



THUNDELARRA

EXPLORATION

ELEMENT 92 PTY LTD

(A wholly owned subsidiary of Thundelarra Exploration Ltd)

REPORT ON XRF ANALYSES

OF CORE SAMPLES

AT NTGS CORE FACILITY, ALICE SPRINGS

Clark Mine DDH1
Clark Mine DDH2
Clark Mine DDH4
Clark Mine DDH6

Date: 03 December 2012
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Report No: 20121204_ClarkMines_XRF

Titleholder	n/a
Operator	n/a
Tenement Manager/Agent	n/a
Titles/Tenements	n/a
Mine/Project Name	Clark Copper Mines No. 1 to 3
Report title	Report of XRF Analyses of Core Samples at NTGS Core Facility, Alice Springs.
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Corporate Author	Element 92 Pty. Ltd. / Thundelarra Exploration Ltd.
Company Reference Number	20121204_ClarkMines_XRF
Target Commodity	Copper
Date of Report	04 December 2012
Datum/Zone	GDA94 / Zone 52
250K mapsheet	Mount Doreen
100K mapsheet	Doreen
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On 28 March 2012, several pieces of core were assayed using a portable X-Ray Fluorescence (XRF) tool at the Northern Territory Geological Survey’s core facility in Alice Springs. The core was from several holes drilled in 1968 by (former) NT Mines Department at Clark Copper Mine (abandoned), about 80 kms WNW of Yuendumu, NT.

Element 92 Pty Ltd (“Element 92”) does not hold the ground which includes Clark Copper Mines, however it holds significant tenure surrounding the area, including ground with very similar geology to that seen at Clark Mines. The examination of the Clark Mine core was an important step in assessing the overall prospectivity of the ground held by Element 92 by confirming the tenor of mineralisation reported by Fruzzetti (1971).

An Innov-X Alpha 4000 portable XRF Analyser was used to collect a standard suite of elements including P, S, Cl, K, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Rb, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ta, W, Au, Hg, Pb, Bi, U.

Table 01 details the intervals tested at the core facility.

Reading	Locality	Hole ID	Depth From	Depth To	Sample Type
1	Clark Cu No. 3 Mine	DDH1	196	196.2	Core
2	Clark Cu No. 3 Mine	DDH1	335	335.1	Core
3	Clark Cu No. 3 Mine	DDH1	335	335.1	Core
4	Clark Cu No. 1 Mine	DDH2	249	250	Core
5	Clark Cu No. 1 Mine	DDH2	249	250	Core
6	Clark Cu No. 3 Mine	DDH4	31	32	Core
7	Clark Cu No. 3 Mine	DDH4	31	32	Core
8	Clark Cu No. 2 Mine	DDH6	17	17	Core

Table 01. Summary of samples tested using XRF.

Full XRF results are shown in **Appendix 1**. A peak Cu assay of 11.64% Cu was returned from DDH4 from 31 to 32m (reading # 6), however a second shot close by the first returned only 2.8% Cu. None of the assays were significantly anomalous in any other major elements of interest.

The assay results and brief examination of the core indicates that the copper mineralisation is apparently confined to very narrow veins associated with shear zones and is unlikely to result in economic mineralisation within similar geological terrane held by Element 92.

References

Fruzzetti, O., 1971. The Clark Copper Mine, Mount Doreen, Northern Territory. Mines Branch Report MBR/69/4.

APPENDIX 1

XRF ASSAY DATA

Date	Time	Project	HoleID	Depth_From	Depth_To	Comments/PSID	CheckType	Sample Type	StandardID	Reading	Mode	LiveTime
28-Mar-12	15:18:20	NGALIA	DDH1	196	196.2	Clarke's Cu Mine		WCORE		1	Soil	39.71
28-Mar-12	15:23:21	NGALIA	DDH1	335	335.1	Clarke's Cu Mine		WCORE		2	Soil	40.62
28-Mar-12	15:26:02	NGALIA	DDH1	335	335.1	Clarke's Cu Mine		WCORE		3	Soil	39.74
28-Mar-12	15:35:08	NGALIA	DDH2	249	250	Clarke's Cu Mine		WCORE		4	Soil	41.48
28-Mar-12	15:39:59	NGALIA	DDH2	249	250	Clarke's Cu Mine		WCORE		5	Soil	41.86
28-Mar-12	15:54:11	NGALIA	DDH4	31	32	Clarke's Cu Mine		WCORE		6	Soil	38.86
28-Mar-12	15:58:01	NGALIA	DDH4	31	32	Clarke's Cu Mine		WCORE		7	Soil	41.88
28-Mar-12	15:43:40	NGALIA	DDH6	17	17	Clarke's Cu Mine		WCORE		8	Soil	40.99

Reading	LE	LE +/-	P	P +/-	S	S +/-	Cl	Cl +/-	K	K +/-	Ca	Ca +/-	Ti	Ti +/-	V	V +/-	Cr	Cr +/-	Mn	Mn +/-	Fe	Fe +/-
1	<LOD	0	12716	4089	<LOD	3134	<LOD	1056	16088	481	5167	178	<LOD	102	29	6	<LOD	27	14923	257	27120	456
2	<LOD	0	<LOD	9201	3621	828	<LOD	908	23212	557	1309	114	124	18	<LOD	9	<LOD	14	190	12	4849	83
3	<LOD	0	<LOD	9413	3579	825	<LOD	865	21557	536	1976	126	191	21	14	4	<LOD	15	296	14	5131	88
4	<LOD	0	<LOD	12823	4255	1160	<LOD	1149	37859	902	2529	162	3054	94	98	10	72	10	323	20	37238	654
5	<LOD	0	<LOD	18135	7437	1683	<LOD	1540	34319	946	3315	182	1946	94	91	12	57	15	1457	47	102441	1996
6	<LOD	0	<LOD	21758	12216	2033	<LOD	1822	10327	524	4975	239	5179	175	80	15	133	17	205	27	67015	1530
7	<LOD	0	23516	5608	6668	1426	<LOD	1300	761	208	1932	109	217	55	50	9	56	13	107	23	79386	1520
8	<LOD	0	<LOD	10189	7649	1110	<LOD	990	4895	261	873	90	287	31	17	5	30	7	288	16	15639	274

Reading	Co	Co +/-	Ni	Ni +/-	Cu	Cu +/-	Zn	Zn +/-	As	As +/-	Se	Se +/-	Rb	Rb +/-	Sr	Sr +/-	Zr	Zr +/-	Mo	Mo +/-	Ag	Ag +/-
1	<LOD	86	<LOD	51	<LOD	28	476	13	<LOD	8	<LOD	3	1089	15	97	3	<LOD	11	<LOD	8	<LOD	25
2	<LOD	41	<LOD	43	432	16	43	5	<LOD	5	<LOD	2	759	11	<LOD	4	<LOD	10	<LOD	8	<LOD	24
3	<LOD	36	<LOD	44	235	13	82	6	<LOD	5	<LOD	2	716	10	<LOD	4	<LOD	10	<LOD	8	26	8
4	<LOD	124	<LOD	65	<LOD	28	95	7	<LOD	6	<LOD	3	290	7	34	2	59	5	<LOD	9	<LOD	27
5	<LOD	227	136	34	<LOD	34	291	12	<LOD	7	<LOD	3	320	7	5	2	136	5	<LOD	10	<LOD	30
6	<LOD	242	<LOD	153	116437	1615	<LOD	178	492	12	<LOD	6	42	3	8	2	50	5	39	4	<LOD	34
7	<LOD	276	<LOD	121	28047	361	<LOD	79	255	7	18	2	<LOD	6	23	2	42	4	14	3	<LOD	30
8	<LOD	92	<LOD	76	31174	364	2387	47	<LOD	20	5	1	25	2	<LOD	5	<LOD	11	10	3	36	9

Reading	Cd	Cd +/-	Sn	Sn +/-	Sb	Sb +/-	Ta	Ta +/-	W	W +/-	Au	Au +/-	Hg	Hg +/-	Pb	Pb +/-	Bi	Bi +/-	U	U +/-
1	<LOD	74	<LOD	79	<LOD	84	23	5	<LOD	48	<LOD	5	<LOD	31	37	6	17	5	<LOD	28
2	<LOD	70	<LOD	75	<LOD	80	24	3	<LOD	32	<LOD	5	29	8	<LOD	13	27	4	<LOD	23
3	<LOD	71	<LOD	76	<LOD	80	17	3	<LOD	36	<LOD	5	<LOD	26	<LOD	12	23	4	<LOD	22
4	<LOD	79	<LOD	84	<LOD	90	22	4	<LOD	40	<LOD	5	<LOD	27	<LOD	11	18	3	<LOD	18
5	<LOD	87	106	31	<LOD	99	15	5	<LOD	52	<LOD	6	<LOD	35	26	5	14	4	<LOD	20
6	<LOD	97	<LOD	103	<LOD	109	<LOD	28	<LOD	100	<LOD	17	<LOD	54	49	6	<LOD	10	<LOD	16
7	<LOD	85	<LOD	89	<LOD	93	<LOD	15	<LOD	68	<LOD	13	<LOD	37	24	5	<LOD	7	<LOD	13
8	<LOD	80	<LOD	85	<LOD	89	<LOD	23	<LOD	79	<LOD	8	79	15	389	12	91	5	<LOD	11