

NTS 093L/10E TRIM 093L 057 LAT. 54 34' 42" N LONG. 126 44' 33 W

GROUSE MOUNTAIN JULIA VEIN PROJECT GEOCHEMICAL, GEOPHYSICAL REPORT

McQUARRIE LAKE, HOUSTON, B.C.

OMENICA MINING DIVISION

FOR

BRANCH TORCH RIVER RESOURCES LTD., **BANKERS HALL, WEST TOWER,** SUITE 1000, 888-3rd Street SW, CALGARY, AB T2P 5C5

BY

GEOLOGICA

ANDRIS KIKAUKA, P. GEO. 406 - 4901 EAST SOOKE RD., SOOKE, B.C. **V0S 1N0**

DEC 15, 2007

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1.0 SUMMARY

This report was prepared by Andris Kikauka, P.Geo. at the request of Torch River Resources Ltd to describe and evaluate the results of geological, geophysical and geochemical surveys carried out on mineral tenure ID # 553762. The claim (and 4 additional perimeter claims) are registered 100% to FMC 143363 (William E. Pfaffenberger).

This report summarizes geological and geochemical fieldwork carried out on the Grouse Mtn/Julia Vein project (mineral tenure ID # 553762) describing economically significant base and precious metal bearing mineral zones. The Grouse Mtn claims are located 20 km north-northwest of Houston, B.C (Fig. 1).

Access to the Grouse Mtn claims are via a 7.2 km 4WD forest access road (which crosses private land) from highway 16. Helicopter support is required for access to remote portions of the claim.

The claims are underlain by a complex of extrusive, intrusive, and sedimentary rocks. The intrusive rocks include Late Cretaceous Bulkley Intrusive Suite and Eocene Goosly monzodiorite to gabbro (Fig. 3 and 4). Intrusive rocks are spatially related to base and precious metal bearing mineralization located on the following occurrences: Grouse Mtn (Minfile 93L 251), Paola (Minfile 93L 296), and Christina (Minfile 93L 295).

Geological, geochemical and geophysical data compiled by the author has led to recommendations for work on the Grouse Mtn claims. A two phase program of geological mapping, geophysical and geochemical survey grids and follow-up core drilling is recommended. Proposed fieldwork within the Grouse Mtn claims, would be focused on exploring known and new mineral occurrences, as well as detailed ground investigation of geophysical and geochemical anomalies.

Phase 1 recommendations include geological mapping, geochemical rock chip sampling, EM and magnetometer geophysics with a proposed budget of \$75,000. The proposed fieldwork would involve approximately 7 kilometers of geophysical and geochemical grid lines across geochemical targets outlined. Contingent on results from phase 1, a second phase that includes 1,250 m of core drilling, geochemical sampling, and geological mapping is recommended. The estimated budget for phase 2 is \$400,000. The proposed budget total for phase 1 and 2 is C\$475,000.

2.0 INTRODUCTION

In June, 2007, Mr William E. Pfaffenberger requested the writer review all relevant information on the Grouse Mtn group of claims owned by Torch River Res Ltd. If appropriate, outline a program of surface exploration and diamond drilling to enhance development of Ag-Au-Cu-Pb-Zn bearing mineralization situated on the subject property. This report is based in part on previous work, carried out by various mining companies, the British Columbia Geological Survey, as well as the author's site visit that included geological mapping, geophysical surveys and geochemical sampling. This report is partly based on published fieldwork reports carried out by various private sector mining company personnel and public sector government personnel.

3.0 RELIANCE ON OTHER EXPERTS

This report is based in part on documents and technical reports prepared by various authors. The portions of this report that give information gathered from various authors are referenced. The documents and technical reports from other authors were used to compile the Grouse Mtn property history.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Grouse Mtn group consists of contiguous mineral tenures that are located 20 km NNW of Houston, BC. The Grouse Mtn group of mineral tenures is within the Omenica Mining Division and the registered owner of the mineral tenures is FMC number 143363, William E. Pfaffenberger (president, Torch River Res Ltd).

The Grouse Mtn claim group is comprised of the following www.mtonline.gov.bc.ca mineral tenures (Fig. 2):

CLAIM NAME*	HECTARES	TENURE NO.	EXPIRY DATE
Grouse Mtn 1	468.706	553762	August 14, 2009*
Grouse Mtn 2	187.428	553764	August 14, 2009*
Grouse Mtn 3	131.243	553767	August 14, 2009*
Grouse Mtn 4	318.562	557529	August 14, 2009*
Grouse Mtn 5	356.079	557530	August 14, 2009*

*Expiry date based on assessment work on mto tenure 553762 (work done June, 2007, Min of Energy and Mines, GSB event number 4182133).

The author is not aware of any planned or existing land use that would adversely affect development of mineral resources on the Grouse Mtn property. The mineral tenure area has not been subject to a legal survey.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE & PHYSIOGRAPHY

The property is located 2 km west of McQuarrie Lake about 20 kilometres northnorthwest of Houston, B.C (Fig. 1). Elevations on the claims range from 3,870-4,985 feet (1,180-1,520 m). The Grouse Mtn claim ID # 553762 can be accessed via a 7.2 km 4WD forest access road (which crosses private land) from highway 16. Alternate access to other portions of Grouse Mtn claim group is via helicopter.

There are moderate slopes (and rare steep slopes) throughout the Grouse Mtn claims and the road access follows a ridge where slopes are <20 percent grade, except where the Julia Vein adit is located next to the road where short (<50 m) sections exceed 20 percent grade

The town of Houston is approximately 45 minutes driving time to the Grouse Mtn claim (located 2 km west of McQuarrie Lake). The community of Houston has over 500 permanent residents that include a small percentage of people actively involved in mining and exploration. A variety of services are available in Houston, that include health, emergency, aircraft, mechanical, equipment, lumber, transportation, and retail stores. Additional services are available in Smithers, B.C. Westland Helicopters and Highland Helicopters operate charter flights from their base in Houston, BC.

6.0 PROPERTY HISTORY

The Grouse Mtn claim group has been intermittently explored for mineral resources over the past 50 years. Recorded exploration in the Grouse Mountain area began in 1914 with discovery of copper-zinc-silver mineralization near Coppermine Lake, where work on the Ruby Zone included 1,100 meters of crosscutting and 18,000 meters of core drilling (1980's). Historic resource estimates on the Ruby prospect include 360,000 tonnes @ 0.38% Cu, 4.23% Zn, 0.88 opt Ag. The Ruby Zone mineral resource is located about 1 kilometre south of mineral tenure ID # 553762.

A chronological summary of previous work on the Grouse Mtn claim group (carried out on mineral tenure ID # 553762) is summarized as follows: The first recorded work on the Grouse Mtn vein system (also referred to as Gwenda, Cornucopia, Chance, Julia Veins) was in 1938 and 1940 when 2.72 tonnes of ore produced 12,548 grams silver and 85.3 kgs copper (Source: MINFILE). In 1952, the owners of the claim performed hand trenching, stripping and excavation of a 15 metre long adit. Grades up to 312 opt Ag, 0.33 opt Au and 4.0% Cu were recorded. From 1964 to 1970, additional trenching and road development was carried out. In 1984, Adriatic Resources carried out 26 diamond drill holes, (total depth of 1,170 metres or 3,838 feet), geological mapping, geochemical soil surveys, and geophysical VLF-EM surveys (Cavey,1990). Significant assay results from 1984 core drilling on the Julia, Gwenda, and Christina Vein systems are summarized as follows (Cavey, 1990):

Hole	From	То	Interval	% Cu	Ag opt	Au opt	% Pb	% Zn	Zone
no.	(m)	(m)	(m)						name
84-2	16.69	16.76	0.07	0.24	7.03	0.006	1		Julia
84-2	21.91	21.98	0.07	0.13	6.64	0.009			Julia
84-2	28.94	29.45	0.51	2.30	55.72	0.135			Julia
84-4	23.38	23.59	0.21	1.04	48.46	0.045	0.02	0.81	Julia
84-4	42.61	42.88	0.27	0.62	44.94	0.059	6.87	8.57	Julia
84-5	15.91	16.21	0.30	0.41	23.03	0.014	0.47	0.60	Julia
84-26	5.24	6.00	0.76	0.32	13.83	0.023	0.08	0.67	Julia
84-26	6.80	7.47	0.67	0.34	12.24	0.011	0.01	0.08	Julia
84-26	10.00	10.58	0.58	0.55	30.10	0.031	3.26	3.65	Julia

The results indicate relatively higher grades of silver bearing mineralization are associated with relatively higher Cu-Pb-Zn values. Relatively higher gold values have a positive correlation with increased copper percentage. Due to a lack of 3-D data and understanding of the distribution of mineralization, it is not known whether these intervals represent true width. Work done by Adriatic Resources in 1984 indicates the presence of variable and relatively narrow drill intercept intervals (0.07-0.76 m) of elevated silver values and lesser gold associated with copper-zinc bearing minerals over a vertical distance of less than 30 metres and strike length of less than 200 metres on the Julia (aka Last Chance) quartz-sulphide fissure vein occurrence.

In 2005, Valley Resources Ltd carried out trenching and excavated a total of 8 trenches, 140 metres in length (Hanson, 2005). Trenches were mapped and grab samples were collected from mineralized intervals. Fourteen rock chip samples were collected and submitted to Acme Analytical, Vancouver, BC for base and precious metal geochemical analysis.

7.0 GEOLOGICAL SETTING

The property is underlain mainly by andesitic (calc-alkaline) tuffs/flows, volcanic breccia, minor siltstone, greywacke, and volcaniclastic rocks of Lower Jurassic Hazelton Group Telkwa Formation. In the Grouse Mountain area, the Hazelton Group has been intruded by Upper Cretaceous and/or Eocene stocks and north-northwest trending dykes that include feldspar porphyry, feldspar-biotite porphyry, and fine-grained mafic lithologies (Fig. 3 and 4). The feldspar porphyries which occur west of Grouse Mountain have similar mineralogy to the Eocene intrusions found at the Equity Silver Mine (located approximately 50 kilometres southeast of Grouse Mountain). The main lithologies that have been mapped within 1 kilometre radius from the Julia Vein are summarized as follows:

Eocene Goosly Intrusive Complex Monzodioritic to gabbroic dykes/sills

Late Cretaceous Bulkley Intrusive Complex calc-alkaline intermediate composition dykes/sills

Lower Jurassic Hazelton Group Telkwa Formation:

andesitic (calc-alkaline) tuffs/flows, volcanic breccia, minor siltstone, greywacke, and volcaniclastic rocks

Epigenetic quartz-carbonate-polymetallic sulphide minerals (pyrite-chalcopyritesphalerite-galena-tetrahedrite) occur as vein/shear zones trending N to NE and dipping moderately west.

8.0 DEPOSIT TYPES

Exploration on the Grouse Mtn group of claims is directed towards precious and base metal bearing zones. The main deposit type on the subject property consists of epigenetic, hydrothermal quartz-sulphide fissure vein/replacement systems.

9.0 MINERALIZATION

Within the Grouse Mtn group of claims, there are quartz-carbonate-sulphide vein and/or replacement deposit types:

Deposit	Au:Ag	Ore	Gangue	Textures	Alteration	Structure	Age
Туре	Ratio	Minerals	Minerals				
Au-Ag Base Metal Veins, Poly- metallic	>1:126 <1:1163	Pyrite, Chalco- pyrite, Sphalerite Tetra- hedrite, Galena,	K-feldspar, chlorite, calcite, epidote, kaolinite, sericite	Quartz- calcite inter- growths, comb structure, Colloform, vuggy,	Pyrite, chlorite, silica, sericite, carbon- ate	Vein stockwork, breccia veins, dyke margin dissemin- ated	Early Creta- ceous, Eocene
{				cockade			

10.0 EXPLORATION

Grouse Mountain/Julia Vein June, 2007 fieldwork summary:

A 400 meter long by 250 meter wide area was surveyed by east-west oriented arid lines spaced at 50 meters apart. The 400 meter long north-south oriented baseline was thinned, brushed and marked with orange flagging. The 2007 grid focused on the main area of previous mining of the Julia Vein (1938 and 1940 2.72 tonnes of ore produced 12,548 grams silver and 85.3 kgs copper (Source: MINFILE), trenching and drilling (carried out by Adriatic Resources, 1984). The 2007 grid consists of 8 east-west lines with a total of 77 soil samples taken at 25 meter spacing along 1.725 kilometers of grid lines. The soil samples were taken from a depth of 20-35 centimeters using a grubhoe and placed into marked kraft envelopes. The grid lines were also surveyed with a GEM -GSM 19 proton magnetometer, with mobile readings taken at 12.5 meter spacing along 2 kilometers of east-west oriented grid lines (L 4750 N to L 5100 N). A total of 3 rock chip samples were taken from widths ranging from 0.2 to 0.3 m. Approximately 2 kilograms of rock chips were collected from previously trenched exposures of the Julia guartz-sulphide vein system. The rock chips were placed in marked poly ore bags and all samples were shipped to Pioneer Labs, Richmond, BC for 30 element ICP geochemical analysis, Au geochemical analysis, and whole rock geochemical analysis. A total of 156 magnetometer readings were taken at 12.5 m interval along E-W oriented grid tie-lines covering a total distance of 1.8 kilometres. The magnetometer survey was carried out to attempt to detect the presence of intrusive rock high in magnetite content (mag high) and to locate altered and silicified rock (mag low). Results from the mag survey shows a variation of 422 nT (ranging from 56390 to 56812), which occurs at the west end of L4850 N (stn 4887 E to 4912 E), suggesting there may be intrusive rocks with high magnetite content in this area (Fig. 5). There is a very weak 20-30 nT response over the Julia Vein area suggesting that alteration has destroyed magnetic minerals adjacent to the Julia Vein. Two other moderate strength (100-200 nT) positive magnetic anomalies occur (L 4800 N stn 4937 E. and L 5000 N, stn 4912 E), which may also be explained by the presence of magnetic minerals and related intrusive rocks. Areas of known mineralization in the area of the Julia Vein form a poorly defined, weak strength (20-30 nT) magnetic low (Fig. 5).

11.0 DRILLING

In 1984, Adriatic Resources carried out 26 diamond drill holes, (total depth of 1,170 metres or 3,838 feet), geological mapping, geochemical soil surveys, and geophysical VLF-EM surveys (Cavey, 1990). Significant assay results from 1984 core drilling on the Julia, Gwenda, and Christina Vein systems are summarized as follows (Cavey, 1990):

Hole	From	To	Interval	% Cu	Ag opt	Au opt	% Pb	% Zn	Zone
no.	(m)	(m)	(m)						name
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84-4	42.61	42.88	0.27	0.62	44.94	0.059	6.87	8.57	Julia
84-5	15.91	16.21	0.30	0.41	23.03	0.014	0.47	0.60	Julia
84-26	5.24	6.00	0.76	0.32	13.83	0.023	0.08	0.67	Julia
84-26	6.80	7.47	0.67	0.34	12.24	0.011	0.01	0.08	Julia
84-26	10.00	10.58	0.58	0.55	30.10	0.031	3.26	3.65	Julia

The results indicate relatively higher grades of silver bearing mineralization are associated with polymetallic base metal values. Gold values obtained from 1984 drill core samples show a correlation with increased copper percentage.

12.0 SAMPLING METHOD AND APPROACH

Torch River Res 2007 grid consists of 8 east-west lines that were surveyed with Garmin 60Cx GPS and flagged at 25 m intervals. A total of 77 soil samples taken at 25 meter spacing along 1.725 kilometers of grid lines (Fig. 4). The soil samples were taken from a depth of 20-35 centimeters using a grubhoe and placed into marked kraft envelopes. The grid lines were also walked with a GEM –GSM 19 proton magnetometer. A total of 156 mobile readings were taken at 12.5 meter spacing along 2 kilometers of east-west oriented grid lines (L 4750 N to L 5100 N). The survey was carried out during 0900 to 1300 hours on June 27, 2007 which was checked for magnetic activity by checking NRC magnetic readout for their base stations throughout Canada for the day of the Grouse Mtn magnetic survey. The total field magnetic data from the Grouse Mountain was manually corrected by looping (returning to a common point on the baseline and doing a repeat reading and adjusting the readings manually to compensate for minor diurnal variation.

A total of 3 rock chip samples were taken from widths ranging from 0.2 to 0.3 m. Approximately 2 kilograms of rock chips were collected from previously trenched exposures of the Julia quartz-sulphide vein system. The rock chips were placed in marked poly ore bags and all samples were shipped to Pioneer Labs, Richmond, BC for 30 element ICP geochemical analysis, Au geochemical analysis, and whole rock geochemical analysis.

13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

Sampling and assay data from 2007 was carried out using relevant and reliable methods. The samples were prepared using standard analytical procedures by Pioneer Labs, Richmond, B.C. This includes crushing the rock chip samples, and passing through -10 mesh, and splitting 250 grams and pulverizing and passing -150 mesh. Multi-element ICP analysis was done on all samples which involves taking 0.5 grams sample and digesting with 3 ml of aqua regia, diluted with 10 ml water. Gold analysis was done separately on all samples taking 10 grams and digesting with aqua regia, MIBK extracted, and finished by AA or graphite furnace AA.

14.0 DATA VERIFICATION

Pioneer Labs performs internal quality control by performing routine check analysis on random samples to verify data. The results of geochemical surveys performed are intended to be an exploration guide and do not constitute mineral resource or reserve studies involving geo-statistical evaluation.

15.0 ADJACENT PROPERTIES

The well mineralized Babine Eocene age and Bulkley Cretaceous age belt of intrusive rocks extend for 50 km north and south of Houston, BC. Exploration and development of mineral deposits in the Houston area include Lakeview, Fireweed, CR and Poplar occurrences that contain various base and precious metal bearing minerals.

16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The Grouse Mountain group of claims has had limited past production (in 1938 and 1940 when 2.72 tonnes of ore produced 12,548 grams silver and 85.3 kgs copper Source: MINFILE). This work on the Julia Vein is poorly documented, and there has been no metallurgical testing of mineralization.

17.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

The Grouse Mountain group of claims does not have any established mineral resource or mineral reserve estimate.

18.0 OTHER RELEVANT DATA AND INFORMATION

The Grouse Mtn group of claims has an abandon cabin (circa 1938-40) situated about 150 m north of the Julia Vein adit.

19.0 INTERPRETATIONS AND CONCLUSIONS

A compilation of geological, geochemical and geophysical data indicates there are several areas of interest for follow-up mineral exploration fieldwork on the subject property. The area west of McQuarrie Lake has numerous guartzsulphide vein occurrences. At the Julia Vein, the better mineralized zones are developed along brittle-ductile fault zones that generate guartz-carbonate veins related to fractures (conjugate shear fractures) that generally occur within a shear zone and/or fault structure. Results from 2007 soil sampling program show a relatively strong silver anomaly (>5 ppm Ag) immediately adjacent to the Julia Vein near the adit and two trenches located 50-100 m SSW of and 50-100 m N of the adit (Fig. 4). Soil in these areas of >5 ppm Ag contain above average Cu-Au-Zn values. Relatively moderate-strength and more wide-spread silver in soil anomalies (1-5 ppm Ag) are located in the NE portion of the grid area. Total field magnetometer positive anomalies did not correlate with silver in soil anomalies (Fig. 5). The strongest magnetometer positive anomalies were located in the southwest portion of the grid area which is close to a large NW trending Eocene Goosly dyke that appears as a regional scale total field moderate strength magnetic high (GSC Map 7760G, Airborne Magnetic Survey, 1968). The silver in soil anomalies correlated with a weak and poorly defined total field magnetic low located in the centre and east portions of the grid area.

20.0 RECOMMENDATIONS

Intrusion-related Ag-Au-Cu-Zn bearing quartz-sulphide fissure veins occur in the area of the Grouse Mtn 1-5 claims. Geological, geochemical and geophysical fieldwork focused on outlining the presence of base and precious metal bearing quartz-sulphide veins on the Grouse Mtn claim group is recommended.

In order to advance exploration on the Grouse Mtn property, a 2 phase fieldwork program focused on exploring known mineral occurrences, geophysical and geochemical anomalies. As well as follow up work on known mineral occurrences, a program of mapping and sampling is recommended. The economic viability of the mineralization situated on the Grouse Mtn claims should be evaluated. Based on the potential for discovery of base and precious metal bearing mineralization, a 2 phase program of core drilling, geological mapping, DEEP-EM (Pulse-EM or UTEM) and magnetometer geophysics, and geochemical sampling is recommended.

PHASE 1

Detailed geological mapping and geochemical soil and rock chip sampling is recommended. Magnetometer geophysics covering about 6 km of grid lines is also recommended. The approximate budget for this work would be C\$75,000.

PHASE 2

Contingent on the results of phase 1, diamond drilling is recommended. The total diamond drilling in phase 2 would amount to 2,000 meters (6,096 feet). Additional geological mapping and sampling is also recommended. The proposed budget for phase 2 is approximately C\$400,000.

PROPOSED BUDGET

PHASE 1

Item	Description	Amount (Cdn\$)
Personnel: Geologist Field Assistant	25 days X \$300/day 25 days X \$250/day	7,500 6,250
Camp costs Satellite phone Equipment (generators, saws, etc.)	25 days X \$100/day 1 month X \$1,000/month	2,500 1,000 500
Expenses Food Fuel Travel	175 man-days X \$20/man/day	3,500 1,750 2,000
Transportation Survey costs	Helicopter charters 7 km grid lines	14,500 25,000
Analytical soil and rock samples	500 samples X \$25/sample	6,200
Communication Telephone and Fax		800
Report and drafting		2,500
Filing Fees		1,000
Total		75,000

TOTAL PHASE 1 = \$75,000

Contingent on the results of phase 1, a second phase of fieldwork including 2,000 meters of core drilling is recommended and outlined as follows:

PROPOSED BUDGET- PHASE 2

Item	Description	Amount (Cdn\$)
Personnel: Geologist Field Assistant Cook	50 days X \$300/day 50 days X \$250/day 50 days X \$175/day	15,000 12,500 8,750
Camp costs Satellite phone Equipment (generators, saws)	50 days X \$100/day 2 months X \$1,000/month	5,000 2,000 1,550
Drilling	2,000 meters (6,562 ft)	270,000
Expenses Food Fuel Travel	350 man-days X \$20/man/day	7,000 4,200 4,000
Transportation		49,000
Analytical Core and rock samples	500 samples X \$25/sample	12,500
Communication Telephone and Fax		1,600
Report and drafting		4,000
Filing Fees		2,900
Total		\$ 400,000

TOTAL PHASE 1 & 2 = \$475,000

21.0 REFERENCES

Cavey, George, 1990, Report on the AIC International Res Corp Chance Property

EMPR AR 1925-pg 141, 1926-pg 135, 1928-pg 169, 1929-pg 169, 1937-C11 EMPR GEM 1970-pg 158, 1972-pg 397-417 EMPR Assessment report 10,182, 12,374, 12,364, 13,364, 13,720, 14,256, 20,665, 21,880 EMPR Fieldwork 1988, pg 195-208

GSC Map 7760G, 1968, Airborne Magnetic Survey, Smithers 93L, 1"=4 miles

Hanson, Daryl J., 2005, Geological Report Grouse Mtn (Julia) Property, Omenica Mining Division, for Valley Resources Ltd.

22.0 DATE AND SIGNATURE PAGE

I, Andris Kikauka, of 4901 East Sooke Rd., Sooke B.C. V0S 1NO am a self employed professional geoscientist. I hereby certify that;

1. I am a graduate of Brock University, St. Catharines, Ont., with an Honours Bachelor of Science Degree in Geological Sciences, 1980.

2. I am a Fellow in good standing with the Geological Association of Canada.

3. I am registered in the Province of British Columbia as a Professional Geoscientist.

4. I have practiced my profession for twenty years in precious and base metal exploration in the Cordillera of Western Canada, U.S.A., South America, and for three years in uranium exploration in the Canadian Shield.

5. I am responsible for the technical report on behalf of Torch River Resources Ltd.

6. The information, opinions, and recommendations in all sections of this technical report are based on fieldwork carried out on the subject properties as well as historic data from various referenced sources.

7. I am not aware of any material fact or material change with respect to the subject matter in this technical report that is not reflected in this report or omissions that render the report to be misleading.

8. I am employed as an independent consultant. This report is intended to satisfy the requirements of the Mineral Act with respect to filing assessment work.

Andris Kikauka, P. Geo.,

Dated Dec 15, 2007 at Sooke, B.C.



ITEMIZED COST STATEMENT-

GROUSE MTN/JULIA VEIN PROJECT- GEOCHEMICAL ANALYSIS AND GEOPHYSICAL MAGNETOMETER SURVEY FIELDWORK DURING JUNE 24-28, 2007 ON MINERAL TENURE 553762 TRIM 093L 057, OMENICA MINING DIVISION

FIELD CREW:

Andris Kikauka (Geologist) 5 Days	\$ 1,855.00
FIELD COST:	
Mob and Demob \$	210.00
Equipment and Supplies	90.00
Magnetometer Survey (139 readings, 1.8 km line grid)	450.00
Geochemical analysis 77 soil, 3 rock ICP 30 element, Au geochem	1,680.00
Helicopter charter (1.2 hours)	1,382.00
Food & Accommodation	436.62
Report	600.00

Total amount= \$ 6,703.62





Exploration Assistant





PIONEER LABORATORIES INC.

APPENDIX A TORCH RIVER RESOURCES LTD. Project: Grouse/Julia Sample Type: Soils/Rocks

#103-2691 VISCOUNT WAY RICHMOND, BC CANADA V6V 2R5

TELEPHONE (604)231-8165

GEOCHEMICAL ANALYSIS CERTIFICATE

Multi-element ICP Analysis - .500 gram sample is digested with 3 ml of aqua regia, diluted to 10 ml with water. This leach is partial for Mn, Fe, Ca, P, La, Cr, Mg, Ba, Ti, B, W and limited for Na, K and Al. Detection Limit for Au is 3 ppm. *Au Analysis- 10 gram sample is digested with aqua regia, MIBK extracted, and is finished by AA or graphite furnace AA. Analyst <u>Report No. 2070683</u> Date: July 18, 2007

ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Со	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	v	Ca	Р	La	Cr	Mg	Ba	Ti	В	Al	Na	ĸ	W	Au*
SAMPLE	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
L4750N 4875E	2	33	32	268	1.6	15	11	2556	4.70	31	8	ND	2	14	1.2	10	3	76	.15	.180	7	22	.33	185	.02	20	2.20	.01	.05	2	1
L4750N 4900E	1	19	18	183	.9	19	8	426	4.72	20	9	ND	2	11	.6	3	3	81	.14	.085	6	24	.52	124	.02	20	2.40	.01	.05	2	4
L4750N 4925E	1	26	20	176	.4	16	9	470	5.12	34	8	ND	2	8	.5	3	3	73	.05	.080	5	24	.61	97	.01	20	2.45	.01	.03	2	1
L4750N 4950E	2	22	22	212	.5	24	11	1119	3.63	49	8	ND	2	18	.8	4	3	58	.35	.061	7	29	.65	147	.01	20	1.95	.01	.04	2	1
L4750N 4975E	2	63	24	198	1.8	23	9	1222	3.38	38	8	ND	2	46	2.2	5	3	50	1.34	.146	21	28	.57	234	.01	20	2.35	.01	.06	2	1
L4750N 5000E	2	16	22	168	.3	11	12	2187	3.38	19	8	ND	2	19	1.8	3	3	69	.33	.057	6	20	.33	192	.01	20	1.62	.01	.06	2	3
L4750N 5025E	1	16	24	144	.3	15	10	577	3.31	24	8	ND	2	17	.5	3	3	56	.28	.025	6	21	.55	149	.01	20	1.84	.01	.04	2	2
L4750N 5050E	1	9	17	50	.3	6	3	153	2.94	13	8	ND	2	8	.5	3	3	69	.07	.051	5	14	.15	73	.01	20	1.28	.01	.02	2	4
L4750N 5075E	1	14	20	143	.3	12	6	297	3.55	12	8	ND	2	12	.5	3	3	64	.24	.037	4	17	.39	115	.01	20	1.66	.01	.03	2	1
L4750N 5100E	2	32	33	237	.3	15	16	5941	4.41	17	8	ND	2	18	1.2	9	3	70	.44	.107	9	24	.45	332	.01	20	2.52	.01	.08	2	1
L4800N 4875E	2	19	19	119	.3	13	7	377	3.66	16	8	ND	2	20	.6	3	3	70	.31	.038	8	19	.45	178	.01	20	1.99	.01	.03	2	1
L4800N 4900E	1	8	20	24	.4	6	2	161	1.55	6	8	ND	2	17	.5	3	3	61	.18	.036	3	20	.23	60	.06	20	1.21	.01	.04	2	1
L4800N 4925E	1	10	15	74	.3	7	4	777	2.58	· 11	8	ND	2	10	.5	3	3	53	.15	.043	4	12	.26	126	.01	20	1.13	.01	.04	2	1
L4800N 4950E	1	40	23	272	.7	17	12	3940	3.92	18	8	ND	2	35	1.8	16	3	61	.75	.110	11	24	.52	361	.01	20	2.46	.01	.07	2	1
L4800N 4975E	1	169	31	312	32.4	22	16	1573	4.37	47	8	ND	2	15	1.5	29	3	64	.23	.062	9	25	.73	162	.02	20	2.22	.01	.05	2	145
L4800N 5000E	1	12	15	81	.5	8	5	255	3.74	13	8	ND	2	13	.5	3	3	75	.14	.051	4	15	.29	93	.02	20	1.34	.01	.04	2	1
L4800N 5025E	1	9	11	77	.4	9	5	207	2.87	6	8	ND	2	14	.5	3	3	55	.12	.041	4	16	.31	113	.01	20	1.83	.01	.03	2	2
L4800N 5050E	1	48	31	230	1.1	23	13	1294	4.22	25	10	ND	2	19	1.1	3	3	61	.37	.066	11	25	.72	237	.01	20	2.42	.01	.05	2	1
L4800N 5075E	1	24	14	96	.3	11	31	24575	4.85	21	8	ND	2	23	.5	11	3	153	.28	.255	5	35	.33	231	.05	20	1.88	.01	.05	2	3
L4800N 5100E	1	44	10	40	.4	12	7	722	3.26	16	8	ND	2	24	.5	3	3	103	.22	. 143	3	38	.37	77	.03	20	1.94	.01	.03	2	1
L4850N 4875E	1	25	19	158	.3	15	8	578	4.06	36	8	ND	2	10	.5	3	3	67	.10	.051	6	20	.53	103	.01	20	2.14	.01	.04	2	1
L4850N 4900E	1	45	23	252	.7	20	10	2397	3.93	25	8	ND	2	55	1.6	7	3	64	.91	.086	11	27	.53	358	.01	20	2.87	.01	.06	2	1
L4850N 4925E	1	28	19	150	.8	13	10	1352	3.36	29	8	ND	2	26	.9	7	3	66	.46	.076	12	21	.40	215	.01	20	2.08	.01	.05	2	1
L4850N 4950E	2	16	14	126	.3	16	9	462	3.90	69	9	ND	2	12	.5	4	3	67	.14	.031	5	22	.65	95	.01	20	1.88	.01	.05	2	1
L4850N 4975E	1	21	18	121	.3	15	8	528	3.65	45	8	ND	2	9	.5	3	3	73	.09	.071	5	21	.59	98	.01	20	1.91	.01	.05	2	16
L4850N 5000E	1	506	22	247	45.6	16	11	896	3.65	70	8	ND	2	13	2.8	105	3	60	.17	.085	5	20	.55	119	.01	20	2.06	.01	.04	2	54
L4850N 5025E	1	30	19	179	.4	22	13	990	3.54	17	8	ND	2	9	.5	3	3	55	.12	.061	6	23	.63	117	.02	20	2.33	.01	.03	2	8
L4850N 5050E	1	40	27	211	1.2	19	10	579	5.40	118	8	ND	2	8	.6	8	3	73	.05	.069	5	27	.66	111	.01	20	2.65	.01	.04	2	7
L4850N 5075E	1	24	22	82	2.2	9	5	315	4.07	41	8	ND	2	7	.5	4	3	85	.05	.058	4	18	.22	105	.01	20	1.77	.01	.03	2	5
L4850N 5100E	1	20	19	180	2.2	15	10	692	3.22	18	8	ND	2	13	.5	6	3	58	.34	.044	6	20	.58	189	.01	20	1.80	.01	.04	2	3

ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	۷	Ca	Ρ	La	Cr	Mg	Ba	Ti	B	Al	Na	κ	W	Au
SAMPLE	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
L4900N 4875E	2	22	22	129	.8	11	8	485	6.28	397	8	ND	2	8	.5	6	3	87	.11	.074	3	18	.58	118	.03	20	2.25	.01	.03	2	3
L4900N 4900E	1	19	15	111	.3	12	7	353	4.15	23	8	ND	2	8	.5	3	3	94	. 08	.048	4	20	.38	70	.02	20	2.00	.01	.04	2	1
L4900N 4925E	1	13	16	107	.5	9	6	406	4.29	18	8	ND	2	8	.5	3	3	78	.11	.056	3	17	.28	72	.02	20	2.10	.01	.03	2	1
L4900N 4950E	2	34	30	231	.3	14	10	4088	3.41	13	8	ND	2	21	1.4	9	3	58	.44	.083	9	22	.38	209	.01	20	2.07	.01	.05	2	1
L4900N 4975E	1	21	17	119	.3	11	7	702	3.81	17	8	ND	2	8	.5	3	3	81	.08	.087	4	19	.39	86	.01	20	1.85	.01	.05	2	1
L4900N 5000E	1	20	22	131	.4	13	7	558	4.24	26	8	ND	2	11	.8	3	3	81	.12	.069	5	20	.36	142	.01	20	1.71	.01	.04	2	13
L4900N 5025E	1	20	19	114	.5	10	5	409	3.56	16	8	ND	2	16	.5	3	3	74	.27	.055	5	17	.26	188	.01	20	1.45	.01	.04	2	8
L4900N 5050E	3	82	36	385	2.5	24	13	3211	5.09	31	8	ND	2	35	2.9	7	3	76	1.10	.254	16	30	.56	317	.01	20	3.40	.01	.07	2	9
L4900N 5075E	1	18	20	123	.4	13	7	336	4.70	26	8	ND	2	11	.5	3	3	92	.11	.045	5	23	.43	99	.01	20	1.90	.01	.04	2	7
L4900N 5100E	1	10	19	47	.5	5	3	166	1.73	4	8	ND	2	12	.5	3	3	45	.11	.028	5	12	.21	82	.01	20	1.22	.01	.04	2	6
L4950N 4875E	1	13	12	109	.3	11	6	326	3.91	15	8	ND	2	7	.5	3	3	92	.06	.061	5	19	.42	71	.02	20	1.58	.01	.04	2	7
L4950N 4900E	1	8	18	52	.5	8	4	220	3.90	13	8	ND	2	6	.5	3	3	103	.04	.099	5	17	.22	52	.03	20	1.52	.01	.03	2	5
L4950N 4925E	1	5	11	16	.3	3	2	133	1.26	2	8	ND	2	9	.5	3	3	36	.15	.046	2	5	.08	22	.11	20	.52	.01	.03	2	4
L4950N 4950E	2	17	18	180	.3	15	10	759	4.59	17	8	ND	2	8	.5	3	3	92	.11	.064	5	24	.49	96	.02	20	1.96	.01	.04	2	1
L4950N 4975E	1	17	16	112	.7	13	7	768	4.73	23	8	ND	2	12	.5	3	3	93	.20	.091	5	22	.43	110	.02	20	1.70	.01	.04	2	1
L4950N 5000E	1	15	16	121	.4	12	6	381	4.87	18	8	ND	2	12	.5	3	3	102	.13	.067	5	23	.34	104	.03	20	1.72	.01	.03	2	1
L4950N 5025E	2	393	37	1267	6.9	28	12	2423	3.92	81	8	ND	2	45	10.6	25	4	55	1.23	.149	23	35	.64	208	.01	20	2.47	.01	.07	2	3
L4950N 5050E	2	113	37	566	5.5	22	12	2927	3.83	51	8	ND	2	49	4.5	13	3	51	1.76	.260	26	26	.42	280	.01	20	3.30	.01	.05	2	4
L4950N 5075E	3	148	24	451	3.7	24	11	3374	4.19	58	8	ND	3	33	4.7	21	3	60	.81	.196	25	27	.35	244	.02	20	4.02	.01	.04	2	7
L4950N 5100E	1	26	30	166	2.3	15	13	601	3.98	26	8	ND	2	24	.8	5	3	73	.52	.059	8	22	.55	139	.01	20	2.49	.01	.05	2	3
L5000N 4875E	1	19	38	114	.4	8	8	966	4.59	209	8	ND	2	9	.5	3	3	129	.12	.102	4	17	.29	102	.02	20	1.53	.01	.04	2	15
L5000N 4900E	3	20	23	261	.4	11	9	876	5.06	40	8	ND	2	16	1.0	3	3	110	.34	.057	5	23	.33	141	.01	20	1.98	.01	.03	2	1
L5000N 4925E	1	12	15	99	.3	8	4	296	3.27	15	8	ND	2	11	.5	3	3	87	.14	.061	5	18	.25	94	.02	20	1.29	.01	.03	2	1
L5000N 4950E	1	19	12	99	.3	13	7	290	5.33	17	8	ND	2	11	.5	3	3	179	.11	.049	5	22	.45	64	.06	20	1.97	.01	.02	2	1
L5000N 4975E	1	13	16	106	.3	10	5	304	4.40	24	8	ND	2	7	.5	3	3	100	.05	.068	5	19	.35	64	.02	20	1.88	.01	.03	2	3
L5000N 5000E	1	24	28	183	.9	14	8	623	4.06	33	8	ND	2	10	.6	3	3	92	.09	.072	5	23	.45	99	.02	20	1.86	.01	.03	2	1
L5000N 5025E	2	234	51	715	4.4	24	14	355 3	3.99	75	8	ND	2	44	6.7	19	3	62	1.25	.204	21	31	.62	205	.01	20	2.44	.02	.05	2	12
L5000N 5050E	2	175	62	462	1.2	23	33	7143	5.48	97	8	ND	2	37	5.8	12	3	84	1.14	.161	22	21	.74	180	.01	20	2.98	.01	.04	2	4
L5000N 5075E	2	361	29	800	3.7	23	15	3119	3.47	104	8	ND	2	57	6.3	19	6	45	2.33	.215	29	24	.40	181	.01	20	2.98	.01	.04	2	5
L5000N 5100E	2	21	65	147	1.1	7	7	393	4.42	80	8	ND	2	8	.5	5	3	101	.09	.062	5	10	.17	85	.01	20	1.75	.01	.04	2	3
L5050N 4875E	2	15	14	300	.3	13	6	354	4.27	16	8	ND	2	9	1.1	3	3	91	.12	.040	5	19	.43	79	.02	20	1.71	.01	.03	2	2
L5050N 4900E	1	26	124	493	.5	14	8	551	4.53	24	8	ND	2	7	1.3	4	3	77	.09	.070	5	21	.45	72	.01	20	1.90	.01	.04	2	1
L5050N 4925E	12	95	441	2316	2.5	28	21	5679	4.93	95	11	ND	2	14	16.4	11	4	78	.97	.089	17	26	.63	123	.01	20	2.31	.01	.04	2	4
L5050N 4950E	1	122	49	3618	1.1	26	13	1604	3.57	44	8	ND	2	26	20.3	7	3	57	.85	.066	16	27	.65	92	.02	20	1.69	.01	.05	2	2
L5050N 4975E	2	35	103	505	.9	21	19	1252	4.15	65	8	ND	2	9	1.4	5	4	61	.14	.068	6	26	.67	79	.01	20	2.41	.01	.04	2	2

ELEMENT	Мо	Cu	Pb	Zn	Ag	Ni	Со	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	Р	La	Cr	Mg	Ba	Ti	В	Al	Na	κ	W	Au
SAMPLE	ppm	ppm	ppm	ppm	ppm	ppn	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
L5050N 5000E	2	61	45	282	.3	15	19	1773	4.82	127	8	ND	2	11	1.1	6	3	90	.18	.082	6	20	.56	94	.01	20	1.89	.01	.06	2	4
L5050N 5025E	2	54	44	339	1.1	15	10	595	4.82	72	8	ND	2	27	1.3	5	3	94	.76	.043	6	22	.49	121	.01	20	1.99	.01	.03	2	3
L5050N 5050E	2	41	25	145	.8	9	16	915	6.97	128	8	ND	2	17	.5	4	3	143	.82	.057	4	17	.57	130	.03	20	2.52	.01	.03	2	30
L5050N 5075E	5	26	53	230	.3	10	10	669	7.47	267	8	ND	2	7	.5	7	3	172	.09	.092	4	17	.30	67	.01	20	1.95	.01	.04	2	2
L5050N 5100E	1	18	13	83	.4	7	5	231	3.65	40	8	ND	2	7	.5	3	3	136	.07	.056	4	11	.21	60	.03	20	1.20	.01	.02	2	1
L5100N 4900E	2	30	30	374	.4	18	9	539	4.37	18	8	ND	2	25	2.1	4	3	82	.80	.056	4	28	.59	133	.01	20	2.23	.01	.04	2	8
L5100N 4925E	1	19	61	128	.3	10	4	337	2.27	6	8	ND	2	15	1.1	3	3	94	.28	.046	5	54	.23	73	.05	20	1.07	.01	.04	2	1
L5100N 4950E	2	413	83	2974	3.2	30	14	3971	4.49	38	10	ND	3	45	25.6	9	4	60	1.53	. 105	28	36	.54	183	.03	20	2.93	.02	.06	2	3
L5100N 4975E	1	10	45	160	.3	7	4	257	2.90	6	8	ND	2	11	1.0	3	3	79	.09	.028	6	16	.26	119	.02	20	1.25	.01	.03	2	1
L5100N 5000E	1	83	27	494	2.1	18	7	1129	3.30	19	8	ND	2	34	5.8	3	3	58	1.13	.097	14	32	.48	134	.01	20	2.33	.01	.03	2	3
L5100N 5025E	1	23	13	33	.3	2	3	336	1.95	66	8	ND	2	9	.5	3	3	70	.24	.087	3	6	. 19	76	.05	20	1.23	.01	.05	2	2
L5100N 5050E	1	31	32	129	1.6	5	3	372	1.39	17	8	ND	2	37	1.5	3	3	35	1.62	.053	4	11	.11	89	.01	20	1.14	.01	.03	2	2
GM-07-AR-01 (Rock)	3	207	5	276	29.0	34	21	5383	6.63	50	10	ND	2	214	3.7	64	4	44	9.60	.051	3	57	2.91	38	.01	20	1.30	.01	.11	2	110
GM-07-AR-02 (Rock)	4	52	3	166	4.8	34	24	4853	8.60	51	8	ND	2	210	2.0	21	3	57	9.61	.024	2	86	2.62	19	.01	20	1.54	.01	.08	2	38
GM-07-AR-03 (Rock)	1	535	7	268	93.1	31	20	4399	6.16	40	8	ND	2	223	5.0	308	3	34	9.87	.010	2	63	3.09	12	.01	20	.48	.01	.04	2	80

For Ag greater than 35 ppm, assay digestion is required for correct data.

PIONEER LABORA	TORIES	INC.		#1	.03-26	91 VIS	SCOUN	T WAY	r RI	CHMO	ND, BC	C	ANAD	A 1	16V 2	R5			TEL	EPHONE	(604)	231-8165
			G	ЕО	СНЕ	міс	CAL	v	но	LE	RO	СК	7	AN A	A L Y	SI	S					
TORCH RIVER RE Project: Grouse Mtn/ Sample Type: Rocks	SOURCES	S LTD.	0.2	0 gram	sample	is fuse	d with	LiBO2,	disolv	red in	100 mls	5% HNO	13 and	is fir	nished	by ICF	?/ES.		Analy: Report Date:	st <u>RS</u> t No. 2070 August 02	20769 2, 2007	
ELEMENT	SiO2	AI2O3	Fe2O3	MgO	CaO	Na2O	K20	TiO2	P2O5	MnO	Cr2O3	Ва	Ni	Sr	Zr	Y	Nb	Sc	LOI	TOT/C	TOT/S	SUM
SAMPLES	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
GM-07-AR-01	43.70	8.31	9.38	4.78	13.03	0.07	1.95	0.41	.13	.64	.021	267	38	202	2 19	13	5	5 18	17.4	4.84	.32	99.88
GM-07-AR-02	47.36	6.55	11.6	4.31	12.99	0.03	1.22	0.31	.07	.58	.025	5 142	2 39	199	9 17	' 11	5	i 14	14.8	4.33	1.33	99.89
GM-07-AR-03	52.01	2.15	8.38	4.88	13.14	0.04	0.44	0.10	.03	.51	.016	5 57	32	208	6	; 7	5	56	18.1	5.35	.26	99.83

GSC - Geomagnetism: Plotting Service

APPENDIX B



Geomagnetism Summary Plot from Canadian Magnetic Observatories

[Close this window][Print this page][Info on plot]

http://geomag.nrcan.gc.ca/common_apps/stackplot_result_e.php

12/21/2007

APPENDIX C

/Gem Sys	stems GSM-1	9Т 6112151	v7. 0	7 XI 2006	5 M t-e2.v7
/ID 1 f: /	ile 01surve	y.m 15 II	00	June 2	27,2007
/X Y nT	sa cor-nT	time			
04750N	05100.00E	56487.53	99 (000000.00	000442.0
04750N	05087.50E	56502.29	99	000000.00	000510.0
04750N	05075.00E	56522.08	99 (000000.00	000530.0
04750N	05062.50E	56545.87	99	000000.00	000602.0
04750N	05050.00E	56526.53	99	000000.00	000710.0
04750N	05037.50E	56516.11	99	000000.00	000734.0
04750N	05025.00E	56545.81	99	000000.00	000758.0
04750N	05012.50E	56547.68	99	000000.00	000818.0
04750N	05000.00E	56543.47	99 (000000.00	000842.0
04750N	04987.50E	56547.30	99	000000.00	000902.0
04750N	04975.00E	56537.10	99 1	000000.00	000926.0
04750N	04962.50E	56535.65	99	000000.00	000950.0
04750N	04950.00E	56507.82	99 0	000000.00	001014.0
04750N	04937.50E	56465.67	99	000000.00	001034.0
04750N	04925.00E	56482.29	99 (000000.00	001110.0
04750N	04912.50E	56526.61	99	000000.00	001134.0
04750N	04900.00E	56517.36	99 (000000.00	001158.0
04750N	04887.50E	56496.86	99	000000.00	001242.0
04750N	04875.00E	56511.30	99 (000000.00	001318.0
04750N	04862.50E	56495.02	99	000000.00	001402.0
04750N	04850.00E	56495.28	99	000000.00	001426.0
04800N	04850.00E	56501.51	99 (000000.00	001714.0
04800N	04862.50E	56512.19	99 (000000.00	001738.0
04800N	04875.00E	56524.21	99	000000.00	001802.0
04800N	04887.50E	56542.34	99 (000000.00	001830.0
04800N	04900.00E	56531.99	99	000000.00	001902.0
04800N	04912.50E	56574.09	99 (000000.00	001930.0
04800N	04925.00E	56572.70	99	000000.00	002002.0
04800N	04937.50E	56766.70	99 (000000.00	002050.0
04800N	04950.00E	56681.10	99 (000000.00	002118.0
04800N	04962.50E	56464.10	99 (000000.00	002158.0
04800N	04975.00E	56488.07	99	000000.00	002234.0
04800N	04987.50E	56503.23	99 (000000.00	002330.0
04800N	05000.00E	56512.03	99	000000.00	002402.0
04800N	05012.50E	56546.59	99 (000000.00	002434.0
04800N	05025.00E	56633.41	99	000000.00	002506.0
04800N	05037.50E	56475.40	99 (000000.00	002534.0
04800N	05050.00E	56642.07	99	000000.00	002602.0
04800N	05062.50E	56567.31	99 (000000.00	002638.0
04800N	05075.00E	56563.63	99 (000000.00	002710.0
04800N	05087.50E	56547.46	99 (000000.00	002738.0
04800N	05100.00E	56561.57	99 (000000.00	002814.0
04850N	05100.00E	56516.16	99 (000000.00	003058.0
04850N	05087.50E	56517.93	99 (000000.00	003130.0
04850N	05075.00E	56521.99	99 (000000.00	003150.0
04850N	05062.50E	56507.47	99 (000000.00	003210.0
04850N	05050.00E	56625.50	99 (000000.00	003254.0
04850N	05037.50E	56425.42	99	000000.00	003322.0
04850N	05025.00E	56499.99	99 (000000.00	003402.0
04850N	05012.50E	56507.74	99	000000.00	003426.0
04850N	05000.00E	56496.69	99 (000000.00	003450.0

04850N	04987.50E	56504.31	99	000000.00	003738.0
04850N	04975.00E	56451.20	99	000000.00	003810.0
04850N	04962.50E	56586.07	99	000000.00	003850.0
04850N	04950.00E	56532.15	99	000000.00	003910.0
04850N	04937.50E	56505.98	99	000000.00	003938.0
04850N	04925.00E	56447.13	99	000000.00	004006.0
04850N	04912.50E	56390.92	99	000000.00	004034.0
04850N	04900.00E	56612.46	99	000000.00	004102.0
04850N	04887.50E	56812.68	99	000000.00	004134.0
04850N	04875.00E	56572.10	99	000000.00	004226.0
04850N	04862.50E	56616.39	99	000000.00	004306.0
04850N	04850.00E	56736.43	99	000000.00	004338.0
04900N	04850.00E	56675.21	99	000000.00	004530.0
04900N	04862.50E	56394.54	99	000000.00	004558.0
04900N	04875.00E	56420.11	99	000000.00	004622.0
04900N	04887.50E	56472.81	99	000000.00	004650.0
04900N	04900.00E	56472.45	99	000000.00	004718.0
04900N	04912.50E	56492.29	99	000000.00	004814.0
04900N	04925.00E	56519.88	99	000000.00	004846.0
04900N	04937.50E	56574.89	99	000000.00	004930.0
04900N	04950.00E	56522.98	99	000000.00	005010.0
04900N	04962.50E	56547.46	99	000000.00	005038.0
04900N	04975.00E	56462.84	99	000000.00	005106.0
04900N	04987.50E	56523.71	99	000000.00	005134.0
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04900N	05012.50E	56511.08	99	000000.00	005350.0
04900N	05025.00E	56467.87	99	000000.00	005426.0
04900N	05037.50E	56542.28	99	000000.00	005534.0
04900N	05050.00E	56530.41	99	000000.00	005602.0
04900N	05062.50E	56518.83	99	000000.00	005630.0
04900N	05075.00E	56533.67	99	000000.00	005658.0
04900N	05087.50E	56513.24	99	000000.00	005726.0
04900N	05100.00E	56492.77	99	000000.00	005746.0
04950N	05100.00E	56510.65	99	000000.00	005910.0
04950N	05087.50E	56459.29	99	000000.00	005946.0
04950N	05075.00E	56469.40	99	000000.00	010006.0
04950N	05062.50E	56528.98	99	000000.00	010034.0
04950N	05050.00E	56509.74	99	000000.00	010122.0
04950N	05037.50E	56523.30	99	000000.00	010158.0
04950N	05025.00E	56541.53	99	000000.00	010226.0
04950N	05012.50E	56492.24	99	000000.00	010250.0
04950N	05000.00E	56532.57	99	000000.00	010318.0
04950N	04987.50E	56525.57	99	000000.00	010350.0
04950N	04975.00E	56501.39	99	000000.00	010434.0
04950N	04962.50E	56485.51	99	000000.00	010506.0
04950N	04950.00E	56518.07	99	000000.00	010542.0
04950N	04937.50E	56515.38	99	000000.00	010614.0
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04950N	04887.50E	56476.17	99	000000.00	010802.0
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04950N	04850.00E	56488.09	99	000000.00	010910.0
05000N	04850.00E	56468.72	99	000000.00	011022.0
05000N	04862.50E	56462.46	99	000000.00	011050.0
U5000N	U48/5.00E	56456.81	99	000000.00	011110.0

05000N	04887.50E	56470.70	99	000000.00	011134.0
05000N	04900.00E	56218.84	99	000000.00	011154.0
05000N	04912.50E	56669.71	99	000000.00	011222.0
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05000N	04950.00E	56548.05	99	000000.00	011358.0
05000N	04962.50E	56360.62	99	000000.00	011430.0
05000N	04975.00E	56535.02	99	000000.00	011454.0
05000N	04987.50E	56501.01	99	000000.00	011610.0
05000N	05000.00E	56518.23	99	000000.00	011630.0
05000N	05012.50E	56531.81	99	000000.00	011654.0
05000N	05025.00E	56529.07	99	000000.00	011710.0
05000N	05037.50E	56520.97	99	000000.00	011734.0
05000N	05050.00E	56531.05	99	000000.00	011810.0
05000N	05062 50E	56609 07	99	000000.00	011846.0
05000N	05002.00E	56526 30	99	000000.00	011906 0
05000N	05087 505	56513 60	99	000000.00	011926 0
05000N	05100 00F	56521 47	99	000000.00	011946 0
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05050N	05100.000	56530 39	99	000000.00	012114 0
05050N	05007.50E	56545 22	<i>33</i>	000000.00	012114.0
05050N	05075.000	56519 26	99	000000.00	012134.0
05050N	05062.50E	56510.20	<i>33</i>	000000.00	012202.0
OFOFON	05050.00E	56524.08	99	000000.00	012250.0
05050N	05037.50E	56462.93	99	000000.00	012254.0
OSOSON	05025.008	56507.67	99	000000.00	012318.0
05050N	05012.50E	56500.76	99	000000.00	012338.0
OFOFON	05000.00E	56503.07	99	000000.00	012442.0
05050N	04987.50E	56501./1	99	000000.00	012458.0
05050N	04975.00E	56504.49	99	000000.00	012514.0
05050N	04962.50E	56536.61	99	000000.00	012534.0
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05050N	04850.00E	56488.09	99	000000.00	012914.0
05100N	04850.00E	56515.37	99	000000.00	013030.0
05100N	04862.50E	56581.31	99	000000.00	013050.0
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05100N	05012.50E	56509.91	99	000000.00	013538.0
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05100N	05037.50E	56550.73	99	000000.00	013642.0
05100N	05050.00E	56458.97	99	000000.00	013702.0
05100N	05062.50E	56518.30	99	000000.00	013722.0

05100N	05075.00E	56557.46	99	000000.00	013738.0
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05100N	05100.00E	56632.25	99	000000.00	013818.0



