



COMPASS RESOURCES NL

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**FIRST ANNUAL REPORT**  
**EXPLORATION RETENTION LICENSE 148**  
**BATCHELOR**  
**NOVEMBER 2002**

M. K. Boots  
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Distribution

Original	Department of Business, Industry and Resource Development
Copy 1	Guardian Resources Pty. Ltd
Copy 2	Compass Resources NL

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## **SUMMARY**

During the first year of tenure, only a small amount of field work, was undertaken. Office work completed involved a more thorough compilation of previous drill data and updating and correcting the computer database of the Area 55 Prospect.

Farm out negotiations with a third party were advanced to allow for an incoming party to undertake follow-up deep drilling at the Area 55 Prospect.

## **TENEMENT DETAILS**

ERL 148 was originally applied for by Compass Resources NL and Guardian Resources Pty. Ltd on 16 April, 1996 as 14 blocks to replace EL 6640. Those original blocks were 3841, 3941, 3842, 3942, 4042, 3843, 3943, 3844, 3745, 3646, 3647, 3548, 3648 and 3549.

Following amendments, the tenement was granted effective 26 November, 2001 covering an area of 2005 hectares. The Retention Licence was granted to Compass Resources 100% with joint venture agreements giving equity as Compass 90% and Guardian Resources Pty. Ltd. 10%. Compass is operator of the exploration in the tenement.

Within this tenement is MLN(A) 1162, also applied for by Compass and Guardian, which covers the base metal mineralisation at the Area 55 Prospect.

Figure 1 shows the location of the tenement which is located to the west of the town of Batchelor.

## **PREVIOUS EXPLORATION**

Due to the proximity of the Licence to known uranium mines and base metal mineralisation, a significant amount of exploration has been undertaken. The BMR commenced exploration in 1951 with a high level airborne survey and continued exploration in the area up to about 1970. In 1963 they completed one diamond drill hole designated DDG 17 within the boundaries of the Exploration Retention Licence. They were likewise involved in drilling four diamond drill holes, 69A1 to 59A3 and 60A4 in the period 1959-1960.

Territory Exploration Pty. Ltd., (TEP) a subsidiary of CRA, undertook significant regional and detailed evaluation in the period 1954 to 1965. This work concentrated on uranium exploration, however approximately 70 diamond drill holes were completed within the boundaries of the tenement in that period, mostly in the vicinity of the Area 55 Prospect. They creased exploration at this Prospect following their two best drill intercepts of 21.34 metres @ 2.83% copper, 0.46% lead in hole 819 and 53.34 metres of 0.60% copper and 13.76% lead in hole 818.

Uranerz undertook detailed uranium exploration in the area in the period 1979 to 1984, drilling a large number of RAB holes within the tenement and in adjoining tenements.

Previous compilations of data, especially that by Y. Miezitis (BMR record 1967/150) have been particularly useful in assembling and handling the large database.

Compass, together with Acacia Resources undertook details exploration of the Area 55 prospect in the period 1991-1999. This included the following drilling

- ? 62 diamond drill holes (7358.70 metres including precollars)
- ? 122 R/C percussion drill holes (4021.5 metres)

Major drill intersections of weathered and primary sulphidic base metals were recorded with copper, cobalt, lead and nickel being the most important metals present.

The better intersections are listed below

### Better Diamond Drill Hole Intersections

Hole	From	To	Int	% Cu	%Pb	% Co	% Ni
55-1	18	34	16	0.57	9.45	0.021	0.059
	34	67	33	2.89	2.55	0.103	0.187
	74	88.5	14.5	1.26	0.02	0.501	0.302
55-2	97	110	13	1.02	6.78	0.152	0.273
	110	126	16	1.84	0.93	0.556	0.607
55-10	23	52	29	1.33	0.63	0.054	0.134
55-11	137	153.2	17.2	3.72	0.11	0.664	0.643
55-13	174	191	17	1.95	1.01	0.341	0.270
55-14	41	52	11	0.24	8.32	0.066	0.080
	60	127	37	2.83	0.13	0.643	0.541
55-043	54	65	11	0.40	7.32	0.223	0.276
	66	78	12	2.35	1.17	0.429	0.686
55-044	85	92	7	3.94	0.42	0.679	0.467
55-045	55	64	9	1.33	9.68	0.088	0.273
	71	90	19	1.92	3.56	0.148	0.358
	95	107	12	1.80	2.16	0.276	0.399
	111	125	13	1.41	0.02	0.291	0.305
55-046	31	64	33	2.48	3.48	0.184	0.224
	74	83	9	2.96	0.10	0.478	0.482
55-048	18	49	31	0.58	6.51	0.139	0.217
	66	90	24	4.12	0.28	0.384	0.410
55-060	26	61	35	0.65	12.93	0.227	0.411
	79	96	17	1.68	0.11	0.392	0.347
55-061	30	69	39	0.71	15.62	0.190	0.288
	81	110	29	1.02	0.05	0.528	0.516
55-062	136	146	10	2.73	0.11	0.909	0.575

## RESOURCE (History of Changes)

When Compass and Guardian acquired the original tenement (EL 6640) over the Area 55 Prospect, it had a published resource (in 1965 by CRA) of: approximately 1 million tonnes at an average grade of 4-5% lead and 0.9% copper to a depth of 66 metres.

Following infill drilling by Acacia Resources in 1995, they produced a resource figure utilising "copper equivalent" grades and cutoffs of 1% copper equivalent. That figure was

3.6 million tonnes at 0.64% copper, 0.18% cobalt, 0.18% nickel, or 3.63% copper equivalent, using the then price relationship of copper = 1.0, cobalt = 14.0 and nickel = 2.7.

In late 1997 MMS Mining Consultants Pty. Ltd., calculated an indicated resource (using a cut off grade of above 0.5% copper and below 0.5% copper with cobalt above 0.1%) of 4.1 million tonnes grading 0.22% cobalt, 0.84% copper, 0.98% lead and 0.22% nickel and 4.3 g/t silver. An SG of 2.0 was used for this calculation.

Area 55 has grown in importance with more recent drilling. In late 1998 using a cut off of above 0.5% copper and below 0.5% copper with cobalt above 0.1% cobalt, the indicated resource as calculated by MineConsult Pty. Ltd. increased to 7.3 million tonnes at 0.19% cobalt, 0.73% copper, 0.76% lead and 0.18% nickel.

By using a cut off of >0.05% cobalt for copper grades less than 0.5% copper, the indicated resource is 12.4 million tonnes at 0.14% cobalt, 0.49% copper, 0.56% lead and 0.14% nickel.

## **WORK COMPLETED**

A more thorough search of previous exploration data in the Federal Government's archives in Darwin located more detailed drill logs and assay logs of CRA-TEP drilling at the Area 55 prospect. This data allowed for an updating and correction to the existing database.

In addition, the drilling data from the Area 55A prospect (located just north of ERL 148 in ERL 125) has been added to the database. This will allow a more holistic interpretation of the Area 55 mineralisation and guide further deeper drilling in both ERL 148 and ERL 125.

## **INTERPRETATION OF AREA 55 MINERALISATION**

As part of the updating of all previous drilling data at the Area 55 prospect, a more detailed understanding of this mineralisation was achieved. It is now apparent that a complex stratigraphy exists, characterised by complex alteration patterns and rock types.

Although samples have not been regularly assayed for titanium, it is apparent from what assay and petrological data are available, that rutile is a major alteration product associated with the mineralisation.

The stratigraphy of the Area 55 mineralisation is as summarised below:

Whites Formation	Massive pyritic black shale
Complex Ore Zone	Silicified carbonate rich schists Pale talc-chlorite-sepiolite schists Sacharoidal textured carbonate-mica schists Chlorite-biotite-phogopite sulphide schist Sulpidic black shale
Coomalie Dolomite	Tremolite-talc-chlorite dolomite/magnesite Massive off-white dolomite/magnesite

**EXPLORATION RETENTION LICENSE 148  
EXPENDITURE REPORT  
TO NOVEMBER 2002**

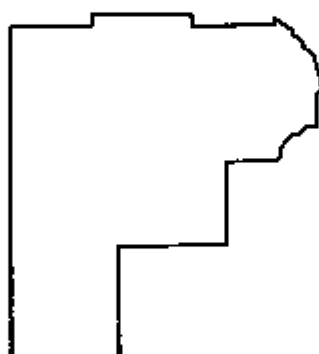
	\$
Salaries/wages/on costs	10,998.52
Tenement costs/Landowner searches	9,000.00
Travel and Accommodation	68.78
Geological Consultants	283.75
Field Costs	2,560.79
Motor Vehicle Costs	451.54
Site Rehabilitation costs	111.14
Other Costs (Aboriginal clearances, etc)	3,600.00
Overheads	2,762.45
 Total Expenditure	 \$30,386.97



**SECOND SCHEDULE  
(Plan of Area)**

130° 57'

131° 00'



13° 01'

13° 04'

**ERL 148  
2005 Ha**