

SOUTH AUSTRALIA
DEPARTMENT OF MINES AND ENERGY



OPEN FILE ENVELOPE NO. 8718

EL 1732, TRURO

PARTIAL RELINQUISHMENT REPORT

Submitted by

CRA Exploration Pty Ltd

1993

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ENVELOPE 8718

TENEMENT: EL 1732, Truro

TENEMENT HOLDER: CRA Exploration Pty Ltd

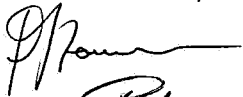
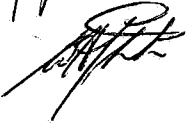
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CRA EXPLORATION PTY. LIMITED

RELINQUISHMENT REPORT FOR
PARTIAL SURRENDER OF TRURO EL 1732,
SOUTH AUSTRALIA

AUTHOR: D.J. LOUWRENS
COPIES TO: SADME
CIS CANBERRA
DATE: 11TH AUGUST, 1993
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LIST OF PLANS

<u>Plan No.</u>	<u>Title</u>	<u>Scale</u>
SAa 5426	Truro EL 1732, S.A. - Location Plan	1:250 000
SAa 6187	Truro EL 1732, S.A. - Sample Locations on Area of Surrender	1:100 000

LIST OF APPENDICES

Appendix 1	Drainage Gravel Sample Results
Appendix 2	-80# Stream Sediment Sample Results
Appendix 3	Geochemistry of Whole Rock Samples

1. SUMMARY

The area of surrender of Truro EL 1732 was covered by a regional drainage sampling programme to test for kimberlitic indicator minerals and base metal mineralisation.

A single macro-diamond was recorded in the Kapunda area but follow-up sampling was negative. Chromites were recorded in twelve gravel samples but further studies revealed that only two displayed a low possibility of being derived from kimberlites. Minus 80# stream sediment sampling returned low metal contents and no follow-up work was warranted.

A number of basic rock types mapped on the Adelaide 1:250 000 geology sheet were visited and sampled to test the possibility that they might be kimberlitic. However, geochemical results of the three samples collected within the area of surrender indicate that the rocks are non-kimberlitic.

2. CONCLUSIONS AND RECOMMENDATIONS

Results from the drainage sampling programme indicate that the area of surrender has low base metal potential and little possibility of hosting kimberlitic lithologies. Partial relinquishment of EL 1732 was recommended.

3. INTRODUCTION

Truro EL 1732 is located approximately 70km north east of Adelaide in an area centred on the town of Truro, as shown on plan SAa 5426. The exploration licence was originally granted to CRA Exploration Pty. Limited on 15th July 1991, covering an area of approximately 1548km². Partial surrender of EL 1732 reduces the area to approximately 712km².

The area was originally identified as having potential for diamondiferous kimberlites and stratabound base metal mineralisation.

This report details work completed by CRA Exploration Pty. Limited in the area of surrender.

4. INVESTIGATIONS

4.1 Drainage Sampling

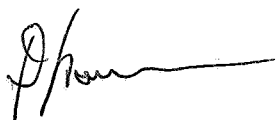
A total of 54 gravel samples were collected in the area of surrender. The samples were collected as part of a regional drainage sampling programme to test for the presence of kimberlitic indicator minerals in stream gravels. Each sample tested drainage catchments of approximately 17km², with further sampling conducted where follow-up was warranted.

Gravel sample results are listed in Appendix 1. A single macro-diamond was recorded in a creek near Kapunda. Follow-up sampling recorded four non-kimberlitic chromites in upstream gravels, but no further diamonds were reported. Of twelve samples recording chromite grains, further studies suggested that only two showed low possibility of kimberlitic affinity. Follow-up work was not warranted since upstream sample results were negative.

A total of 41 stream sediment samples (-80 mesh) were collected in the area of surrender. Geochemical results are listed in Appendix 2. Generally low metal contents were recorded in these samples and no further work was recommended.

4.2 Rock Sampling

Basic rock types mapped on the Adelaide 1:250 000 geology sheet were visited to test the possibility that they may be kimberlitic. Rock samples were collected at three sites and assayed for a suite of whole rock and trace elements. Geochemical results determined that the samples are non-kimberlitic (Appendix 3).



D.J. LOUWRENS

DJL/dt

REFERENCES

- Home, D.P. Third Quarterly Report for Truro EL 1732, South Australia, for the Period
Ending 14th April, 1992. CRAE Report No. 17999.
- Donnelly, M.J. Fourth Quarterly Report for Truro EL 1732, South Australia, for the Period
Ending 14th July, 1992. CRAE Report No. 18158.

LOCATION

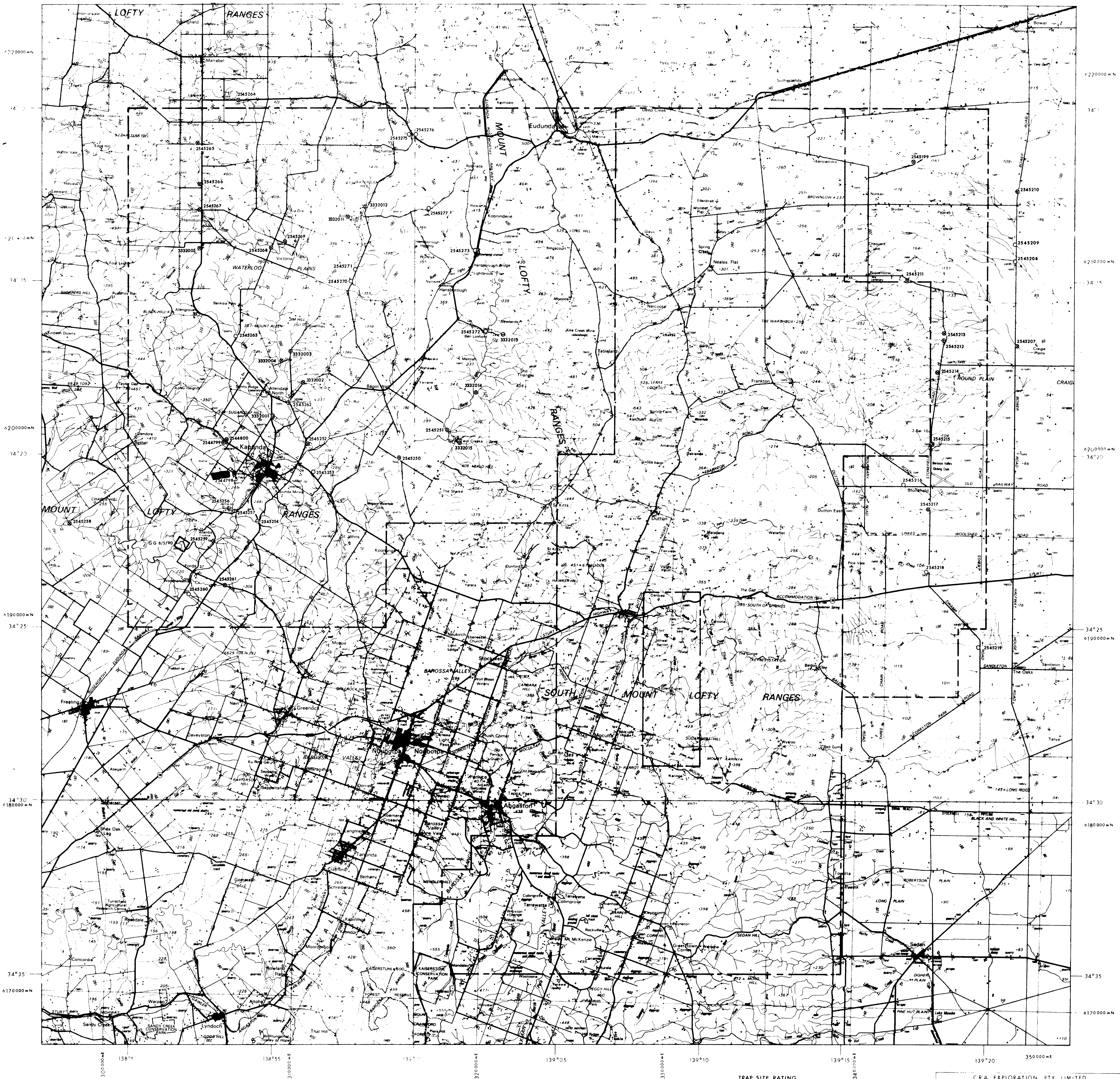
Adelaide	SH 5409	1:250 000 sheet
Kapunda	6629	1:100 000 sheet
Eudunda	6729	1:100 000 sheet

KEYWORDS

Diamonds, Geochem drainage, Geochem rock.

LIST OF DPO'S

37845, 37848, 37850, 54259, 54260



TRAP SITE RATING

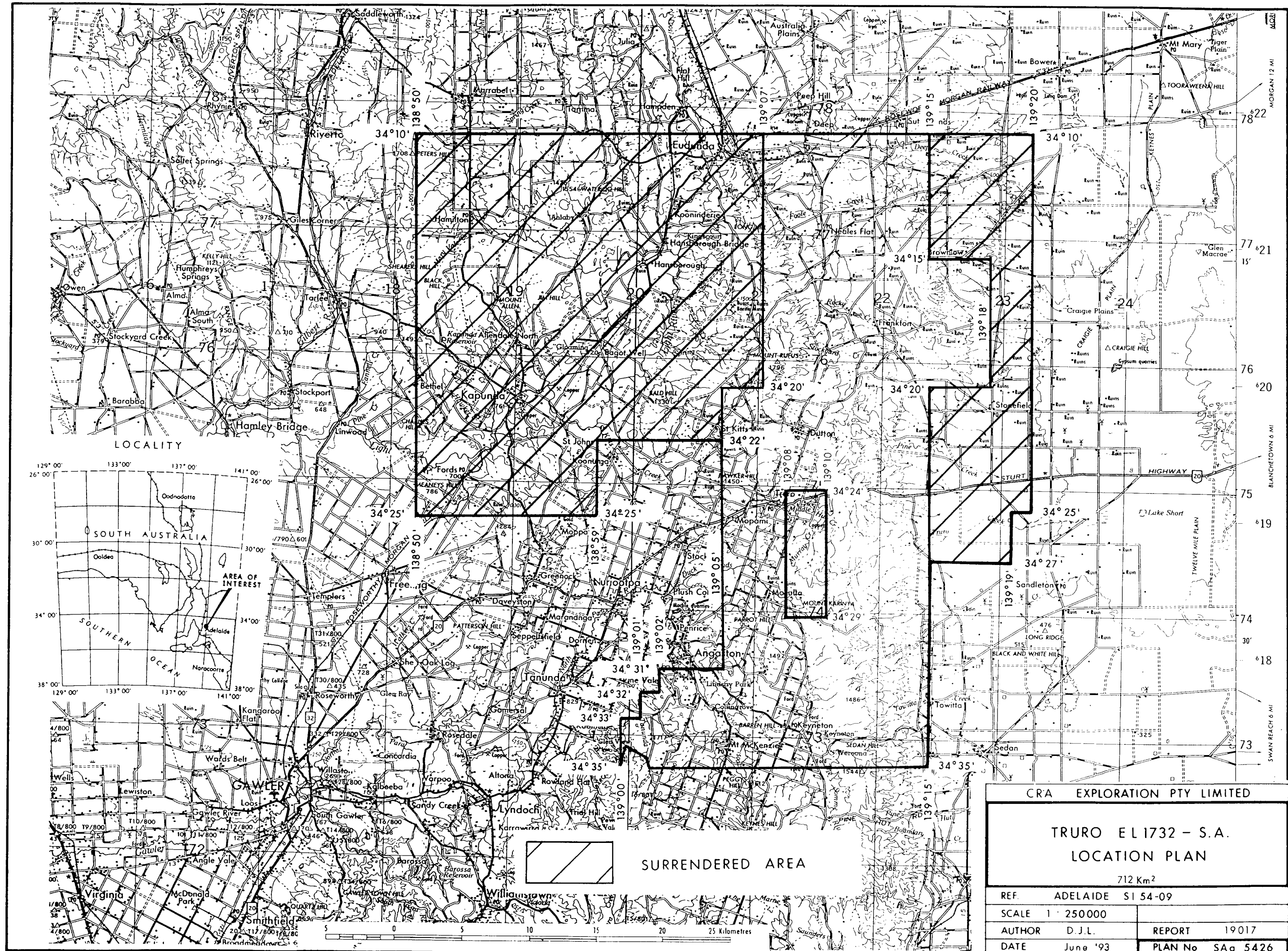
- Good
- Good to Moderate
- ◐ Moderate
- ◑ Moderate to Poor
- ⊙ Poor
- Unsatisfactory

CRA EXPLORATION PTY LIMITED

TRURO EL1732 - S.A.

SAMPLE LOCATIONS ON
AREA OF SURRENDER

Ref	ADELAIDE	S1 54-9
Scale	1:100,000	Drawn
Author	D.J.L.	Report No
Date	Aug '93	Plan No
		5Aa 6187



APPENDIX 1

Drainage Gravel Sample Results

TRURO EL1732 GRAVEL SAMPLE RESULTS

SAMPLE NO	EASTING	NORTHING	RESULTS	COMMENTS
2545199	342400	6215150	Negative	
2545207	348150	6205450	1 Chromite	Non kimberlitic chromite
2545208	348000	6210000	Negative	
2545209	348000	6210850	Negative	
2545210	348050	6213700	Negative	
2545211	342250	6208900	1 Chromite	Non kimberlitic chromite
2545212	344250	6205650	Negative	
2545213	344300	6206000	Negative	
2545214	344050	6203900	Negative	
2545215	343650	6200150	3 Chromites	Non kimberlitic chromites
2545216	342250	6197900	Negative	
2545217	343650	6196650	Negative	
2545218	343700	6193200	Negative	
2545219	346500	6189300	Negative	
2545250	315150	6198850	Negative	
2545251	317750	6200350	1 Pyrope	
2545252	310200	6199400	4 Chromites	Non kimberlitic chromites
2545253	310550	6197950	Negative	
2545254	307750	6195200	Negative	
2545255	306400	6197850	1 Diamond 0.9x0.5mm	
2545256	306300	6195700	Negative	
2545257	306350	6195700	Negative	
2545258	297600	6195000	Negative	
2545259	305350	6194150	2 Chromites	Possible kimberlitic chromites
2545260	304100	6191300	Negative	
2545261	306050	6191850	Negative	
2545262	309250	6201650	Negative	
2545263	306400	6205100	Negative	
2545264	306150	6217700	Negative	
2545265	304050	6215350	Negative	
2545266	304250	6213150	Negative	
2545267	304200	6211850	Negative	
2545268	308150	6209800	4 Chromites	Non kimberlitic chromites
2545269	308850	6210100	1 Chromite	Non kimberlitic chromite
2545270	312450	6208100	Negative	
2545271	312600	6208550	2 Chromites	Possible kimberlitic chromites
2545272	319600	6205650	Negative	
2545273	319100	6209800	Negative	
2545275	315400	6216050	Negative	
2545276	315750	6215900	Negative	
2545277	316500	6212100	Negative	
2544798	306500	6197800	Negative	
2544799	305750	6199450	4 Chromites	Non kimberlitic chromites
2544800	305900	6199600	Negative	
3332001	308350	6200900	1 Chromite	Non kimberlitic chromite
3332002	309900	6202700	15 Chromites	Non kimberlitic chromites
3332003	309250	6204350	1 Pyrope	
3332004	308750	6203850	Negative	
3332005	304250	6209800	Negative	
3332011	312150	6211550	Negative	
3332012	313150	6212150	13 Chromites	Non kimberlitic chromites
3332013	320600	6205500	Negative	
3332014	319200	6202350	Negative	
3332015	318400	6199700	Negative	

APPENDIX 2

-80# Stream Sediment Sample Results

SAMPLE	EAST	NORTH	Au	Pb	Ag	As	Zn	Cu	Ni	Co	Cr	Fe	Mn	P	Ba	Ce	La	Th	Zr	Sb	Mo	Sn	U	Nb
2545199	342400	6215150	0.001	20	0.25	7	45	20	23	11	43	32000	415	241	385	64	38	12	105	0.47	0.83	1.97	1.69	12.9
2545207	348150	6205450	0.002	15	0.25	9	46	27	30	13	63	37200	461	356	473	70	41	19	110	0.43	0.66	2.8	1.66	14.3
2545208	348000	6210000	0.002	15	0.25	6	51	23	25	10	52	33400	497	302	355	62	36	10	89	0.26	0.35	1.78	1.3	3.96
2545209	348000	6210850	0.005	20	0.25	6	58	24	28	11	50	36900	550	401	383	67	38	14	104	0.33	0.74	2.26	1.39	10.1
2545210	348050	6213700	0.012	20	0.25	11	46	28	28	12	47	30900	398	230	398	56	33	13	92	0.2	0.15	1.95	1.43	11.7
2545211	342250	6208900	0.013	15	0.25	5	41	20	21	10	45	31200	459	293	402	66	39	15	103	0.73	2.48	1.57	1.2	10.6
2545212	344250	6205650	0.005	15	0.25	7	38	23	25	11	53	32500	500	348	440	80	48	18	116	0.54	1.63	2.52	1.73	15.5
2545213	344300	6206000	0.001	5	0.25	5	27	15	17	8	35	23900	357	242	381	83	46	15	99	0.72	0.91	1.71	1.43	15.2
2545214	344050	6203900	0.001	10	0.25	8	30	19	21	9	40	26800	369	244	355	54	33	13	94	0.71	1.56	1.7	1.4	11.5
2545215	343650	6200150	0.002	15	0.25	11	54	37	62	13	104	42200	472	366	564	80	46	18	144	0.8	2.9	3.31	2.26	25
2545216	342250	6197900	0.001	15	0.25	9	44	18	23	10	44	29500	448	307	409	61	39	16	85	0.58	0.58	1.82	1.28	17.8
2545217	343650	6196650	0.001	15	0.25	7	43	19	23	10	46	30400	371	207	483	74	45	16	91	0.49	0.76	1.86	1.5	15.1
2545218	343700	6193200	0.001	20	0.25	9	56	25	28	11	63	35600	258	182	528	69	42	16	110	0.44	0.77	2.95	2.22	9.83
2545219	346500	6189300	0.001	15	0.25	6	47	23	25	10	53	33200	346	239	559	85	46	15	113	0.22	0.42	2.64	1.8	7.49
2545250	315150	6198850	0.002	10	0.25	2	58	23	32	14	51	39000	583	433	495	71	38	18	131	1.41	1.52	3.56	2.25	13.7
2545251	317750	6200350	0.003	15	0.25	1	57	25	31	13	58	39800	342	408	448	74	39	17	139	1.36	2.04	3.52	2.02	20.4
2545252	310200	6199400	0.008	10	0.25	2	38	15	14	6	28	20400	195	173	261	62	32	13	99	0.59	1.04	1.86	1.45	7.79
2545253	310550	6197950	0.007	10	0.25	2	113	18	14	6	27	20200	207	271	232	59	31	13	94	0.51	1.01	2.03	1.44	12.6
2545254	307750	6195200	0.002	30	0.25	8	53	37	27	11	54	34900	445	386	418	69	39	17	132	0.69	1.14	3.08	2.84	19.2
2545255	306400	6197850	0.007	10	0.25	4	31	24	17	8	29	25400	348	271	309	51	27	14	102	0.77	1.05	2.12	1.42	22.9
2545256	306300	6195700	0.004	15	0.25	5	48	25	21	9	33	28400	268	363	357	65	35	18	114	0.44	1.03	2.44	2.34	17.6
2545257	306350	6195700	0.009	10	0.25	4	38	46	20	8	34	30000	391	416	318	59	31	14	100	0.57	0.73	2.77	1.8	16.5
2545258	297600	6195000	0.001	5	0.25	4	36	40	18	8	33	28500	340	312	366	60	33	12	104	0.5	0.76	2.26	1.62	14.2
2545259	305350	6194150	0.001	30	0.25	2	40	40	22	10	44	29400	360	327	360	64	32	15	117	1.71	1.86	2.88	1.98	19.7
2545260	304100	6191300	0.003	20	0.25	3	63	30	29	14	72	41300	396	465	260	88	42	18	143	1.27	2.62	3.35	1.82	34.9
2545261	306050	6191850	0.003	10	0.5	3	27	16	16	8	35	23500	237	161	236	57	27	11	104	0.8	1.57	2.14	1.4	25.8
2545262	309250	6201650	0.003	10	0.25	1	30	17	20	9	39	28200	266	180	238	74	33	11	109	0.73	0.97	2.22	1.64	28.2
2545263	306400	6205100	0.003	15	0.25	3	58	23	24	11	51	29700	205	376	366	77	38	16	123	0.77	1.47	2.79	2.29	30.6
2545264	306150	6217700	0.001	5	0.25	1	17	12	13	8	45	24000	878	227	229	68	35	14	85	0.44	0.59	1.35	1.76	19.3
2545265	304050	6215350	0.004	10	0.25	5	33	26	14	5	69	29300	146	392	511	91	44	17	168	2.28	1.5	4.28	2.14	55.3
2545266	304250	6213150	0.001	20	0.25	5	32	20	21	12	49	37300	310	250	423	92	44	17	123	0.72	1.26	2.59	1.95	39.8
2545267	304200	6211850	0.001	10	0.25	4	44	17	25	12	45	28100	189	339	363	72	35	14	109	1.3	2.51	3.35	1.99	22.3
2545268	308150	6209800	0.002	20	0.25	7	50	27	27	11	75	38900	133	491	538	77	38	14	147	1.2	2.69	4.08	3.08	54.5
2545269	308850	6210100	0.001	5	0.25	2	21	11	5	5	22	19600	184	164	215	98	47	12	90	0.92	0.89	1.87	1.44	23.3
2545270	312450	6208100	0.002	20	0.25	4	45	20	19	9	54	32300	215	487	380	82	39	13	121	0.75	2.06	3.14	2.61	35.1
2545271	312600	6208550	0.01	5	0.25	2	20	14	12	6	28	20800	193	213	249	66	30	10	89	0.59	0.73	1.69	1.28	17.8
2545272	319600	6205650	0.001	15	0.25	1	59	24	37	12	57	37600	371	458	379	57	29	15	112	0.67	1.13	2.56	1.87	18.6
2545273	319100	6209800	0.002	20	0.25	3	76	29	36	15	68	39900	727	591	502	73	37	17	140	0.71	0.78	3.8	2.13	23.4
2545275	315400	6216050	0.001	10	0.25	4	42	19	19	11	49	29300	344	441	361	84	39	13	122	0.73	0.81	2.42	1.94	50.8
2545276	315750	6215900	0.0005	15	0.25	3	50	19	25	13	62	32300	381	386	302	60	28	11	106	1.33	2.77	3.03	1.68	37.7
2545277	316500	6212100	0.0005	10	0.25	0.5	47	22	24	9	58	28400	184	359	356	75	35	12	122	0.88	1.73	3.36	2.65	48.5

000012

APPENDIX 3
Geochemistry of Whole Rock Samples

Geochemistry of Whole Rock Samples (DPO 54260, Analabs)

	Sample No.	Au	As	Ba	Co	Cr	Cu	Nb	Ni	Th	Zn	La	Ce	Ag	Pb	LOI	Na2O	Al2O3	SiO2	TiO2	MnO	CaO	K2O	MgO	P2O5	Fe2O3
	3332031	<0.005	6	141	42	127	106	<10	105	<10	88	15	17	<5	<50	3.04	2.490	16.68	46.20	1.340	0.177	9.900	0.91	8.410	0.12	10.45
	3332032	<0.005	4	2210	23	116	27	10	107	14	45	45	82	<5	<50	2.27	3.530	12.60	54.50	1.550	0.046	2.450	4.10	5.220	1.35	11.90
	3332033	<0.005	2	2170	41	246	57	<10	94	<10	84	17	17	<5	<50	3.81	1.810	15.70	46.60	1.530	0.178	9.650	0.63	8.420	0.14	11.01
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%	%	%	%
Method		GG313	GA114	GI201	GI201	GI201	GI201	GI201	GI201	GI201	GI201	GI201	GI201	GI201	GI201	OM615	OI204	OI204	OI204	OI204	OI204	OI204	OI204	OI204	OI204	OI204

AMG Location: 3332031 320800 6203250
 3332032 323800 6205200
 3332033 324150 6204900

000014