 1992, it was realized that line locations for the 1990 and 1991 programs were not reliable. Accordingly during the 1993 program five addittional GPS stations were established and tied in to recent aerial photos and BC Forest Service 1:20,000 mapping, resulting in considerably more reliable positioning. A total of seventeen soil samples were taken at 20 meter intervals along a 3.5 km. line parallel to the east boundary of the claim and situated 0.6 kms. east-south-east of the 1990 line T-1. Two rock chip grab samples were taken from material found in two old

trenches on the west side of a prominent gully near the north end of the claim. Two deeper soil samples were taken at 1990 station T-1-14. Survey control for this year's program was provided using a Gamin GPS 100 survey instrument, Brunton Compass, hip chain and a Thommen altimeter. Altimeter readings were adjusted by -11 meters to tie previous mapping.

3.0 GEOLOGY

Area geology is described, in detail, in Open File 1989-11, in descriptions of adjoining properties in Exploration in B.C. 1988 pps. B15-28, and in assessment report 21277. The claim is located on the north limb of the Hall Creek syncline adjacent to the Silver King shear zone in intensely sheared and altered volcanics of the Lower Jurassic Rossland Group/Elise Formation.

3.2 Claim Geology.

Outcrops encountered on the soil sample lines have been noted on Figure 3 and consist mainly of light to medium and dark grey, fine grained, schistose volcanics. White quartz and associated silicious felsite rocks with sparse pyrite mineralization were noted in two old pits on the west side of the narrow gully at the north end of the claim. Pyromorphite was noted in numerous small quartz filled fractures in tuffaceous rocks at station T-1-6 and along the rock ridge between there and station GPS-93-2. A prominent lineament was noted on air photos intersecting the NE corner of the claim and is coincident with the west edge of the rock ridge at stations T-1-6 and GPS stations 14, 15, 16 and 93B-1 and 2.(figure 3).

4.0 GEOCHEMISTRY

4.1. Field program

Seventeen soil samples were taken at 20 meter intervals on line B-93. This line was run parallel to the east boundary of the claim and was located 0.6 kilometers from line T-1 (Figure 4). Samples were taken from a well developed 'B' layer at depths ranging from 5 to 20 cms between the 'A'(humus) and gradational 'C'(colluvium) layers. Two grab samples were taken from quartz and silicified felsite, with sparse disseminated pyrite mineralization, found in two old pits in the gully at the north end of the claim. Two soil samples were taken from station T-14, both from the 'C' layer.

4.2 Analytical techniques

All samples were analyzed at Chemex Labs in North Vancouver. Soil samples were analyzed using the ICP 32 process which uses a nitric-aqua-regis digestion process with subsequent ICP spectroscopy analysis. Results are considered to be adequate for detection of major gold and base metal indicators. Rock chip samples were crushed and ringed to -150 mesh and analyzed using the ICP 32 process.All samples were analyzed for gold using Chemex's 101 trace level analysis with detection limits between 1 ppb and 10 ppm.

4.3 Assay results

Values for gold, copper, lead and zinc were plotted and contoured (Figs.5 to 8). Gold values were generally low however the trends seen previously on line T-1 at stations T1-1 and T1-14 are faily obvious, and can also be seen on the maps for copper, lead and zinc at, or near, stations B-93-17 and B-93-12. Slightly anomalous gold/copper values were obtained from RC BR-2. The two deep soil samples taken from the 'C' layer at station T-1-14 had higher than background values for copper and the deeper sample taken at or near weathered bedrock had an anomalously high chromium value.

5.0 POSITIONING

Claim location and positioning of the geochemical lines were obtained using the original claim survey, aerial photos BC 88046 Nos.16 and 17, and a copy of the BC Forest Service 1:20,000 topog and forest cover maps. The location for line T-1 was obtained in 1990 by compass triangulation. In 1992 and 1993 eight GPS readings were taken using a Gamin GPS-100 survey instrument. Specifications for the GPS-100 claim an accuracy of 5 meters in the averaging mode however accuracy has been found to vary by 50 meters or more in steep terrain and with less than 4 available positioning satellites. When the US military decide to degrade their satellite transmissions, which can occur at random, the GPS system is not accurate enough to be useful for this type of work. This situation can be checked by systematic readings taken at known survey reference points. The GPS locations shown on Figs. 2 through 8 are judged to be accurate to within 20 to 30 meters.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Overall results of the geochemical sampling, while not spectacular, are judged to be sufficiently encouraging to warrant addittional work. Line B-93 should have infill samples taken at at 5 meter intervals between stations 7 and

14, and lines T-3 and T-2 should be extended with 5 meter sampling to obtain better coverage over the indicated gold anomaly. If this work confirms the position of the anomaly it could probably be followed up by a limited amount of hand trenching. Line B-93 should be extended to cover the north end of the claim. A geological mapping and sampling program should be carried out along the lineament noted on Figure 3. This program could be carried out with an expenditure of about ten to twelve man days work.

7.0 BIBLIOGRAPHY

1. GSC Memoir 308, Nelson Area, West half.

2. BC Min.Res.Div. GSB. Geological Fieldwork 1988 pps.33-43, Open File 1989-11.

3. BC Minister of Mines annual reports 1887,1889-1919,1947-1949, 1956, 1958, 1965-1967.

4. BC Minfiles 175, 176.

5. Assessment Report 21277

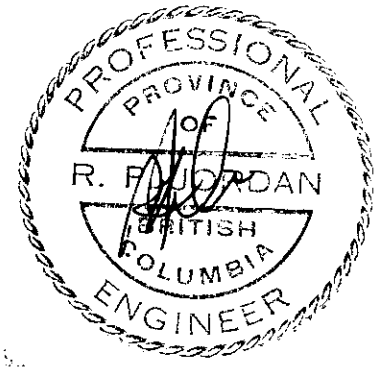
8.0 STATEMENT OF EXPENDITURES

4WD transport Nelson to site and return 2 days 48 kilometers @ $0.30	14.40
Labour 24 hours @ $13.25	318.00
Meals and Accomodation 2 man days	80.00
Planning,supervision, report prep.	350.00
Assay costs	329.00
Drafting and Reproduction	25.00
GPS Rental	58.00
Total	$ 1174.40

9.0 AUTHOR'S QUALIFICATIONS

I hereby certify that I am registered as a Professional Engineer (Geological) in the province of British Columbia, registration number 4707.

October 27 1993.



GEOCHEMICAL SAMPLING - BRITANNIA CLAIM - SAMPLE DESCRIPTIONS JULY 1993

SAMPLE No.	UTM COORDINATES NORTH	EAST	ELEV	TYPE	DEPTH	SAMPLE DESCRIPTION	COMMENTS
B93-1	5474457	478947	1687	S/B	0-17	No A LAYER. Med. brown. w. shale colluv.	Otc 5m S. of line at 18 metres in bedded fissile sericitic schist strike 305° Dip 53° S (↓ Very steep.)
B93-2	438	943	1709	S/B	5-15	0-5 humus 5-15 med. brown. w. grey. shale colluv	
B93-3	418	937	1718	S/B	7-18	0-7 humus. 7-18 med. brown. minor colluv.	Edge of clear cut. Grey sericitic shale float.
B93-4	393	932	1729	S/B	5-15	0-5 humus 5-15 rusty brown w abundant grey sh. colluv.	Large talus block just above.
B93-5	5474379	478929	1737	S/B	5-15	0-5 humus 5-15 rusty brown. w some colluv.	Massive otc at ≈5.5 med grd. grey volcanic tuff. strike 310° Dip 55°S
B93-6	359	924	1747	S/B	5-10	0-5 humus 5-10 med. grey brown w. grey shale colluv.	
B93-7	340	920	1751	S/C	5-8	0-5 humus 5-8 brown. grey. soil w. abundant colluv.	No B layer present.
B93-8	320	915	1752	S/B	5-15	0-5 humus 5-9 grey. fine soil, 9-15 rusty brown	Abundant dark grey schist at 15 cms
B93-9	301	911	1762	S/B	5-15	0-5 humus 5-15 rusty brown. soil.	Grey schist at 15 cms
B93-10	5474281	478907	1769	S/B	5-15	0-5 humus 5-15 brown. soil w. rusty grey sch. colluv.	
B93-11	261	903	1778	S/B	5-15	0-5 humus 5-15 rusty brown. w. limonite colluv.	
B93-12	242	898	1772	S/B	5-15	0-5 humus 5-15 rusty brown soil.	
B93-13	223	894	1779	S/C	7-10	0-7 humus 7-10 brown soil w. abundant grey sericitic sch. colluv.	Large outcrop 15 metres up slope
B93-14	204	889	1787	S/C	7-10	0-7 humus 7-10 brown soil w. abundant colluv.	Large outcrop 10 metres to right. Massive med. grey wx. s/i schistose tuffaceous volcanics. Strike 300° Dip 63°S. Starts at ≈ 14.3
B93-15	5474184	478885	1791	—	—	No soil.	Crest of outcrop. GPS reading 5 metres west of 15.5
B93-15.5	5474174	478883		—	—	No soil.	
B93-16	5474154	478867	1785±	S/B	5-15	0-5 humus 5-15 brown. soil.	Talus in prominent N-S gulley 25 metres @ S30°W from CPS 93B-5.
B93-17	5474478	478951	1683±	S/B	4-10	0-4 humus 4-10 rusty brown. w. abundant colluv.	20m @ 013.5° from B93-1
B93-18	5474497	478956	1679	S/B	7-12	0-3 humus 3-12 rusty brown soil.	40m @ 013.5° from B93-1
B93-19	5474322	478859	1770	S/C	15-20	Rusty brown w. abundant colluvium.	Taken at 1990 station T-14.
B93-20	5474322	478859	1770		30	Brown rusty schist.	Bedrock sample.
RC-BR-1	5474577±	478974±	—	R/C	0	- Grab sample wh. qtz. & sil. felsite w. sparse py min. from pit 30m @ 220° from ▲ GPS 15, on west side of prominent gulley.	
RC BR-2	5474582±	478963±	—	R/C	0	- Grab sample wh. qtz. & felsite dike w. sparse py min from pit 25m @ 230° from GPS 15	

LEGEND

S/B 'B' LAYER SOIL SAMPLE
S/C 'C' LAYER SOIL SAMPLE
RC ROCK CHIP SAMPLE

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: JORDAN, R. & ASSOCIATES LTD.

R.R.1
PRIDDIS, AB
T0L 1W0

Project :
Comments: CC: W.R. RENDER

Page Number :1-A
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Certificate Date: 08-AUG-93
Invoice No. :19318139
P.O. Number :
Account :GMZ

BRITANNIA

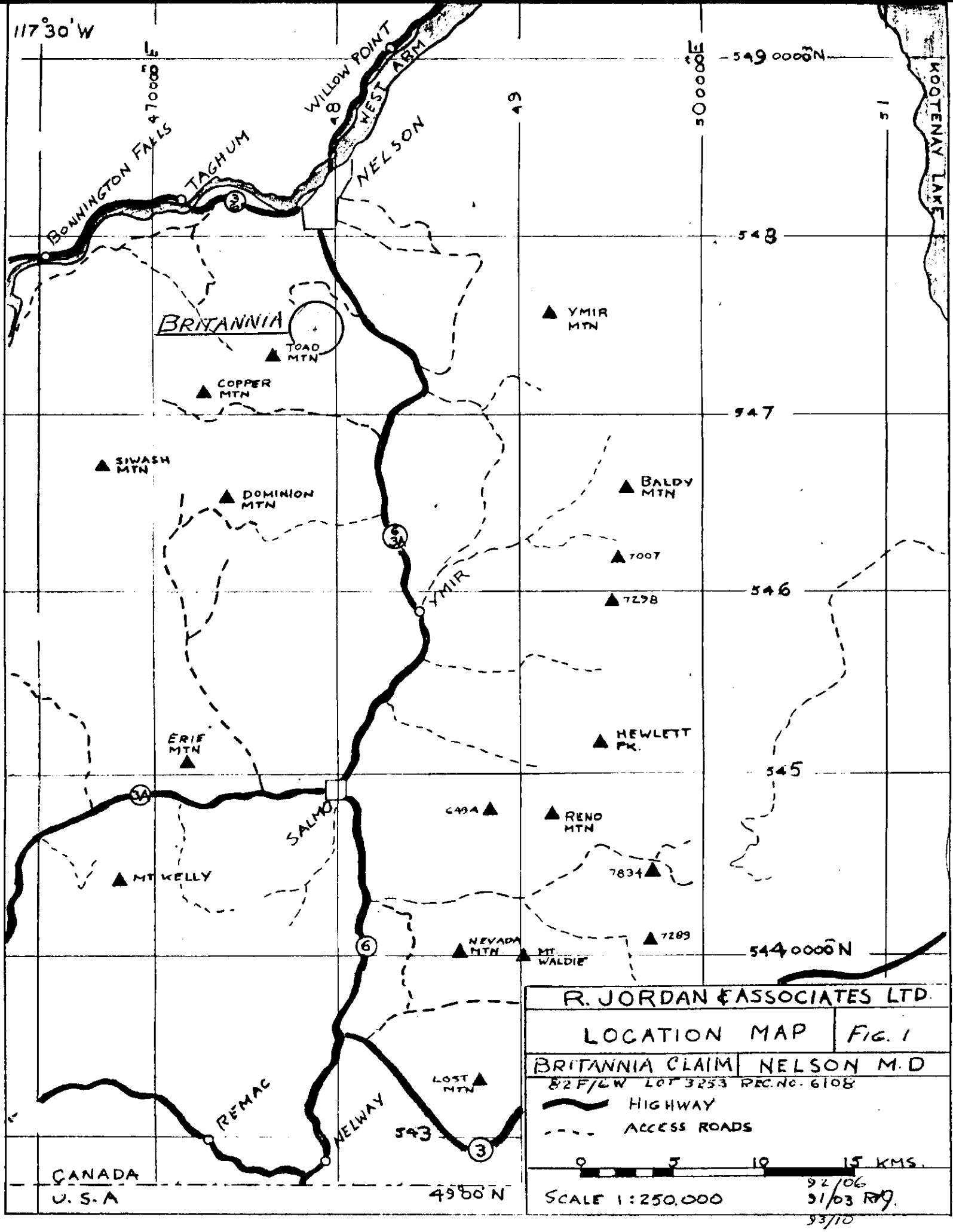
CERTIFICATE OF ANALYSIS A9318139

SAMPLE	PREP CODE	Au NAA ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
B93-01	201 229	12	< 0.2	1.16	4	110	0.5	< 2	0.24	1.0	22	8	81	5.76	< 10	< 1	0.07	10	0.20	2420
B93-02	201 229	12	< 0.2	1.28	4	70	0.5	< 2	0.19	0.5	21	6	75	5.61	< 10	< 1	0.07	10	0.15	1595
B93-03	201 229	15	< 0.2	1.62	12	80	0.5	< 2	0.13	0.5	14	7	55	4.85	< 10	< 1	0.08	10	0.19	935
B93-04	201 229	< 1	0.6	1.83	4	200	0.5	< 2	0.14	1.5	12	16	22	3.11	< 10	< 1	0.09	10	0.33	2280
B93-05	201 229	10	< 0.2	2.57	4	90	0.5	< 2	0.06	0.5	12	13	52	4.48	< 10	< 1	0.07	< 10	0.38	565
B93-06	201 229	2	< 0.2	1.14	2	90	0.5	< 2	0.04	0.5	10	8	43	5.19	< 10	< 1	0.04	< 10	0.22	555
B93-07	201 229	2	< 0.2	1.49	2	240	0.5	< 2	0.08	0.5	15	33	39	5.40	< 10	< 1	0.10	10	0.39	5600
B93-08	201 229	27	0.6	1.83	2	50	0.5	< 2	0.02	< 0.5	5	15	21	4.33	< 10	< 1	0.07	< 10	0.13	235
B93-09	201 229	14	0.6	3.69	6	60	0.5	< 2	0.03	< 0.5	14	< 1	42	4.38	< 10	< 1	0.06	< 10	0.19	740
B93-10	201 229	2	0.2	2.12	2	90	0.5	< 2	0.06	0.5	17	72	62	4.03	< 10	< 1	0.06	< 10	0.57	1275
B93-11	201 229	10	0.8	2.78	2	100	0.5	< 2	0.02	< 0.5	13	30	41	3.83	< 10	< 1	0.06	< 10	0.23	1025
B93-12	201 229	30	0.8	1.83	2	60	< 0.5	< 2	0.03	0.5	6	19	24	2.97	< 10	< 1	0.05	< 10	0.16	585
B93-13	203 205	5	< 0.2	1.13	2	80	0.5	< 2	0.16	< 0.5	18	48	41	4.94	< 10	< 1	0.11	< 10	0.56	1395
B93-14	201 229	12	< 0.2	1.08	2	170	0.5	< 2	0.18	0.5	16	18	35	3.86	< 10	< 1	0.08	10	0.50	2590
B93-16	201 229	3	0.2	2.30	4	60	0.5	< 2	0.09	0.5	18	52	65	3.51	< 10	< 1	0.07	< 10	0.97	1340
B93-17	201 229	51	< 0.2	1.69	4	110	0.5	< 2	0.18	< 0.5	18	30	58	5.37	< 10	< 1	0.07	10	0.57	1015
B93-18	201 229	11	< 0.2	1.50	2	110	0.5	< 2	0.06	0.5	12	26	36	4.81	< 10	< 1	0.07	< 10	0.41	1275
B93-19	201 229	10	0.2	2.59	4	70	0.5	< 2	0.04	< 0.5	15	57	61	4.42	< 10	< 1	0.07	10	0.37	520
B93-20	217 229	15	< 0.2	1.92	2	90	1.0	< 2	0.09	0.5	42	490	99	7.74	10	< 1	0.19	10	0.83	1255

SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
B93-01	201 229	2	0.01	12	1560	40	< 2	2	17	0.02	< 10	< 10	35	< 10	138
B93-02	201 229	2	< 0.01	7	1090	26	< 2	2	15	0.01	< 10	< 10	30	< 10	96
B93-03	201 229	2	0.01	8	1120	28	< 2	2	11	0.02	< 10	< 10	33	< 10	112
B93-04	201 229	1	0.01	19	1900	24	< 2	2	12	0.06	< 10	< 10	34	< 10	164
B93-05	201 229	1	0.01	9	1220	12	< 2	3	7	0.08	< 10	< 10	52	< 10	98
B93-06	201 229	1	0.01	9	1020	14	< 2	2	5	0.04	< 10	< 10	66	< 10	70
B93-07	201 229	2	0.01	19	1500	14	< 2	4	24	0.13	< 10	< 10	73	< 10	138
B93-08	201 229	2	0.02	7	1030	14	< 2	2	4	0.11	< 10	< 10	47	< 10	50
B93-09	201 229	2	0.02	17	1280	14	2	3	6	0.10	< 10	< 10	41	< 10	64
B93-10	201 229	1	0.01	37	1540	14	< 2	4	7	0.11	< 10	< 10	64	< 10	68
B93-11	201 229	1	0.01	16	1180	22	< 2	2	4	0.06	< 10	< 10	44	< 10	72
B93-12	201 229	1	0.01	9	1510	22	< 2	1	4	0.06	< 10	< 10	33	< 10	44
B93-13	203 205	1	0.01	17	900	16	< 2	2	15	0.01	< 10	< 10	45	< 10	86
B93-14	201 229	1	< 0.01	11	870	18	< 2	< 1	13	0.01	< 10	< 10	37	< 10	96
B93-16	201 229	1	0.01	25	1240	22	< 2	2	14	0.09	< 10	< 10	61	< 10	84
B93-17	201 229	1	0.01	17	1640	20	< 2	3	13	0.04	< 10	< 10	47	< 10	110
B93-18	201 229	1	0.01	13	2390	18	< 2	2	7	0.05	< 10	< 10	48	< 10	90
B93-19	201 229	2	0.01	28	830	18	< 2	3	7	0.08	< 10	< 10	54	< 10	64
B93-20	217 229	1	0.04	143	1280	10	< 2	11	16	0.01	< 10	< 10	99	< 10	106

SAMPLE	PREP CODE	Au oz/T FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
RC BR-1	205 274	0.0005	< 0.2	0.12	8	70	< 0.5	< 2	0.07	< 0.5	< 1	119	14	0.43	< 10	< 1	0.02	< 10	0.01	20
RC BR-2	205 274	0.0015	3.2	0.05	36	10	< 0.5	< 2	0.02	< 0.5	1	133	287	1.40	< 10	< 1	0.01	< 10	< 0.01	10

SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
RC BR-1	205 274	9	0.02	3	250	2	< 2	< 1	20	< 0.01	< 10	10	6	< 10	6
RC BR-2	205 274	10	< 0.01	4	60	2	6	< 1	4	< 0.01	< 10	< 10	2	< 10	12



R. JORDAN & ASSOCIATES LTD.

LOCATION MAP | FIG. 1

BRITANNIA CLAIM | NELSON M.D

82F/6W LOT 3253 REC. NO. 6108

HIGHWAY

ACCESS ROADS

0 5 10 15 KMS.

SCALE 1:250,000

92/06
91/03 RPT.
93/10