

98-4234

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**PACIFIC NEVADA PTY LTD**  
PO BOX 7214 Cloisters Square  
Perth WA 6850

MINERAL RESOURCES  
- 9 NOV 1998  
TASMANIA

**EL14/97 LOVELLS CREEK**

**MICROFILMED**  
FICHE No. 014976-77

EL14/97  
9 NOV 1998  
See folio 39

**REPORT ON EXPLORATION  
ACTIVITY  
05-12-97 TO 05-12-98**

Volume 1 of 1

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&  
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Pacific Nevada Mining Pty. Ltd. November 1998

Distribution: Pacific Nevada Pty. Ltd - Perth  
- Hobart  
Department and Resources

**98-4234**

ANNUAL REPORT-LOVELLS CREEK  
EL 14/97 - PACIFIC NEVADA  
R REIDS WESTBROOK

**CONTENTS**

<b>1.0</b>	<b>Introduction</b>	<b>1</b>
1.1	LOCATION AND ACCESS	1
1.2	TENURE AND LAND USAGE	1
<b>2.0</b>	<b>Geology</b>	<b>1</b>
<b>3.0</b>	<b>Exploration Potential and Philosophy</b>	<b>1</b>
<b>4.0</b>	<b>Work conducted</b>	<b>2</b>
<b>5.0</b>	<b>Expenditure</b>	<b>2</b>
<b>6.0</b>	<b>References</b>	<b>2</b>

**LIST OF FIGURES**

Figure 1 Location of Exploration License 14/97, Lovells.

**LIST OF PLATES**

Plate 1 Stream Sediment Sample Locations.

Plate 2 Rock Chip Sample Locations.

Plate 3 Aeromagnetics - 1<sup>st</sup> Vertical Derivative.

Plate 4 Airborne EM - Apparent Conductivity.

**LIST OF APPENDICES**

Appendix 1 Sample location and analytical data tables.

## 1.0 Introduction

This annual report covers exploration activities on Exploration License 14/97 – Lovells during the period 5<sup>th</sup> December, 1997 to 5<sup>th</sup> December, 1998. The basic data is presented and will be further detailed in reporting at the end of tenure year 2.

Field work was undertaken during the period April to November, 1998.

### 1.1 LOCATION AND ACCESS

Exploration license 14/97 covers 246 km<sup>2</sup> in an area centered 25km SSW of Smithton in northwest Tasmania (Fig 1). Access to the area is mostly by well formed forestry roads.

### 1.2 TENURE AND LAND USAGE

The area largely comprises State Forest with some private property and Crown Land. The Lovells Creek Forest Reserve and Bond Tier Forest Reserve are also included.

## 2.0 Geology

The geology of EL14/97 consists of two principal components, being the Mesoproterozoic Rocky Cape Group and the unconformably overlying Neoproterozoic Togari Group. The latter is a sequence of clastic sedimentary rocks, mafic volcanics, dolomite and chert forming most of what is termed the Smithton Synclinorium. The Togari Group is disconformably overlain by the Scopus Formation, which forms the uppermost unit of the Smithton Synclinorium and comprises interbedded mudstone, siltstone and lithicwacke (Seymour and Calver, 1995).

Readers are referred to Brown (1989) and Seymour and Calver (1995) for a more detailed description of the geology.

## 3.0 Exploration Potential and Philosophy

EL14/97 is one of numerous exploration licenses held by Pacific Nevada in northwest Tasmania, which are being collectively explored for the following potential ore deposit target types:-

- Proterozoic iron-formation Au (Homestake model)
- Proterozoic iron-formation Cu-Au pipes (Selwyn/Starra)
- Proterozoic sediment-hosted Cu (eg. Kupferschiefer/White Pine)

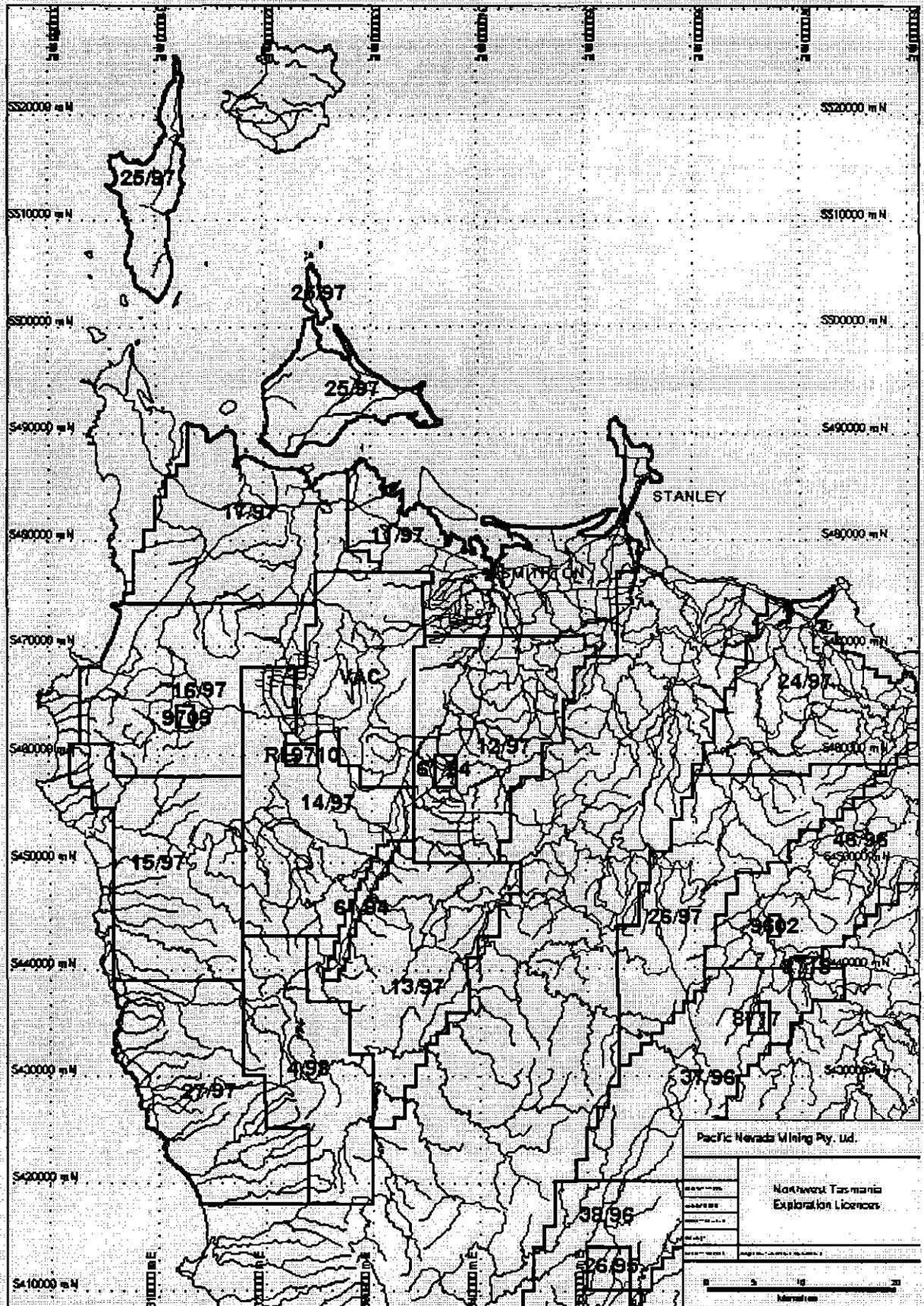


Figure 1.

98-4234

5 cm

#### 4.0 Work Conducted

Exploration during 1998 included data collation and assessment of previous exploration, reconnaissance stream sediment (Bulk (BCL, 39), minus 80 mesh (44) and panned concentrate (39) sampling) and rock chip (43) surveys. Sample location data and analysis reports are appended.

453 line km's of Airborne EM and aeromagnetics were flown at 150m line spacing and 50m elevation, as a part of a region wide survey conducted by UTS Geophysics (Perth).

The main prospects identified are:-

- The "Dismal Swamp" Prospect. Characterised by consistently elevated to anomalous stream sediment analysis located in drainage from a volcano-sedimentary sequence (up to 174ppm Cu and 218ppm Zn in -80#, and 58.2ppb Au and 29.66ppm Cu in bulk samples). Rock chip samples from the Dismal Swamp prospect have peak values of 548ppm Cu, 297ppm Zn and 438ppm Co.
- The "Roger River Cu" Prospect. Comprises malachite-quartz-epidote mineralisation in volcano-sedimentary rocks within the Roger River Fault zone. Rock chips return up to 1200ppm Cu (up to 4.5% Cu was reported from previous CRA sampling).

#### 5.0 Expenditure

Geology	\$36,758
Geophysics	\$21,198
Administration	\$5,796
 Total Expenditure	 \$63,751

NB: Geochemical expenditure is included within the Geology category.

#### 6.0 References

- Brown, A. V., 1989. Geological atlas 1:50000 series. Sheet 21 (7916S). Smithton. Explanatory. Report. Geological. Survey. Tasmania.
- Seymour, D. B., and Calver, C. R., 1995. Explanatory notes for the Time-Space Diagram and Stratotectonic Elements Map of Tasmania. Report Tasmanian Geological Survey 1995/01.

543006

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**APPENDIX 1  
EL14/97 LOVELLS CREEK**

**SAMPLE LOCATION  
AND  
ANALYTICAL DATA TABLES  
5-12-97 TO 5-12-98**

Prepared by: Robert Reid, Senior Geologist  
Pacific Nevada Mining Pty. Ltd. November 1998

80#	East (AMG)	North (AMG)	Au	Cu	Pb	Zn	Ni	Fe	Mn	Co	As
6430525	333560	5454000	1	77	-3	68	38	7.18	584	17	1
6430526	333600	5453760	-1	36	-3	49	34	3.56	508	17	1
6430527	330860	5453320	-1	44	-3	52	38	1.52	293	13	-1
6430532	333300	5453300	2	97	3	112	71	7.92	808	43	-1
6430536	333600	5455540	2	111	34	130	123	7.97	777	38	-1
6431048	333780	5455920	4	98	-1	189	130	8.54	474	41	1
6630602	319740	5463380	-1	96	3	167	100	11.5	1704	46	-1
6630604	319850	5462600	2	92	-3	184	126	11.8	2432	66	-1
6630604	319850	5462600	2	92	-3	184	126	11.8	2432	66	-1
6630605	319900	5462680	3	163	6	189	98	15.2	2505	90	-1
6630609	320230	5454970	-1	5	5	46	30	0.78	114	13	-1
6630610	319100	5451200	-1	12	5	46	30	1.69	181	11	1
6630611	319340	5451800	-1	5	5	27	14	0.62	53	4	-1
6630612	322350	5449000	-1	14	5	70	31	1.27	148	11	-1
6630613	320125	5453375	-1	9	6	39	41	1.48	175	9	2
6630614	325550	5448850	-1	47	9	105	174	7.3	296	35	11
6630615	325450	5449020	-1	40	8	261	288	7.3	1355	81	6
6630616	322850	5450730	-1	16	9	83	110	1.85	117	12	1
6630617	322600	5450900	-1	12	5	123	81	2.07	218	29	2
6630618	322240	5452800	-1	30	6	114	154	5.85	470	20	3
6630619	322250	5452000	-1	31	4	158	215	6.76	482	25	4
6630620	32050	5452700	-1	9	3	82	57	1.38	134	19	1
6630621	323230	5447220	-1	9	8	41	21	1.46	270	10	3
6630851	321735	5446190	-1	20	3	63	73	2.88	1054	26	1
6630852	321960	5446570	-1	18	9	45	73	2.48	968	22	4
6630853	321925	5446610	-1	16	-3	59	49	2.57	1024	25	4
6630854	322525	5447815	-1	15	-3	36	21	1.4	349	10	5
6630913	319300	5462020	4	133	-3	178	105	7.44	644	39	2
6630959	319980	5461500	-1	56	6	104	30	6.79	3842	162	-1
6630960	319300	5462020	-1	130	-3	160	82	7.77	580	31	1
6630961	319850	5462600	-1	90	4	220	134	9.93	1133	48	-1

Bulk	East (AMG)	North (AMG)	Au	Cu	Pb	Zn
6420522	333560	5454000	1	8.55	-0.3	3.56
6420523	333600	5453760	1.01	4.39	-0.3	2.47
6420524	330860	5453320	0.11	11.86	-0.3	4.22
6420529	333300	5453300	3.9	7.59	1.93	6.52
6421047	333780	5455920	1.6	9.64	-0.3	4.3
6620607	320230	5454970	-1	-1	-1	-1
6620608	319100	5451200	-1	-1	-1	-1
6620609	319340	5451800	-1	-1	-1	-1
6620610	322350	5449000	-1	-1	-1	-1
6620611	320125	5453375	-1	-1	-1	-1
6620612	325550	5448850	-1	-1	-1	0.01
6620613	325450	5449020	-1	-1	-1	0.02
6620614	322850	5450730	-1	-1	-1	-1
6620615	322600	5450900	-1	-1	-1	-1
6620616	322240	5452800	-1	-1	-1	0.02
6620617	322250	5452000	-1	-1	-1	0.03
6620618	32050	5452700	-1	-1	-1	-1
6620619	323230	5447220	-1	-1	-1	-1
6620850	321735	5446190	-1	-1	-1	-1
6620851	321960	5446570	-1	-1	-1	-1
6620852	321925	5446610	-1	-1	-1	0.01
6620853	322525	5447815	-1	-1	-1	-1
6620913	319300	5462020	58.2	14.3	-0.3	12.2
6620956	319980	5461500	2.1	29.66	-0.3	15.4
6620957	319300	5462020	2.1	24.41	-0.3	11.5
6620958	319850	5462600	0.6	10.76	-0.3	17.6

## APPENDIX - EL14/97

543009

Pancon	East (AMG)	North (AMG)	Au
6410517	333560	5454000	-1
6410518	333600	5453760	-1
6410522	333300	5453300	-1
6411039	333780	5455920	-5
6610604	319850	5462600	28
6610608	320230	5454970	-5
6610609	319100	5451200	-5
6610610	319340	5451800	-5
6610611	322350	5449000	-5
6610612	320125	5453375	-5
6610613	325550	5448850	-5
6610614	325450	5449020	-0.15
6610615	322850	5450730	-0.15
6610616	322600	5450900	-5
6610617	322240	5452800	-5
6610618	322250	5452000	-5
6610619	32050	5452700	-5
6610620	323230	5447220	-5
6610847	321735	5446190	118
6610848	321960	5446570	-5
6610849	321925	5446610	-5
6610850	322525	5447815	-5
6610913	319300	5462020	5.29
6610954	319980	5461500	-1.55
6610955	319300	5462020	5
6610956	319850	5462600	-5
6910602	319740	5463380	-1

## APPENDIX - EL14/97

Rock Chip Sample Number	Easting (AMG)	Northing (AMG)	Au	Cu	Pb	Zn	Ag	As	Ba	Co	Fe(ppm)	Ca	K	Mg	Mn	Na	P	Ti	Zr	Ni
6640568	333180	5452430	-1	13	18	163	-5	33	376	42	147000	12300	24800	18700	844	2000	400	8150	44	209
6640569	333360	5452170	3	101	-50	92	-5	22	107	39	76900	64800	1600	51700	2150	24300	450	4390	54	118
6640696	319220	5453140	3	13	-50	-5	0.6	11	360	-5	6650	400	4250	1440	26	100	350	1570	13	-10
6640697	319180	5453140	3	71	11	7	-5	31	578	-5	12300	350	4200	1400	31	100	600	1570	12	21
6640698	319180	5453140	1	98	10	-5	-5	30	416	-5	9950	250	4100	1350	29	100	200	1410	11	29
6640699	322300	5449850	2	-5	-50	-5	-5	10	251	-5	3800	250	4600	1230	19	100	350	1900	13	-10
6640731	328150	5457460	1	-5	11	-5	0.9	5	22	-5	4150	500	550	210	63	50	-30	673	8	11
6640733	323230	5447220	1	-5	-50	-5	-5	28	12	-5	3100	210000	250	101400	172	400	50	228	6	15
6640734	323230	5447220	-1	11	-50	125	-5	35	331	41	88000	65300	12600	25400	2430	24200	1000	11300	152	26
6640577	321825	5446320	-1	6	-50	33	-5	5	10	-5	9400	20900	800	16800	191	400	500	350	5	11
6640512	333410	5453080	-1	1580	-50	230	-5	30	87	104	127000	9620	18400	31700	1620	350	1400	14700	168	129
6640513	333410	5453080	1	7	-50	-5	-5	-10	7	-5	1850	218000	-500	131800	116	350	450	87	-5	-10
6640566	330960	5453300	-1	-5	-50	-5	-5	13	7	-5	7600	221000	600	107100	52	200	50	93	-5	-10
6640600	318080	5464770	-1	51	-50	30	-5	52	241	-5	87400	550	35200	4140	200	5800	300	9070	118	72
6640601	318120	5464760	-1	32	-50	115	-5	30	208	-5	131000	300	28500	30100	657	3550	400	7350	94	132
6640612	318170	5460800	1	103	-50	195	-5	21	395	41	78500	700	21700	20500	1460	10700	650	12300	155	255
6640613	318340	5460640	3	74	59	142	-5	38	304	46	75200	950	21400	34200	461	8050	300	8420	134	391
6640645	319990	5463380	-1	34	-50	43	-5	13	218	10	139000	150	48600	7780	176	4150	300	4880	50	46
6640646	320010	5463370	-1	60	-50	78	-5	45	156	5	116000	150	34700	11600	396	6150	400	8360	96	34
6640647	320040	5463360	-1	36	-50	19	-5	57	225	10	46700	100	51300	3260	94	10700	100	11900	124	46
6640648	319820	5463380	-1	103	-50	60	-5	35	184	24	98900	150	42500	12200	245	3950	600	510	107	77
6640649	319780	5463340	-1	159	-50	74	-5	45	220	27	105000	250	31800	9860	708	1100	1050	9510	106	121
6640650	319750	5463310	-1	94	-50	139	-5	27	172	22	168000	350	15100	9620	283	500	1150	9030	78	119
6640651	319680	5463280	-1	83	-50	127	-5	58	195	32	167000	300	28100	5230	492	500	1600	9290	106	77
6640652	319590	5463250	3	232	-50	60	-5	36	64	46	147000	200	1900	1810	963	500	1350	7010	114	175
6640653	319520	5463200	1	103	-50	53	-5	48	277	36	121000	200	36800	4780	678	150	1150	11100	134	54
6640654	319050	5463800	-1	196	-50	91	-5	36	565	16	145000	250	42200	2450	246	2250	1750	7850	42	57
6641829	319980	5461500	-1	548	-1	199	-1	-1	100	113	96100	25300	1100	28100	1580	23100	450	15900	83	76
6641830	319920	5461630	-1	41	-50	29	-5	30	21	9	161000	150	900	700	461	-	350	14700	127	16
6641831	319510	5462140	-1	226	-50	297	-5	15	192	438	147000	9000	1400	12600	11300	23800	750	13700	97	218
6641832	319430	5462090	-1	431	-50	229	-5	-10	218	388	166000	1250	1100	8460	16000	11700	800	15700	135	168
6641833	319640	5463040	-1	68	-50	116	-5	24	148	14	130000	150	22200	18200	415	5200	450	10300	131	101
6641834	319600	5463040	-1	52	-50	187	-5	19	154	29	147000	150	19900	32500	627	3700	500	12400	127	115

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APPENDIX - EL14/97

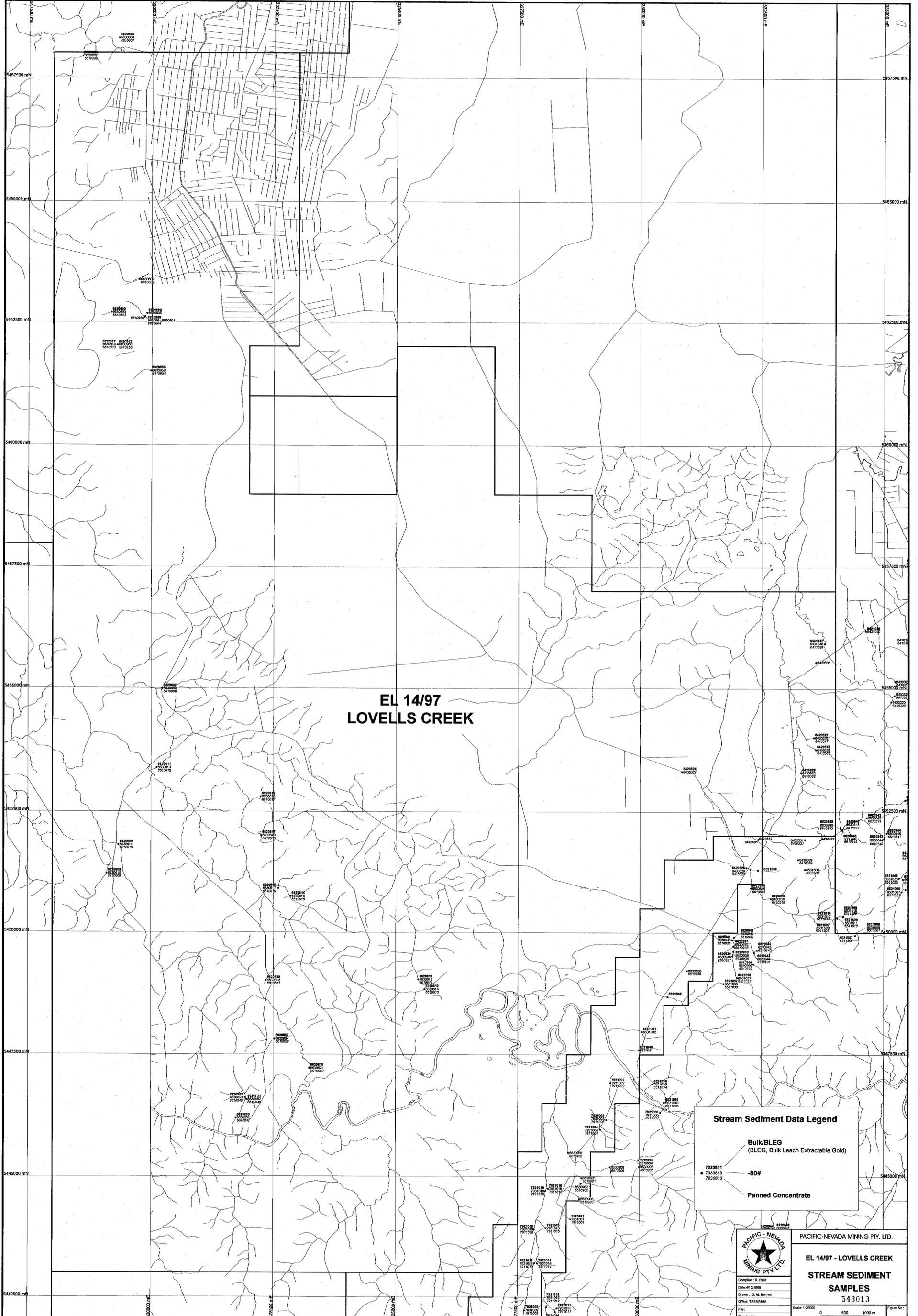
Rock Chip Sample Number	Easting (AMG)	Northing (AMG)	Au	Cu	Pb	Zn	Ag	As	Ba	Co	Fe(ppm)	Ca	K	Mg	Mn	Na	P	Ti	Zr	Ni
6641835	319550	5463040	-1	52	-50	274	-5	-10	83	55	189000	150	7400	44300	449	1050	600	15500	82	128
6641836	319620	5463000	-1	79	-50	29	-5	-10	228	6	100000	100	36300	3750	55	2850	350	11000	139	37
6641837	319580	5463000	-1	15	-50	24	-5	21	98	9	231000	350	11400	1530	207	1100	350	19200	128	-10
6641838	319600	5463000	-1	18	-50	115	-5	37	154	12	176000	300	21800	18000	404	4150	400	11100	101	83
6641517	333255	5452566	-1	248	12	81	-0.5	-5	43	42	90300	75000	350	39800	1510	26100	400	6990	67	72
6641518	333185	5452240	-1	20	27	166	-0.5	-5	382	44	152000	14400	20600	21800	902	2350	600	16000	136	203
6641519	333185	5452255	-1	18	18	127	-0.5	-5	441	32	123000	13200	36200	15100	467	2850	1350	16400	144	185
6641521	333265	5452885	-1	9	-10	5	-0.5	-5	51	-5	5000	297000	150	51500	1680	150	-50	96	-5	-10
6641520	333265	5452885	-1	-5	-10	7	-0.5	-5	7	-5	3300	212000	150	126300	187	150	-50	85	-5	-10
6641522	333265	5452885	-1	-5	11	102	-0.5	-5	13	30	71400	109000	3700	20700	2940	200	2650	4170	58	63
6641523	333220	5452830	-1	50	-10	116	-0.5	-5	20	34	66800	56200	3450	16300	1410	300	3750	3170	49	65

543011

APPENDIX - EL14/97

Soil Sample Number	Easting (AMG)	Northing (AMG)	Au	Cu	Pb	Zn	Ag	As	Ba	Co	Fe(ppm)	Ca	K	Mg	Mn	Na	P	Ti	Zr	Ni
6650608	331450	5451850	6	26	8	33		1		6	26800				35					55
6650609	331400	5451850	1	33	5	29		3		4	40600				26					51
6650610	331350	5451850	2	90	7	46		5		9	49600				43					97
6650611	331300	5451850	1	105	7	45		5		7	90500				32					86
6650612	331275	5451850	1	86	7	46		9		8	129000				48					109
6650613	331250	5451850	-1	51	5	59		2		10	53400				51					7
6650614	331225	5451850	1	74	5	61		4		10	90700				50					90
6650615	331200	5451850	-1	63	8	57		-1		12	64500				52					86
6650616	331175	5451850	2	35	8	58		1		9	41400				69					58
6650617	331150	5451850	-1	35	10	59		1		9	44700				65					55
6650618	331125	5451850	-1	30	3	44		-1		9	22600				55					60
6650619	331100	5451850	-1	47	9	44		3		7	49600				41					71
6650620	331075	5451850	-1	64	10	39		8		7	133000				24					71
6650621	331050	5451850	-1	27	16	34		1		6	14100				27					83
6650674	332500	5452100	2	172	-10	96	0.8	12	63	40	161000	1550	1800	2780	371	12700	150	13500	114	77
6650675	332525	5452100	2	214	200	124	0.9	9	124	106	181000	1500	2150	3760	2730	10600	150	14300	129	105
6650676	332550	5452100	2	172	-10	113	0.8	8	76	50	141000	2350	2100	3990	513	17100	200	13100	112	79
6650677	332575	5452100	1	147	-10	120	-0.5	-5	79	67	122000	14800	2200	12000	1110	23400	400	12400	105	80
6650678	332600	5452100	-1	156	-10	111	1.3	10	71	111	152000	4500	2450	6400	1210	18700	300	12500	109	63
6650679	332625	5452100	-1	132	-10	65	1.1	-5	45	12	135000	500	850	6470	190	6500	150	10500	103	46
6650680	332650	5452100	-1	226	-10	57	1.6	12	55	11	160000	250	2700	4960	319	750	200	18400	159	38
6650681	332675	5452100	-1	186	11	51	-0.5	12	164	8	149000	200	5600	3170	302	350	300	13700	119	38
6650682	332700	5452100	4	238	-10	43	1.4	20	21	7	168000	100	1050	1910	271	300	550	17600	159	55
6650683	332725	5452100	2	211	564	44	1.9	18	33	6	154000	200	1900	1830	370	300	250	22700	177	56
6650684	332750	5452100	-1	245	-10	69	1.7	8	37	11	163000	150	2100	1530	589	250	350	15000	150	83
6650685	332775	5452100	1	210	-10	40	0.5	13	28	7	118000	100	1550	1590	178	200	350	16100	159	71
6650686	332800	5452100	1	182	-10	49	1.3	23	35	8	77800	200	1750	1590	202	350	250	18000	193	73

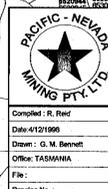
543012



**EL 14/97  
LOVELLS CREEK**

**Stream Sediment Data Legend**

- Bulk/BLEG  
(BLEG, Bulk Leach Extractable Gold)
- -80#
- Panned Concentrate

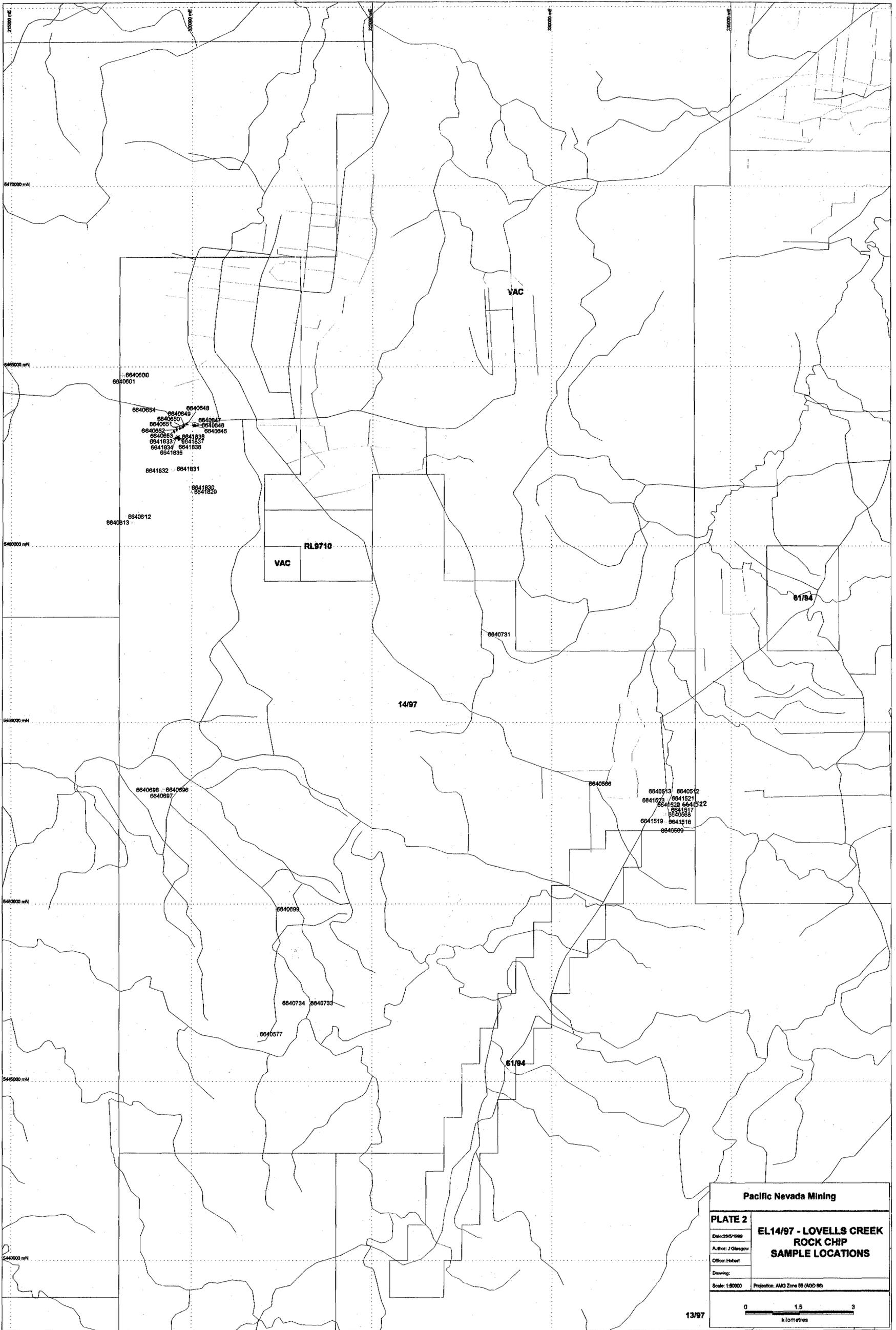


PACIFIC-NEVADA MINING PTY. LTD.  
**EL 14/97 - LOVELLS CREEK**  
**STREAM SEDIMENT**  
**SAMPLES**  
 543013

Consulted: J. Reed  
 Date: 4/21/98  
 Drawn: G. M. Bennett  
 Office: TASMANIA  
 File:  
 Drawing No.:

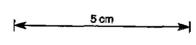
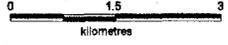
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 0 500 1000 m  
 Figure No.:

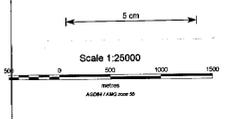
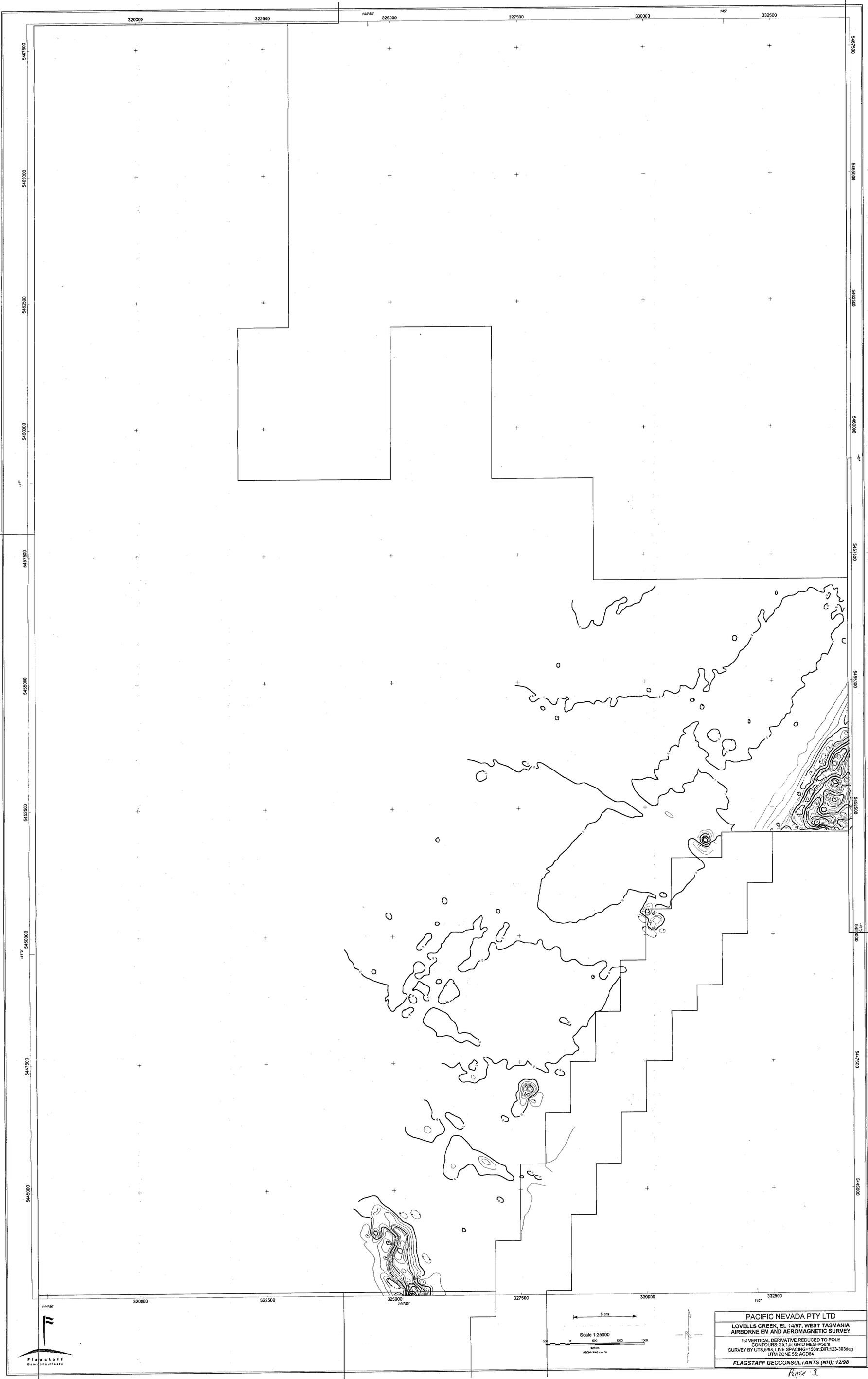
5 cm



<b>Pacific Nevada Mining</b>	
<b>PLATE 2</b>	<b>EL14/97 - LOVELLS CREEK ROCK CHIP SAMPLE LOCATIONS</b>
Date: 2/9/1999	
Author: J Glasgow	
Office: Hobart	
Drawing:	
Scale: 1:80000	Projection: AMG Zone 55 (AGD 85)

13/97



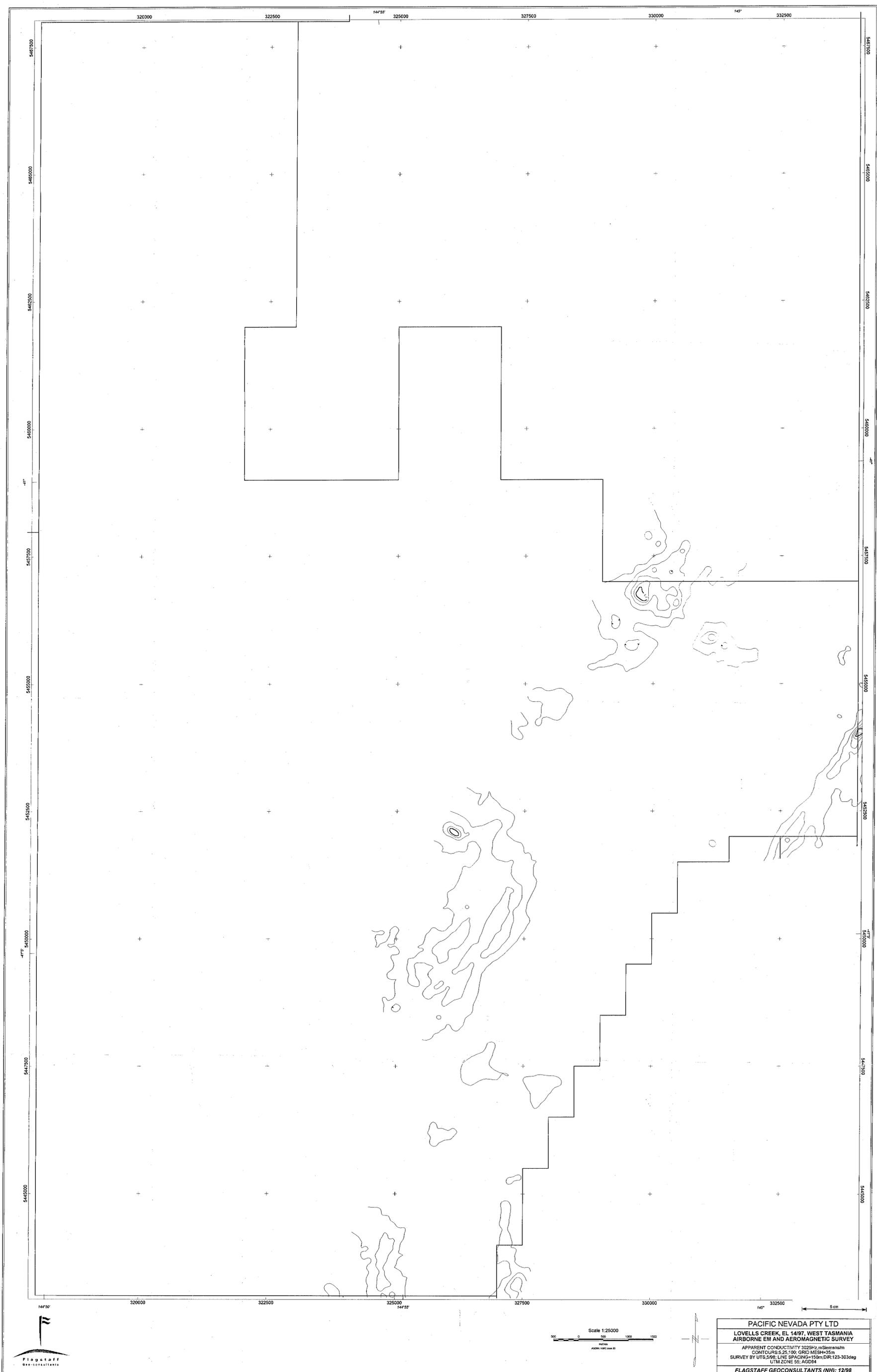


PACIFIC NEVADA PTY LTD  
 LOVELLS CREEK, EL. 14/97, WEST TASMANIA  
 AIRBORNE EM AND AEROMAGNETIC SURVEY  
 1st VERTICAL DERIVATIVE REDUCED TO POLE  
 CONTOURS: 2.5 T.S. GRID MESH: 50m  
 SURVEY BY UTS 598; LINE SPACING=150m; DIR: 123-303deg  
 UTM ZONE 55; AGD84  
 FLAGSTAFF GEOCONSULTANTS (NH); 12/98

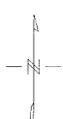
TCR-98-14314

543015

Page 3



Scale 1:25000  
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 METERS  
 AGDS84 AD84 PROJ 84



PACIFIC NEVADA PTY LTD  
 LOVELLS CREEK, EL 14/97, WEST TASMANIA  
 AIRBORNE EM AND AEROMAGNETIC SURVEY  
 APPARENT CONDUCTIVITY 3025Hz, mSiemens/m  
 CONTOURS 5, 25, 100; GRID MESH=35m  
 SURVEY BY UTS, 5/98; LINE SPACING=150m, DIR:123-303deg  
 UTM ZONE 55; AGDS84  
 FLAGSTAFF GEOCONSULTANTS (NH); 12/98

TCR-Q8-1434

Page 4.