

**EL 8139 - RYAN CREEK
RELINQUISHMENT REPORT**

**09.06.93 - 08.06.95
Batchelor 1:100 000 Sheet**

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**C. Fawcett
June 1995**

DME Y

12 DEC 1995

SCANNED

Territory Goldfields N.L.

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1. SUMMARY

Exploration activities carried out within the relinquished portion of EL8139, comprised RAB drilling, lag sampling and aeromagnetic interpretation.

The licence area was granted to Dominion Gold Operations Pty Ltd in June 1993. This report outlines all work carried out between 9 June 1993 to 30 March 1995 on those blocks relinquished in March 1995.

2. LOCATION AND TENURE

EL8139 is located about 130km southeast of Darwin on the Burnside (14/2-II) and Margaret River (14/2-11) 1:50,000 map sheets. The relinquished blocks lie between latitudes 13°12'S and 13°15'S and longitudes 131°23'E and 131°25'E (See Figure 1)

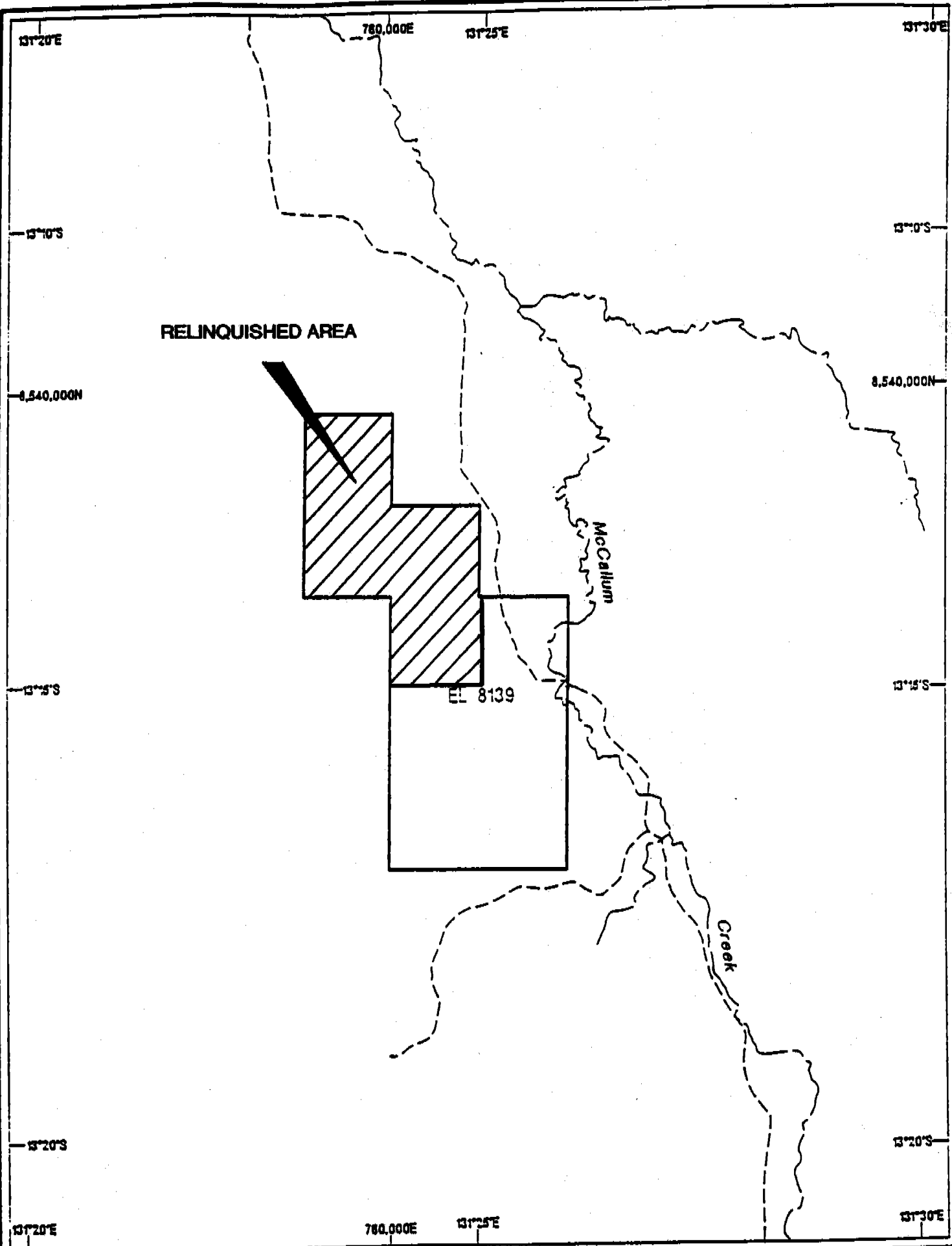
Access is via the Stuart Highway and Mt Ringwood Station tracks.

3. GEOLOGY

3.1 Regional Geology

The Pine Creek Inlier is a roughly triangular area of about 66,000km² south and east of Darwin, which contain Early Proterozoic metasedimentary rocks resting on a gneissic and granitic archaean basement. The metasediments represent fluvial, shallow water and intertidal basinal sequence up to 14km thick (Needham et al, 1980).

During the Top End Orogeny (1870-1780Ma) the rocks were metamorphosed to mainly greenschist facies, however, amphibolite facies dominates in the northeast in the Alligator Rivers region. Proven Archaean rocks are restricted to mainly granite-gneiss of the Rum Jungle, Waterhouse and Nanambu Complexes which formed mantled gneiss domes near the presently exposed western and eastern margins of the inlier.



RYAN CREEK - EL 8139 TENEMENT LOCATION

PROJECT: PINE CREEK STATE N.T.

ORIGINATOR: M.Palmer Date: Jul'94 DRAWN/REVISED: W.P. Jul'94

SCALE: 1 : 100,000 FIGURE No: 1 PLAN No: 2X-Tb2

 Dominion Mining Limited

The sedimentary rocks are mainly shale, siltstone, sandstone, conglomerate, carbonate rocks and iron formations. Felsic to mafic volcanism and associated tuffaceous sediments are also present. The sedimentary sequence is intruded by transitional igneous rocks including pre-tectonic dolerite sills and syn to post tectonic granitoid plutons and dolerite lopoliths and dykes. Largely undeformed platform covers of Middle Proterozoic to Mesozoic strata rest on these with marked uniformity.

3.2 Local Geology

EL8139 is underlain by rocks of the Mt. Bonnie and Burrell Creek Formations of the Lower Proterozoic. Outcrop within the lease is sparse with low hills of Mt. Bonnie Formation and Burrell Creek Formation sediments in the SE corner. For the most part the lease is covered with recent alluvial sediments derived from the Margaret River drainage system.

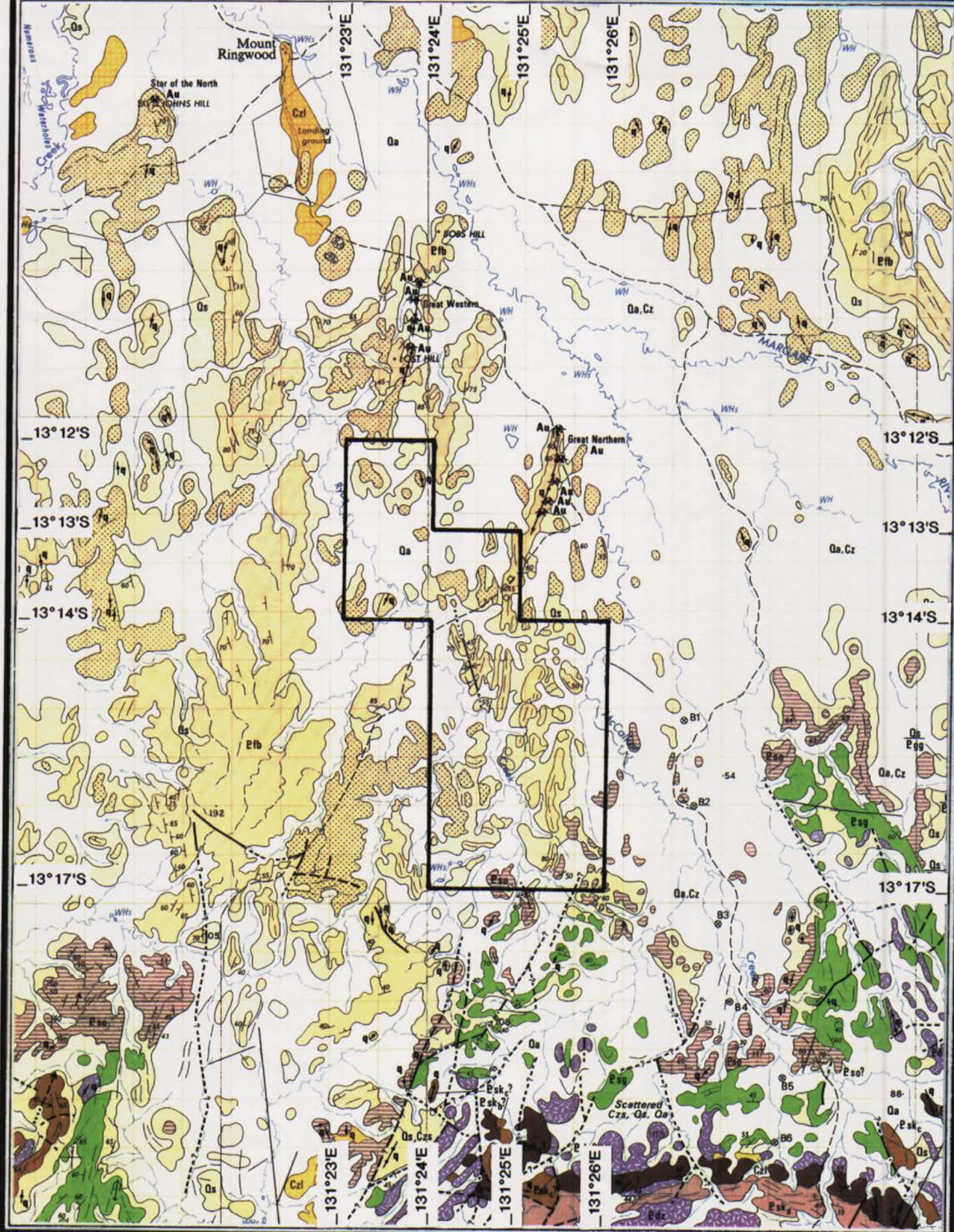
The structure of the area has not been resolved in any detail however there are a number of NW trending anticlinal structures. See Figure 2 for Fact Geology.

4. DOMINION EXPLORATION

Exploration activities within the relinquished portion of EL8139 in the first two years of tenure has included the acquisition and interpretation of geophysical data, RAB drilling and lag sampling.

Interpretation of the aeromagnetic data revealed a 'bullseye' magnetic high in the southern area which was thought to resemble that associated with the Goodall deposit. No magnetic features were evident in the relinquished blocks. (Palmer 1994).

RAB drilling was carried out over the relinquished blocks where outcrop was sparse. This involved the drilling of 23 holes for a total of 97 metres, to depths of up to 12 metres with the average depth approximately 4 metres. The bottom 1 or 2 metres of each hole was sampled and analysed for Au, Cu, Pb, Zn, Ag, As, Bi, Fe, and Mn. Results can be seen in Appendix 1.



0 1 2 3 6
kilometres

EL 8139 FACT GEOLOGY

PROJECT **BURNSIDE**

STATE **N.T.**

ORIGINATOR **M.P.**

Date **6/94**

DRAWN **L.C.**

Date **6/94**

SCALE **1:100000**

FIGURE NO. **2**

PLAN NO: **2X-Ga2**

 **Dominion Mining Limited**

Lag sampling covered the southern portion of the relinquished blocks. Forty two samples of +2mm-8mm size were collected and submitted to AmdeI Darwin for analysis Au, Cu, Pb, Zn, Ag, As, Fe, Mn and Bi. Results can be seen in Appendix 2.

Samples numbers and locations can be seen in Plate 1.

5. REFERENCES

Needham, R.S., Crick, J.H. and Stuart-Smith, P.B. (1980)
'Regional Geology of Pine Creek Geosyncline.' In Proceedings of the
International Uranium Symposium. International Atomic Energy Agency.
Vienna p1-22.

Palmer, M., 1994. EL8139 - Ryan Creek, Annual Report, Year One of
Tenure, 9 June 1993 to 8 June 1994. Unpublished report to the
NTDME.

8535000m N

8530000m N

EL 8139

RELINQUISHED AREA

○ **RAB DRILLING**

✚ **LAG SAMPLE**

* 44184
 * 44185
 * 44186
 * 44187
 * 44188
 * 44189
 * 44190
 * 44191
 * 44192
 * 44193
 * 44194
 * 44195
 * 44196
 * 44197
 * 44198
 * 44199
 * 44200

75500mE

75000cm E

**EL 8139**

RAB AND LAG SAMPLE LOCATIONS

PROJECT

STATE

ORIGINATOR

Date _____

DRAWN

Date _____

SCALE

PLATE NO.

1

PLAN NO:



Territory Goldfields N.L.

APPENDIX 1

RAB DRILLING LOGS AND ASSAY RESULTS

VERTICAL RAB LOG

Contractor: _____

Project: Gr. Lignite

Logged: Don

Prospect: Ryan's McCallum's Creek

Sampled: Jim

Page ____ of ____

Date: 12/10/94

Hole No.	Co-ordinates	Primary Descriptor	Secondary Descriptor						Remarks	Sample No.	Interval	Au	Depth	E _m Blade	E _m Hammer
			Alt	Comp	Magn	Rock	Text	Well							
285 001 761400E	37000N 761600E	cy Oal								40876	0-3				
287 002 761400E	37010N 61580E	sd Sgw L67								40876	3-6		4		
288 003 761400E	37020N 61420E	cy Oal								40877	0-2				
288 003 61200E	37070N 61200E	Sgw L67								40877	2-3		3	7	
289 004 761400E	37070N 61050E	cy Oal								40878	0-2				
289 004 761400E	37070N 61050E	Sgw L6								40878	2-3		3	10	
290 005 760800E	36980N 60800E	cy Oal								40879	0-2.5				
290 005 760800E	36980N 60800E	Sgw LA								40879	2.5-2		3	13	
290 005 760800E	36980N 60800E	cy Oal								40880	0-3				
290 005 760800E	36980N 60800E	Wind Sgw LA								40880	3-6		4	17	
291 006 760600E	36970N 60580E	cy Oal							Duplicate	40881	0-2				
291 006 760600E	36970N 60580E	Pd Snd L7								40882	2-3		3	20	
292 007 760400E	36980N 60360E	Oal / Oal								40882	0-2				
292 007 760400E	36980N 60360E	Pd Snd L5								40883	2-3		3		
293 008 760200E	36950N 60195E	cy Oal								40884	0-2				
293 008 760200E	36950N 60195E	Pd Snd L6								40884	2-3		3	26	
294 009 760000E	36900N 59970E	Oal								40885	0-1				
294 009 760000E	36900N 59970E	Wind Snd L5								40885	1-2.5		2	28	
295 010 758800E	37020N 59800E														

Remarks: _____

DOMINION MINING LIMITED

VERTICAL RAB LOG

Contractor: _____

Project: ML Langwood

Logged: DM

Prospect: Ryan's Creek

Sampled: Im

Page ___ of ___

Date: 18/10/94

Hole No.	Co-ordinates	Primary Descriptor	Secondary Descriptor						Remarks	Sample No.	Interval	Au	Depth	Em Blade	Em Hammer
			Alt	Comp	Mnvn	Flock	Text	Weth							
295	37000N 754900E	cy Ody								40886	0-3				
296	37020N 59820E	Per Sgw BL6	Per		Per-ult					40886	3-5		5	33	
	759600E	cy Ody									0-5				
	37020N 59860E	cy Osp									5-7				
		stk Sgw BL7			stk					40887	7-9		9	42	
297	37020N 59850E	cy Oal							gravel.		0-5				
		cy Osp									5-10				
		cy Sgw BL7								40888	10-12		12	54	
298	36970 59180E	cy Oal							gravel		0-6				
		Pol Sand BLR								40889	6-9		9	63	
299	36900N 58900E	cy Oal							gravel		0-5				
		Sand ALB								40890	5-6		6	69	
300	38600N 758400E	Creek - 2 new line													
	38650N 58150E	cy Oal							basal gravel		0-4				
		Pol Sand BL								40891	4-6		6	75	
301	38590 758600E	cy Oal									0-2				
	58550E	Sand								40892	2-3		3	78	
		Oal									0-1				
302	38570 758800	Sand								40893	1-2		2	80	
	58770														

Remarks:



117
97
214

Contractor: _____

Project: Ringwood
 Logged: Don

Prospect: Reno's Creek
Sampled: 25m.

Page __ of __

Date: 18/10/90

Hole No.	Co-ordinates	Primary Descriptor	Secondary Descriptor						Remarks	Sample No.	Interval	Au	Depth	E m Blade	E m Hammer
			Alt	Comp	Mnvn	Rock	Text	Weth							
85 94RTR 18 94RDR 303	38600N 75900E 38550N 58780E	Ool cg Sgw L							o/c		0-1			80	
304 19	759200E 38590 59180E	Ool. cg Sgw LA								40894	1-2		2	82	
305 20	759400E 38570 59400E	cg Ool cg Sgw LP								40895	1-3		3	85	
306 21	759600E 38570 59600E	cg Ool cg Sgw							lag	40896	2-3		3	88	
307 22	59800E 38530N 59820E	Ool cg Sgw LB							"	40897	2-3		3	91	
308 23	760000 38620N 59950E??									40898	1-3		3	94	
		E.O.L.								40899	1-3		3	97	
		Across Creek.							Standard	40900					

Flammkuchen:

Final

ANALYTICAL REPORT

SAMPLE	AuDp1	AuDp2	Cu	Pb	Zn	Ag	As
40876	1	--	47	3	39	<0.1	20
40877	<1	--	26	7	38	<0.1	<5
40878	<1	--	19	7	35	<0.1	<5
40879	<1	--	17	8	40	<0.1	<5
40880	<1	--	17	3	41	<0.1	<5
40881	2	--	18	3	41	<0.1	<5
40882	<1	--	24	2	50	<0.1	<5
40883	<1	--	38	7	45	<0.1	10
40884	<1	--	24	6	65	<0.1	<5
40885	<1	--	22	10	35	<0.1	15
40886	2	--	24	8	43	<0.1	10
40887	7	--	44	18	54	<0.1	10
40888	1	--	14	6	42	<0.1	<5
40889	2	2	43	27	71	<0.1	15
40890	1	--	18	10	56	<0.1	<5
40891	2	--	21	5	39	<0.1	<5
40892	<1	--	9	4	41	<0.1	<5
40893	<1	--	6	4	38	<0.1	<5
40894	<1	<1	4	4	37	<0.1	<5
40895	<1	--	5	2	42	<0.1	<5
40896	<1	--	26	2	32	<0.1	<5
40897	<1	--	29	4	34	<0.1	<5
40898	<1	--	23	4	51	<0.1	15
40899	<1	--	37	12	29	<0.1	20
40900	7	--	16	54	14	<0.1	30

UNITS	ppb	ppb	ppm	ppm	ppm	ppm	ppm
DET.LIM	1	1	1	1	1	0.1	5
SCHEME	AA9	AA9	AA9	AA9	AA9	AA9	AA9

Final

ANALYTICAL REPORT

SAMPLE	Bi	Fe	Mn
40876	<1	3.02%	130
40877	<1	3.50%	230
40878	<1	3.10%	390
40879	<1	3.26%	280
40880	<1	4.08%	300
40881	<1	4.60%	330
40882	<1	3.88%	300
40883	<1	3.20%	290
40884	<1	4.18%	230
40885	<1	7.32%	23
40886	<1	3.94%	590
40887	<1	4.04%	420
40888	<1	3.00%	125
40889	<1	5.32%	280
40890	<1	3.42%	450
40891	<1	2.64%	240
40892	<1	2.66%	175
40893	<1	3.38%	170
40894	<1	2.98%	230
40895	<1	2.98%	280
40896	<1	2.56%	200
40897	<1	2.54%	220
40898	<1	4.02%	420
40899	<1	3.24%	370
40900	10	15.1%	200

UNITS	ppm	ppm	ppm
DET.LIM	1	5	4
SCHEME	AA9	AA9	AA9

APPENDIX 2

LAG SAMPLING LOGS AND ASSAY RESULTS



GEOCHEMICAL SAMPLING

LEVELMENT : EL8139

Project: PinewoodProspect: Ryan's Creek

Page ____ of ____

Sample Type: LAG +B -8Sampler: BDDate: 29/10/94

Laboratory: _____

Analytical Methods: _____

Co-ordinate / Location	Slope Vector	Primary Descriptor	Secondary Descriptor			Sample No. Prefix	Analysis			
							Au.			
85 37000N 759120E 760000E	W → E	Per Rkn PR	angular			44154	<			
760160E 760260E	↔	Per Rkn PR	" / edge			44155	<			
760420 760400E	↔	Per Rkn PR	vgz - tr			44156	<			
P36 850N 760200E	↔	Per Rkn PR	" "			44157	<			
736920N 741210E	↔	Pol Sand PR				44158	<			
		NS								
37000N 761720E 761700E	W → E	Pol Sand PR	vgz - tr			44159	1			
		E.O.L.								
85 36200N 761700E	E → W	Per Sand PRB				44160	<			
STANDARD		RND - 3				44161	5			
761570E 761600E	↔	Per Sand PRB	vgz - tr			44162	<			
761400E	↔	ultr Sgw RB	vgz - tr			44163	<			
761200E 761200E	↔	Pol Sand PR	angular			44164	<			
761080E 761000E	↔	Per Rkn PR	"			44165	4			
760770E 760800E	↔	Pol Sand PR	"			44166	<			
760570 760600E	↔	"	"			44167	<			
760300E 760400E	↔	"	" / vgz - tr			44168	<			
760060E 760100E	↔	Per Rkn PRB	subrounded / vgz - 5%			44169	4			
759700E	↔	Per Rkn PRB	angular			44170	<			
759620E 759600E	↔	Pol Sand PRB	"			44171	2			
85 36200N 759300E	W → E	Pol Sand PRB	vgz - 5%			44172	<			
85 36200N 759400E	↔	Rock: Per Rgn				44173	2			
85 36200N 759400E	↔	Per Sgw RB				44174	13			
759230 759200E	↔	Per Sand PR				44175	<			
759000E 759000E	↔	vgz Rkn PR9	vgz - 20%			44176	2			
758800E	↔	Per Rkn PR9	" tr			44177	<			
758580E 758600E	↔	Per Rkn PR2				44178	<			
758410E 758400E	↔	Per Rkn PR2	vgz - 30%			44179	<			
		E.O.L.								

Remarks



GEOCHEMICAL SAMPLING

Project: Highwood Prospect: Ryan's Creek Page of

Sample Type: LAG +2, -8 Sampler: BD Date: 29/10/94

Laboratory: _____ Analytical Methods: _____

[illegible]

Remarks



DOMINION MINING LIMITED

GEOCHEMICAL SAMPLING

Project: Ringwood Prospect: Ryan's Creek Page of

Sample Type: LAG +2, -8 Sampler: BD Date: 2/11/94

Laboratory: AMEL Analytical Methods:

	Co-ordinate / Location	Slope Vector	Primary Descriptor	Secondary Descriptor			Sample No. Prefix	Analysis			
								Au			
75	38° 57'N 61° 37'E 761200E	E W 	vgz Rsc PR	vgz	5%		44184	2			
	38° 58'N 61° 18'E 761200E		Per Rsc PR				44185	2			
	38° 59'N 60° 58'E 761000E		Per Rsc PR				44186	<			
	60° 78'E 760800E		Per Rsc PR				44187	1			
	60° 51'E 760600E		Per Rsc PR				44188	<			
	38° 26'N 60° 30'E 760300E		vgz Rsc PR	vgz	10%		44189	<			
			F.O.L.								
83	34° 00'N 60° 00'E 760400E	W E 	Per Rsc PR	vgz	3%		44190	1			
	60° 00'E 760300E		vgz Rsc PR	vgz	10%		44191	2			
	60° 00'E 761000E		vgz Rsc PR	vgz	5%		44192	4			
	61° 16'E 761200E		Per Rsc PR	vgz	5%		44193	2			
	61° 42'E 761400E		Per Rsc PR	vgz	5%		44194	2			
	61° 59'E 761600E		vgz Rsc PR	vgz	10%		44195	1			