

PINE CREEK GOLDFIELDS LIMITED

REPORT ON DRILLING AT NORTH ENTERPRISE

September 1989, MLN 13
C.J. FAWCETT

C. J. Fawcett

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1. INTRODUCTION

North Enterprise is situated north of the Enterprise pit on the Enterprise anticline in an area defined by 12000N and 12250N. This area occupies the northern section of MLN 13.

During October - November 1989, a 29 hole vertical percussion program was carried out on lines 12050N - 12250N (50m lines at 20m intervals) and were concentrated around the anticlinal axis. Holes were drilled to the base of oxidation and sampled at 2m intervals. No logging of chips was undertaken.

Drilling was carried out by East-West Drilling using an H13 Gemco multipurpose rig.

2. GEOLOGY AND MINERALISATION

Holes were drilled within the Spotted Silt Horizon and the Lower Mine Greywacke of the mine sequence. Although abundant quartz is evident at surface, assay results were generally <0.5 g/t Au. Figures 1-5 give the position of the holes relative to the anticlinal axis and the assay results. Results greater than 0.5 g/t Au were intersected either close to the hinge zone or within 40m on the western limb of the anticline.

3. STRUCTURE

A north-easterly trending fault has been interpreted from surface mapping. This cuts across the hinge of the anticline. No displacement has been observed, however some flexuring of bedding may have occurred. Plibersek (1989) calculated a subvertical throw on this fault of 30m.

Reference

Plibersek, P; Mapping of Gandys Hill and International Anticline, August 1989
Internal report.

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APPENDIX I

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Sample	Au	Au(R)
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59801 0-2	0.02	
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59802 2-4	<0.01	<0.01
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59803 4-6	0.01	
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59804 6-8	0.02	
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59805 8-10	<0.01	
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59806 10-12	<0.01	
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59807 12-14	<0.01	
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59808 14-16	0.01	
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59816 0-2	0.11	
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59817 2-4	0.08	
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59818 4-6	<0.01	
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59819 6-8	<0.01	
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59820 8-10	<0.01	
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59821 10-12	<0.01	
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59822 12-14	0.02	
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59823 14-16	<0.01	<0.01
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59824 16-18	<0.01	
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59825 18-20	0.02	
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59826 20-22	0.01	
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59827 22-24	0.04	
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59828 24-26	0.05	0.05
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59829 26-28	0.15	
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59830 28-30	0.51	0.46
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59936 0-2	0.29	
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59937 2-4	0.05	
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650

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Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
59938 4-6	0.09	0.08
59939 6-8	0.08	
59940 8-10	<0.01	
59941a 10-12	<0.01	
59941b ¹⁰⁻¹² 12-14	<0.01	
¹²⁻¹⁴ 59942 14-16	0.01	
¹⁴⁻¹⁶ 59943 16-18	<0.01	
¹⁶⁻¹⁸ 59944 18-20	<0.01	<0.01
¹⁸⁻²⁰ 59945 20-22	<0.01	
²⁰⁻²² 59946 22-24	<0.01	
²²⁻²⁴ 59947 24-26	<0.01	
²⁴⁻²⁶ 59948 26-28	<0.01	
²⁶⁻²⁸ 59949 28-30	<0.01	
59831 0-2	0.31	0.31
59832 2-4	0.77	
59833 4-6	2.07	2.05
59834 6-8	1.23	
59835 8-10	0.35	
59836 10-12	0.18	
59846 0-2	0.16	
59847 2-4	0.11	
59848 4-6	0.26	0.29
59849 6-8	0.11	
59850 8-10	0.45	
59851 10-12	0.20	

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Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
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59852 12-14	0.06	
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59853 14-16	0.05	
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59854 16-18	0.03	
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59601 0-2	0.14	0.13
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59602 2-4	0.31	
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59603 4-6	0.14	
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59604 6-8	0.15	0.16
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59605 0-2	0.13	
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59606 2-4	0.07	
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59607 4-6	0.05	
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59608 6-8	0.04	
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59609 8-10	0.04	
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59610 10-12	0.01	0.01
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59611 12-14	<0.01	
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59612 14-16	<0.01	
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59613 16-18	0.01	<0.01
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59614 18-20	<0.01	
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59615 0-2	0.05	
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59616 2-4	0.02	
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59617 4-6	0.02	
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59618 6-8	0.01	<0.01
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59619 8-10	<0.01	
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59620 10-12	<0.01	
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59621 12-14	<0.01	
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59622 14-16	<0.01	
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Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
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59623 16-18	0.06	
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59624 18-20	0.18	
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59625 20-22	0.09	
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59626 22-24	0.01	
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59627 24-26	<0.01	<0.01
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59628 0-2	0.52	0.54
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59629 2-4	0.66	
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59630 4-6	0.11	
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59631 6-8	0.70	
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59632 8-10	0.36	
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59633 10-12	1.16	1.30
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59634 12-14	0.13	
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59635 14-16	0.08	
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59636 16-18	0.11	
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59637 18-20	0.13	
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59638 20-22	0.15	0.12
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59639 22-24	<0.01	
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59640 24-26	0.05	
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59641 26-28	0.02	
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59642 0-2	0.25	0.26
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59643 2-4	0.02	
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59644 4-6	0.02	
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59645 6-8	<0.01	<0.01
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59646 8-10	<0.01	
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59647 10-12	0.04	
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Sample	Au	Au(R)
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59648 12-14	0.06	
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59649 14-16	0.04	
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59650 16-18	<0.01	
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59651 18-20	0.04	
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59652 20-22	0.17	0.14
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59653 22-24	0.33	
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59654 24-26	0.22	
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59861 0-2	0.17	
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59862 2-4	0.09	0.07
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59863 4-6	0.07	
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59864 6-8	0.18	
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59865 8-10	0.39	
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59866 10-12	0.27	
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59867 12-14	0.18	
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59868 14-16	1.37	1.59
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59876 0-2	0.07	
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59877 2-4	<0.01	
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59878 4-6	<0.01	<0.01
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59879 6-8	<0.01	
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59880 8-10	0.06	
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59881 10-12	0.48	
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59882 12-14	0.18	
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59883 14-16	0.12	
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59884 16-18	0.31	
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59891 0-2	0.44	
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Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
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59892 2-4	0.09	
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59893 4-6	0.02	0.02
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59894 6-8	0.08	
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59895 8-10	0.03	
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59896 10-12	0.08	
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59897 12-14	0.24	
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59898 14-16	0.05	
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59899 16-18	0.08	
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59900 18-20	<0.01	
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59901 20-22	<0.01	<0.01
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59921 0-2	0.24	
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59922 2-4	0.25	0.23
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59923 4-6	1.25	
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59924 6-8	0.48	
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59925 8-10	0.41	
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59926 10-12	0.39	
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59927 12-14	0.44	
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59928 14-16	0.88	
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59929 16-18	0.46	
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59930 18-20	6.32	6.60
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59931 20-22	1.13	
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59932 22-24	3.03	
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59933 24-26	0.38	
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59934 26-28	0.25	0.26
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59935 28-30	0.24	
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Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
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59906 0-2	0.29	
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59907 2-4	6.14	6.24
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59908 4-6	0.09	
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59909 6-8	<0.01	
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59910 8-10	0.02	
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59911 10-12	0.03	0.02
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59912 12-14	<0.01	
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59913 14-16	0.05	
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59914 16-18	0.02	
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59915 18-20	0.19	
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59916 20-22	0.04	
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59917 22-24	0.06	0.06
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59918 24-26	0.05	
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59919 26-28	0.03	
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59920 28-30	0.05	
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59011 0-2	0.20	
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59012 2-4	0.23	
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59013 4-6	0.28	
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59014 6-8	0.06	0.06
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59015 8-10	0.04	
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59016 10-12	0.05	
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59017 12-14	Sample not received.	
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59017 A 12-14	0.31	
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59017 C 12-14	0.13	
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59018 14-16	0.32	
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Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
59019 16-18	0.31	0.28
59020 18-20	0.49	
59951 0-2	0.33	
59952 2-4	0.12	
59953 4-6	0.08	
59954 6-8	0.31	
59955 8-10	0.08	0.11
59956 10-12	0.32	
59957a 12-14	0.14	
59957b 12-14	0.38	
59958 14-16	0.42	0.36
59959 16-18	0.26	0.29
59960 18-20	0.12	
59961 20-22	0.08	0.09
59962 22-23	0.16	
59026 0-2	0.13	
59027 2-4	0.21	
59028 4-6	0.07	
59029 6-8	0.03	
59030 8-10	0.23	0.16
59031 10-12	0.07	
59032 12-14	0.08	
59033 14-16	0.05	
59034 16-18	0.06	
59035 18-20	0.12	

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Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
59041 0-2	0.33	0.34
59042 2-4	0.37	0.34
59043 4-6	0.13	
59044 6-8	0.11	
59045 8-10	0.28	0.32
59046 10-12	0.13	
59047 12-14	0.30	
59048 14-16	0.24	
59049 16-18	0.04	
59050 18-20	0.04	0.05
59051 20-22	0.04	
59056 0-2	0.03	
59057 2-4	0.05	
59058 4-6	0.04	
59059 6-8	0.10	0.10
59060 8-10	0.34	
59061 10-12	0.37	
59062 12-14	0.53	0.49
59063 14-16	0.21	
59064 16-18	0.20	
59065 18-20	0.12	
59071 0-2	0.13	
59072 2-4	0.12	
59073 4-6	0.40	0.39
59074 6-8	0.84	

Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
59075 8-10	1.68	1.77
59076 10-12	0.60	
59077 12-14	0.52	
59078 14-16	0.36	
59079 16-18	0.10	
59080 18-20	0.03	0.05
59081 20-22	0.03	
59082 22-24	0.60	
59083 24-26	0.30	
59086 0-2	0.17	
59087 2-4	0.03	0.04
59088 4-6	0.09	
59089 6-8	0.36	
59090 8-10	0.54	
59091 10-12	0.39	
59092 12-14	0.24	0.23
59093 14-16	0.03	
59094 16-18	0.04	
59095 18-20	0.15	
59096a 20-22	0.03	
59096b 20-22	0.25	0.22
59097 22-24	0.30	
59098 24-26	0.96	1.03
59099 26-28	0.19	
STD D1	0.63	0.64

Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
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STD GC13	3.29	
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59074 (b) 6-	1.23	
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59655 0-2	0.33	
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Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
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59996 0-2	0.24	
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59997 2-4	1.32	1.27
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59998 4-6	0.20	
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59999 6-8	0.07	
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60000 8-10	0.28	0.32
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59001 10-12	0.07	
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59002a 12-14	0.07	0.08
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59002b 12-14	0.17	0.20
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59003 14-16	0.29	
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59004 16-18	0.07	
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59656 2-4	0.09	
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59657 4-6	0.11	
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59658 6-8	0.26	
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59659 8-10	0.41	0.44
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59660 10-12	0.31	
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59661 12-14	0.16	
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59662 14-16	0.17	
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59663 16-18	0.09	
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59664 18-20	0.14	
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59665 0-2	0.34	
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59666 2-4	0.26	
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59667 4-6	0.41	
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59668 6-8	0.21	
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59669 8-10	0.12	
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59670 10-12	0.60	
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Data in ppm unless otherwise stated.

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Sample	Au	Au(R)
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59671 12-14	1.23	1.23
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59672 14-16	0.66	
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59673 0-2	0.45	0.42
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59674 2-4	0.20	
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59675 4-6	0.30	
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59676 6-8	0.73	
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59677 8-10	0.21	
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59678 10-12	0.28	
-------------	------	--

59679 12-14	0.34	
-------------	------	--

59680 14-16	0.19	
-------------	------	--

59981 0-2	0.08	
-----------	------	--

59982 2-4	0.06	
-----------	------	--

59983 4-6	0.05	0.04
-----------	------	------

59984 6-8	0.02	
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59985 8-10	0.44	0.39
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59986a 10-12	0.06	
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59986b 10-12	0.09	0.08
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59987 12-14	0.10	
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59988 14-16	0.06	
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59966 0-2	0.22	
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59967 2-4	0.18	
-----------	------	--

59968 4-6	0.24	
-----------	------	--

59969 6-8	0.14	
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59970 8-10	0.07	0.08
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59971a 10-12	0.34	0.35
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Data in ppm unless otherwise stated.

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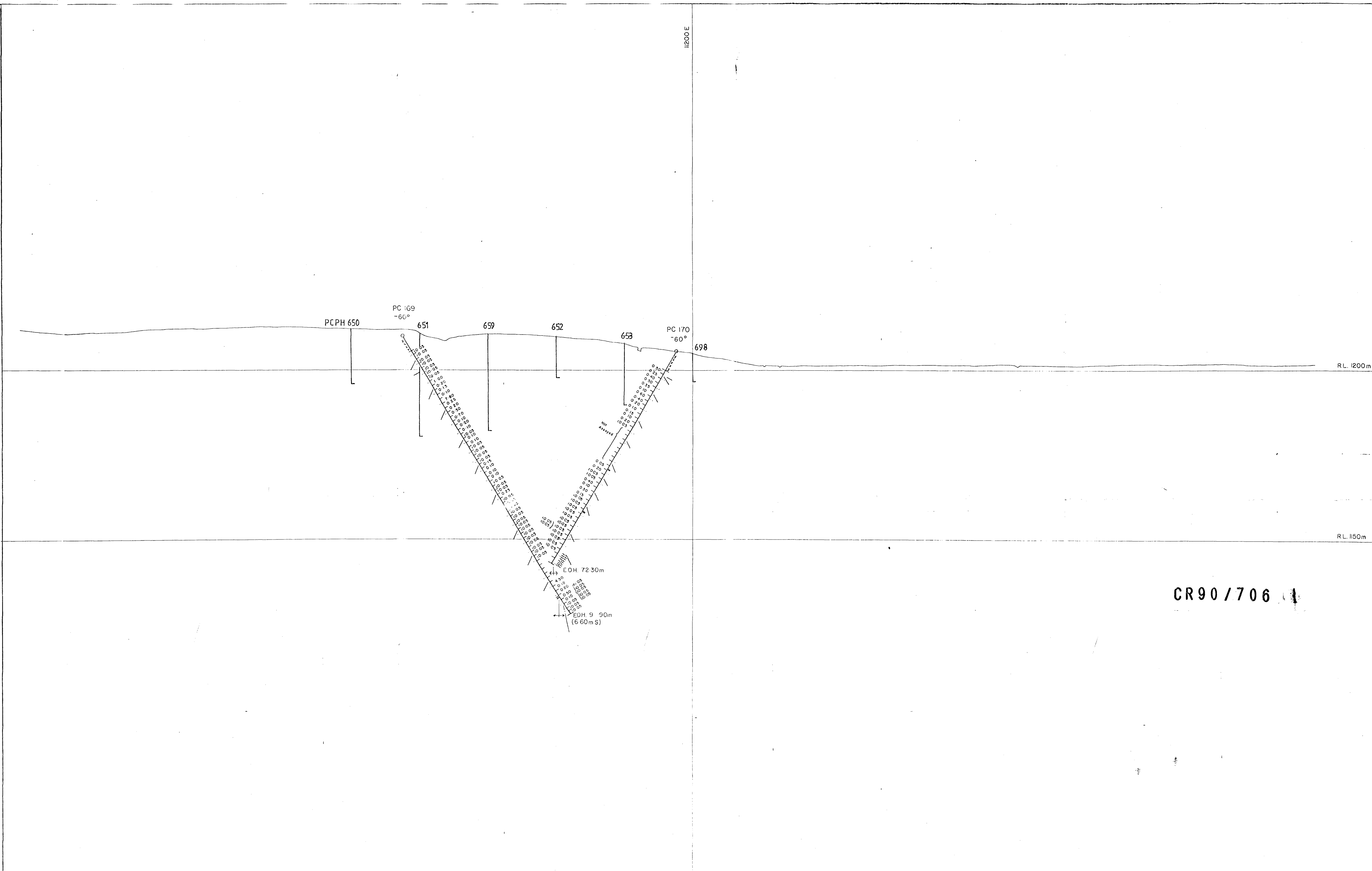
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Sample	Au	Au(R)
59971b 10-12	0.11	0.08
59101 0-2	0.21	
59102 2-4	0.03	0.04
59103a 4-6	0.02	
59103 b 4-6	0.02	
59104 6-8	0.02	0.03

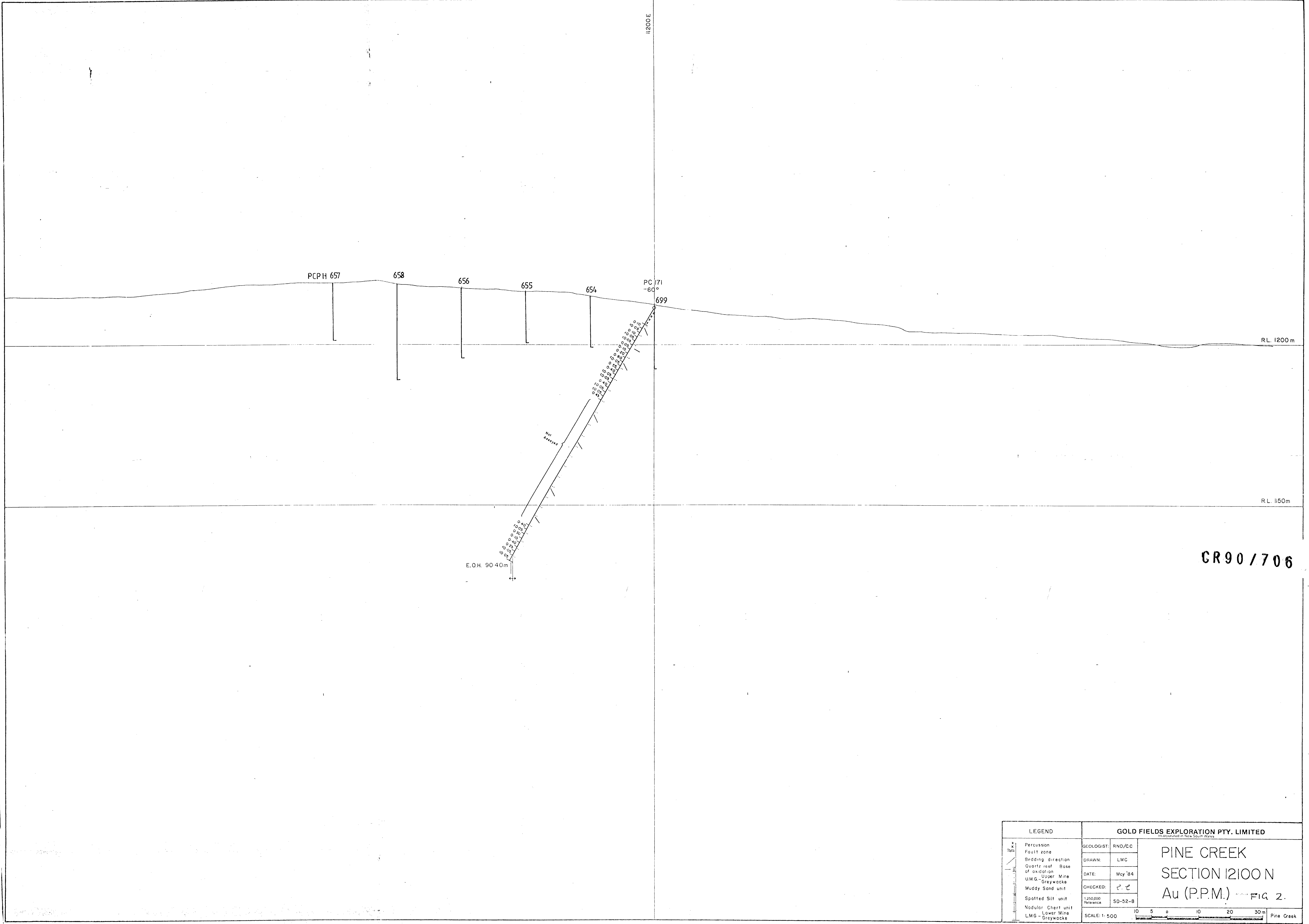
670

Data in ppm unless otherwise stated.



CR90/706

LEGEND		GOLD FIELDS EXPLORATION PTY. LIMITED	
	Percussion	GEOLOGIST: RND/CC	PINE CREEK SECTION 12050N Au (P.P.M.) Fig 1
	Fault zone	DRAWN: LMC	
	Bedding direction	DATE: April '84	
	Quartz reef	CHECKED: C E	
	Base of oxidation	1:250,000 Reference SD-52-B	
	UMG - Upper Mine	SCALE: 1:500	10 5 0 10 20 30m Pine Creek
	UMG - Greywacke		
	Muddy Sand unit		
	Spotted Silt unit		
	Nodular Chert unit		
	Lower Mine		
	LMG - Greywacke		

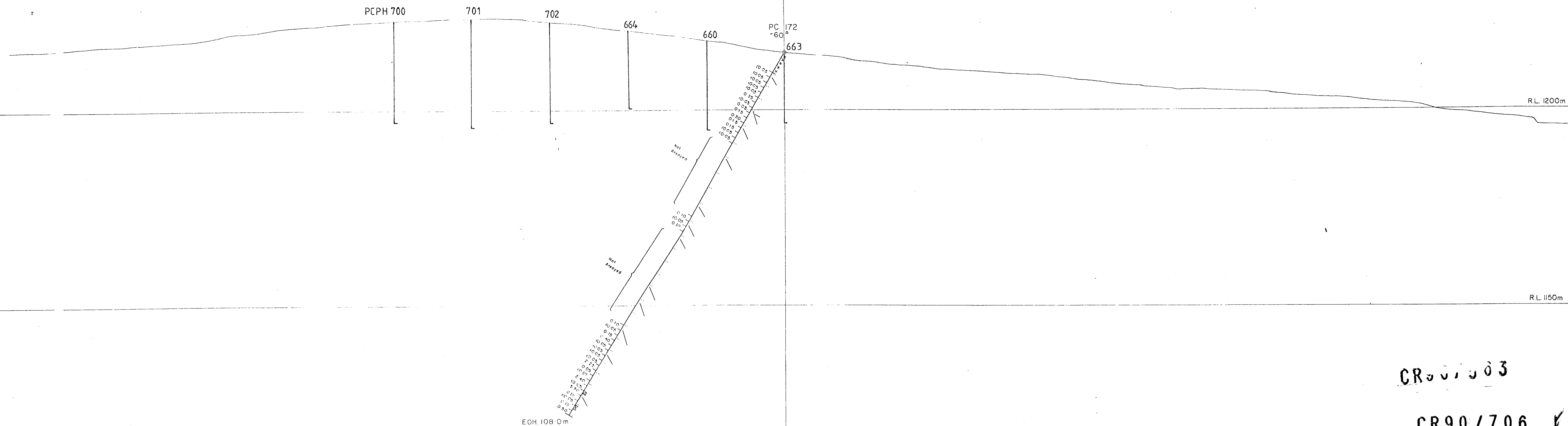


CR90/706

LEGEND		GOLD FIELDS EXPLORATION PTY. LIMITED	
	Percussion	GEOLOGIST:	RND/CC
	Fault zone	DRAWN:	LMC
	Bedding direction	DATE:	May '84
	Quartz reef	CHECKED:	C. C.
	Base of oxidation	1:250,000 Reference	SD-52-B
	U.M.G. - Upper Mine	SCALE: 1:500	10 5 0 10 20 30 m Pine Creek
Muddy Sand unit			
Spotted Silt unit			
Nodular Chert unit			
L.M.G. - Lower Mine			
Greywacke			

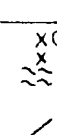
PINE CREEK
SECTION 12100 N
Au (P.P.M.)

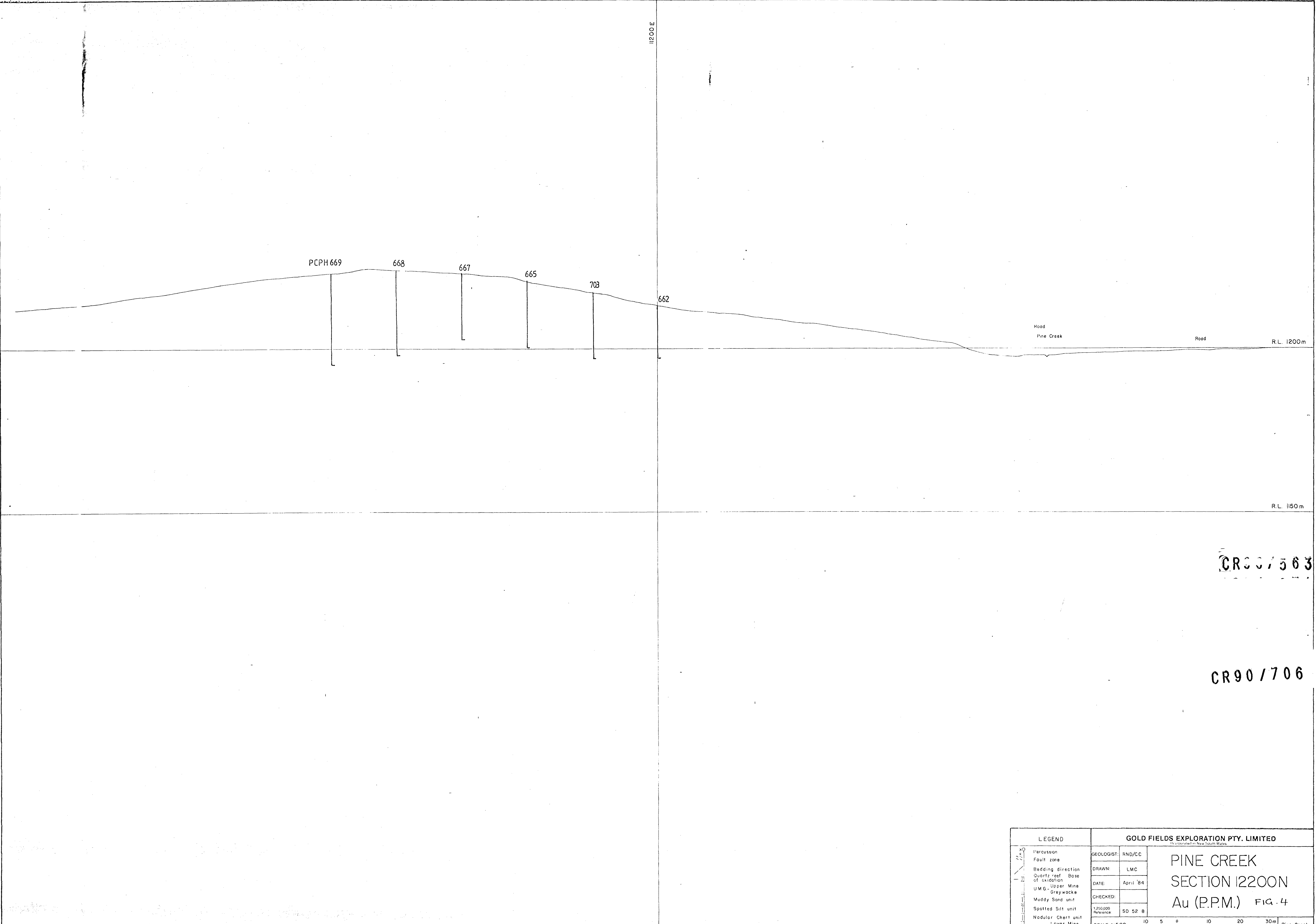
Fig 2.



CR 90/706

CR 90/706

LEGEND		GOLD FIELDS EXPLORATION PTY. LIMITED (Incorporated in New South Wales)	
			

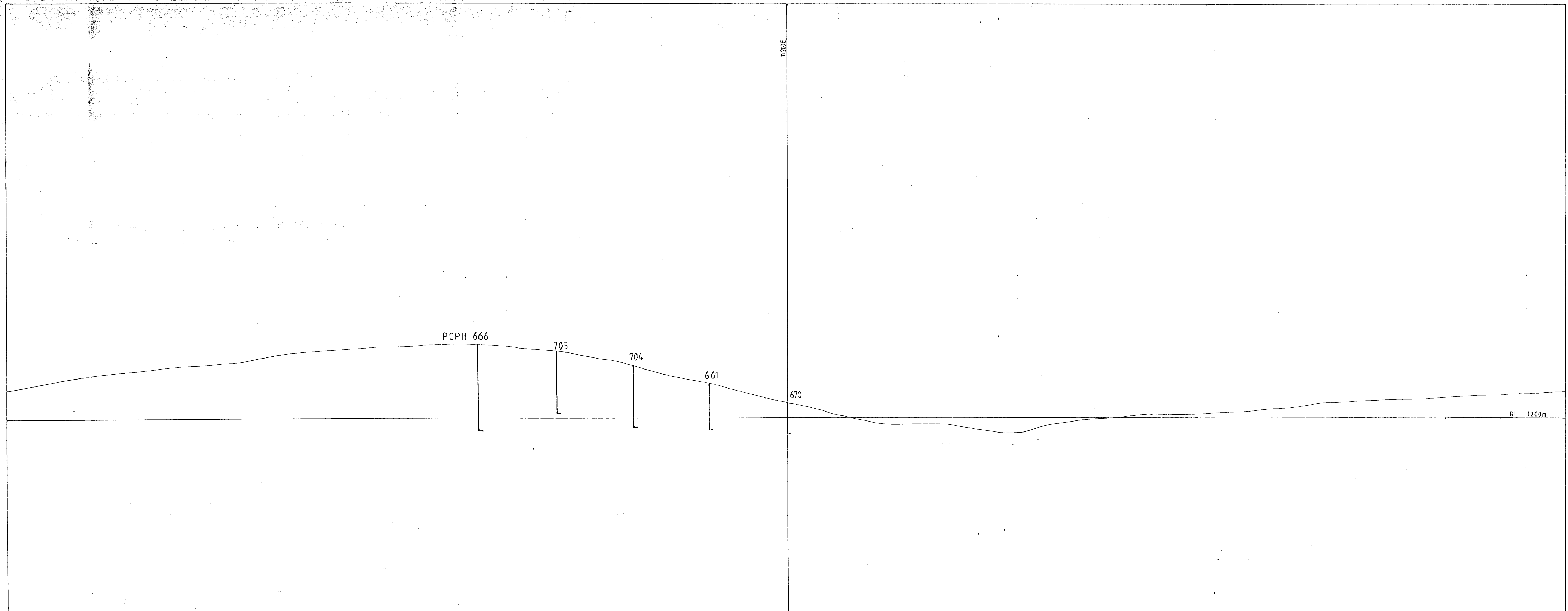


CR90/563

CR90/706

LEGEND		GOLD FIELDS EXPLORATION PTY. LIMITED	
	Percussion	GEOLOGIST:	RND/CC
	Fault zone	DRAWN:	LMC
	Bedding direction	DATE:	April '84
	Quartz reef	CHECKED:	
	Base of oxidation	1:250,000 Reference	SD 52.8
SCALE: 1:500			
		Pine Creek	

PINE CREEK
SECTION 12200N
Au (P.P.M.) FIG. 4



CR90/706

PINE CREEK
SECTION 12250N
FIG 5
SCALE 1:500