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EL 7/74 MOINA

PROGRESS REPORT ON EXPLORATION

DURING THE 12 MONTHS TO 18 JUNE 1987

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1. SUMMARY

Exploration at Moina by Comalco and Shell Australia has revealed a resource of 26.5 million tonnes of 18% CaF_2 with minor associated tin and tungsten. A pyrrhotite/sphalerite skarn was also found containing about 5 million tonnes of 8% zinc.

A number of drill holes had been intermittently assayed for gold in the past. CRA Exploration initiated a programme of reassaying old drill core for gold.

A correlation of gold with the sphalerite/pyrrhotite and magnetite/chlorite skarns was noted. Further work is proposed.

2. INTRODUCTION

This report covers all work carried out during the year ending 18th June 1987 on the portion of EL 7/74 that is proposed for retention after the final relinquishment date of the licence.

The ground occupies the area around the Moina skarns which contain resources of fluorite and sphalerite. The area is the subject of a Joint Venture between Comalco Limited, Billiton Australia (formerly Shell) and CRA Exploration Pty. Limited. CRA Exploration commenced management of exploration activities within EL 7/74 in March 1985. During the life of the licence, CRAE concentrated on the Pb/Zn potential of the Cambrian volcanics of the Winterbrook Inlier and on evaluating the Moina skarns. Previous work had shown there to be some gold in the skarns (max. 10ppm) as well as silver in the hanging wall rocks. This report covers the CRAE work in examining the precious metal potential of the area and the exploration for further metasomatism related mineralisation.

3. CONCLUSIONS

The area is known to contain a fluorite resource of 26.5 million tonnes at 18% CaF_2 and a zinc resource of 5 million tonnes at 8% zinc. In addition the work during the last year has shown there to be potential for gold within the skarns. As yet there have been no high grade assays in the drill holes but numerous results up to 2ppm Au are promising considering that none of the holes were drilled with gold as a target.

4. RECOMMENDATIONS

1. Soil sampling over fault zones and areas which may be found of interest after statistical treatment of the geochemistry.
2. Assaying of drill core in skarns.
3. If necessary - further drilling.

5. GEOLOGY

The Devonian Dalcoath Granite outcrops to the east of the area. A western extension of the granite has been intersected in drill holes within the retention area. This granite intrudes and alters rock of Ordovician age. These comprise the Moina Sandstone - typically a clean white sandstone containing infrequent shale units and often pyritic in the area around the Dalcoath Granite - and the overlying Gordon Limestone which has in places been completely replaced by fluorite/magnetite or sphalerite/pyrrhotite skarns.

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Underlying the Moina Sandstone is the Ordovician Roland Conglomerate, which forms major topographic highs, and Cambrian volcanics of the Fossey Mountain Trough which outcrop in the south east of the area.

Overlying the whole sequence is an intermittent cover of tertiary basalt and pyroclastics.

The licence is dominated by a south-east trending group of faults, of which the Bismuth Creek Fault is the most significant. The others include Hugo's Fault and Weste's Fault. The Bismuth Creek Fault cuts through the main Moina skarn (at Shepherd and Murphy) and is believed to have a controlling influence on the mineralisation. The geology of the area is summarised on plan TASH 3290.

6. GEOCHEMISTRY

The area has been extensively prospected and a number of small mines have been developed. The Department of Mines, Mt. Lyell Mining and Railway Company, Comalco and Shell have drilled a total of 48 holes into the area. The holes were aimed at locating and delineating the extent of skarns (notably the Shepherd and Murphy Wrigglite). These holes were sampled at various intervals and tested for a variety of elements. Most common were Cu, Pb, Zn, Sn, and W but a wide variety of other elements were analysed for on a sporadic basis including Au, Ag and rare earths.

6.1 Previous Work

As well as geochemistry on drill core, a grid was cut and C Horizon soil samples were collected at 25 metre intervals. These were analysed for lead and tin

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and sometimes for other base metals. Rock samples were also collected from numerous outcrops. The attention of CRAE geologists was caught by gold assays in the core and by gold anomalies in -80# and cyanide leach stream sediment samples collected from the creeks draining the skarn area. A summary of the earlier borehole assays for Au can be found in Appendix 2. Assaying was performed over very irregular intervals and recorded values up to 4.5ppm over 1 metre except for one exceptional figure recorded as 2750ppm over 7.93 metres which is believed to be a typing anomaly. The highest values were found to be in the magnetite skarns with MD39 assaying 11.2 metres at 0.8gm. CRAE elected to systematically sample a number of holes assaying for gold as the primary target.

*believed!
find out
!!*

*What assaying
method?*

6.2 Core Reassaying

SMD16?

Reassaying for gold was done on all or part of holes ML1A, ML3A, SMD6, SMD7, SMD9, SMD13, SMD24, SMD25, MD33, MD39 and MD42. Table 1 lists the location and orientation data for the holes sampled:-

TABLE 1

Drillhole	Easting	Northing	Dip	Azimuth	Depth (m)
ML1A	1180E	60N	-50°	180°	265.0
ML3A	1450E	125S	-50°	000°	260.0
SMD6	860E	50S	-90°	-	102.0
SMD7	975E	90N	-90°	-	71.0
SMD9	150E	100S	-90°	-	130.0
SMD13	1450E	50S	-90°	-	132.0
SMD16	1450E	125S	-90°	-	171.0
SMD24	1380E	10S	-75°	215°	170.0
SMD25	1380E	10S	-65°	215°	44.8
MD33	650E	222N	-90°	-	164.0
MD39	1301E	106N	-90°	-	260.0
MD42	1160E	97N	-90°	-	208.0

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In SMD16 a strong correlation was observed between gold and zinc assays. This places particular importance on the sphalerite rich skarn as a potential gold target. ✓

In SMD24 Hugo Fault was found to be mineralised (4 metres at 1.04ppm Au). This raises the possibility of significant fault mineralisation existing in the Hugo's and Bismuth Creek fault zones. In SMD9 there was found to be a gold association with a pyrrhotite skarn (8 metres at 1.45 ppm).

While no high grade results (greater than 5 g/t) were returned the above results are quite encouraging, especially those in the sphalerite rich skarn.

6.3 Discussion

At this stage there appears to be gold associated with fault zones, zinc skarns and pyrrhotite skarns. Clearly we need a better understanding of the control of the gold mineralisation. To this end we will need to examine gold potential of other skarns west of the Bismuth Creek fault and also reassay any holes that have intersected fault zones. All the drill hole and geochemical data will also have to be entered to enable a detailed study of the statistical and spacial relationship of the various types of mineralisation to be completed.

7. AEROMAGNETIC FOLLOW-UP

In 1980 Shell flew a magnetic survey over all of the areas included in the Joint Venture with Comalco. This survey was designed to enhance geological knowledge of the areas, but more importantly, to locate further skarns. A consultant geophysicist employed by Shell, completed an interpretation of the whole area. Following the entry of CRAE into the Joint Venture a tape of the data was obtained and a reinterpretation of possible skarns made.

7.1 Interpretation

The interpretation was designed to locate any evidence of alteration close to Moina, that might have been passed over in a broader, more general approach.

While magnetite skarns were the main target it was considered that sphalerite/pyrrhotite skarns were unlikely to be extremely magnetic and that even the most subtle anomalies were worthy of consideration. The magnetic interpretation is discussed in detail in Appendix 3.

7.2 Ground Follow-up

The interpreted aeromagnetic anomalies are shown on plan TASH 3400. Many of these fall within the grid surveyed with ground magnetics by Comalco and Shell and most of these anomalies have been drill tested except for anomaly 18 near the Lawkenlaw mine which may not have been effectively tested by SMD26. Anomalies 26 and 28 were interpreted as being high priority for follow up. These were initially surveyed with two lines each of ground magnetics with readings taken at 10 metre intervals using a Geometrics G856 magnetometer. The lines were simply chained in using compass and topofil. Following the results of first two lines over anomaly 28 (The Dalcoath Road Anomaly) three further lines were surveyed in using the same specifications.

7.3 Results

The data from the ground surveys over anomaly 26 showed no clear distinct magnetic anomaly but rather a general rise with a number of peaks. Ground inspection showed

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the presence of a Tertiary pyroclastic containing large basaltic fragments with cooled glassy margins near the anomaly position. A basaltic source, probably a fissure vent, is believed to be the cause.

The Dalcoath Road Anomaly shows a discrete anomaly across line 0,100 and 200E. This anomaly is possibly faulted to the south on lines 300E and 400E. Modelling the ground magnetic data, gives a body of weak magnetic susceptibility dipping at 10 degrees to the north. The dip conforms with that of the Moina Sandstone which outcrops at surface. It is thus assumed that the source is a stratigraphic unit within the Moina Sandstone which contains a higher than normal percentage of magnetic material.

7.4 Discussion

Anomaly 26 seems well explained by the basalt but anomalies 28 and 18 will require some further work. Unfortunately there is a problem with some Mining Licences in this area which will first have to be resolved.

8. FUTURE PROGRAMME

A programme of continuing to evaluate the Moina area for its gold potential is proposed. This will include:

1. Soil and drill hole geochemistry along the fault zones. Earlier pulps have been lost so the samples will have to be collected again.
2. Further drill hole geochemistry in the skarns.
3. Evaluating the unexplained magnetic anomalies using soil and rock chip geochemistry.
4. Possible drilling to better define the sphalerite rich skarn.

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9. REFERENCES

- Askins, P W 1978 EL 7/74 Moina. Areas covered by Moina Sheets 1, 2, 3. Report on all investigation to September, 1978, by Comalco Ltd.
- Askins, P W 1979 EL 7/74 Moina. Areas covered by Moina Sheets 1, 2, 3. 1979. Update and Moina Sheet A, report on all investigations to August, 1979, by Comalco Ltd.
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- Smyth, W D 1982 EL 7/74 Moina. Progress Report on Exploration during the period 31/7/81 to 30/6/82. Unpubl. Shell Rep. 08.1066.
- Smyth, W D 1983 EL 7/74 Moina. Progress Report on Exploration during the period 1/7/82 to 30/6/83. Unpubl. Shell Rep. 08.2064.

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10. LOCATION

Burnie 1:250 000 Sheet SK 55-03

11. KEYWORDS

Geochem-drainage, Geochem-rock, Geophys- Magnetics,
Calc-Silicate, Base Metals, Gold, Ordovician, Limestone.

12. LIST OF PLANS

<u>Plan</u>		<u>Scale</u>
<u>TASh No</u>		
3401	MOINA RL 7/74 Location Plan	1:1 000 000
3398	MOINA EL 7/74 Location Plan Showing area to be relinquished	1:100 000
3290	MOINA EL 7/74 Moina Prospect Geological Plan	1:10 000
3291	MOINA EL 7/74 Moina Prospect Exploration Summary Plan	1:10 000
3225	MOINA EL 7/74 Moina Prospect Grid and Drillhole Location Plan	1:10 000
3400	MOINA EL 7/74 Moina Prospect Airborne Magnetic Anomalies & Ground Follow-up	1:10 000

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3339	MOINA EL 7/74 Drillhole ML1A Section Line 1150E Lithologies & Gold Assays-ppm	1:1000
3340	MOINA EL 7/74 Drillhole ML3A Section Line 1450E Lithologies & Gold Assays-ppm	1:1000
3341	MOINA EL 7/74 MD39,42 & SMD16,24,25 SECTIONS LINE 0 ⁰ M North Lithologies & Gold Assays-ppm	1:1000
3403	MOINA EL 7/74 Ground Magnetism, Moina Anomaly 26 Line 261E	As Shown
3404	MOINA EL 7/74 Ground Magnetism Moina Anomaly 26 Line 262E	As Shown
3405	MOINA EL 7/74 Ground Magnetism Moina Anomaly 28 Line 0E	As Shown
3406	MOINA EL 7/74 Ground Magnetism Moina Anomaly 28 Line 100E	As Shown
3407	MOINA EL 7/74 Ground Magnetism Moina Anomaly 28 Line 200E	As Shown
3408	MOINA EL 7/74 Ground Magnetism Moina Anomaly 28 Line 300E	As Shown
3409	MOINA EL 7/74 Ground Magnetism Moina Anomaly 28 Line 400E	As Shown

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13. LIST OF APPENDICES

- Appendix 1 Previous Gold Results Summary
- Appendix 2 Borehole Geochemistry
- Appendix 3 Aeromagnetic Interpretation

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APPENDIX 1

PREVIOUS GOLD RESULTS SUMMARY

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SAMPLE NUMBER	DDH ML 1A		Sample Type	ANALYSES								Geological Observations	
	INTERVAL (in Feet)			Cu	Pb	Zn						Au ppm	
1152702	95	110	1/4 split core								0.04		
703	110	115	"								0.01		
704	115	125	"								0.02		
705	125	130	"								0.02		
706	130	160	"								0.01		
707	160	165	"								0.01		
708	165	180	"								0.01		
709	180	185	"								0.04		
710	185	190	"								0.01		
711	190	200	"								0.02		
712	200	210	core grinds								0.02	0.01	
713	210	220	"								0.01	0.01	
714	220	230	"								0.10		
715	230	240	"								0.04		
716	240	250	"								0.03		
717	250	260	"								0.01		
718	260	270	"								0.01		
719	270	280	"								0.01		
720	280	290	"								0.01		
1152721	290	300	"								0.01		
DETECTION LIMIT											0.01		
ANALYTICAL METHOD											PM 209		
PROJECT SHEFFIELD - MOINA				1:250 000 Sheet BURNIE				AMG Zone				Sheet No 1.	
PROJECT MOINA EL 7/74				DPO's 32050								Laboratory ALS BRISBANE	
PROJECT SHEPHERD + MURPHY MINE												Collected By BGF Date	

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016

SAMPLE NUMBER	DDH ML 1A		Sample Type	ANALYSES								Geological Observations	
	INTERVAL (in feet)			Cu	Pb	Zn					Au ppm		
1152722	300	310	core grinds							0.01			
723	310	320	"							0.01			
724	320	330	"							0.01			
725	330	340	"							0.01			
726	340	350	"							0.01			
727	350	360	"							0.01			
728	360	370	"							0.01	0.01		
729	370	380	"							0.01			
730	380	390	"							0.01	0.01		
731	390	400	"							0.01			
732	400	410	"							0.01			
733	410	420	"							0.02			
734	420	430	"							0.01			
735	430	440	"							0.01			
736	440	450	"							<0.01			
737	450	460	"							0.02	<0.01		
738	460	470	"							0.02			
739	470	480	"							0.01			
740	480	490	"							0.01			
1152741	490	500	"							0.01			
DETECTION LIMIT										0.01			
ANALYTICAL METHOD										PM 209			
Project SHEFFIELD - MOINA				1 250 000 Sheet BURNIE				AMG Zone				Sheet No 2.	
Location MOINA EL 7/74				DPO's 32050								Laboratory ALS BRISBANE	
Area / Project SHEPHERD + MURPHY MINE												Collected By BGF Date	

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017

SAMPLE NUMBER	DDH ML 1A		Sample Type	ANALYSES								Au ppm	Geological Observations
	INTERVAL (in feet)			Cu	Pb	Zn							
1152742	500	510	Core grade									0.01	
743	510	520	"									0.01	0.02
744	520	530	"									<0.01	
745	530	540	"									0.02	
746	540	550	"									0.01	
747	550	560	"									0.01	
748	560	570	"									0.02	
749	570	580	"									0.02	
750	580	590	"									0.05	
751	590	600	"									0.02	
752	600	610	"									0.02	
753	610	620	"									0.01	
754	620	630	"									0.02	
755	630	640	"									0.01	
756	640	650	"									0.01	
757	650	660	"									0.02	
758	660	670	"									0.01	
759	670	680	"									0.01	
760	680	690	"									0.03	
1152761	690	700	"									0.01	
DETECTION LIMIT												0.01	
ANALYTICAL METHOD												PM 209	

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Project	SHEFFIELD - MOINA	1 250 000 Sheet	BURNIE	AMG Zone	Sheet No	3.
Project	MOINA EL 7/74	DPO's	32050		Laboratory	ALS BRISBANE
Project	SHEPHERD + MURPHY MINE				Collected By	BBF
					Date	

CRA EXPLORATION PTY. LTD.

018

SAMPLE NUMBER	DDH ML 1A		Sample Type	ANALYSES								Geological Observations	
	INTERVAL (in feet)			Cu	Pb	Zn						Au ppm	
1152762	700	710	core grinds								0.02		
763	710	720	"								0.01		
764	720	730	"								0.01		
765	730	740	"								0.02		
766	740	750	"								0.02	<0.01	
767	750	760	"								<0.01	<0.01	
768	760	770	"								0.01		
769	770	780	"								<0.01		
770	780	790	"								0.01		
771	790	800	"								<0.01		
772	800	810	"								0.02		
773	810	820	"								<0.01		
774	820	830	"								<0.01		
775	830	840	"								<0.01		
776	840	850	"								<0.01		
777	850	860	"								0.02		
1152778	860	867	"								0.03		
DETECTION LIMIT											0.01		
ANALYTICAL METHOD											PM 209		
Project SHEFFIELD - MOINA				1:250 000 Sheet BURNIE				AMG Zone				Sheet No 4.	
Location MOINA EL 7/74				DPO's 32050								Laboratory ALS BRISBANE	
Area / Prospect SHEPHERD + MURPHY MINE												Collected By BGF Date	

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CRA EXPLORATION PTY. LTD.

019

SAMPLE NUMBER	DDH ML3A		Sample Type	ANALYSES								Geological Observations	
	INTERVAL (in feet)			Cu	Pb	Zn						Au ppm	
1152601	57	67	core grind								0.01		
602	67	77	"								0.01		
603	77	87	"								<0.01		
604	87	97	"								0.08		
605	97	107	"								0.03		
606	107	117	"								0.02		
607	117	127	"								0.01		
608	127	137	"								0.02		
609	137	147	"								0.01		
610	147	157	"								0.04	0.03	
611	157	167	"								0.03		
612	167	177	"								0.03		
613	177	187	"								0.05		
614	187	197	"								0.02		
615	197	207	"								0.02		
616	207	217	"								0.02		
617	217	227	"								0.03		
618	227	237	"								0.02		
619	237	247	"								0.02		
1152620	247	257	"								0.02		
DETECTION LIMIT											0.01		
ANALYTICAL METHOD											PM 209		
Project	SHEFFIELD - MOINA			1 250 000 Sheet				BURNIE		AMG Zone		Sheet No	1.
Treatment	MOINA EL 7/74			DPO's				32049				Laboratory	ALS BRISBANE
Area / Prospect	SHEPHERD + MURPHY MINE											Collected By	B6F
											Date		

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CRA EXPLORATION PTY. LTD.

020

SAMPLE NUMBER	DDH ML 3A		Sample Type	ANALYSES								Au ppm	Geological Observations
	INTERVAL (in feet)			Cu	Pb	Zn							
1152621	257	267	core grind									0.03	
622	267	277	"									0.02	
623	277	287	"									0.08	
624	287	297	"									0.02	
625	297	307	"									0.03	
626	307	317	"									0.10	
627	317	327	"									0.95	1.08
628	327	337	"									0.09	
629	337	346	"									<0.01	
630	346	351	1/4 split core									0.08	
631	351	356	"									0.08	
632	356	361	"									0.08	
633	361	366	"									0.06	
634	366	371	"									0.06	
635	371	376	"									0.08	
636	376	381	"									0.04	
637	381	386	"									0.04	
638	386	391	"									0.04	
639	391	396	"									0.04	
1152640	396	401	"									0.04	
DETECTION LIMIT												0.01	
ANALYTICAL METHOD												PM209	

Project	SHEFFIELD - MOINA	1:250 000 Sheet	BURNIE	AMG Zone	Sheet No	2.
Terrace	MOINA EL 7/74	DPO's	32049	Laboratory	ALS	BRISBANE
Area / Prospect	SHEPHERD + MURPHY MINE	Collected By	BGF	Date		

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021

SAMPLE NUMBER	DDH ML 3A			ANALYSES								Geological Observations	
	INTERVAL (in feet)		Sample Type	Cu	Pb	Zn					Au ppm		
1152641	401	406	1/4 split core								0.04		
642	406	411	"								0.08		
643	411	416	"								0.01		
644	416	421	"								0.18	0.16	
645	421	426	"								0.06		
646	426	431	"								0.08	0.08	
647	431	436	"								0.06	0.06	
648	436	441	"								0.06	0.07	
649	441	446	"								0.08		
650	446	451	"								0.06		
651	451	456	"								0.06		
652	456	461	"								0.04		
653	461	466	"								0.06		
654	466	471	"								0.06		
655	471	476	"								0.06		
656	476	481	"								0.01		
657	481	486	"								0.04		
658	486	491	"								2.18		
659	491	496	"								0.04		
1152660	496	501	"								0.05		
DETECTION LIMIT											0.01		
ANALYTICAL METHOD											PM 209		
Project SHEFFIELD - MOINA				1 250 000 Sheet BURNIE				AMG Zone				Sheet No 3.	
Referred MOINA EL 7/74				DPO's 32049, 32059								Laboratory ALS BRISBANE	
Area / District SHEPHERD + MURPHY MINE												Collected By BGF Date	

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022

SAMPLE NUMBER	DDH ML 3A		Sample Type	ANALYSES								Geological Observations	
	INTERVAL (in feet)			Cu	Pb	Zn						Au ppm	
1152661	501	506	1/4 split core								0.02		
662	506	511	"								0.01		
663	511	516	"								0.02		
664	516	521	"								0.01		
665	521	526	"								0.01		
666	526	531	"								0.03		
667	531	536	"								0.02		
668	536	541	"								0.03		
669	541	546	"								0.04		
670	546	551	"								0.01		
671	551	556	"								0.02		
672	556	561	"								<0.01		
673	561	566	"								0.02		
674	566	571	"								0.01		
675	571	576	"								0.01		
676	576	581	"								0.01		
677	581	586	"								0.01		
678	586	591	"								0.01		
679	591	596	"								0.01		
1152680	596	601	"								0.01		
DETECTION LIMIT											0.01		
ANALYTICAL METHOD											PM 209		
Project SHEFFIELD - MOINA				1 250 000 Sheet BURNIE				AMG Zone				Sheet No 4	
Relevant MOINA EL 7/74				DPO's 32059								Laboratory ALS BRISBANE	
Area / Prospect SHEPHERD + MURPHY MINE												Collected By BGF Date	

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CRA EXPLORATION PTY. LTD.

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SAMPLE NUMBER	DDH ML 3A		Sample Type	ANALYSES								Geological Observations	
	INTERVAL (in feet)			Cu	Pb	Zn						Au ppm	
1152681	601	606	1/4 split core									<0.01	
682	606	611	"									0.01	0.01
683	611	615	"									0.01	0.01
-													
1152686	615	625	core grind									<0.01	
687	625	635	"									<0.01	
688	635	645	"									0.02	
689	645	655	"									0.01	
690	655	665	"									0.01	
691	665	675	"									0.01	
692	675	685	"									0.01	
693	685	695	"									0.04	
694	695	705	"									0.03	
695	705	715	"									0.03	
696	715	725	"									0.01	
697	725	735	"									0.01	
698	735	745	"									0.02	
699	745	755	"									0.01	
1152700	755	765	"									<0.01	
701	765	778	"									0.01	0.01
DETECTION LIMIT												0.01	
ANALYTICAL METHOD												PM 209	

Project	SHEFFIELD - MOINA	1 250 000 Sheet	BURNIE	AMG Zone	Sheet No	5.
Terrace	MOINA EL 7/74	DPO's	32059, 32049	Laboratory	ALS	BRISBANE
Area of Prospect	SHEPHERD + MORPHY MINE	Collected By	BGF	Date		

925024

CRA EXPLORATION PTY. LTD.

02A

SAMPLE NUMBER	DDH 78 SMD 24		ANALYSES								Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm	
1152938	135.0	136.5	1/2 split core							0.02		
939	136.5	138.0	"							0.02		
940	138.0	139.5	"							0.04		
941	139.5	141.0	"							0.06		
942	141.0	142.5	"							0.04		
943	142.5	144.0	"							0.04	0.02	
944	144.0	145.5	"							0.63	0.64	
945	145.5	147.0	"							1.79		
946	147.0	148.5	"							0.78		
947	148.5	150.0	"							0.27		
948	150.0	151.5	"							0.03		
949	151.5	153.0	"							0.04		
950	153.0	154.5	"							0.01		
951	154.5	156.0	"							0.04		
952	156.0	157.5	"							0.02		
953	157.5	159.0	"							0.02		
954	159.0	160.5	"							0.01		
955	160.5	162.0	"							<0.01		
956	162.0	163.5	"							<0.01		
1152757	163.5	165.0	"							0.01		
DETECTION LIMIT										0.01		
ANALYTICAL METHOD										PM 209		
Project MOINA			1:250 000 Sheet BURNIE				AMG Zone		Sheet No 4.			
Tenement MOINA EL 7/74			DPO's 32060				Laboratory ALS BRISBANE					
Area / Prospect							Collected By BGF		Date			

925025

CRA EXPLORATION PTY. LTD.

025

SAMPLE NUMBER	DDH 78 SMD 24		ANALYSES										Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn							Au ppm	
1152958	165.0	166.5	1/4 split etc										<0.01	
959	166.5	168.0	"										0.01	
1152960	168.0	169.8	"										<0.01	
DETECTION LIMIT													0.01	
ANALYTICAL METHOD													PM	
													209	
Project MOINA			1 250 000 Sheet BURNIE					AMG Zone		Sheet No 5.				
TETRENT MOINA EL 7/74			GPO's 32060					Laboratory ALS BRISBANE						
Area / Prospect								Collected By BEF		Date				

925026

CRA EXPLORATION PTY. LTD.

026

SAMPLE NUMBER	DDH 78 SMD 25		ANALYSES								Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm	
1152970	0	3.0	core grinds							0.02		
971	3.0	6.0	"							0.01		
972	6.0	9.0	"							0.03		
973	9.0	12.0	"							0.08		
974	12.0	15.0	"							0.04		
975	15.0	18.0	"							0.04	0.05	
976	18.0	21.0	"							0.04		
977	21.0	24.0	"							0.03		
978	24.0	27.0	"							0.08		
979	27.0	30.0	"							0.02		
980	30.0	31.5	1/2 split core							0.02		
981	31.5	33.0	"							<0.01		
982	33.0	34.5	"							0.01		
983	34.5	36.0	"							0.01		
984	36.0	37.5	"							0.01		
985	37.5	39.0	"							0.01		
986	39.0	42.0	core grinds							0.01		
1152987	42.0	44.8	"							<0.01		
DETECTION LIMIT											0.01	
ANALYTICAL METHOD											PM 209	

925027

Project	MOINA	1 250 000 Sheet	BURNIE	4MG Zone	Sheet No	1.
Date	MOINA 7/74	DPO's	32059		Laboratory	ALS BRISBANE
Project Prospect					Collected By	B6F
					Date	

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 01

TENEMENT NAME MOINA No. 7/74

PLAN - MAP REFERENCE

DEPTH 164 m HOLE No. SMD 33

CO-ORDINATES 650E 222N AZIMUTH - DRILLERS COMMENCED

RL COLLAR INCLINATION -90 DRILL TYPE COMPLETED CASING LEFT DPO No(s) 38719

DEPTH		Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)						
um (M)	To (M)									A _v	P _k	P _d				
						1655022	52	54		0.03	<10	<10				
						023	54	56		0.02	<10	<10				
						1655024	56	58		0.03	<10	<10				
					Det. Limit UNITS					0.01	10	10				
										ppm + ppb						

925028

CRA EXPLORATION PTY. LTD.

028

SAMPLE NUMBER	DDH 80 MD 39		ANALYSES										Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn				Pt ← ppm	Pd G →	Au ppm		
1152401	0.0	3.0	core grind								<0.01			
402	3.0	6.0	"								0.01			
403	6.0	9.0	"								0.02			
404	9.0	12.0	"								0.02			
405	12.0	15.0	"								0.02			
406	15.0	18.0	"								0.01			
407	18.0	21.0	"								0.01			
408	21.0	24.0	"								0.02			
409	24.0	27.0	"								<0.01	0.02		
410	27.0	30.0	"								0.01	0.02		
411	30.0	33.0	"								0.04			
412	33.0	36.0	"								0.02	0.01		
413	36.0	39.0	"						<10	<10	0.02			
414	39.0	42.0	"						<10	<10	0.01			
415	42.0	45.0	"						<10	<10	0.01			
416	45.0	48.0	"						<10	<10	0.01			
417	48.0	51.0	"								0.01			
418	51.0	54.0	"								0.02			
419	54.0	57.0	"								0.02			
1152420	57.0	60.0	"								0.02			
DETECTION LIMIT											0.01			
ANALYTICAL METHOD											PM			
											207			

Project	MOINA - SHEFFIELD	1 250 000 Sheet	BURNIE	AMG Zone	Sheet No. 1.
Tenement	MOINA EL 7/74	DPO's	32059		Laboratory ALS BRISBANE
Area / Prospect	SHEPHERD + MURPHY AREA				Collected By BEF Date

925029

CRA EXPLORATION PTY. LTD.

023

SAMPLE NUMBER	DDH 80 MD 39		ANALYSES								Geological Observations		
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm		
1152421	60.0	63.0	core grind								0.01		
422	63.0	66.0	"								0.02		
423	66.0	69.0	"								0.06	0.04	
424	69.0	72.0	"								0.01		
425	72.0	75.0	"								0.02		
426	75.0	78.0	"								0.02		
427	78.0	81.0	"								0.01		
428	81.0	84.0	"								0.01		
429	84.0	87.0	"								0.02		
430	87.0	90.0	"								<0.01		
431	90.0	93.0	"								0.02		
432	93.0	96.0	"								0.02		
433	96.0	99.0	"								0.02		
434	99.0	102.0	"								0.03		
435	102.0	105.0	"								0.01		
436	105.0	108.0	"								0.01		
437	108.0	111.0	"								0.03		
438	111.0	114.0	"								0.02		
439	114.0	117.0	"								0.04		
1152440	117.0	120.0	"								0.02		
DETECTION LIMIT											0.01		
ANALYTICAL METHOD											PM 207		
Project MOINA - SHEFFIELD				1 250 000 Sheet BURNIE				AMG Zone				Sheet No 2.	
DETAILS: MOINA EL 7/74				DPO's 32059								Laboratory ALS BRISBANE	
Area / Prospect SHEPHERD + MURPHY AREA												Collected By BGF Date	

925030

CRA EXPLORATION PTY. LTD.

030

SAMPLE NUMBER	DDH 80 MD 39			ANALYSES							Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn				Pt ← PPL →	Pd	Au ppm
1152441	120.0	123.0	core quind								0.02	
442	123.0	126.0	"								0.04	
443	126.0	129.0	"								0.03	
444	129.0	132.0	"								0.02	
445	132.0	135.0	"								0.01	
446	135.0	138.0	"								0.01	0.02
447	138.0	141.0	"								0.03	
448	141.0	145.5	"								0.02	
449	190.0	191.5	1/4 split core								1.14	▲
450	191.5	193.0	"								0.16	▲
451	193.0	194.5	"						IS	IS	1.20	▲
452	194.5	196.0	"						IS	IS	1.98	▲
453	196.0	197.5	"								0.26	▲
454	197.5	199.0	"								0.06	▲
455	199.0	200.5	"								0.30	▲
456	200.5	202.0	"								0.64	▲
457	202.0	203.5	"								0.57	▲
458	203.5	205.0	"								0.43	▲
459	205.0	206.5	"								0.11	
1152460	206.5	208.0	"								0.03	
DETECTION LIMIT											0.01	
ANALYTICAL METHOD											PM 209	

IS. = Insufficient Sample.

15m @ 0.67 g/t Au.

Project	MOINA - SHEFFIELD	1 250 000 Sheet	BURNIE	AMG Zone	Sheet No.	3.
Tenement	MOINA EL 7/74	DPO's	32059, 32060	Laboratory	ALS BRISBANE	
Area / Prospect	SHEPHEARS & MURPHY AREA			Collected By	BEF	Date

925031

CRA EXPLORATION PTY. LTD.

031

SAMPLE NUMBER	DDH 80 MD 39		ANALYSES								Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm	
1152461	208.0	209.5	1/4 split core							0.01		
462	209.5	211.0	"							0.01		
463	211.0	212.5	"							0.02		
464	212.5	214.0	"							0.08		
465	214.0	215.5	"							<0.01		
466	215.5	217.0	"							0.47	●	
467	217.0	218.5	"							0.25	0.26 ●	
468	218.5	220.0	"							0.02		
469	220.0	221.5	"							0.02		
470	221.5	223.0	"							0.01		
471	223.0	224.5	"							0.01		
472	224.5	226.0	"							<0.01		
473	226.0	227.5	"							<0.01		
474	227.5	229.0	"							<0.01		
475	229.0	230.5	"							<0.01		
476	230.5	232.0	"							<0.01		
477	232.0	233.5	"							<0.01		
478	233.5	235.0	"							<0.01		
479	235.0	236.5	"							0.12		
1152480	236.5	238.0	"							0.01		
DETECTION LIMIT										0.01		
ANALYTICAL METHOD										PM 209		
Project MOINA - SHEFFIELD			1 250 000 Sheet BURNIE			AMG Zone			Sheet No 4.			
Referent MOINA E L 7/74			DPO's 32060, 32061			Laboratory ALS BRISBANE			Collected By BEF			
Area / Prospect SHEPHERD + MURPHY AREA						Date						

925032

CRA EXPLORATION PTY. LTD.

032

SAMPLE NUMBER	DDH 80 M: D 39		ANALYSES								Geological Observations		
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm		
1152481	238.0	239.5	1/4 split core								<0.1		
482	239.5	241.0	"								<0.1		
483	241.0	242.5	"								0.02		
484	242.5	244.0	"								0.02		
485	244.0	245.5	"								<0.01		
486	245.5	247.0	"								<0.01		
487	247.0	248.5	"								<0.01		
488	248.5	250.0	"								<0.01		
489	250.0	251.5	"								<0.01		
490	251.5	253.0	"								<0.01		
491	253.0	254.5	"								<0.01		
492	254.5	256.0	"								<0.01		
493	256.0	257.5	"								<0.01		
494	257.5	259.0	"								<0.01		
1152495	259.0	260.4	"								<0.01		
DETECTION LIMIT											0.01		
ANALYTICAL METHOD											PM		
ANALYTICAL METHOD											209		
Project	MOINA - SHEFFIELD			1 250 000 Sheet				BORNIE		AMG Zone		Sheet No.	5.
Territory	MOINA EL 7/74			DPO's				32061		Laboratory		ALS BRISBANE	
Area / Prospect	SHEPHERD + MURPHY AREA									Collected By		BGF	Date

BORNIE

C.R.A. EXPLORATION PTY. LIMITED
 DRILL CORE LOG

SHEET No. 01
 No. EL7/74

TENEMENT NAME MOINA
 PLAN - MAP REFERENCE
 DEPTH 260.4 HOLE No. SMO-39
 CASING LEFT DPO No(s) 38719

CO-ORDINATES 1301E
106N AZIMUTH — DRILLERS COMMENCED
 RL COLLAR INCLINATION -90° DRILL TYPE COMPLETED

DEPTH		Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)			
^m M)	To(M)									Au	Pg	Pd	
						1655027	190	193		0.86	10	20	●
						55028	193	196		1.00	10	20	●
					Detect Limit UNITS					0.01	10	10	
										ppm/ppb			→

925034

CRA EXPLORATION PTY. LTD.

03A

SAMPLE NUMBER	DDH 81 MD 42		ANALYSES								Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm	
1152501	0	3.6	pulp chips							0.03		
502	3.6	4.8	"							0.03		
503	4.8	8.3	"							0.02		
504	8.3	15.6	"							0.04		
505	15.6	18.4	chips							0.01		
506	18.4	21.0	chips							<0.01		
507	21.0	27.0	"							<0.01		
508	27.0	28.6	"							<0.01		
509	28.6	34.0	"							0.02		
510	34.0	36.0	"							0.02		
511	36.0	43.8	"							0.02		
512	43.8	44.6	"							0.02		
513	44.6	50.0	"							0.02		
514	50.0	57.0	"							0.01		
515	57.0	65.0	"							0.01		
516	65.0	73.0	"							0.02		
517	73.0	75.0	"							0.01	0.01	
518	75.0	81.0	"							0.01		
519	81.0	85.5	"							0.03		
1152520	85.5	90.0	"							0.02		
DETECTION LIMIT										0.01		
ANALYTICAL METHOD										PM 209		
SHEFFIELD - MOINA			1:250 000 Sheet BURNIE				AMG Zone		Sheet No 1.			
MOINA 7/74			DPO's 32050				Laboratory ALS BRISBANE					
SHEPHERD + MURPHY AREA							Collected By BGF		Date			

925035

CRA EXPLORATION PTY. LTD.

035

SAMPLE NUMBER	DDH 81 MD 42			ANALYSES								Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm		
1152521	90.0	95.0	pulp							0.01			
522	95.0	101.0	"							0.01			
523	101.0	103.0	"							0.02			
524	103.0	110.0	"							0.02			
525	110.0	120.0	"							0.02			
526	120.0	127.0	"							0.02			
527	127.0	129.0	"							0.01			
528	129.0	135.0	"							0.01			
529	135.0	137.0	"							0.01			
530	137.0	140.0	"							0.02			
531	140.0	143.0	"							0.01			
532	143.0	145.0	"							0.01			
533	145.0	148.0	"							0.01			
534	148.0	151.0	"							0.02			
535	151.0	158.0	"							0.04	0.03		
536	158.0	160.0	"							0.08	0.08		
537	160.0	162.5	"							0.06			
538	162.5	164.6	"							0.05			
539	164.6	165.6	"							0.04			
1152540	165.6	167.8	"							0.03	0.02		
DETECTION LIMIT											0.01		
ANALYTICAL METHOD											PH 209		
SHEFFIELD - MOINA				1:250,000 Sheet				BURNIE		AMG Zone		Sheet No. 2.	
MOINA EL 7/74				DPO's				32050				Laboratory ALS BRISBANE	
SHEPHERD + MURPHY AREA										Collected By		BGF Date	

925036

CRA EXPLORATION PTY. LTD.

036

SAMPLE NUMBER	DDH 81 MD 42			ANALYSES								Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm		
1152541	167.8	168.8	pulp							0.03			
542	168.8	171.1	"							0.10			
543	171.1	174.1	"							0.06			
544	174.1	176.0	"							0.07	0.08		
545	176.0	177.0	"							0.08			
546	177.0	178.5	"							0.03			
547	178.5	179.5	"							0.11			
548	179.5	180.8	"							0.01			
549	180.8	183.1	" chips							0.07			
550	183.1	184.45	" chips							0.06			
551	184.45	184.95	"							0.02			
552	184.95	187.2	" chips							0.01			
553	187.2	188.2	"							0.01			
554	188.2	188.8	"							0.01			
555	188.8	191.0	"							0.01			
556	191.0	192.6	"							0.01			
557	192.6	195.2	" chips							0.01			
558	195.2	197.0	" chips							0.01			
559	197.0	199.3	" chips							0.01			
1152560	199.3	208.0	"							0.01			
DETECTION LIMIT										0.01			
ANALYTICAL METHOD										PM 209			
SHEFFIELD - MOINA				1:250 000 Sheet BURNIE				AGG Zone				Sheet No 3.	
MOINA EL 7/74				DPO's 32050								Laboratory ALS BRISBANE	
SHEPHERD + MURPHY AREA												Collected By BGF Date	

925037

APPENDIX 2

BOREHOLE GEOCHEMISTRY

038

DRILLHOLE Au ASSAYING

Drill Hole	Total Depth (m)	Au Assaying (m)	Assay Interval (m)	Results (ppm)	Comments
MD 32	152.4	0.00-154.40	max 7.30 min 0.26 ~1.0m	<0.01-0.19	Elevated Au associated with magnetite skarn
MD 33	163.60	44.40-163.60	max 6.46 min 0.36 ~2.0m	<0.01-0.06	Elevated Au associated with magnetite skarn
MD 34	196.0	23.95-196.0	max 10.00 min 0.02 ~3.0m	<0.01-0.12	
MD 35	161.40	4.00-161.40	max 7.45 min 0.95 ~2.0m	<0.01-0.42	
MD 36	170.50	122.20-170.50	max 6.25 min 0.80 ~2.0m	<0.01-0.02	
MD 37	176.60	153.56-155.00	1.44	<0.01	
MD 37		158.68-160.90	2.22	0.03	
MD 37		163.42-164.68	1.26	0.04	
MD 38	263.1	94.95-95.35	0.40	<0.01	
MD 38		178.80-180.60	0.80	<0.01	
MD 38		188.80-201.50	~2.0m	<0.01	
MD 38		214.50-222.20	~2.5m	<0.01	
MD 38		243.20-243.90	0.70	0.06	Chlorite skarn
MD 39	260.4	0.00-80.00	~10.0m	<0.05-0.05	
MD 39		145.50-202.00	~1.5m	<0.05-1.85	Incorporates 5.0m at 1.1gm and 11.2m at 0.8gm within magnetite rich skarns
MD 39		222.60-224.85	1.1	<0.01	
MD 39		228.00-232.40	~2.2m	<0.01	
MD 39		241.60-243.15	1.55	<0.01	

DRILLHOLE Au ASSAYING

039

Drill Hole	Total Depth (m)	Au Assaying (m)	Assay Interval (m)	Results (ppm)	Comments
MD 40	158.0	11.70-12.90	1.2	0.1	
MD 40		14.20-15.40	1.2	0.1	
MD 40		15.90-18.70	1.9 & 0.9	0.05	
MD 40		20.00-21.00	1.0	<0.05	
MD 40		21.80-22.80	1.0	0.10	
MD 40		23.50-24.50	1.0	0.10	
MD 40		26.20-26.80	0.6	0.10	
MD 40		31.40-32.60	1.2	0.05	
MD 40		37.40-38.40	1.0	0.05	
MD 40		41.30-42.20	0.9	0.05	
MD 40		45.60-47.60	2.0	0.05	
MD 40		52.70-53.20	0.5	0.05	
MD 40		56.10-56.60	0.5	0.10	
MD 40		60.60-61.30	0.9	0.15	
MD 40		64.50-65.80	1.3	0.05	
MD 40		70.10-71.10	1.0	0.05	
MD 40		74.50-75.90	1.5	<0.05	
MD 40		81.60-81.90	0.3	<0.05	
MD 40		85.20-86.50	1.3	<0.05	
MD 40		88.80-97.40	~1.5	<0.05-1.15	
MD 40		98.30-100.80	0.3 & 2.20	0.10	) Magnetite
MD 40		103.60-105.40	0.4 & 1.40	<0.05-0.05	) rich
MD 40		106.80-116.40	~1.5	<0.05	) skarn
MD 40		116.90-140.00	max 5.10 min 0.70 ~3.5m	<0.05-0.10	
MD 40		145.0-150.0	5.0	<0.05	

040

DRILLHOLE Au ASSAYING

Drill Hole	Total Depth (m)	Au Assaying (m)	Assay Interval (m)	Results (ppm)	Comments
MD 41	150.7	NIL	-	-	Magnetite rich skarn with elevated As from 13.0-30.0
MD 42	208.0	127.0-129.0	2.0	<0.05	
MD 42		143.0-145.0	2.0	<0.05	
MD 42		151.0-158.0	7.0	<0.05	
MD 42		135.0-137.0	2.0	<0.05	
MD 42		160.0-162.5	2.5	<0.05	
MD 42		164.60-171.10	1.0-2.3	<0.05)
MD 42		174.10-176.00	1.90	<0.05	) Magnetite
MD 42		178.50-179.50	1.0	<0.05	) rich
MD 42		184.45-184.95	0.5	<0.05	) skarn
MD 42		188.20-188.80	0.6	<0.05)
MD 42		192.60-197.00	2.6 & 1.8	<0.05	
MD 43	325.0	NIL	-	-	
ML 1.A	265.50	24.70-68.60	43.90	0.01	
ML 2	335.30	37.65-43.30	5.65	0.01	
ML 2		43.30-82.93	39.63	0.10	
ML 2		82.93-102.13	19.20	0.02	
ML 3.A	260.30	104.27-115.09	10.82	0.015	
ML 3.A		108.23-108.38	0.15	0.084	
ML 3.A		115.09-123.02	7.93	2750.000 (??)	
ML 3.A		123.02-145.73	22.71	0.09	
ML 3.A		124.08-124.23	0.15	0.036	
ML 3.A		138.87-139.02	0.15	0.012	
ML 3.A		144.36-144.51	0.15	0.040	
ML 3.A		145.73-196.65	50.92	0.12	

041

MOINA SN-W-F DEPOSIT

925042

DRILLHOLE Au ASSAYING

Drill Hole	Total Depth (m)	Au Assaying (m)	Assay Interval (m)	Results (ppm)	Comments
SMD 4	109.25	68.37-107.5	<1.5	max 0.15 AAS	
SMD 5	81.15	39.80-40.67	0.87	0.10 AAS	
SMD 5		43.00-44.00	1.00	0.05 AAS	
SMD 5		47.50-48.85	1.35	0.05 AAS	
SMD 5		52.80-53.30	0.50	<0.05 AAS	
SMD 6	102.5	NIL	-	-	
SMD 7	71.50	NIL	-	-	
SMD 8	60.80	NIL	-	-	
SMD 9	129.70	NIL	-	-	
SMD 10	117.50	NIL	-	-	
SMD 11	120.00	NIL	-	-	
SMD 12	123.25	NIL	-	-	
SMD 13	182.5	7.00-11.00	2.0	<0.05	) High Au associated
SMD 13		35.00-37.50	~1.0	<0.05-4.5	) with magnetite-
SMD 13		80.00-134.00	~1.0	<0.05-1.80	) chlorite skarn and
SMD 13		176.00-178.00	1.0	<0.05	) Zn rich skarn
SMD 15	116.12	NIL	-	-	
SMD 16	171.00	NIL	-	-	Passed through Zn rich skarn and magnetite-chlorite skarn. Needs assaying for Au
SMD 17	74.15	NIL	-	-	
SMD 20	94.75	NIL	-	-	
SMD 21	155.25	NIL	-	-	
SMD 22	110.00	NIL	-	-	Minor sphalerite in core
SMD 23	37.00	NIL	-	-	

DRILLHOLE Au ASSAYING

042

Drill Hole	Total Depth (m)	Au Assaying (m)	Assay Interval (m)	Results (ppm)	Comments
SMD 24	169.80	29.35-29.70	0.35	<0.05	
SMD 24		46.75-48.05	1.30	<0.05	
SMD 24		84.20-86.25	2.05	0.55	
SMD 24		101.00-104.25	3.25	<0.05	
SMD 24		108.20-110.25	2.05	<0.05	
SMD 24		112.90-113.95	1.05	<0.05	
SMD 24		136.25-138.25	2.00	<0.05	
SMD 24		159.10-159.00	1.30 & 2.00	<0.05	
SMD 25	44.80	NIL	-	-	Hole abandoned due to drilling problems
SMD 26	201.60	NIL	-	-	
SMD 26.A	13.50	NIL	-	-	
SMD 27	73.50	NIL	-	-	
SMD 28	101.00	NIL	-	-	
SMD 29	122.5	NIL	-	-	
SMD 30	127.0	NIL	-	-	
SMD 31	41.40	9.50-24.00	1.00 & 2.00	<0.05-0.15	
SMD 31		30.40-31.40	1.00	<0.05	
SMD 31		32.30-34.00	1.70	<0.05	

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APPENDIX 3

AEROMAGNETIC INTERPRETATION

044

TVS.W3.62.7/74

5 March 1987

Memorandum to: T W DICKSON

Copy to: W A SHEPPARD
F R FUNNELL

From: T VON STROKIRCH

INTERPRETATION OF AEROMAGNETIC DATA

SOUTH OF SHEPHERD & MURPHY

1. INTRODUCTION

Shell flew an aeromagnetic survey to cover the area and the Mines Department has recently released gravity data west of 425 000E, which covers the basalt area though not the Dolcoath Granite itself. This data supplies some useful information about the area.

2. MAGNETIC INTERPRETATION

2.1 Specifications

A data file in Magman format was prepared from the Shell 1980 NW Tasmania survey.

The survey specifications were:-

1. Line spacing 250m
2. Terrain clearance of aircraft 100m
Magnetometer is bird towed on 30m cable
3. Data recording interval approximately 36m

The ground clearance of the bird was actually found to vary from 50m to almost 200m where the topography was most extreme. This may effect the interpretation as in all cases 100 metres has been subtracted from the models depth to give a maximum depth to top. Analogue charts which would allow us to estimate heights are not available to CRAE at this stage.

2.2 Susceptibilities of Rocks

A number of susceptibility measurements of the various rock types were recorded in the Shell reports. Further readings of the basalt susceptibility have been taken by Fred Funnell.

Results are:-

Wrigglite	(15000 - 40000)	x 10 ⁶	cgs units
Pyrrhotite Skarns	(10000 - 18000)	x 10 ⁶	cgs units
Sphalerite Skarns	(80 - 500)	x 10 ⁶	cgs units
Garnet Skarns	(1000 - 3000)	x 10 ⁶	cgs units
Diopside Skarns	(10 - 1000)	x 10 ⁶	cgs units
Moina Sandstone	(0 - 30)	x 10 ⁶	cgs units
Gordon Limestone	(10 - 60)	x 10 ⁶	cgs units
Basalt	(0 - 300)	x 10 ⁶	cgs units

There is clearly a great variation in magnetic responses possible with the various rock types. In addition to the above there is also the Cambrian volcanics which range in composition from acid to basic and thus similarity in magnetic susceptibility. Given that at first impression it seems that the sphalerite skarn is the most gold rich then this would be expected to produce a poor (magnetisation 10-20) response. However adding only a small amount of magnetite, which occurs in the form of wrigglite around and within the sphalerite skarn, immediately gives a magnetic target.

The magnetisation of 2000 assumed in the magnetic modelling is for a medium value of wrigglite. If the wrigglite is only half as magnetic or only present half the time, then the magnetisation will be decreased a concomitant 50%.

2.3 Interpretation

The tabular model was used in all cases as insufficient data was available for 3D estimates. The initial results were produced by letting all values float. Following this most of the anomalies were modelled with the magnetisation set to a fixed value of 2000 which was considered reasonable for a wrigglite skarn.

2.4 Results

Anomaly 20

This anomaly was recorded on a flight line crossing directly over the main wrigglyite skarn at Shepherd and Murphy. The anomaly was modelled at the eastern end where it appears shallowest. A flight line crossing the western end was not modellable because of corrupted data. The derived susceptibility of 9.91×10^{-3} cgs units is one of the highest values obtained. This indicates a magnetite level of around 3% which seems a little low but these estimates are notoriously inexact.

A maximum depth to top of 6m and a width of 150m are reasonable estimates considering the irregular shape of the skarn.

Anomaly 18

This anomaly is a narrow, well defined east-west striking feature which appears associated to the Lawkenlaw mine. The anomaly is bounded by the Bismuth Creek fault to the west. To the east it either plunges sharply or just peters out. The susceptibility of the body is modelled at 1/3 of that of the Shepherd and Murphy anomaly. The depth is similar, at 7 metres and the thickness is 55m. The lower susceptibility may indicate that the anomaly is due to pyrrhotite rather than magnetite.

Anomaly 19

Sphalerite skarn anomaly. Not modellable.

Anomaly 22

Small circular anomaly in between Shepherd & Murphy and Stormont. Under basalt but very low susceptibility indicates that a bedrock source is probable.

Anomaly 23

Deep anomaly in area of Ordovician Sandstone overlain by basalt. The anomaly source is at around 200m depth which makes it a difficult exploration target. Otherwise the anomaly has very similar characteristics to the Shepherd and Murphy skarn. Ground magnetic follow-up is definitely warranted.

Anomaly 24

Small anomaly north of Shepherd and Murphy. The data was corrupted so it could not be modelled. It sits on a trend between anomalies 23 and 25.

Anomaly 26

Small anomaly east of Shepherd and Murphy. Low magnetisation but otherwise a good candidate. Strong probability of being a low magnetite skarn.

Anomaly 28

Discrete east-west anomaly southeast of Shepherd and Murphy. It is terminated by the Bismuth Creek fault. Looks a good chance but not modelled due to corrupted data.

Anomaly 29

Possible small skarn. Isolated anomaly on one flight line. Not modelled due to corrupted data.

Anomaly 44

This anomaly lies just west of the wrigglyite skarn. It is very shallow and lies on a basalt margin. Its low magnetisation means that the source is likely to be either a low magnetite skarn or a weathered basalt. Ground inspection is required.

Tables listing the results of modelling are given in Appendices 1 and 2. Anomalies with ratings of 3 and above are recommended for some follow-up.

T VON STROKIRCH

Encs (App 1, 2 & 3)

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TABLE 1

MOINA AREA AEROMAGNETIC MODELLING - ALL PARAMETERS FLOATING

Anomaly	=	MOINA18A	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5680	Magnetization	=	223.2	Depth	=
Central Fid.	=	175785	Position	=	-24.8		
Mean	=	1841.19	Width	=	133.1		
Interp. dx	=	20	Strike	=	90.0	Thickness	=
Reg. Const.	=	0.000	Dip	=	155.5		
Reg. Grad.	=	0.000					
Anomaly	=	MOINA20A	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5630	Magnetization	=	615.1	Depth	=
Central Fid.	=	172760	Position	=	-19.9		
Mean	=	1773.01	Width	=	150.0		
Interp. dx	=	30	Strike	=	90.0	Thickness	=
Reg. Const.	=	-95.000	Dip	=	108.1		
Reg. Grad.	=	0.000					
Anomaly	=	MOINA20B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5630	Magnetization	=	1096.0	Depth	=
Central Fid.	=	172760	Position	=	-22.7		
Mean	=	1773.01	Width	=	92.0		
Interp. dx	=	30	Strike	=	90.0	Thickness	=
Reg. Const.	=	-95.000	Dip	=	106.3		
Reg. Grad.	=	0.000					
Anomaly	=	MOINA20C	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5630	Magnetization	=	2704.0	Depth	=
Central Fid.	=	172760	Position	=	76.8		
Mean	=	1773.01	Width	=	201.0		
Interp. dx	=	30	Strike	=	90.0	Thickness	=
Reg. Const.	=	-95.000	Dip	=	170.0		
Reg. Grad.	=	0.000					
Anomaly	=	MOINA22A	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5530	Magnetization	=	52.7	Depth	=
Central Fid.	=	110414	Position	=	-1.3		
Mean	=	1865.51	Width	=	167.8		
Interp. dx	=	20	Strike	=	90.0	Thickness	=
Reg. Const.	=	-160.000	Dip	=	92.2		
Reg. Grad.	=	0.000					
Anomaly	=	MOINA23B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5520	Magnetization	=	2346.0	Depth	=
Central Fid.	=	110666	Position	=	96.2		
Mean	=	1803.89	Width	=	186.4		
Interp. dx	=	40	Strike	=	90.0	Thickness	=
Reg. Const.	=	-180.000	Dip	=	141.6		
Reg. Grad.	=	-0.100					

Anomaly	=	MOINA23C	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5530	Magnetization	=	851.9	Depth	=
Central Fid.	=	110444	Position	=	-62.0		
Mean	=	1865.51	Width	=	248.8		
Interp. dx	=	40	Strike	=	75.0	Thickness	=
Reg. Const.	=	-210.000	Dip	=	104.1		
Reg. Grad.	=	0.280					

Anomaly	=	MOINA26A	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5660	Magnetization	=	83.0	Depth	=
Central Fid.	=	174656	Position	=	10.9		
Mean	=	1810.04	Width	=	200.2		
Interp. dx	=	20	Strike	=	75.0	Thickness	=
Reg. Const.	=	0.000	Dip	=	167.4		
Reg. Grad.	=	0.100					

Anomaly	=	MOINA44A	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5570	Magnetization	=	126.2	Depth	=
Central Fid.	=	169396	Position	=	4.7		
Mean	=	1764.39	Width	=	46.0		
Interp. dx	=	20	Strike	=	90.0	Thickness	=
Reg. Const.	=	-95.000	Dip	=	101.8		
Reg. Grad.	=	-0.150					

TABLE 2

MOINA AREA AEROMAGNETIC MODELLING - SUSCEPTIBILITY FIXED

Anomaly	= MOINA1F	Model Type	= TABULAR	Std. Dev.	Fit=
Line Number	= 5540	Magnetization	= 2000.0	Depth	=
Central Fid.	= 109676	Position	= -123.0		
Mean	= 1775.02	Width	= 61.7		
Interp. dx	= 45	Strike	= 90.0	Thickness	=
Reg. Const.	= 0.000	Dip	= 87.9		
Reg. Grad.	= 0.000				
Anomaly	= MOINA2B	Model Type	= TABULAR	Std. Dev.	Fit=
Line Number	= 5520	Magnetization	= 2000.0	Depth	=
Central Fid.	= 110860	Position	= -52.9		
Mean	= 1803.89	Width	= 18.5		
Interp. dx	= 20	Strike	= 80.0	Thickness	=
Reg. Const.	= -150.000	Dip	= 38.6		
Reg. Grad.	= 0.050				
Anomaly	= MOINA4D	Model Type	= TABULAR	Std. Dev.	Fit=
Line Number	= 5570	Magnetization	= 2000.0	Depth	=
Central Fid.	= 169360	Position	= -66.7		
Mean	= 1757.73	Width	= 35.3		
Interp. dx	= 30	Strike	= 75.0	Thickness	=
Reg. Const.	= -30.000	Dip	= 69.8		
Reg. Grad.	= 0.250				
Anomaly	= MOINA8C	Model Type	= TABULAR	Std. Dev.	Fit=
Line Number	= 5580	Magnetization	= 2000.0	Depth	=
Central Fid.	= 170289	Position	= -75.4		
Mean	= 1739.04	Width	= 16.6		
Interp. dx	= 20	Strike	= 90.0	Thickness	=
Reg. Const.	= -200.100	Dip	= 44.0		
Reg. Grad.	= -0.550				
Anomaly	= MOINA10B	Model Type	= TABULAR	Std. Dev.	Fit=
Line Number	= 5560	Magnetization	= 2000.0	Depth	=
Central Fid.	= 108643	Position	= 29.0		
Mean	= 1754.66	Width	= 19.5		
Interp. dx	= 30	Strike	= 90.0	Thickness	=
Reg. Const.	= -190.000	Dip	= 132.4		
Reg. Grad.	= -0.130				
Anomaly	= MOINA13B	Model Type	= TABULAR	Std. Dev.	Fit=
Line Number	= 5540	Magnetization	= 2000.0	Depth	=
Central Fid.	= 109797	Position	= 35.9		
Mean	= 1775.02	Width	= 58.4		
Interp. dx	= 30	Strike	= 120.0	Thickness	=
Reg. Const.	= -150.000	Dip	= 109.9		
Reg. Grad.	= -0.100				

Anomaly	=	MOINA18B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5680	Magnetization	=	2000.0	Depth	=
Central Fid.	=	175785	Position	=	-107.4		
Mean	=	1841.19	Width	=	41.0		
Interp. dx	=	20	Strike	=	90.0	Thickness	=
Reg. Const.	=	0.000	Dip	=	128.2		
Reg. Grad.	=	0.000					
Anomaly	=	MOINA22B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5530	Magnetization	=	2000.0	Depth	=
Central Fid.	=	110414	Position	=	-65.2		
Mean	=	1865.51	Width	=	18.5		
Interp. dx	=	20	Strike	=	90.0	Thickness	=
Reg. Const.	=	-160.000	Dip	=	43.6		
Reg. Grad.	=	0.000					
Anomaly	=	MOINA23C	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5520	Magnetization	=	2000.0	Depth	=
Central Fid.	=	110666	Position	=	95.3		
Mean	=	1803.89	Width	=	215.2		
Interp. dx	=	40	Strike	=	90.0	Thickness	=
Reg. Const.	=	-180.000	Dip	=	141.4		
Reg. Grad.	=	-0.100					
Anomaly	=	MOINA25B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5620	Magnetization	=	2000.0	Depth	=
Central Fid.	=	172549	Position	=	-165.1		
Mean	=	1673.81	Width	=	48.2		
Interp. dx	=	20	Strike	=	90.0	Thickness	=
Reg. Const.	=	260.000	Dip	=	95.4		
Reg. Grad.	=	0.220					
Anomaly	=	MOINA26B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5660	Magnetization	=	2000.0	Depth	=
Central Fid.	=	174656	Position	=	-134.2		
Mean	=	1810.04	Width	=	71.7		
Interp. dx	=	20	Strike	=	75.0	Thickness	=
Reg. Const.	=	0.000	Dip	=	89.3		
Reg. Grad.	=	0.100					
Anomaly	=	MOINA30B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5600	Magnetization	=	2000.0	Depth	=
Central Fid.	=	171433	Position	=	-26.9		
Mean	=	1682.94	Width	=	35.5		
Interp. dx	=	20	Strike	=	95.0	Thickness	=
Reg. Const.	=	-50.000	Dip	=	140.7		
Reg. Grad.	=	0.050					
Anomaly	=	MOINA34B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5750	Magnetization	=	2000.0	Depth	=
Central Fid.	=	179246	Position	=	357.3		
Mean	=	1722.12	Width	=	59.6		
Interp. dx	=	30	Strike	=	-45.0	Thickness	=
Reg. Const.	=	300.000	Dip	=	110.4		
Reg. Grad.	=	0.350					

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Anomaly	=	MOINA35B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5730	Magnetization	=	2000.0	Depth	=
Central Fid.	=	178410	Position	=	109.0		
Mean	=	1950.70	Width	=	40.2		
Interp. dx	=	20	Strike	=	90.0	Thickness	=
Reg. Const.	=	50.000	Dip	=	169.8		
Reg. Grad.	=	0.000					

Anomaly	=	MOINA36C	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5810	Magnetization	=	2000.0	Depth	=
Central Fid.	=	181242	Position	=	-224.2		
Mean	=	2015.57	Width	=	280.2		
Interp. dx	=	40	Strike	=	95.0	Thickness	=
Reg. Const.	=	-100.000	Dip	=	110.1		
Reg. Grad.	=	0.100					

Anomaly	=	MOINA37B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5820	Magnetization	=	2000.0	Depth	=
Central Fid.	=	181480	Position	=	258.8		
Mean	=	1898.88	Width	=	635.8		
Interp. dx	=	40	Strike	=	90.0	Thickness	=
Reg. Const.	=	100.000	Dip	=	167.7		
Reg. Grad.	=	0.000					

Anomaly	=	MOINA38D	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5820	Magnetization	=	2000.0	Depth	=
Central Fid.	=	181425	Position	=	-48.8		
Mean	=	1898.88	Width	=	17.5		
Interp. dx	=	20	Strike	=	80.0	Thickness	=
Reg. Const.	=	105.000	Dip	=	27.5		
Reg. Grad.	=	0.000					

Anomaly	=	MOINA40B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5830	Magnetization	=	2000.0	Depth	=
Central Fid.	=	182070	Position	=	46.6		
Mean	=	1795.07	Width	=	35.1		
Interp. dx	=	40	Strike	=	95.0	Thickness	=
Reg. Const.	=	85.000	Dip	=	125.8		
Reg. Grad.	=	0.100					

Anomaly	=	MOINA41B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5850	Magnetization	=	2000.0	Depth	=
Central Fid.	=	182972	Position	=	-50.7		
Mean	=	1903.23	Width	=	19.6		
Interp. dx	=	20	Strike	=	80.0	Thickness	=
Reg. Const.	=	30.000	Dip	=	38.2		
Reg. Grad.	=	0.450					

Anomaly	=	MOINA44B	Model Type	=	TABULAR	Std. Dev.	Fit=
Line Number	=	5570	Magnetization	=	2000.0	Depth	=
Central Fid.	=	169396	Position	=	-79.0		
Mean	=	1764.39	Width	=	18.3		
Interp. dx	=	20	Strike	=	90.0	Thickness	=
Reg. Const.	=	-95.000	Dip	=	28.7		
Reg. Grad.	=	-0.150					

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TABLE 3

TABLE OF ANOMALIES, AMG POSITION OF MODEL AND RATING

<u>Anomaly</u>	<u>Easting</u>	<u>Northing</u>	<u>Modelled</u> <u>(Y,N)</u>	<u>Rating</u>
16	-	-	N	
18	424292	5405511	Y	6
19	-	-	N	
20	423303	5406424	Y	6
22	420699	5406300	Y	3
23	420562	5407583	Y	3
24	-	-	N	2
26	423894	5406637	Y	5
28	-	-	Y	4
29	-	-	Y	4
44	421734	5406721	Y	3

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 01

TENEMENT NAME M.O.I.N.A No. 7174

PLAN - MAP REFERENCE.....

DEPTH 71m HOLE No. 055 SMD 7

CO-ORDINATES 975 E
90 N AZIMUTH - DRILLERS..... COMMENCED.....

RI COLLAR..... INCLINATION - 90 DRILL TYPE..... COMPLETED.....

CASING LEFT..... DPO No(s) 38719

DEPTH		Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)			
m	To (M)									Pt	Pd	Au	Au
						1655025	10	12		510	510	0.18	0.19
						26	12	14		510	510	0.10	0.10
					Pet limit UNITS					10	10	0.01	0.01
										PPV	PPV		

925056

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 058/174
TENEMENT NAME MOUNA
PLAN - MAP REFERENCE.....
DEPTH 130m HOLE No. SMD 9
CASING LEFT..... DPO No(s) 38718

CO-ORDINATES 150E 100S AZIMUTH - DRILLERS..... COMMENCED.....
RL COLLAR..... INCLINATION -90° DRILL TYPE..... COMPLETED.....

DEPTH		Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by <u>ALS</u>)	
(M)	To (M)									Au	Other
						165501	0	12	0.19		
						102	12	14	0.07		
						103	14	16	0.07		
						104	16	18	0.03		
						105	18	20	0.10		
						106	20	22	0.02		
						107	22	24	0.02		
						108	24	26	0.02		
						109	26	28	0.02	0.02	
						110	28	30	0.03		
						111	30	32	0.02		
						112	32	34	0.02		
						113	34	36	0.01		
						114	36	38	0.02		
						115	38	40	0.02		
						116	40	42	0.02		
						117	42	44	0.02		
						118	44	46	0.02		
						119	46	48	0.02		
						120	48	50	0.01		
						121	50	52	0.02		
						122	52	54	0.02		
						123	54	56	0.02		
						124	56	58	0.02		
						125	58	60	0.02		
						126	60	62	0.02	0.02	
						127	62	64	0.02	0.02	
						128	64	66	0.03		
						129	66	68	0.02		
						130	68	70	0.02		

925057

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 2
No. 7/74

TENEMENT NAME Moina

CO-ORDINATES 150E 100S AZIMUTH — DRILLERS — COMMENCED —
RL COLLAR — INCLINATION -90° DRILL TYPE — COMPLETED —

PLAN - MAP REFERENCE —

DEPTH 130 HOLE No. SMD 9

CASING LEFT — DPO No(s) 3828

DEPTH		Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by <u>ALS</u>)			
From (M)	To (M)									Au	CHEW Au	Pt	Pd
						1655130	70	72		0.01			
						132	72	74		0.02			
						133	74	76		0.02			
						134	76	78		0.02			
						135	78	80		0.02			
						136	80	82		0.01			
						137	82	84		0.01			
						138	84	86		0.02			
						139	86	88		0.02			
						140	88	90		0.02			
						141	90	92		0.02		<10	<10
						142	92	94		0.10		<10	<10
						143	94	96		0.17	●	<10	<10
						144	96	98		1.30	1.25	<10	<10
						145	98	100		2.27	●	<10	<10
						146	100	102		0.72	●	<10	<10
						147	102	104		1.52	●	<10	<10
						148	104	106		0.10		<10	<10
						149	106	108		0.07		<10	<10
						150	108	110		0.07		<10	<10
						151	110	112		0.07		<10	<10
						152	112	114		0.09		<10	<10
						153	114	116		0.04		<10	<10
						154	116	118		0.49	●	<10	<10
						155	118	120		0.04		<10	<10
						156	120	122		0.03		<10	<10
						157	122	124		0.05		<10	<10
						158	124	126		0.02		<10	<10
						159	126	128		0.02		<10	<10
						160	128	130		0.020-0.02		<10	<10

pyroxenite Shear
Zone @ 1.45g/t Au

925058

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 1

TENEMENT NAME MOINA No. 7174

PLAN - MAP REFERENCE.....

CO-ORDINATES 1450 E 50 S AZIMUTH 000° DRILLERS..... COMMENCED..... DEPTH 132m HOLE No. 57003

RL COLLAR..... INCLINATION 90 DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s) 38711

DEPTH		Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	Sample No.	From (M)	To (M)	Rnc (M)	ASSAY VALUES (Analysed by <u>ALS</u>)			
From (M)	To (M)									Au	Au crit	Pt	Pd
						1655201	0	2		0.01			
						1655202	2	4		0.02			
						1655203	4	6		0.01			
						1655204	6	8		0.01			
						1655205	8	10		0.01			
						1655206	10	12		0.02			
						1655207	12	14		0.02			
						1655208	14	16		0.02			
						1655209	16	18		0.03			
						1655210	18	20		0.03			
						1655211	20	22		0.03			
						1655212	22	24		0.14			
						1655213	24	26		0.04			
						1655214	26	28		0.04			
						1655215	28	30		0.04			
						1655216	30	32		0.03			
						1655217	32	34		0.03			
					Sandstone/Siltstone No sulphides.	1655218	34	36		0.68	0.69	<10	<10
						1655219	36	38		0.07			
						1655220	38	40		0.05			
						1655221	40	42		0.05			
						1655222	42	44		0.04			
						1655223	44	46		0.04			
						1655224	46	48		0.01			
						1655225	48	50		0.01			
						1655226	50	52		0.01			
						1655227	52	54		0.01			
						1655228	54	56		0.01			
						1655229	56	58		0.01			
						1655230	58	60		0.02			
						1655231	60	62		0.02			

925059

C.R.A. EXPLORATION PTY. LIMITED
DRILL CORE LOG

SHEET No. 2

TENEMENT NAME..... No.

PLAN - MAP REFERENCE.....

CO ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. 5MD-13

RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s).....

DEPTH		Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)			
From (M)	To (M)									Ag	As _{total}	Pt	Pd
						1655232	62	64		0.01			
						1655233	64	66		0.01			
						1655234	66	68		0.01			
						1655235	68	70		0.02			
						1655236	70	72		0.02			
						1655237	72	74		0.03			
						1655238	74	76		0.02			
						1655239	76	78		0.02			
						1655240	78	80		0.02	0.02		
						1655241	80	82		0.02	0.02		
						1655242	82	84		0.01			
						1655243	84	86	●	0.36			
					86.3-87.35 Ram Sphal skarn	1655244	86	88	●	0.70	0.64	<10	<10
					87.35-97.0 Sphal skarn	1655245	88	90	●	0.80	0.71	20	<10
					Pt/pph <10 ; Pd/pph <10 ; Au/ppm 0.66	1655246	90	92	●	0.66		<10	<10
					" <10 ; " <10 ; " 0.99	1655247	92	94	●	0.99		<10	<10
						1655248	94	96	●	1.28	1.27	<10	<10
					97 - 98.25 Qt skarn (trace sphal)	1655249	96	98	●	1.52	0.38	<10	<10
					98.25 - 103.25 Sphal skarn	1655250	98	100	●	1.12	0.49	<10	<10
						1655251	100	102	●	0.32	0.44		
						1655252	102	104		0.04			
						1655253	104	106		0.10			
						1655254	106	108		0.01			
						1655255	108	110		0.02			
						1655256	110	112		0.02			
						1655257	112	114		0.04			
						1655258	114	116		0.03			
						1655259	116	118		0.03			
					Pt/pph <10 ; Pd/pph <10 ; Au/ppm 0.16	1655260	118	120		0.16		<10	<10
						1655261	120	122		0.02			

8.53
Au

925060

C.R.A. EXPLORATION PTY. LIMITED
 DRILL CORE LOG

SHEET No. 3

TENEMENT NAME.....

PLAN - MAP REFERENCE.....

CO-ORDINATES..... AZIMUTH..... DRILLERS..... COMMENCED..... DEPTH..... HOLE No. SMO-13

RL COLLAR..... INCLINATION..... DRILL TYPE..... COMPLETED..... CASING LEFT..... DPO No(s).....

060

DEPTH		Core Rec. (M)	Core Size	Graphic Log	CORE DESCRIPTION	Sample No.	From (M)	To (M)	Rec (M)	ASSAY VALUES (Analysed by.....)			
41	To (M)									Au	Au (MICR)	Pt	Pd
						1655262	122	124		0.01	0.02		
						1655263	124	126		0.02			
						1655264	126	128		0.01			
						1655265	128	130		0.05			
						1655266	130	132		0.03			
						METHOD				PM209	PM217		
						DET. LIMIT				<0.01	<0.01	<10	<10
						UNITS				PPM	PPG		

925061

CRA EXPLORATION PTY. LTD.

SAMPLE NUMBER	DDH 77 SMD 16		ANALYSES										Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn				Pt ← ppm →	Pd	Au ppm		
1152800	0	3.0	core grind + chips								0.01			
801	3.0	6.0	"								0.04			
802	6.0	9.0	"								0.01			
803	9.0	12.0	"								0.01			
804	12.0	15.0	"								0.01			
805	15.0	18.0	"								0.01			
806	18.0	21.0	"								0.01	0.01		
807	21.0	22.5	1/4 split core								0.06			
808	22.5	24.0	"								0.02			
809	24.0	26.27	"								0.03			
810	26.27	28.1	pulps								0.14			
811	28.1	30.22	"								0.02			
812	30.22	32.0	"								0.02			
813	32.0	34.0	"								0.01			
814	34.0	36.0	"								0.03			
815	36.0	38.0	"								0.03			
816	38.0	40.0	"						<10	<10	2.58	●		
817	40.0	42.35	"								0.59	●		
818	42.35	44.2	"								0.06			
1152819	44.2	46.2	"								0.04			
DETECTION LIMIT											0.01			
ANALYTICAL METHOD											PM 209			
PROJECT MOINA			1:250 000 Sheet BURNIE				AMG Zone				Sheet No 1			
DATE MOINA EL 7/74			DPO's 32050								Laboratory ALS BRISBANE			
NAME OF PROJECT											Collected By BGF		Date	

091

925062

CRA EXPLORATION PTY. LTD.

062

SAMPLE NUMBER	DDH 77 SMD 16		ANALYSES								Geological Observations			
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn				Pt Pd ← Pd →	Au ppm			
1152820	46.2	48.2	pulps								0.03			
821	48.2	50.2	"								0.02			
822	50.2	52.2	"								0.06			
823	52.2	54.2	"								0.02	0.02		
824	54.2	55.7	"								0.02	0.02		
825	55.7	57.2	"								0.03			
826	57.2	59.2	"								0.04	0.06		
827	59.2	61.2	"								0.03			
828	61.2	63.2	"								0.05			
829	63.2	65.5	"								0.11			
830	65.5	68.1	"								0.46	●		
831	68.1	70.0	"						<10	<10	1.07	●	Skarn Me-Sphal-ctd.	
832	70.0	72.55	"								0.57	●		
833	72.55	76.05	"								0.23	●		
834	76.05	78.05	"								0.23	●		
835	78.05	81.6	"								0.04			
836	81.6	82.35	"								0.08	0.08		
837	82.35	85.1	"								0.13			
838	85.1	87.1	"								0.09			
839	87.1	88.7	"								0.10			
DETECTION LIMIT											0.01			
ANALYTICAL METHOD											DM			
											209			
PROJECT MOINA						1 250 000 Sheet BURNIE			AMG Zone			Sheet No 2.		
MOINA E.L 7/74						DPO's 32050						Laboratory A/S BRISBANE		
												Collected By BGF		Date

925063

CRA EXPLORATION PTY. LTD.

063

SAMPLE NUMBER	DDH 77 SMD 16		ANALYSES										Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn				Pt ppb	Pd ppb	Au ppm		
1152840	88.7	91.0	pulps								0.14			
841	91.0	93.0	"								0.10			
842	93.0	95.0	"								0.04			
843	95.0	97.0	"								0.07			
844	97.0	99.0	"								0.14			
845	99.0	101.7	"								0.21	•		
846	101.7	104.27	"								0.11			
847	104.27	106.0	"								0.08			
848	106.0	108.0	"								0.09			
849	108.0	110.0	"								0.15			
850	110.0	112.0	"								0.12			
851	112.0	114.0	"								0.15	0.16		
852	114.0	116.0	"								0.13			
853	116.0	118.0	"								0.06			
854	118.0	120.5	"								0.04			
855	120.5	123.0	"						<10	<10	0.21			
856	123.0	125.43	"						<10	<10	0.04			
857	125.43	128.75	"								0.06	0.08		
858	128.75	131.0	"								0.36			
1152859	131.0	133.0	"								0.84	•		
DETECTION LIMIT											0.01			
ANALYTICAL METHOD											PM	209		
MOINA			1 250 000 Sheet			BURNIE			AMG Zone			Sheet No 3.		
MOINA EL 7/74			DPO's 32050									Laboratory ALS BRISBANE		
												Collected By BGF		Date

925064

CRA EXPLORATION PTY. LTD.

064

SAMPLE NUMBER	DDH 77 SMD 16		ANALYSES										Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn			Pt ←ppm→	Pd ←ppm→	Au ppm			
1152860	133.0	135.0	pulps					<10	<10	1.01				
861	135.0	137.0	"					<10	<10	0.03				
862	137.0	140.0	core grinds					<10	<10	0.02				
863	140.0	143.0	"							0.02				
864	143.0	146.0	"							0.05				
865	146.0	149.0	"							0.01				
866	149.0	152.0	"							0.01				
867	152.0	154.0	"							0.02				
868	154.0	156.0	pulps							0.01	0.01			
869	156.0	159.0	core grinds							0.03				
870	159.0	162.0	"							0.01				
871	162.0	165.0	"							<0.01				
872	165.0	168.0	"							0.01				
1152873	168.0	171.0	"							0.01				
DETECTION LIMIT										0.01				
ANALYTICAL METHOD										PM 209				
Project MOINA			1 250 000 Sheet BURNIE				AIG Zone				Sheet No 4.			
Reference MOINA EL 7/74			DPO's 32050, 32059								Laboratory ALS BRISBANE			
Date of Project											Collected By BGP		Date	

925065

CRA EXPLORATION PTY. LTD.

065

SAMPLE NUMBER	DDH 78 SMD 24		ANALYSES								Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm	
1152878	0.0	3.0	core grind							0.01		
879	3.0	6.0	"							0.02		
880	6.0	9.0	"							0.01		
881	9.0	12.0	"							0.01		
882	12.0	15.0	"							0.03		
883	15.0	18.0	"							0.01		
884	18.0	21.0	"							0.02		
885	21.0	24.0	"							0.01		
886	24.0	27.0	"							0.01		
887	27.0	30.0	"							0.12		
888	30.0	33.0	"							<0.01		
889	33.0	36.0	"							0.02		
890	36.0	39.0	"							0.01		
891	39.0	42.0	"							0.01		
892	42.0	45.0	"							0.01		
893	45.0	48.0	"							0.02		
894	48.0	51.0	"							0.01		
895	51.0	54.0	"							0.01		
896	54.0	57.0	"							0.01		
1152897	57.0	60.0	"							0.01		
DETECTION LIMIT										0.01		
ANALYTICAL METHOD										PM 209		
Project MOINA			1 250 000 Sheet BURNIE				AMG Zone		Sheet No 1.			
Ternment MOINA EL 7/74			DPO's 32059				Laboratory ALS BRISBANE					
Area / Prospect							Collected By 36f		Date			

925066

066

CRA EXPLORATION PTY. LTD.

SAMPLE NUMBER	DDH 78 SMD 24		ANALYSES									Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm		
1152878	60.0	63.0	core grind							0.01	<0.01		
899	63.0	66.0	"							<0.01			
900	66.0	69.0	"							0.06			
901	69.0	72.0	"							0.04			
902	72.0	75.0	"							0.02			
903	75.0	78.0	"							0.01			
904	78.0	80.0	"							<0.01			
905	80.0	81.5	1/4 split core							0.01			
906	81.5	83.0	"							0.60	●		
907	83.0	84.2	"							0.35	●		
908	84.2	86.25	"							0.47	●		
909	86.25	88.0	"							0.98	●		
910	88.0	89.5	"							0.81	●		
911	89.5	90.5	"							1.34	●		
912	90.5	92.0	"							0.27	●		
913	92.0	93.5	"							0.10			
914	93.5	95.25	"							0.18			
915	95.25	98.4	"							0.10			
916	98.4	100.0	"							0.14			
917	100.0	101.25	"							0.08	0.08		
DETECTION LIMIT										0.01			
ANALYTICAL METHOD										DM 209			
Project	MCINA		1 250 000 Sheet			BURNIE			AMG Zone			Sheet No	2.
Tenement	MCINA E _n 7/74		DPO's			32059			Laboratory			ALS BRISBANE	
Area / Prospect									Collected By			BGF	Date

925067

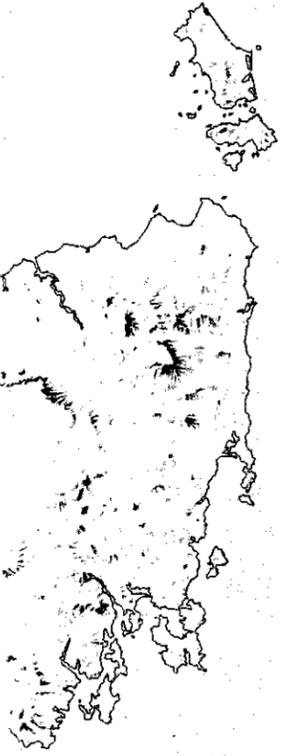
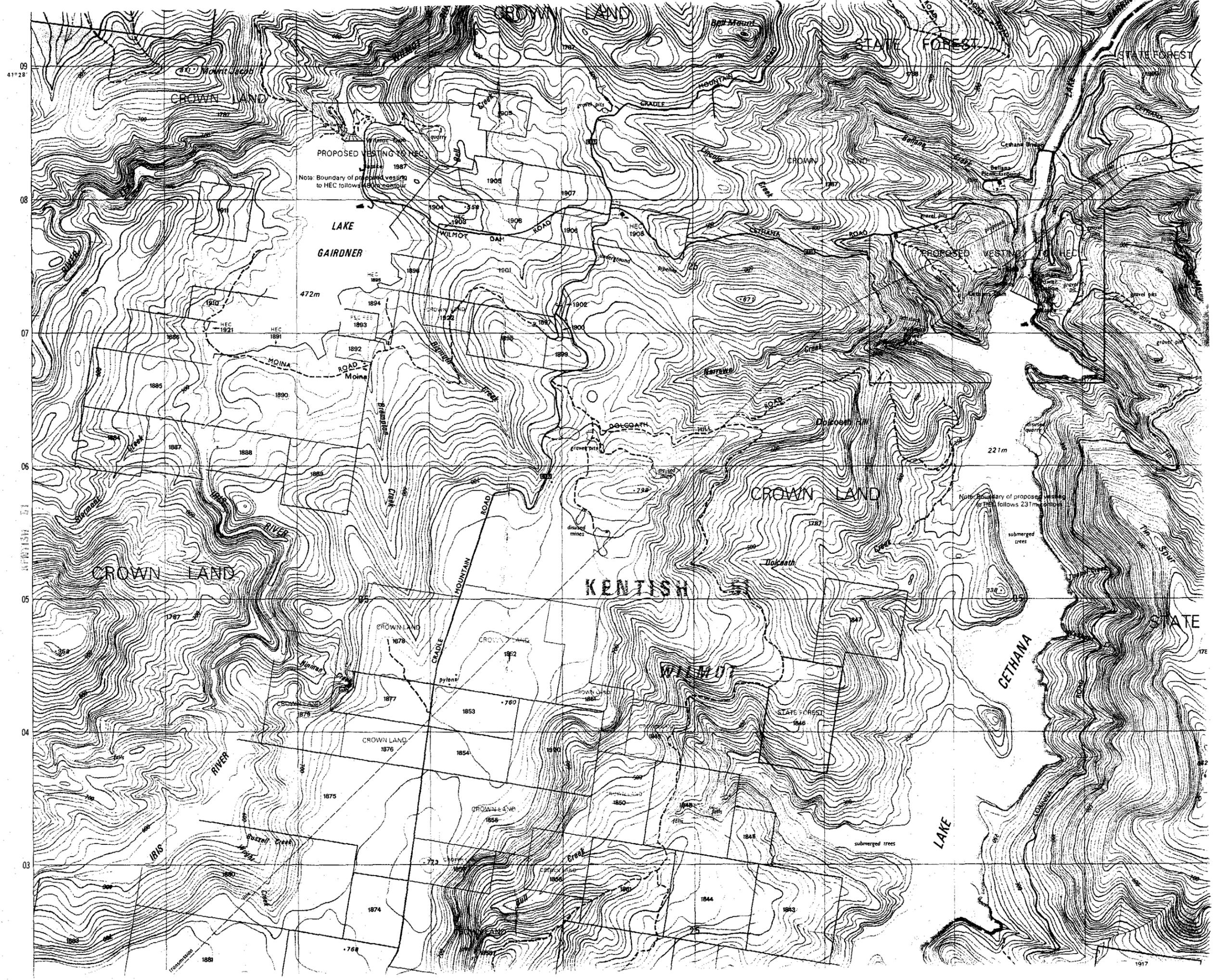
CRA EXPLORATION PTY. LTD.

067

SAMPLE NUMBER	DDH 78 SMD 24		ANALYSES								Geological Observations	
	INTERVAL (in metres)		Sample Type	Cu	Pb	Zn					Au ppm	
1152918	101.25	106.5	1/4 split core							0.11		
919	106.5	108.0	"							0.08		
920	108.0	109.5	"							0.05		
921	109.5	111.0	"							0.03		
922	111.0	112.5	"							0.03		
923	112.5	114.0	"							0.08		
924	114.0	115.5	"							0.05		
925	115.5	117.0	"							0.12	0.14	
926	117.0	118.5	"							0.09	0.10	
927	118.5	120.0	"							0.03		
928	120.0	121.5	"							0.01		
929	121.5	123.0	"							0.02		
930	123.0	124.5	"							0.03	0.03	
931	124.5	126.0	"							0.04		
932	126.0	127.5	"							0.05		
933	127.5	129.0	"							0.40		
934	129.0	130.5	"							0.22	0.18	
935	130.5	132.0	"							<0.01		
936	132.0	133.5	"							<0.01		
1152937	133.5	135.0	"							0.14	0.16	
DETECTION LIMIT										0.01		
ANALYTICAL METHOD										PM 209		
MOINA			1:250 000 Sheet BURNIE				AMG Zone			Sheet No 3.		
MOINA EL 7/74			DPO's 32059, 32060							Laboratory ALS BRISBANE		
										Collected By B6F Date		

925068

1ANIA
000
RIES



publication

925069

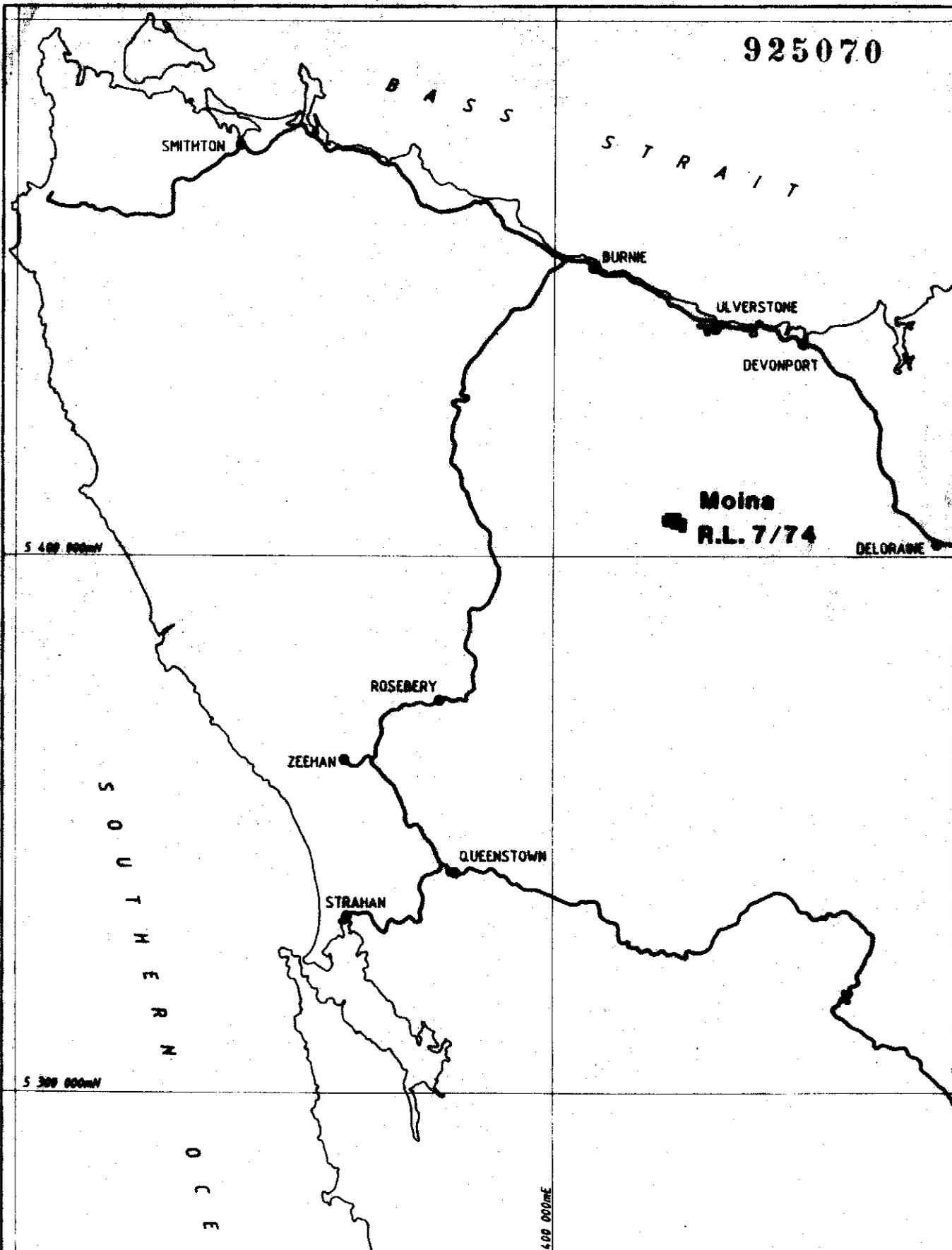


ING OFFICE
OPY
ETURN

690

68

925070



**Moina
R.L. 7/74**

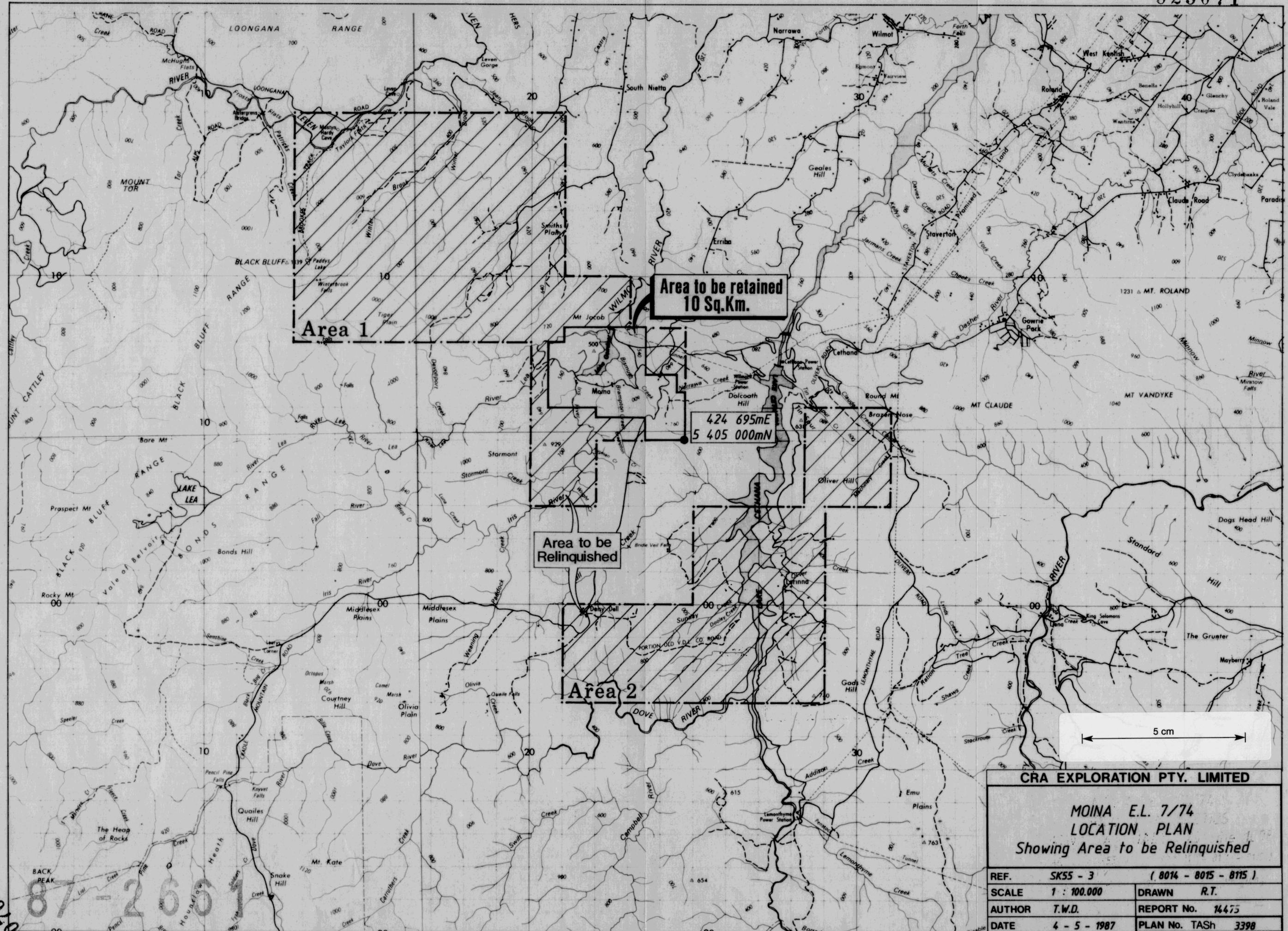
CRA EXPLORATION PTY. LIMITED

MOINA R.L. 7/74

LOCATION PLAN

87-2661

REF.	SK55 - 3	(014 - 015)
SCALE	1 : 1000 000	DRAWN R.T.
AUTHOR	T.V.S.	REPORT No. 16475
DATE	5 - 5 - 1987	PLAN No. TASH 3601



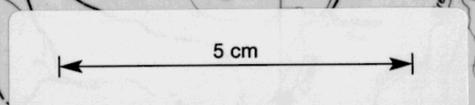
Area to be retained
10 Sq.Km.

Area 1

Area to be Relinquished

Area 2

424 695mE
5 405 000mN



CRA EXPLORATION PTY. LIMITED	
MOINA E.L. 7/74 LOCATION PLAN	
<i>Showing Area to be Relinquished</i>	
REF. SK55 - 3	(8014 - 8015 - 8115)
SCALE 1 : 100.000	DRAWN R.T.
AUTHOR T.W.D.	REPORT No. 14475
DATE 4 - 5 - 1987	PLAN No. TASH 3398

87-2601

072

072

072

- LEGEND**
- QUATERNARY
 - Q10s Basaltic sands and silt
 - Ts Basalt
 - Tg Greyblite
 - ORDOVICIAN
 - Bg Gordon Limestone
 - Bm Main Sandstone
 - Bsh Shale - Main Sandstone
 - Br Riolite Conglomerate
 - CAMBRIAN
 - Epa Periphytic acid tuff
 - Eqr Quartz intric tuff
 - Ecr Crystalline tuff
 - Eop Quartz porphyry
 - Other symbols:
 - Fault
 - Geological Boundary
 - New Markings
 - Shaft
 - Trench
 - Synclinal axis
 - Anticlinal axis
 - Dip and Strike
 - SMD 5
 - Drillhole
 - Road
 - Track
- ** MAPPING AFTER CORALCO 1976 - 1977



925072

5 cm

87-2661

- LEGEND**
- QUATERNARY
 - Q10s Basaltic sands and silt
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 - SMD 5
 - Drillhole
 - Road
 - Track
- ** MAPPING AFTER CORALCO 1976 - 1977

CRA EXPLORATION PTY. LIMITED			
MOINA E.L. 7/74 MOINA PROSPECT GEOLOGICAL PLAN			
REF.	SK55 - 3	(8014 - 8114 - 8115)	
SCALE	1 : 10000	DRAWN	R.T.
AUTHOR	T.V.S.	REPORT No.	14475
DATE	9 - 2 - 1987	PLAN No.	TASH 3290

073

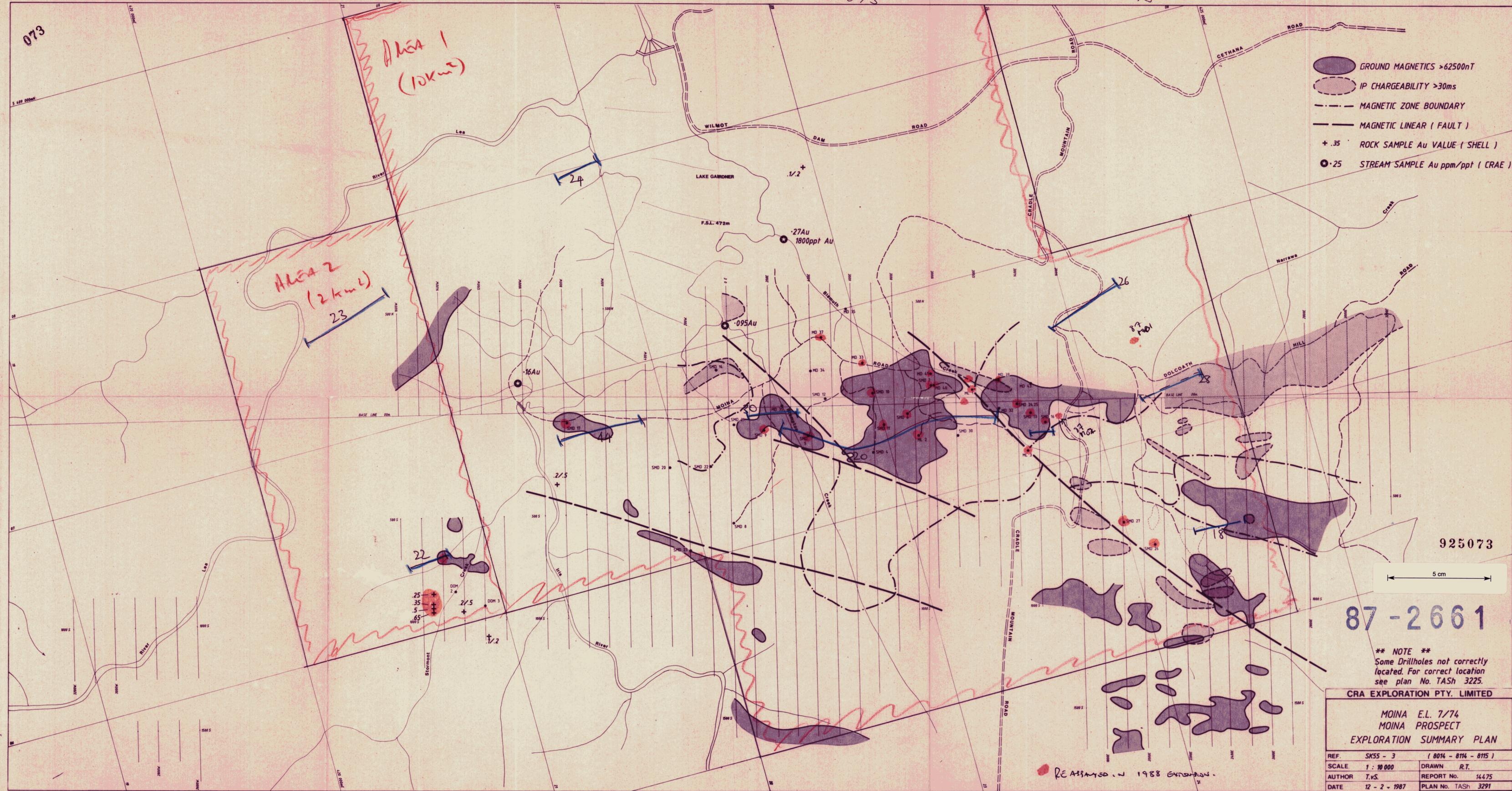
073

073

Area 1
(10km²)

Area 2
(2km²)

-  GROUND MAGNETICS >6250nT
-  IP CHARGEABILITY >30ms
-  MAGNETIC ZONE BOUNDARY
-  MAGNETIC LINEAR (FAULT)
-  + .35 ROCK SAMPLE Au VALUE (SHELL)
-  • .25 STREAM SAMPLE Au ppm/ppt (CRAE)



925073

5 cm

87-2661

**** NOTE ****
 Some Drillholes not correctly located. For correct location see plan No. TASH 3225.

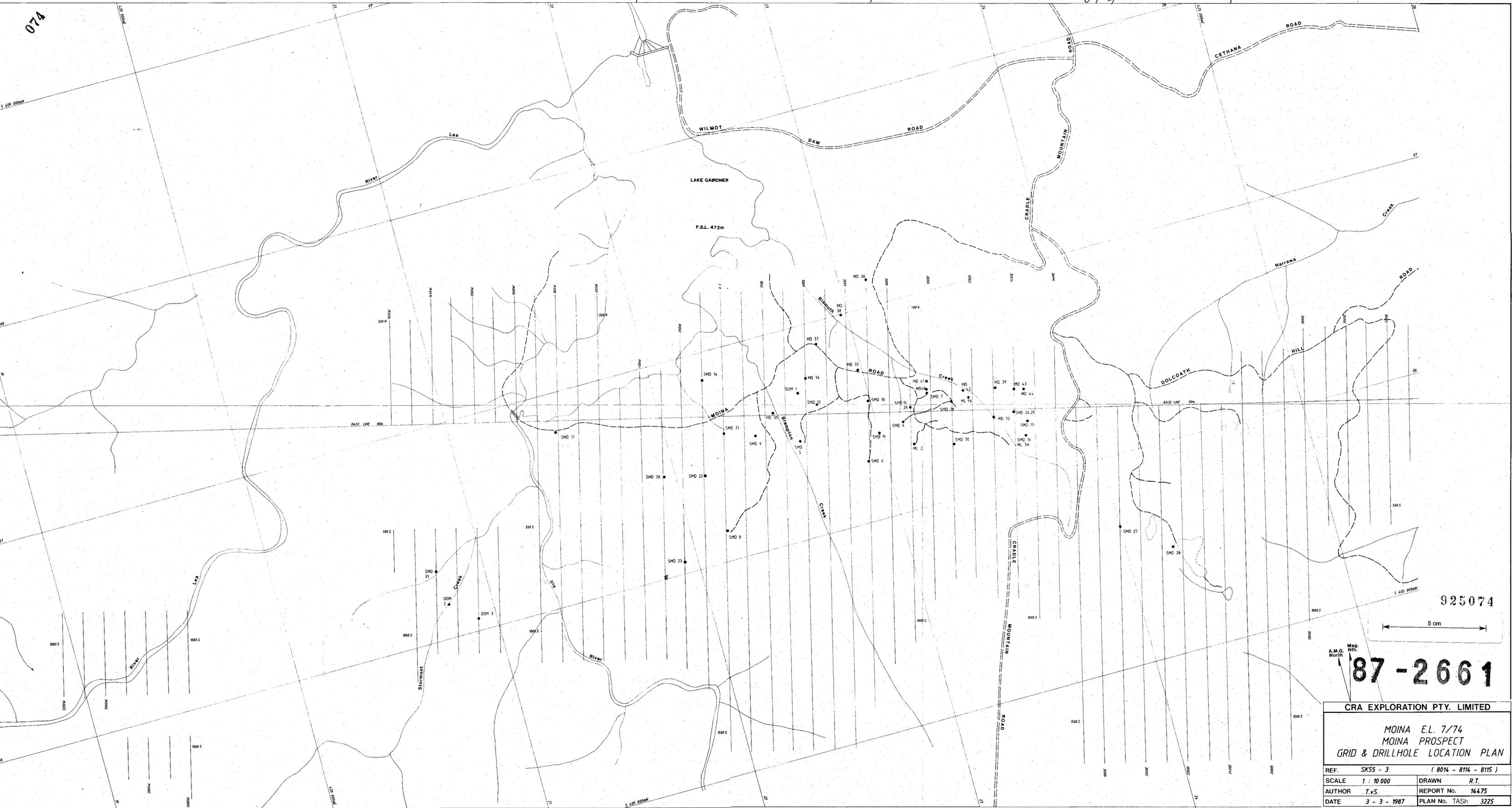
CRA EXPLORATION PTY. LIMITED	
MOINA E.L. 7/74 MOINA PROSPECT EXPLORATION SUMMARY PLAN	
REF. SK55 - 3	(8014 - 8114 - 8115)
SCALE 1 : 10 000	DRAWN R.T.
AUTHOR T.V.S.	REPORT No. 14475
DATE 12 - 2 - 1987	PLAN No. TASH 3291

RE ASSAYED IN 1988 EXTENSION

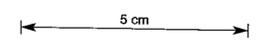
074

074

074



925074



Mag. Nth.
A.M.G. North

87-2661

CRA EXPLORATION PTY. LIMITED	
MOINA E.L. 7/74 MOINA PROSPECT GRID & DRILLHOLE LOCATION PLAN	
REF. SK55 - 3	(8014 - 8114 - 8115)
SCALE 1 : 10 000	DRAWN R.T.
AUTHOR T.v.S.	REPORT No. 14475
DATE 3 - 3 - 1987	PLAN No. TASH 3225

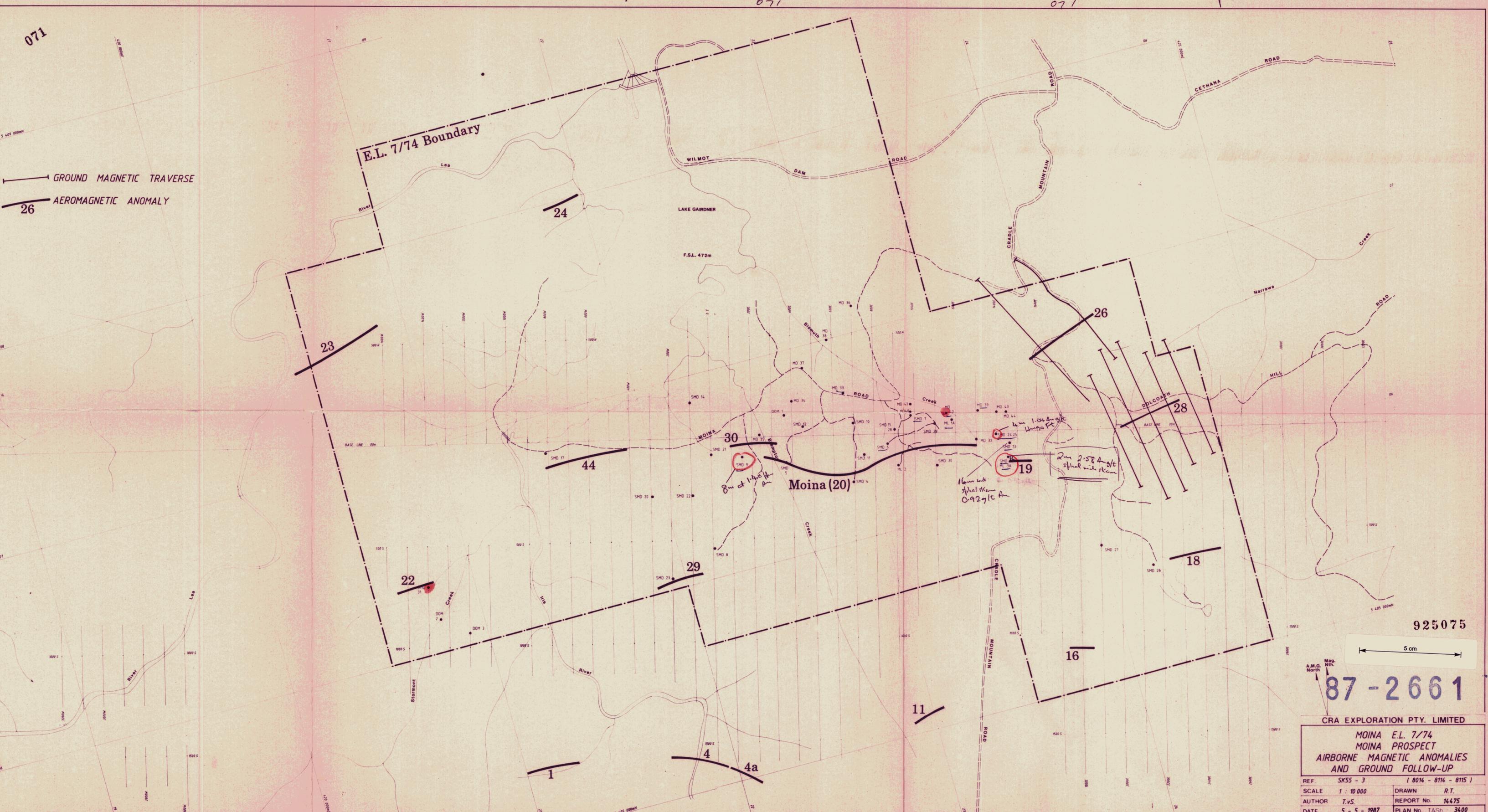
071

071

071

GROUND MAGNETIC TRAVERSE
 26 AEROMAGNETIC ANOMALY

E.L. 7/74 Boundary



925075

5 cm

87-2661

CRA EXPLORATION PTY. LIMITED

MOINA E.L. 7/74
 MOINA PROSPECT
 AIRBORNE MAGNETIC ANOMALIES
 AND GROUND FOLLOW-UP

REF	SK55 - 3	(8014 - 8114 - 8115)
SCALE	1 : 10 000	DRAWN R.T.
AUTHOR	T.v.S.	REPORT No. 14475
DATE	5 - 5 - 1987	PLAN No. TASH 3400

100S

50S

00m

50N

075

ML1A

BISMUTH CREEK FAULT

All Au < 0.10 ppm

925076

-  BRECCIA
-  LIMESTONE
-  SANDSTONE
-  GRANITE (Greisenised)

87 - 2661

E.O.H.
265m.

CRA EXPLORATION PTY. LIMITED

MOINA E.L. 7/74
DRILLHOLE ML 1A SECTION
LINE 1150 E LITHOLOGY
AND GOLD ASSAYS - ppm

A 0.10 ppm Au cut off was used.

5 cm

REF. SK55 - 3 (8014 - 8114 - 8115)

SCALE 1 : 1000 DRAWN R.T.

AUTHOR F.R.F. REPORT No. 14475

DATE 27 - 2 - 1987 PLAN No. TASH 3339

076
ML3A

100S

50S

00m

R.L. 600m

Sandstone

93.6 }
99.7 } 6.10m @ 0.53ppm Au

41.4 m @
2590 ppm Sn
1125 ppm W
9.3% F

Skarn

14.81 - 14.97 1.6m @ 2.18ppm Au

R.L. 500m

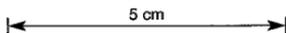
Sandstone

925077

87 - 2661

E.O.H.
260m.

A 0.10 ppm Au cut off was used.



CRA EXPLORATION PTY. LIMITED

MOINA E.L. 7/74
DRILLHOLE ML3A SECTION
LINE 1450 E LITHOLOGY
AND GOLD ASSAYS - ppm

REF.	SK55 - 3	(8014 - 8114 - 8115)
SCALE	1 : 1000	DRAWN R.T.
AUTHOR	F.R.F.	REPORT No. 14475
DATE	27 - 2 - 1987	PLAN No. TASH 3340

650m 1200E 1300E 1400E 1500E

077

077

LEGEND

-  ROLAND CONGLOMERATE
-  SANDSTONE
-  INTERBEDDED SILTSTONE & SANDSTONE
-  SKARN
-  FAULT ZONE

R.L. 600m

550m

MD 42 (Projected)

500m

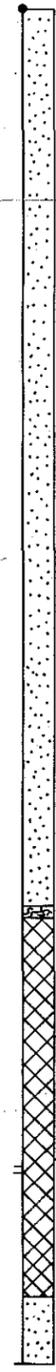
450m

400m

350m

HUGO'S

FAULT



178.5-179.5m 1.1m @ 0.11 ppm Au

158.0m

19m @ 1350 ppm Sn
475 ppm W

177.0m

E.O.H.
208m

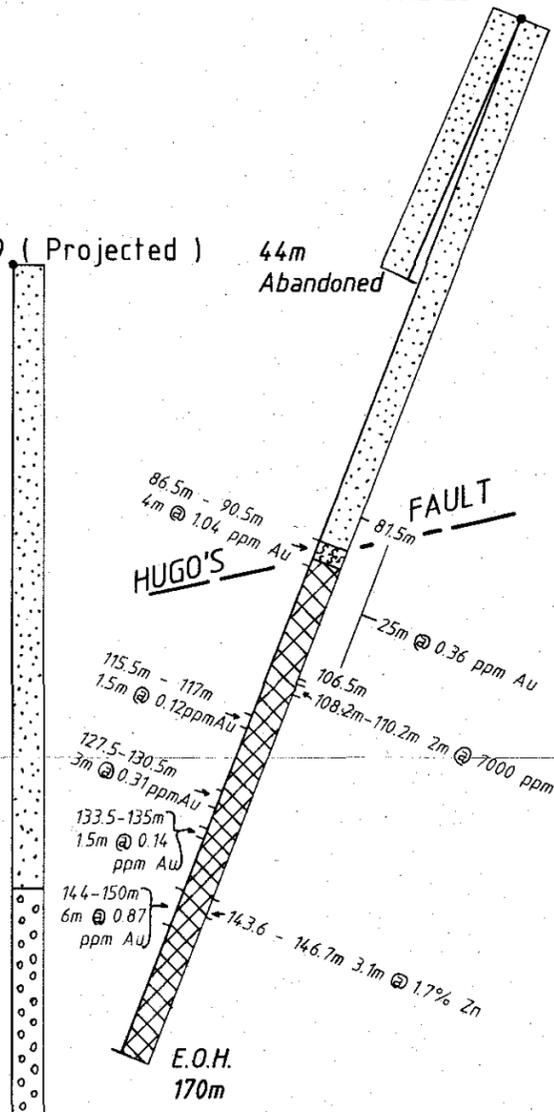
MD 39 (Projected)

44m Abandoned

SMD 25 SMD 24

HUGO'S

FAULT



86.5m - 90.5m
4m @ 1.04 ppm Au

115.5m - 117m
1.5m @ 0.12 ppm Au

127.5 - 130.5m
3m @ 0.31 ppm Au

133.5 - 135m
1.5m @ 0.14 ppm Au

144 - 150m
6m @ 0.87 ppm Au

E.O.H.
170m

FAULT

HUGO'S

176.0m

26m @ 1019 ppm Sn
189 ppm W

202.0m

E.O.H.
260m

190.0m-205.0m
15m @ 0.67 ppm Au

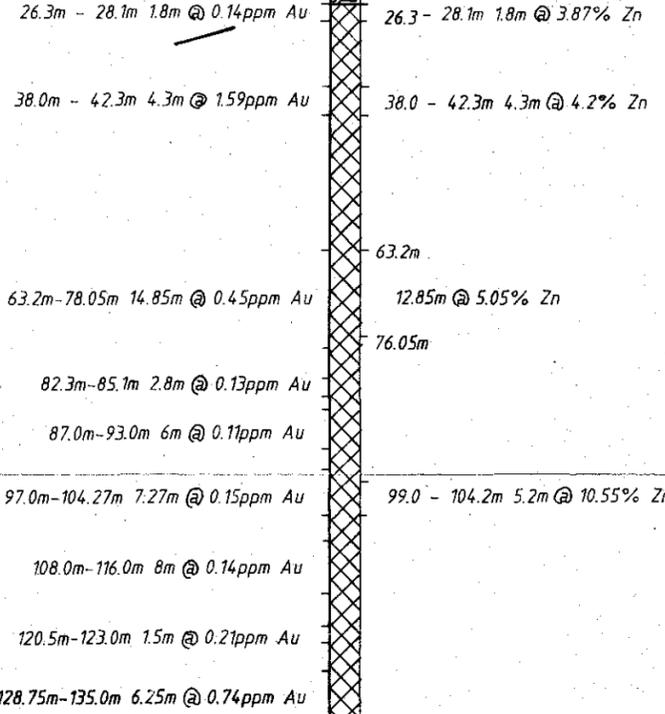
190.0m-196.0m
6m @ 1.12 ppm Au

215.5-218.5m 3m @ 0.36 ppm Au

235-236.5m 1.5m @ 0.12 ppm Au

SMD 16 (Projected)

HUGO'S FAULT



26.3m - 28.1m 1.8m @ 0.14 ppm Au

38.0m - 42.3m 4.3m @ 1.59 ppm Au

63.2m-78.05m 14.85m @ 0.45 ppm Au

82.3m-85.1m 2.8m @ 0.13 ppm Au

87.0m-93.0m 6m @ 0.11 ppm Au

97.0m-104.27m 7.27m @ 0.15 ppm Au

108.0m-116.0m 8m @ 0.14 ppm Au

120.5m-123.0m 1.5m @ 0.21 ppm Au

128.75m-135.0m 6.25m @ 0.74 ppm Au

26.3 - 28.1m 1.8m @ 3.87% Zn

38.0 - 42.3m 4.3m @ 4.2% Zn

12.85m @ 5.05% Zn

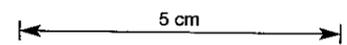
99.0 - 104.2m 5.2m @ 10.55% Zn

E.O.H.
171m

925078

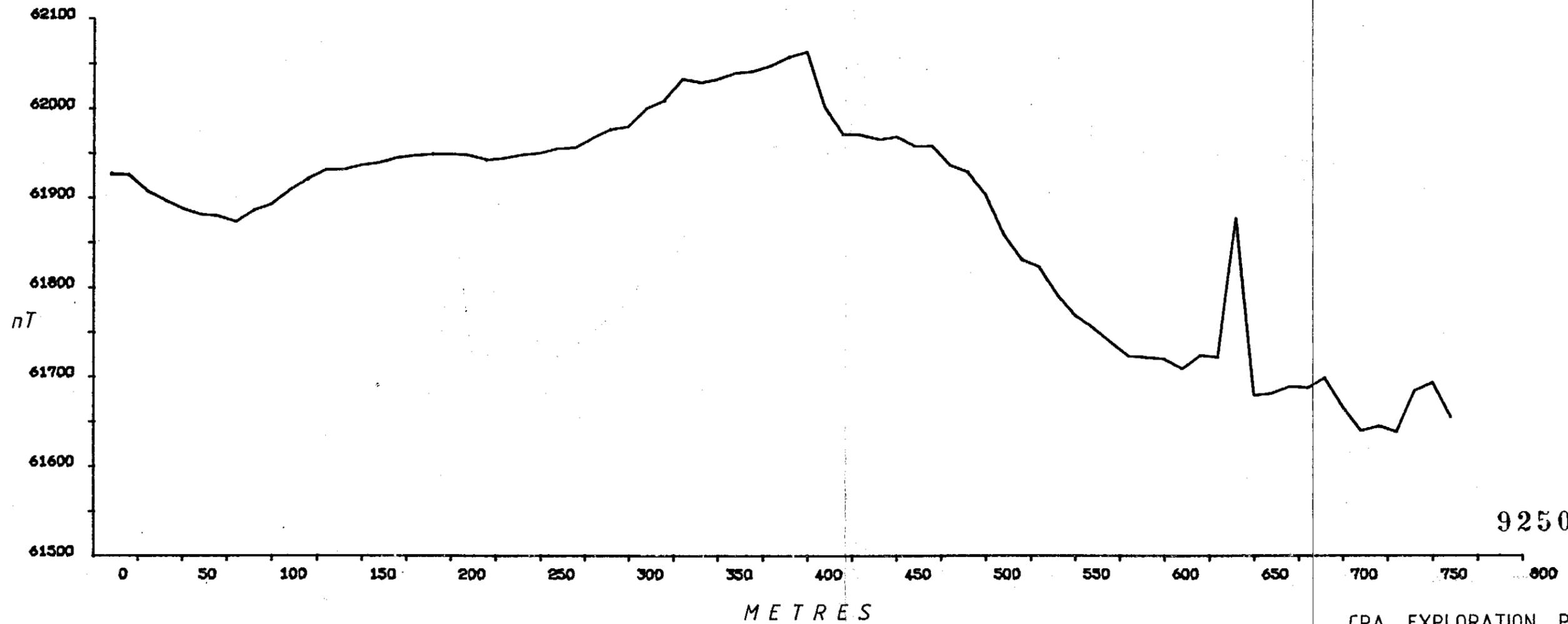
87-2661

A 0.10 ppm Au cut off was used.



CRA EXPLORATION PTY. LIMITED		
MOINA E.L. 7/74		
MD 39,42 & SMD 16,24,25 SECTIONS		
LINE 00m NORTH LITHOLOGY		
AND GOLD ASSAYS - ppm		
REF.	SK55 -	(8014 - 8114 - 8115)
SCALE	1 : 1000	DRAWN R.T.
AUTHOR	F.R.F.	REPORT No. 14475
DATE	27 - 2 - 1987	PLAN No. TASH 3341

Ground magnetics Moina anomaly 26 Line 261



925079

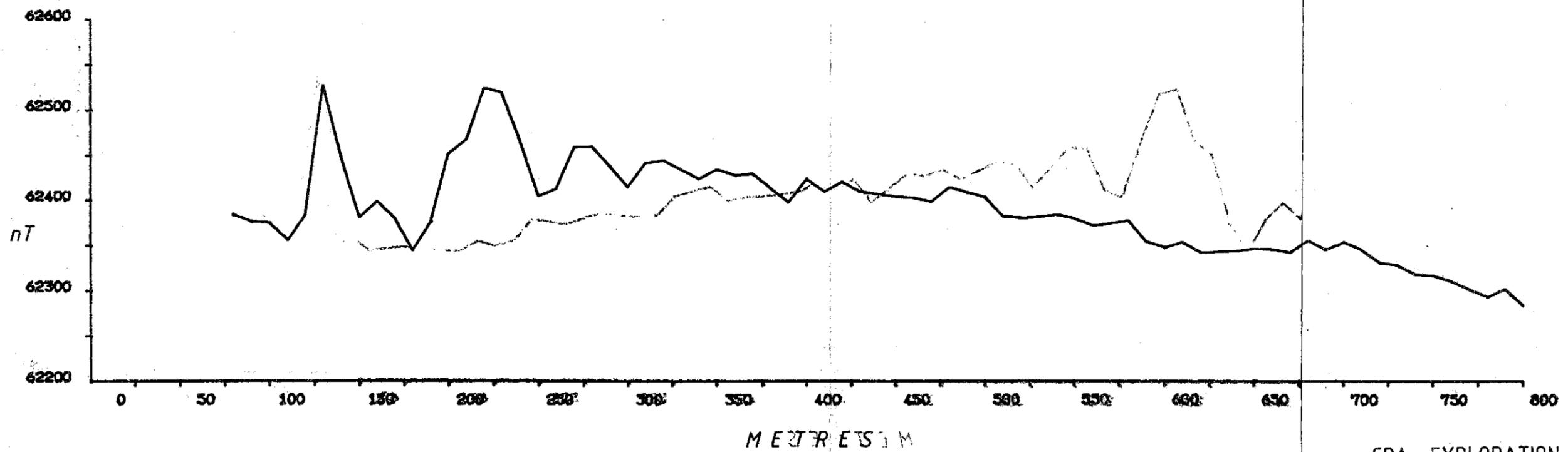
CRA EXPLORATION PTY. LTD.

MOINA E.L. 7/74
 GROUND MAGNETICS
 MOINA ANOMALY 26 Line 261

Ref. SK55 - 3 (8014 - 8114 - 8115)
 Author. T.v.S. Drawn. T.v.S.
 Date. 8 - 5 - 1987 TASH plan No. 3403

87 - 2661

Ground magnetos Moina Monomoly 26 Line 262E



925080

CRA EXPLORATION PTY. LTD.

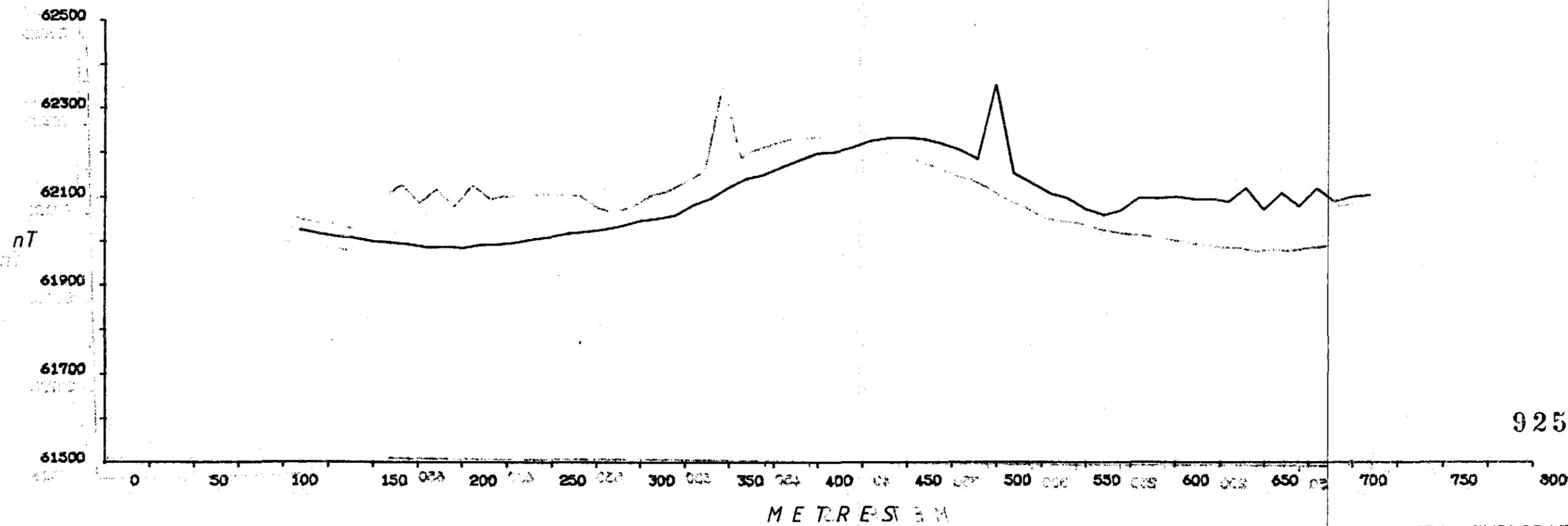
MOINA E.L. 7/74
GROUND MAGNETICS
MOINA ANOMALY 26 Line 262

Ref. SK55 - 3 (8014 - 8114 - 8115)
Author. T.v.S. Drawn. T.v.S.
Date. 8 - 5 - 1987 TASH plan No. 3404

070

87 - 2661

Ground Magnetics Moina anomaly 28 Line OE



925081

CRA EXPLORATION PTY. LTD.

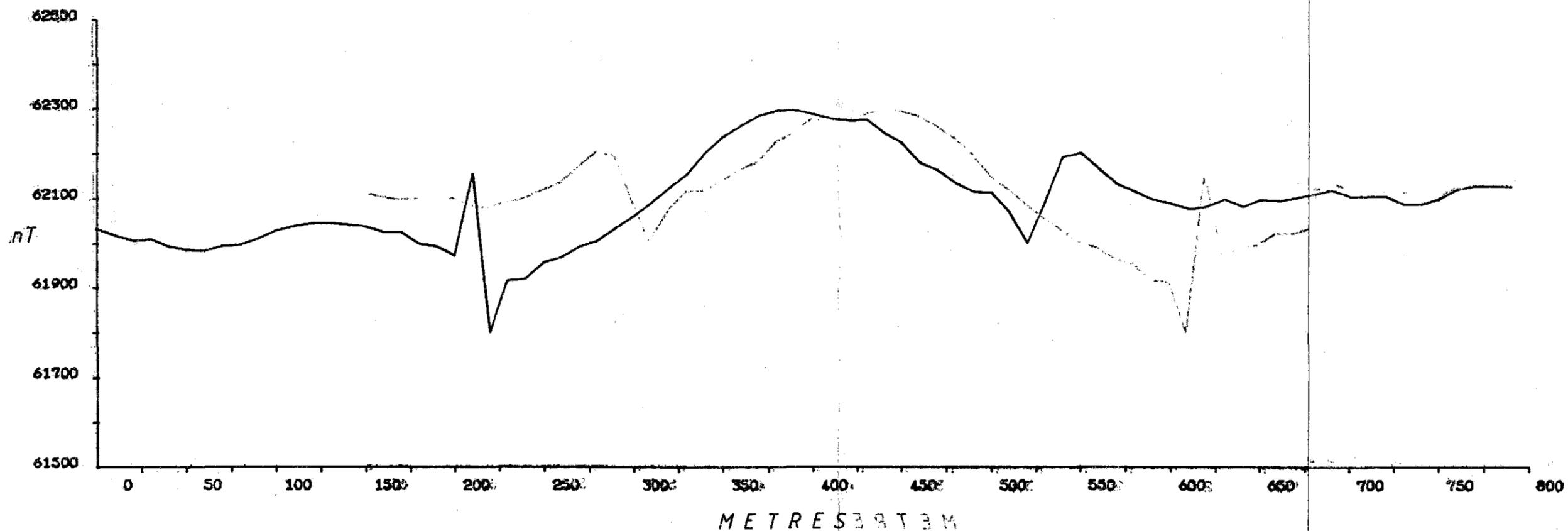
MOINA E.L. 7/74
 GROUND MAGNETICS
 MOINA ANOMALY 28 Line 0 E

Ref. SK55 - 3 (8014 - 8114 - 8115)
 Author. T.v.S. Drawn. T.v.S.
 Date. 8 - 5 - 1987 TASH plan No. 3405

080

87 - 2661

Ground magnetics Moina Anomaly 28 line 100E



925082

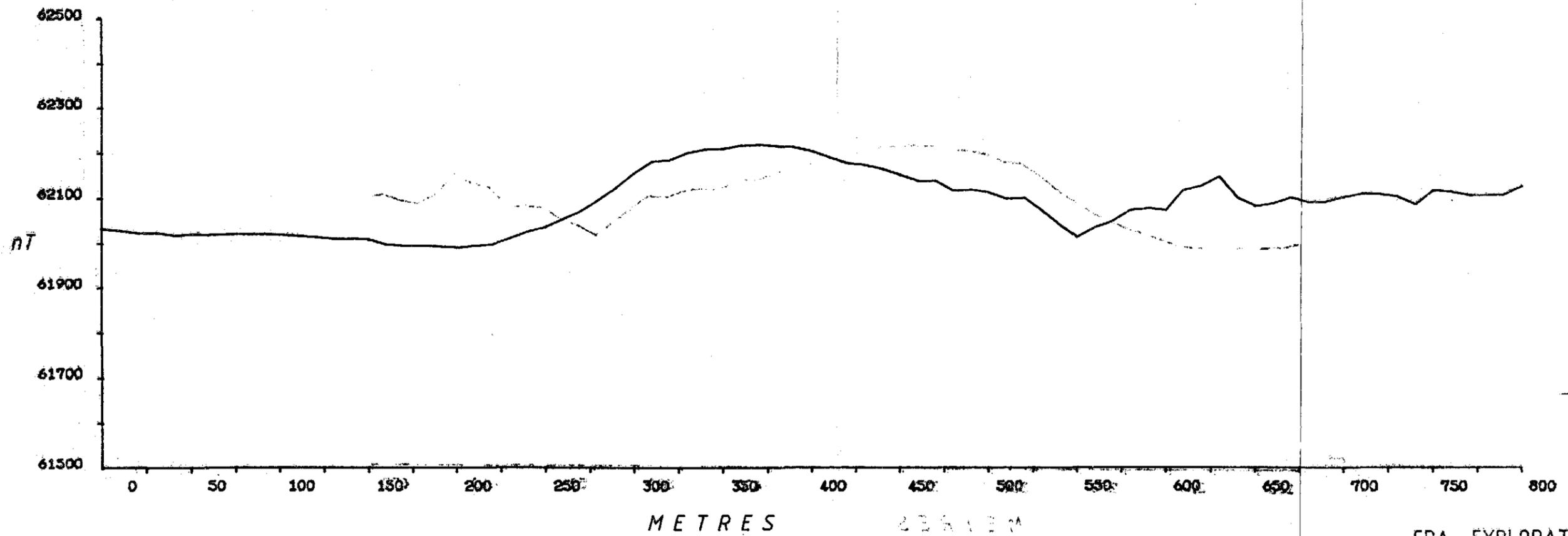
CRA EXPLORATION PTY. LTD.

MOINA E.L. 7/74
GROUND MAGNETICS
MOINA ANOMALY 28 Line 100E

Ref. SK55 - 3 (8014 - 8114 - 8115)
Author. T.v.S. Drawn. T.v.S.
Date. 8 - 5 - 1987 TASH plan No. 3406

180
87 - 2661

Ground magnetics Moina Anomaly 28 Line 200E



925083

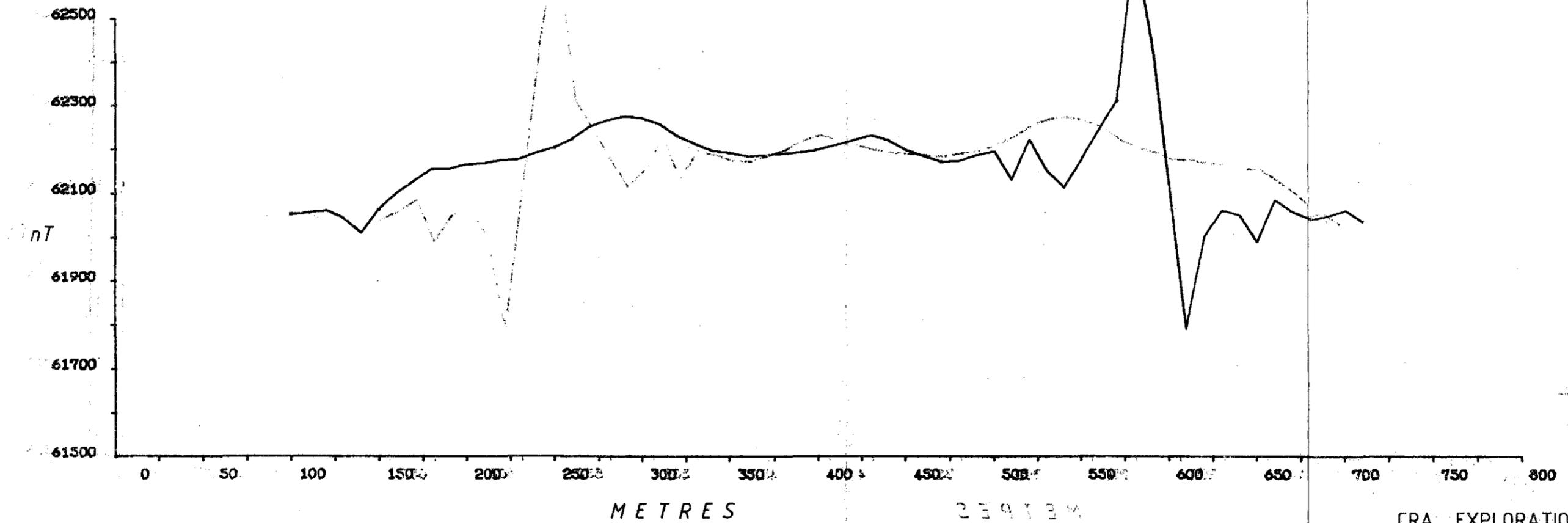
CRA EXPLORATION PTY. LTD.

MOINA E.L. 7/74
 GROUND MAGNETICS
 MOINA ANOMALY 28 Line 200E

Ref. SK55 - 3 (8014 - 8114 - 8115)
 Author. T.v.S. Drawn. T.v.S.
 Date. 8 - 5 - 1987 TASH plan No. 3407

87 - 2661

Ground magnetics Moina anomaly 28 Line 300E



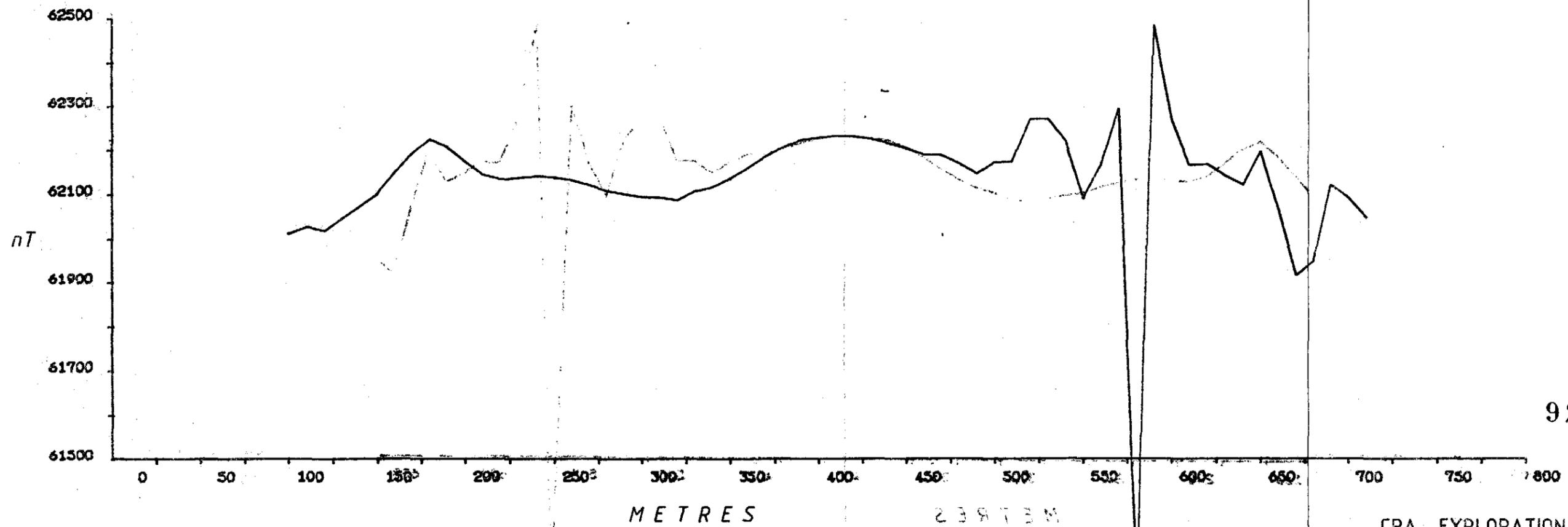
925084

CRA EXPLORATION PTY. LTD.

MOINA E.L. 7/74
 GROUND MAGNETICS
 MOINA ANOMALY 28 Line 300E
 Ref. SK55 - 3 (8014 - 8114 - 8115)
 Author. T.v.S. Drawn. T.v.S.
 Date. 8 - 5 - 1987 TASH plan No. 3408

880
 87-2661

GROUND MAGNETICS MOINA ANOMALY 28 LINE 400E



925085

CRA EXPLORATION PTY. LTD.

MOINA E.L. 7/74
 GROUND MAGNETICS
 MOINA ANOMALY 28 Line 400E

Ref. SK55 - 3 (8014 - 8114 - 8115)
 Author. T.v.S. Drawn. T.v.S.
 Date. 8 - 5 - 1987 TASH plan No. 3409

87 - 2661

080