REPORT ON GEOLOGICAL AND GEOPHYSICAL SURVEYS

DUNCAN CLAIM GROUP

NICOLA MINING DIVISION, BRITISH COLUMBIA

W. R. BERGEY, P.Eng.

October 15, 2002

TABLE OF CONTENTS

ILLUSTRATIONS

REPORT ON GEOLOGICAL & GEOPHYSICAL SURVEYS
DUNCAN CLAIM GROUP
Nicola Mining Division, British Columbia

INTRODUCTION

The Duncan Claim was acquired in 2000 following several years of exploration work by the author on the Molly claim group that adjoined (Molly, Chris and Graham Claims) that to the north. Because of an exploration history on Duncan that included extensive diamond drilling within the southern portion of the claim, the preliminary work in the newly acquired ground was confined mainly to that area. The work included geological mapping and VLF-EM surveys. It also included an evaluation of the economic potential of the area based on the earlier diamond drilling.

Duncan 1 Claim was staked in August 2001. The Molly claim group has since been allowed to lapse.

The present report covers geological mapping and VLF-EM surveying carried out during August 2001 and July 2002 on both claims. This work was an extension of the prior surveys.

LOCATION, ACCESS, CHARACTER OF THE REGION

The area covered in the present report is located within the south-central portion of the Interior Plateau of British Columbia. It lies about 30 kilometres south of the town of Merritt, and 180 kilometres east of Vancouver.

Access to the claims from Merritt is via Highway 5A (Merritt-Princeton Highway) to the road junction 6 kilometres south of the hamlet of Aspen Grove, thence via the Highway 223 (Coalmont Road to a ranch road at Kilometre 6 that serves as an access route to the western portions of both claims. The eastern parts of the claims are accessible from Highway 5A south of Aspen Grove.

Gently rolling till-covered hills occupy the western and central parts of the claims. East of the the narrow, steep-sided Otter Creek valley the land rises abruptly toward the more prominent ridges that lie east of Highway 5A. Most of the rock exposures within the claims are found along the western slope of Otter Creek valley.

The vegetative cover is mostly pasture, along with patches of open woodland. The land currently is being utilized mainly as winter pasture and for periodic small-scale logging.

Otter Creek is the only permanently flowing stream. However, its valley has been extensively dammed by beavers and the watercourse consists of a series of interconnected ponds and swampland.

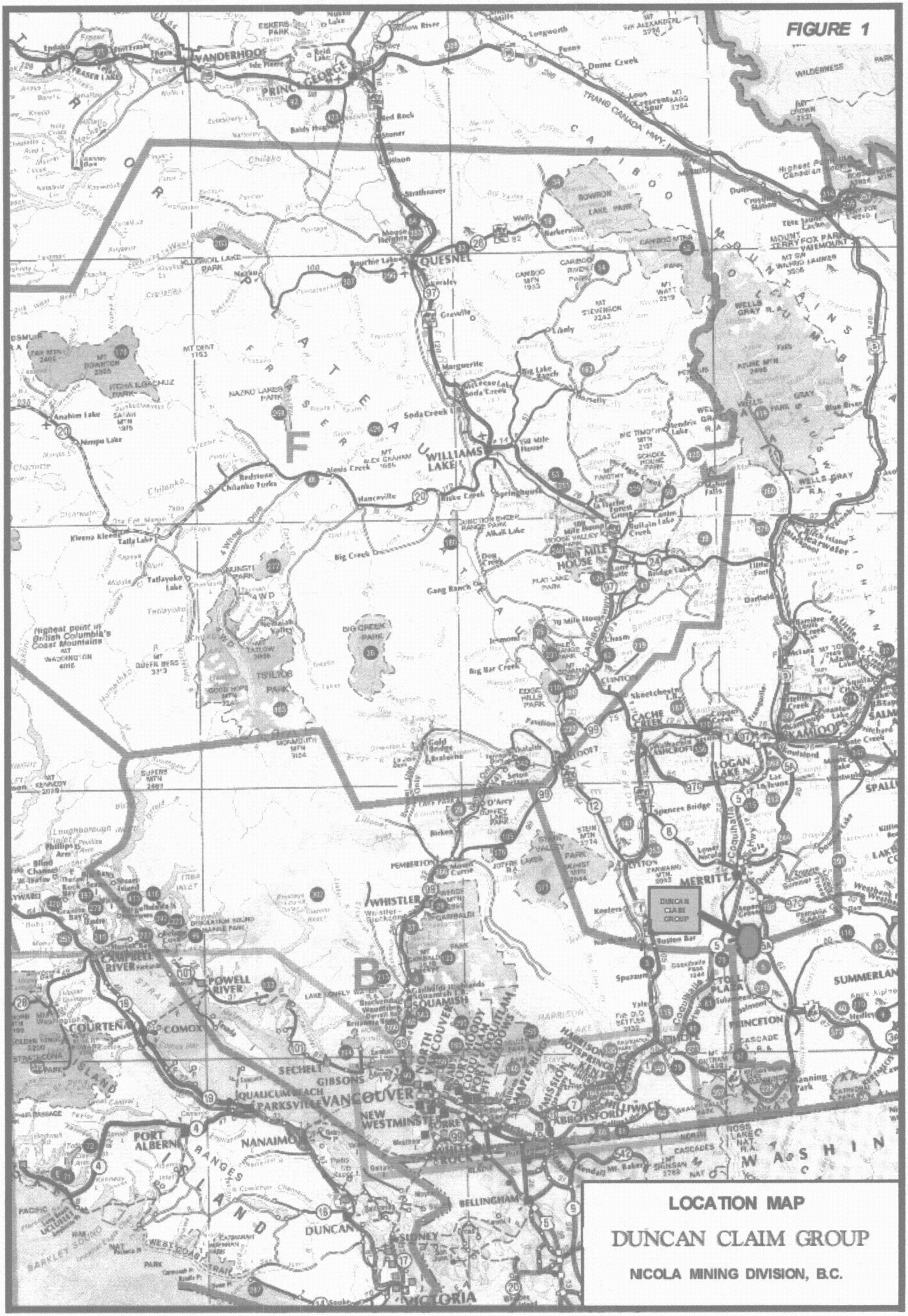


FIGURE 1

LOCATION MAP

DUNCAN CLAIM GROUP

NICOLA MINING DIVISION, B.C.

PROPERTY

The claims covered by this report are located within the Nicola Mining Division. The Duncan Claim contains 8 units; the adjoining Duncan Claim contains 4 units (Figure 2.) The recorded owner is William Richard Bergey of Aldergrove, B.C.

The surface rights to the land on which the claims are situated are owned by Quilchena Cattle Company.

PREVIOUS WORK

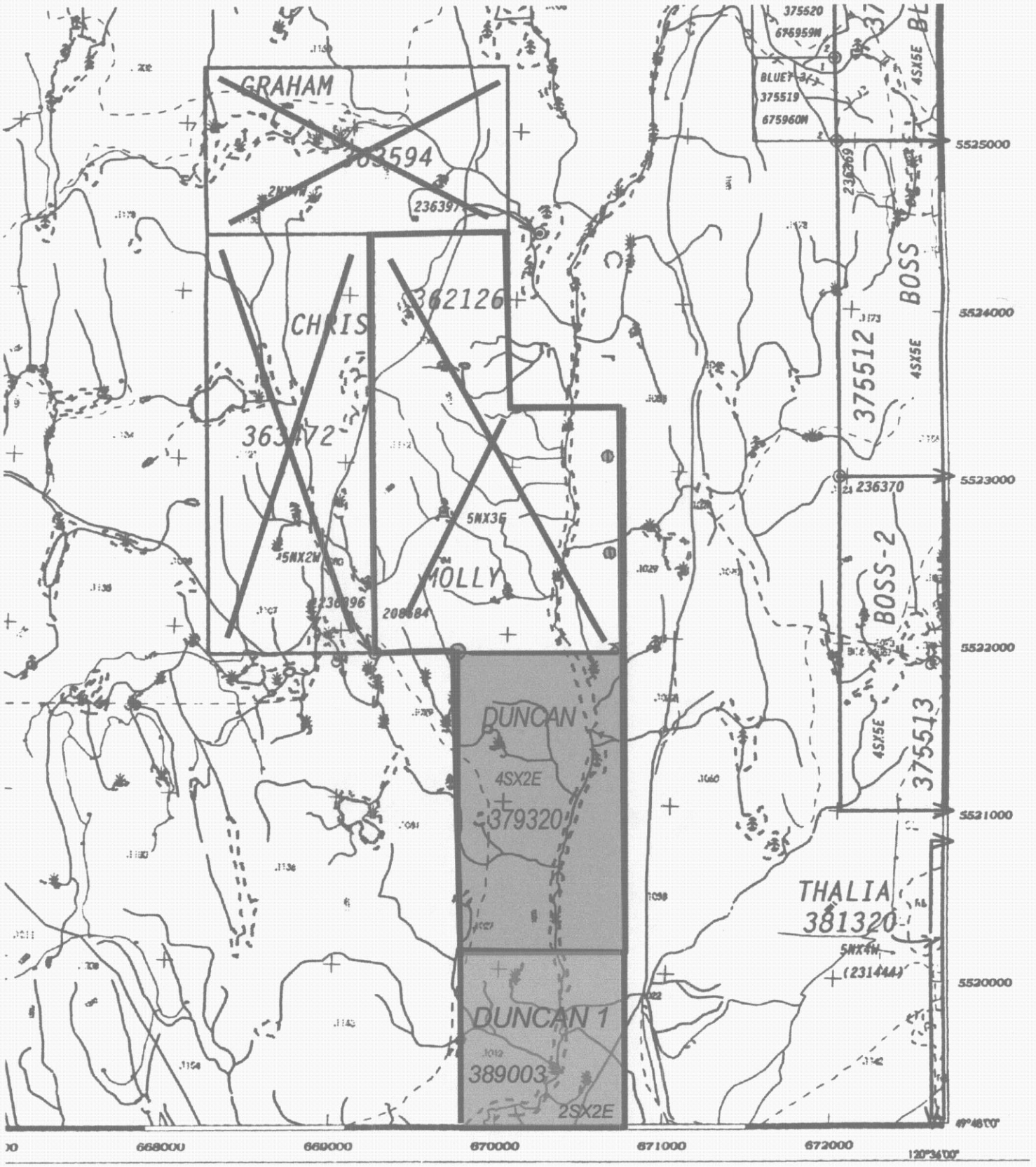
The only published geological maps of the general area are reconnaissance in scope. The most recent of these is a 1:250,000 sheet published by the Geological Survey of Canada in 1989 (Monger,1989). This map is mainly a synthesis of older published and unpublished data data along with newer information from localized mapping and laboratory studies. It is evident that little or no field work was carried out within the area covered in the present report. [The part of the Duncan Claim that contains most of the rock exposures is shown as overburden covered.] The map replaced earlier GSC Map 888A (Rice, 1947) that more accurately portrays the local geology..

A more detailed study of the volcanic and intrusive rock units that underlie the belt between Princeton and Aspen Grove was carried out by B.C. government geologists (Preto, 1979). Unfortunately, this work stopped just short of the northern and eastern boundaries of the claims.

An aeromagnetic map published by the G.S.C. in 1973 at a scale of One Inch to One Mile (Aspen Grove Sheet – 92H/15) has proven to be useful in interpreting certain geological features.

The only serious exploration work in the area was carried out within the southern part of the present Duncan Claim (formerly part of the PAR Group). Tormont Mines Ltd. completed 2759 metres of diamond drilling in 18 holes between 1962 and 1965, based in part on a 1962 magnetometer survey. Andy Robertson drilled an additional hole to a depth of 123 metres during 1975 and 1977. Although mineral rights to the area covering the main showings have been claimed almost continuously since that time, there is no record of any exploration work having been carried out prior to my acquisition of the Duncan Claim. The scant assessment-work filings on the Robertson drilling are the only publically available reports pertaining to the drilling area. Fortunately I was able to obtain copies of the Tormont logs along with a location map of the drill holes. Only unlabeled remnants of drill core were left at the property.

I mapped the drilling area in detail and carried out a VLF-EM survey in 2000 (Bergey, 2001).



DUNCAN CLAIM GROUP

T.N. 19° 19'

Magnetic North

MAGNETIC DECLINATION AS OF 2000 DECEASING

ANNUALLY

1000 m 0 1 km

[From Mineral Titles Reference Map **M092HO87**]

FIGURE 2

REGIONAL GEOLOGY

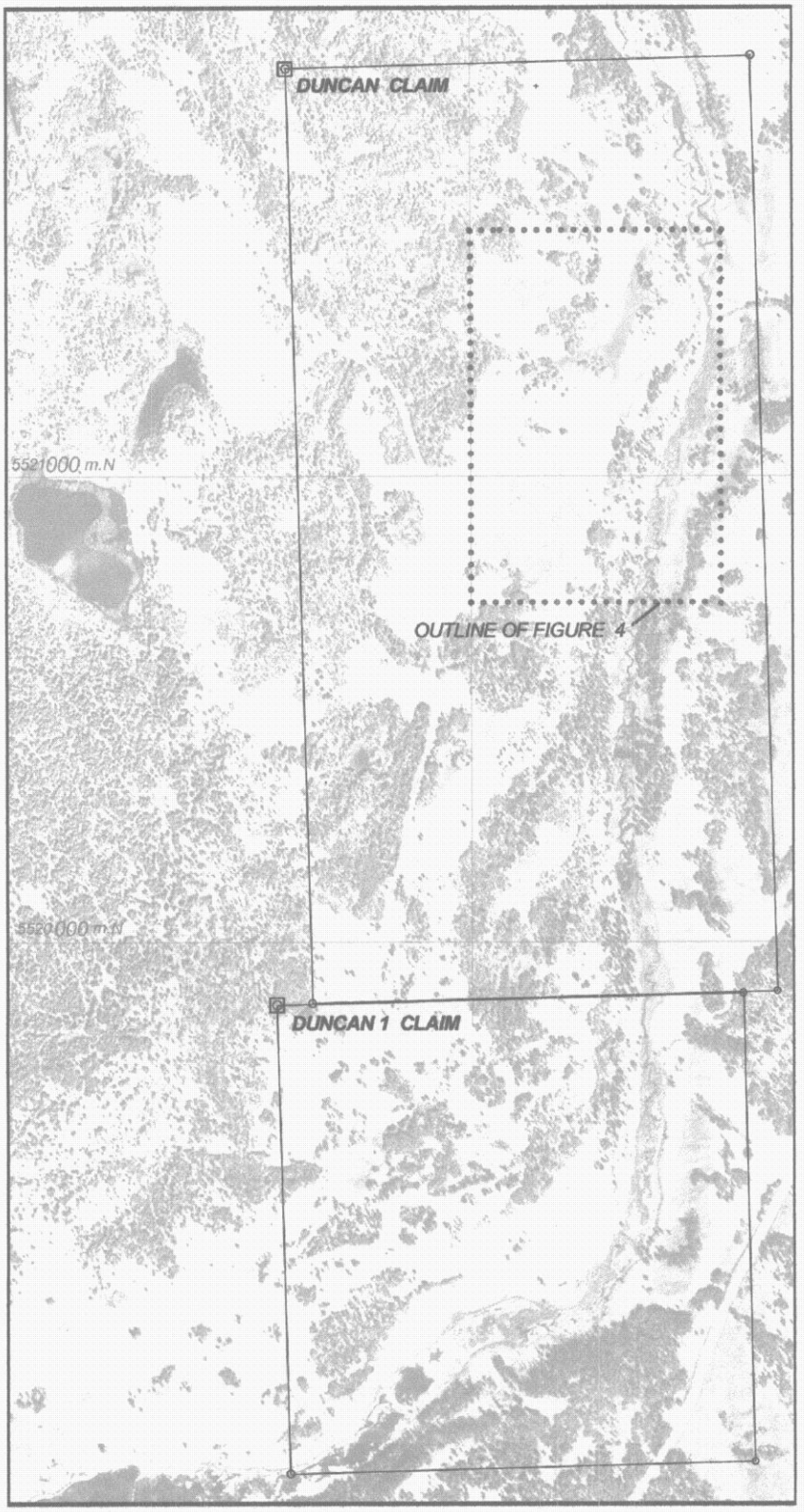
Government geological mapping indicates that most of the region is underlain by a north-trending belt of Upper Triassic volcanic rocks assigned to the Nicola Group. Small bodies of granitic intrusive rocks, coeval in part with the volcanic rocks, are widely distributed within the outcrop area of the Nicola rocks. The eastern margin of an intrusive assemblage, designated as the Allison Lake Pluton, is indicated to lie a short distance west of the boundary of theDuncan Group. The age is given as Upper Triassic to Jurassic, but more recent work suggests that younger intrusions may be present within the assemblage. Monger (1989) classifies the Allison Lake intrusive rocks as granodiorite.

My reconnaissance mapping outside of the property suggests that the intrusive suite is more complex and more widespread than Monger indicates. Quartz diorite appears to be the dominant rock type in the hills west of the Duncan Claim. Along the eastern margin of the assemblage there is a fairly wide belt of granitic rocks) that includes highly siliceous granite. (A portion of this belt was mapped by Preto (1979) southeast of the Duncan 1 Claim. The Allison Lake intrusions appear to be more accurately delineated by Rice (1947) than by the more recent G.S.C. map within the region covered by my reconnaissance mapping.

Another regional geological feature of importance to the present study is the indicated northern extension of the Allison fault that follows Otter Creek. Preto (1979) considered this fault to have been of fundamental importance during the emplacement of the Upper Triassic volcanic rocks and the associated intrusions. His map indicated that it formed the boundary between the Central and Western volcanic facies of the Nicola Group. Monger (1989) interpreted the Allison fault to be a northwest-trending structure; his map denies the existence of a fault along Otter Creek and places the facies boundary farther to the west. My mapping indicates that the fault along the upper portion of Otter Creek (which I have renamed the Otter Creek fault) is older than the Allison Lake pluton that is offset by the Allison fault, in effect agreeing with Monger on the location of the Allison Creek fault and with Preto on the existence of a major fault along otter Creek.

Aside from the obvious linearity of Otter Creek for 15 kilometres, several lines of reasoning suggest a major fault zone based in part on my work on the Molly Claim:

1) A pronounced aeromagnetic "low" extends north from Allison Lake, follows Otter Creek, and continues north beyond Aspen Grove – more than 40 kilometres in total;
2) A ground magnetic survey indicated that the "low" that follows Otter Creek is narrow and sharply defined;
3) Volcanic rocks along Otter Creek on the Molly Claim are highly shattered, altered and veined;
4) The felsic volcanic rocks that dominate the volcanic assemblage west of Otter Creek and the basaltic volcanic rocks that are common east of the creek are mutually exclusive.



DUNCAN CLAIM GROUP

0 500 1000 1500

Metres

[To accompany "Report on Geological & Geophysical Surveys on Duncan Claim Group, dated October 15, 2002]

FIGURE 3

GEOPHYSICAL SURVEYS

Dip-angle VLF-EM measurements were taken using Crone *Radem* receiver tuned to Seattle (24.8 KHz) in two areas -- extensions to the north and south of the geophysical work carried out during 2000. Readings were taken at intervals of 15 metres along east-west lines. In the northern area 15 lines were surveyed over a total length of about 3.5 kilometres. The two survey lines on the Duncan 1 Claim to the south were surveyed covered 360 metres. The "Fraser Filter was utilized to rationalize the dip-angle data for contouring. Only the filtered and contoured data are shown on Figure 5. The original measurements are appended to this report.

GEOLOGICAL MAPPING

Previous mapping (Bergey, 2001) covered an area of about 25 hectares surrounding the drill holes and old workings. The present survey covered the remainder of the two claims, with the exception of a strip about 300 metes in width along the north boundary. The results of the mapping, along with the earlier geological data, drill hole locations and VLF-EM contours from both surveys are shown on Plate1..

VOLCANIC ROCKS

Nicola Group

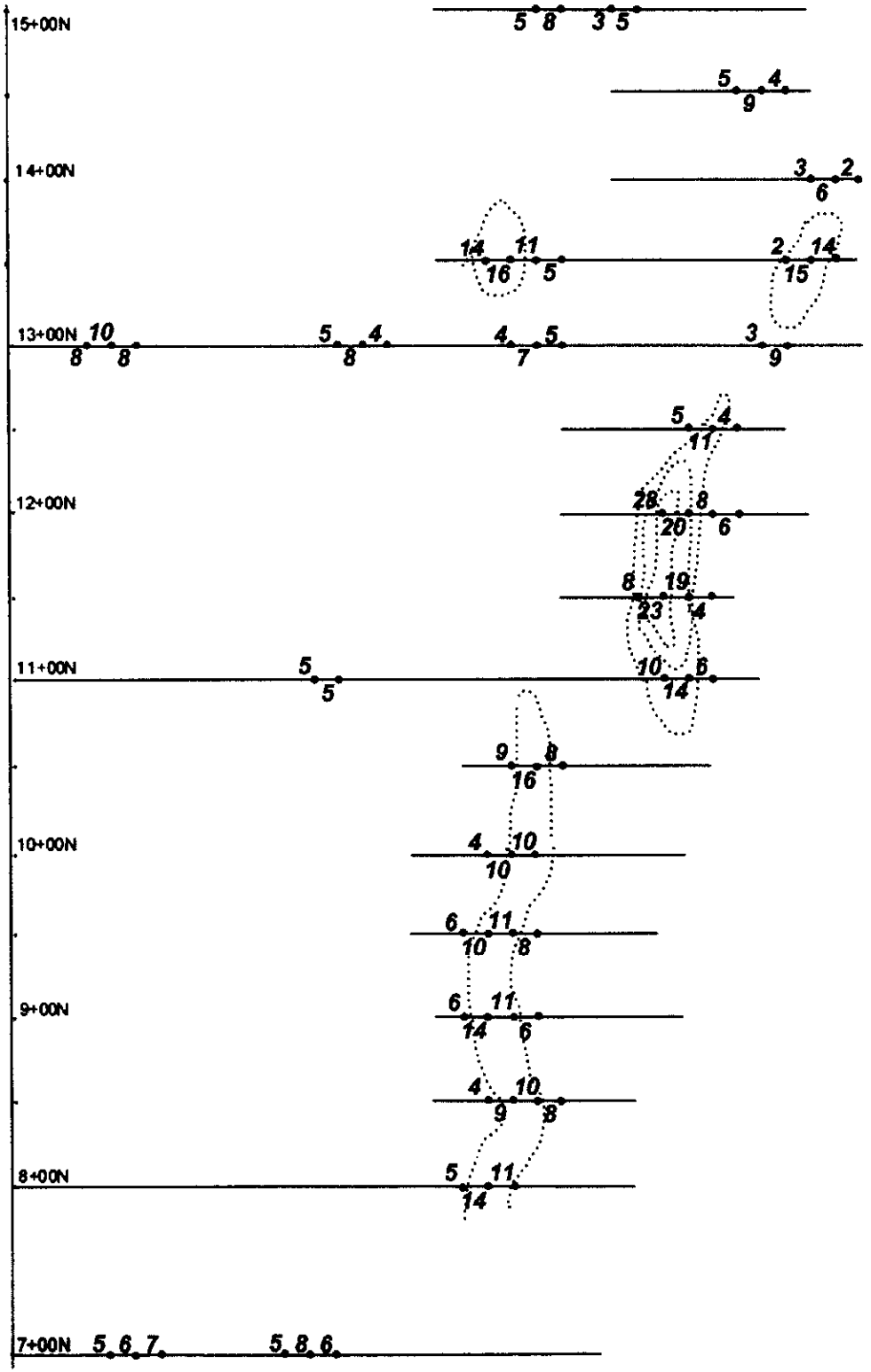
Upper Triassic volcanic rocks of the Nicola Group underlie most of the area west of the steep western slope of the Otter Creek valley. In the eastern portion of this area there are a large number of very small outcrops in the pastures. Despite this cornucopia, I was unable to separate the felsic and andesitic volcanic fragmental rocks into mappable units. This was due in large part to the common occurrence of rocks composed of variable amounts of felsic lapilli in a finer-textured greenish groundmass. Adjacent to the intrusive rocks the volcanics tend to be highly fractured and variably altered.

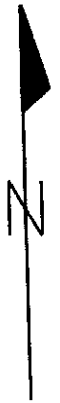
The outcrops of volcanic rocks frequently exhibit strong, steeply-dipping foliation, suggestive of axial-plane cleavage. The attitude of the foliation is locally consistent – north-trending in the south and northwest-trending in the north. No evidence of stratification was found to confirm the suggested trend.

Rock exposures are scarce east of Otter Creek except in the area close to the south boundary of the property. However, two outcrops of dark gray, basaltic lava were located. This material is similar to some of that found along Highway 5A east of the Duncan claims.

INTRUSIVE ROCKS

The intrusive rocks in the region are believed to Late Triassic to Jurassic in age, with the oldest units coeval with volcanic rocks of the Nicola Group.





VLF - EM SURVEY

OF NORTHEASTERN PORTION OF

DUNCAN CLAIM

NICOLA MINING DIVISION, B.C.

SCALE 1 : 4000

0 50 100 200 300

METRES

Contours of filtered values at 5 - unit intervals

Readings shown on traverse lines are positive "Fraser-filtered" values of dip angles from Crone "*Radem*" receiver tuned to Seattle (24.8 KHz)

FIGURE 4

Monzonite

Equigranular, pale-gray hornblende monzonite crops out in the southeastern corner of the property on both sides of Highway 5A. This unit may correlate with the alkalic intrusive suite that is coeval in part with the volcanic rocks of the Nicola Group, rather than with the slightly younger Allison Lake suite that includes the remainder of the intrusive rocks on the property.

Quartz Diorite

Hornblende quartz diorite was mapped a short distance west of the south boundary of the claims. Farther west this rock type underlies a highland area that extends north at least as far as Davis Lake.

Granodiorite

Hornblende granodiorite is exposed on both sides of Otter Creek close to the southwest corner of the property. This rock type is the predominant unit in the Allison Lake pluton to the south.

Quartz-feldspar Porphyry

This rock type is characterized by rounded quartz and subordinate feldspar phenocrysts in a fine-textured holocrystalline granitic groundmass. It lies along the western margin of the granite in the southern portion of Duncan claim and extends to the north in dike-like fashion along Otter Creek. A possible counterpart east of Otter Creek is concealed by till. The quartz feldspar porphyry west of the granite has been intensely brecciated as have the adjacent volcanic rocks.

Porphyritic Granite

Porphyritic biotite granite comprises a body at least 350 metres wide that straddles Otter Creek in the east-central portion of the claims. The rock is coarse-textured and contains large (to 1 cm.+) quartz phenocrysts. Much of the rock in the northern exposure area is obviously brecciated at hand-specimen scale and the weathered surfaces of the outcrops suggest that most, if not all, of the rocks have been fragmented. The fragments tend to be equant except at a few localities where zones of parallel elongated fragments (flow texture) were noted. Brecciation is not evident within second area of outcrops along the east side of Otter Creek. A possible connection between the two areas is masked by overburden.

Quartz Porphyry

Quartz porphyry is found mainly as small exposures (or as clasts in breccia?) close to Otter Creek. However, several large outcrops near Otter Creek are composed entirely of this material. The quartz porphyry is a distinctive rock type composed of large (up to 1.5 cm.) quartz "eyes" in an extremely hard, ultrafine-grained groundmass. Parallel quartz veinlets are present in most of the hand specimens.

It is not clear whether the larger quartz porphyry outcrops are portions of a larger mass or merely several individual bodies. .Drill hole H-30 reportedly intersected quartz porphyry from the collar to a depth of 194 feet, and there was an additional intersection of 136 feet at the bottom of the hole. However, no porphyry was reported from Hole 27 immediately above it (and between H-30

and the largest porphyry outcrop). The logs indicate that H- 29 intersected 61 feet of porphyry at the collar, and other intersections of 64 feet and 88 feet were noted farther down the hole. The "quartz porphyry" intersections shown for the latter hole probably are quartz-feldspar porphyry, at least in part.

Mafic Intrusive Rock

A very dark-gray, fine-textured dike rock crops out along the edge of Otter Creek within the southern portion of the area of intense brecciation. This rock is highly fractured but not brecciated and could be much younger than the other intrusive rocks in the area.

STRUCTURE

The lack of evidence concerning the folding of the volcanic rocks of the Nicola Group, except for the foliation suggestive of axial-plane cleavage, was noted above.

Evidence concerning the existence and the significance of the Otter Creek fault has been documented in my earlier reports. Granitic intrusive rock, including quartz and quartz-feldspar porphyries were emplaced preferentially along the fault zone within the area covered by this report. Indirect evidence pointing to the structure, in addition to the striking alignment of the intrusions along Otter Creek, is the contrast between the volcanic facies immediately east and west of the projected fault line.

The ovoid area of intense brecciation shown on the accompanying map is clearly related to the intrusion of the granitic rocks along Otter Creek, the quartz porphyry in particular. Brecciation is not confined to the outlined zone, but occurs locally within quarz-feldspar porphyry to the north.

MINERALIZATION

Little additional evidence of surface mineralization was found in the course of the recent work except for a number of exposures of ferruginous breccia similar to that noted in the vicinity of some of the showings in the drilling area. The following account is extracted from my earlier report (Bergey,2001).

The original discoveries in the area evidently were made in the volcanic unit along the ridge in the south-central part of the Duncan Claim. Several trenches were excavated, and the four initial drill holes were dedicated to testing this zone. [The largest trench was put down by an outside party, after completion of the drilling, on the basis of a transported gossan composed of limonitic andesite blocks in a ferruginous matrix,] Mineralization in the original trenched areas consists of minor amounts of chalcopyrite associated with pyrite and patches of massive magnetite in limonitic andesite. The initial drill holes encountered sections of heavily disseminated pyrite with a small amount of chalcopyrite. The best section, in hole H-22, averaged 0.25% Cu over 8.0 feet. Vertical hole 75-1 tested the central part of the zone to a depth of 123 metres. Complete logs were not available to me, but the core apparently contained weak copper mineralization

throughout. The best section of 24.4 metres reportedly assayed 0.2% Cu and 2.14 grams/tonne Ag (Assessment Report 5750).

The brecciated porphyry is limonite stained over a wide area and I observed minor amounts of chalcopyrite associated with massive pyrite veinlets in a few places, but there was no evidence of significant copper mineralization in the outcrops that I visited. However, a drilling cross-section southeast of the showings on the ridge encountered significant copper values in two drill holes:

H-26 – 5.8 metres @ 1.4% Cu, 4.3 grams/tonne Ag;
H-27 – 6.7 metres @ 1.9% Cu, 72 grams/tonne Ag.

Lower grade Cu/Ag mineralization was encountered to the north and south of these holes.

The rock in the vicinity of the intersections in the vicinity of the best copper mineralization was logged as "sandstone." with heavy to massive impregnations of "marcasite mixed up with hematite" and with "weak disseminations of chalcopyrite." The intersections in H-26 and H-27 suggest an apparent dip of the mineralization of about 45° to the southeast.

DISCUSSION OF THE RESULTS

The VLF-EM survey north of the drilling area outlined a semi-continuous anomalous zone from Line 8+00N to14+00N. The indications are moderate to fairly strong and are indicative of a conductive zone in bedrock. The anomaly follows the contact between fine-grained granitic porphyry and volcanic rocks. A local anomaly on Line 13+50N is coincident with a test pit in limonite-stained felsic volcanic rocks.

The ferruginous breccia crusts that were noted capping the quartz and quartz-feldspar porphyries at several localities are coincident with or downslope from VLF-EM anomalies.

RECOMMENDATIONS

It is recommended that trenching of the anomalous VLF-EM zones be undertaken in consultation with the landowners.

REFERENCES

Bergey, W.R., 1999a: *Report on Geological and Geophysical Surveys, Molly Claim Group;* Assessment Report 25946

Bergey, W.R., 1999b: *Report on Geological Survey, PAR Claims;* Assessment Report 25965

Bergey, W.R., 2001: *Report on Geological and Geophysical Surveys of parts of Duncan and Molly Claims*; Assessment Report

EMPR Assessment Reports 5760 and 6405

Geol. Surv., Canada: *Aspen Grove, British Columbia;* Geophysical Series (Aeromagnetic), Map 8532G

Monger, J.W.H., 1989: *Hope, British Columbia;* Geol. Surv., Canada, Map 41-1989
Preto, V.A., 1979: *Geology of the Nicola Group Between Merritt and Princeton;* B.C. Ministry of Energy, Mines and Petroleum Resources, Bull. 69
Rice, H.M.A., 1947: *Princeton, British Columbia;* Geol. Surv., Canada, Map 888A

Respectfully submitted,

W. R. Bergey, P.Eng.

STATEMENT OF COSTS

Type of Work	Dates	Days	Cost/day	Cost
Geological mapping	8/8/01 - 8/10/01	3	$400	$ 800
	8-8/02	1		400
VLF-EM survey	5/7/02 - 7/7/02	3	400	1200
Map & report preparation		1	400	400
			Sub-total	$2800
Instrument rental				$ 300
Accommodation				650
Vehicle expenses				500
			TOTAL COST	$4250

STATEMENT OF QUALIFICATIONS

I, William Richard Bergey of 25789 8th Avenue, Aldergrove, B.C. do hereby certify that:

1. I am a Professional Engineer (Geological) in the Province of British Columbia.

2. I have been employed in mining and mineral exploration for the past 55 years.

3 I have supervised and/or carried out numerous exploration programs that employed geological and geophsical techniques to those described in the accompanying "*Report on Geological and Geophysical Surveys of Duncan Clain Group*".

4. I personally conducted all of the work described in the above report.

W.R.Bergey, P.Eng.

RADEM SURVEY -- N.E. DUNCAN CLAIM

[Dip angles recorded in the field as east are shown positive and West dips negative]

STATION	DIP ANGLE	FILTER
LINE 8+00N	[Going East]	
0	-10	
15	-10	
30	-9	-3
45	-8	-4
60	-7	-4
75	-6	-4
90	-5	-1
105	-7	4
120	-8	3
135	-7	-1
150	-7	-2
165	-6	-2
180	-6	-2
195	-5	-3
210	-4	-5
225	-2	-7
240	0	-6
255	0	-2
270	0	5
285	-5	14
300	-9	11
315	-7	-3
330	-4	-10
345	-2	-9
360	0	-5
375	-1	-1
LINE 8+50N	[Going East]	
255	-2	
270	-1	
285	-2	4
300	-5	9
315	-7	10
330	-10	8
345	-10	-4
360	-3	
375	4	

STATION	DIP ANGLE	FILTER
LINE 9+00N	[Going East]	
255	0	
270	0	6
285	-6	14
300	-8	11
315	-9	6
330	-11	1
345	-7	-7
360	-6	-7
375	-5	-11
390	3	-17
405	3	
LINE 9+50N	[Going East]	
240	-1	
255	0	
270	-2	6
285	-5	10
300	-7	11
315	-11	8
330	-9	-1
345	-8	-6
360	-6	-5
375	-6	-6
390	-2	
LINE 10+00N	[Going East]	
240	-5	
255	-6	
270	-4	-1
285	-6	4
300	-8	10
315	-12	10
330	-12	2
345	-10	-7
360	-7	-10
375	-5	-7
390	-5	-3
405	-4	-1

STATION	DIP ANGLE	FILTER
LINE10+50N	[Going East]	
270	-5	
285	-4	
300	-6	9
315	-12	16
330	-14	8
345	-12	-4
360	-10	-6
375	-10	-3
390	-9	-6
405	-5	-9
420	-5	
LINE11+00N	[Going East]	
0	-7	
15	-5	
30	-5	-1
45	-6	1
60	-5	-1
75	-5	-1
90	-5	0
105	-5	0
120	-5	1
135	-6	0
150	-4	-4
165	-3	-1
180	-6	5
195	-6	5
210	-8	2
225	-6	-3
240	-5	-3
255	-6	1
270	-6	-1
285	-4	-4
300	-4	-3
315	-3	-1
330	-4	1
345	-4	1
360	-4	-1
375	-3	1
390	-6	10
405	-11	14
420	-12	6
435	-11	
450	-10	

[RADEM SURVEY -- N.E. DUNCAN CLAIM]

STATION	DIP ANGLE	FILTER
LINE11+50N	[Going East]	
330	-3	
345	-1	
360	1	-5
375	0	8
390	-8	23
405	-14	19
420	-13	4
435	-13	
LINE12+00N	[Going East]	
330	-5	
345	-4	
360	-1	-12
375	4	-16
390	7	3
405	-7	28
420	-10	20
435	-10	8
450	-15	6
465	-11	
480	-7	
LINE12+500N	[Going East]	
330	-7	
345	-4	
360	-1	-10
375	0	-7
390	2	-4
405	1	5
420	-4	11
435	-4	4
450	-3	1
465	-6	

STATION	DIP ANGLE	FILTER
LINE 13+00N	[Going East]	
0	-4	
15	-6	
30	-7	6
45	-9	8
60	-12	10
75	-14	8
90	-15	1
105	-12	-9
120	-8	-13
135	-6	-10
150	-4	-7
165	-3	-6
180	-1	-3
195	-3	5
210	-6	8
225	-6	4
240	-7	0
255	-5	-6
270	-2	-8
285	-2	-2
300	-3	4
315	-5	7
330	-7	5
345	-6	0
360	-6	-4
375	-3	-8
390	-1	-10
405	2	-7
420	1	0
435	0	3
450	0	3
465	-2	9
480	-7	-3
495	8	-12
510	-5	

STATION	DIP ANGLE	
LINE 13+50N	[Going East]	
255	3	
270	3	2
285	-2	14
300	-6	16
315	-9	11
330	-10	5
345	-10	-1
360	-8	-9
375	-3	-13
390	-2	-7
405	-2	-3
420	0	-2
435	-2	2
450	-2	0
465	0	2
480	-6	15
495	-11	14
510	-9	-3
525	-5	
LINE 14+00N	[Going East]	
360	-4	
375	-5	
390	0	-4
405	-5	3
420	-3	1
435	-3	-1
450	-4	-1
465	-1	-3
480	-3	3
495	-5	6
510	-5	2
525	-5	0
540	-5	-1
555	-4	-4
570	-2	-7
585	0	-7
600	1	

[RADEM SURVEY -- N.E. DUNCAN CLAIM]

STATION DIP ANGLE			STATION DIP ANGLE		
LINE 14 +50E	[Going East]		**LINE 15+00E**	[Going East]	
360	-6		255	-2	
375	-5		270	-1	
390	-4	-6	285	-7	5
405	-1	-4	300	-1	-2
420	-4	0	315	-5	5
435	-1	5	330	-8	8
450	-9	9	345	-6	0
465	-5	4	360	-7	3
480	-9		375	-10	5
			390	-8	-7
			405	-2	-14
			420	-2	-6
			435	-2	0
			450	-2	0
			465	-2	2
			480	-4	

RADEM SURVEY -- N.E. DUNCAN 1 CLAIM

[Dip angles recorded in the field as east are shown positive and West dips negative]

STATION DIP ANGLE			STATION DIP ANGLE		
LINE 1+50S			**LINE 2+00S**		
60	0				
45	1	0			
30	-1	3			
15W	-1	3			
0	-2	5	0	-3	
15E	-5	8	15E	-3	
30	-6	3	30	-4	4
45	-4	-8	45	-6	6
60	1	-6	60	-7	6
75	-5	11	75	-9	4
90	-9	13	90	-8	0
105	-8	3	105	-8	-1
120	-9	0	120	-8	-1
135	-8	-3	135	-7	-3
150	-6		150	-6	-9

GEOLOGICAL MAP OF THE DUNCAN CLAIM GROUP

NICOLA MINING DIVISION, BRITISH COLUMBIA

SCALE 1 : 5000

0 250 500 750
Metres

EXPLANATION

TRIASSIC AND / OR JURASSIC

TJb — *Fine-grained mafic intrusive roock*

TJqp — *Quartz porphyry; mainly small bodies shown as π*

TJp — *Mainly quart-feldspar porphyry*

TJg — *Coarse-grained granite with large quartz phenocrysts*

TJgd — *Granodiorite*

TJqd — *Quartz diorite*

TJm — *Monzonite*

TRIASSIC

NICOLA GROUP

Western volcanic facies

TNv — *Felsic and intermediate volcanic rocks*

Central volcanic facies

TNb — *Mafic volcanic rocks*

X — *Small outcrop*

Outcrop area

Filtered VLF-EM data

\# — *Ferruginous breccia of Recent origin*

Attitude of steeply-dipping , intense foliation in volcanic rocks

Diamond drill hole

Outline of zone of intense brecciation

5522000N
5521000N
5520000N
5519000N
669000E
670000E
DUNCAN CLAIM
DUNCAN 1 CLAIM
RANCH ROAD
OTTER CREEK
HIGHWAY 5A
TNv
TJg
TJp
TJqp
TJb
TNb
TJm
TJgd
TJqd
H-21
H-22
H-23
H-24
H-25
H-26
H-27 (60°)
H-30 (72.5°)
H-31
H-32
H-33
H-34
H-35
H-36