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ASX RELEASE

30 January 2019



Exploration Update for Ladybird Prospect
Sandstone Gold Project, WA

HIGHLIGHTS

- High grade gold mineralisation confirmed from previous explorers drilling at Ladybird.
- Significant downhole* RC drill intercepts at Ladybird include:

MSGC1162	:	5m	@	29.4 g/t Au	from	8m
HKR006	:	4m	@	7.3 g/t Au	from	42m
TRC018	:	5m	@	5.6 g/t Au	from	0m
TRC010	:	3m	@	8.5 g/t Au	from	12m
MSGC1387	:	5m	@	4.9 g/t Au	from	10m
MSGC1385	:	5m	@	4.6 g/t Au	from	36m
MSGC1123	:	5m	@	4.1 g/t Au	from	67m
HKR017	:	4m	@	5.1 g/t Au	from	49m
MSGC1122	:	3m	@	6.5 g/t Au	from	21m

**Cautionary note: due to the steep nature of mineralisation, downhole widths are not true widths.*

- Mineral Resource estimates (JORC 2012) in Progress and RC drilling Planned for Q1, 2019

Compilation and review of previous explorer's data has confirmed that shallow high-grade gold mineralisation exists at the Ladybird Prospect. Although the mineralised zone is relatively narrow and steeply dipping, the grade and continuity of mineralisation suggests that the deposit could be amenable to open pit mining in its upper reaches.

Alto has commissioned Dr Spero Carras of Carras Mining Pty Ltd to prepare a JORC (2012) Mineral Resource Estimate for the Ladybird deposit. This should be completed in February 2019.

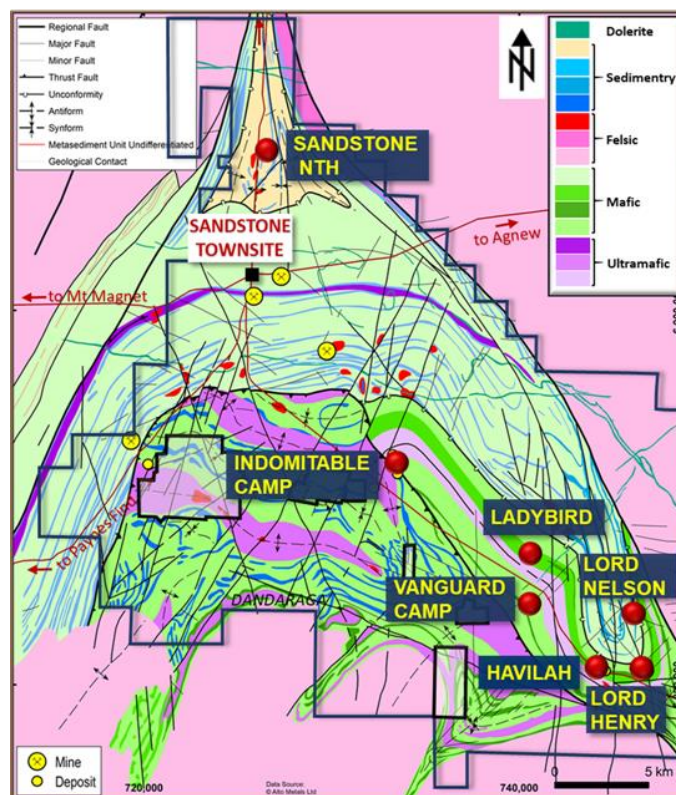
Further RC drilling is planned to test for along strike and down-dip extensions to the mineralisation which could potentially expand the mineralised zone.

Introduction

In 1986 Western Mining Corporation (WMC) carried out a regional lag geochemical survey which highlighted the historical Lady Mary prospect and also two anomalies to the NW and SE of Lady Mary. The anomaly 1km SE of Lady Mary (named "Ladybird") reported peak assays of 380ppb Au and 280ppb Au on adjacent lines 400m apart.

The Ladybird Prospect is located approximately 25km SE of the town of Sandstone and lies approximately 3km north of the Sandstone - Menzies road. The prospect area is comprised of mafic and ultramafics rocks intercalated with thin sedimentary marker beds of chert and banded iron formation (BIF). The stratigraphy strikes NW-SE and has sub-vertical dips. Refer Figure 1 below.

Figure 1. Location of Ladybird Prospect over Sandstone Greenstone Belt Regional Geology



Drilling

WMC initially completed 19 reverse circulation (RC) drill holes in 1988 at Ladybird which defined a 550m strike length of gold mineralisation. A further ten RC drill holes were completed in the same year, and drill hole MSGC1162 reported a high-grade intersection with gold values including 1m at 67 g/t Au. In 1990, a further nine RC holes were completed and in 1992 WMC reported a maiden resource estimate. A summary of all drilling in the Ladybird area by WMC and later explorers is shown below in Table 1.

Table 1. Summary of all Drilling at Ladybird

Company	RAB		AIR-CORE		RC	
	Holes	Metres	Holes	Metres	Holes	Metres
WMC (1988-1990)					38	2,726
Elmina (1993)					3	300
Herald (1998-1999)	35	1,070			16	658
Troy (2001-2002)	6	178	3	219	14	443
Total	41	1,248	3	219	71	4,127

Alto has captured and digitised the existing Ladybird drilling data and produced a 3D model of the geology and mineralisation. (see Figure 2 and Figures 3 - 5). The model has assisted with interpretation of the mineralisation and the targeting of future drilling.

Figure 2. Google Image of Ladybird Showing Drill Hole Collars and Max Au

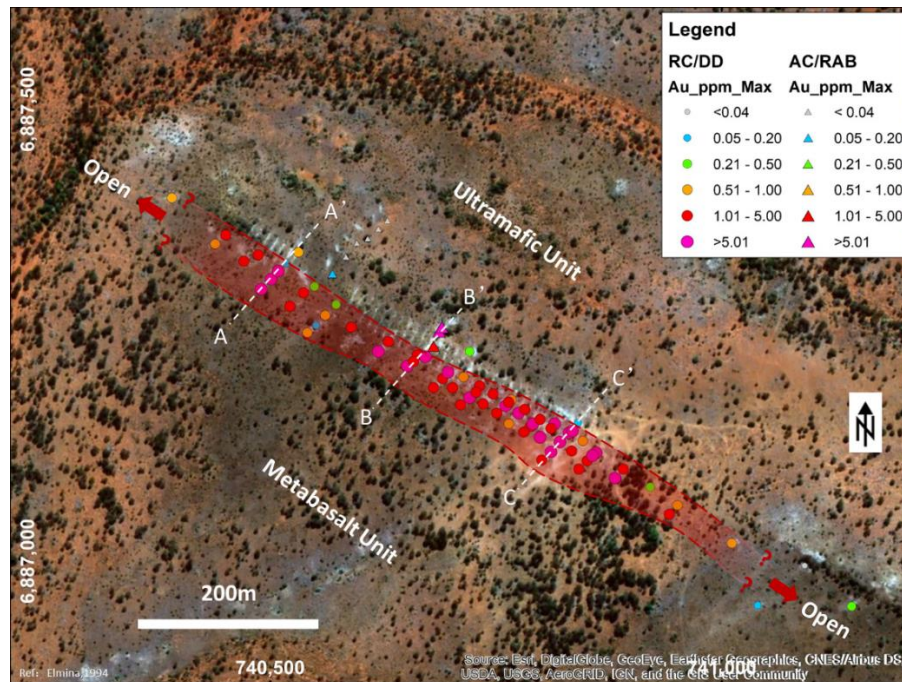


Figure 3. Ladybird Prospect – Cross Section A - A'

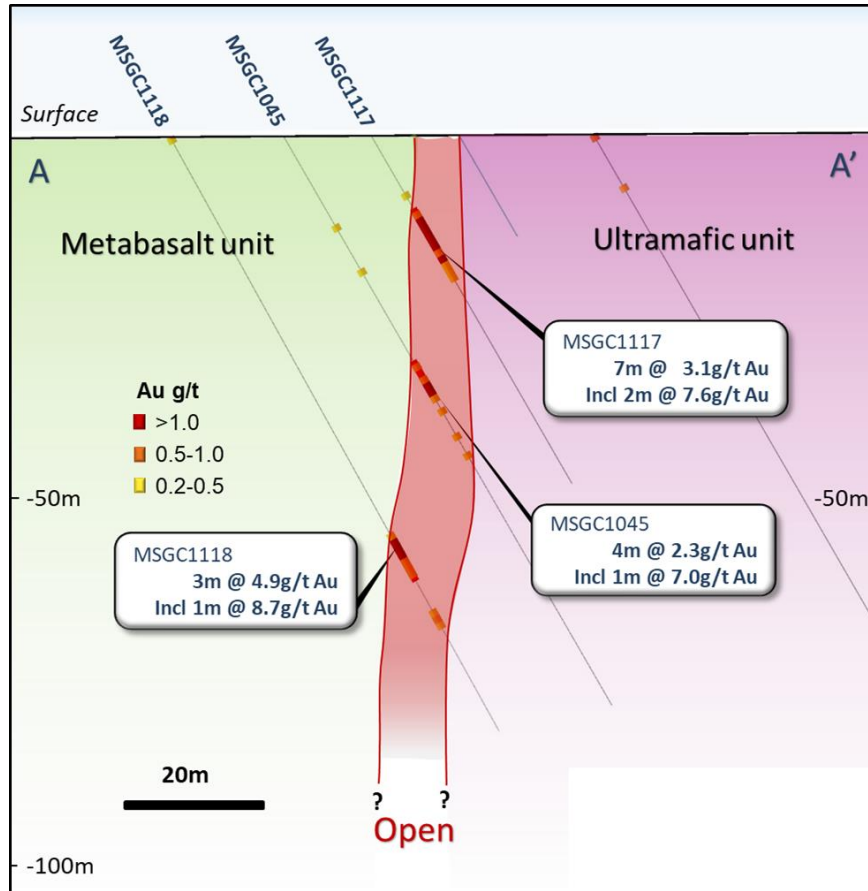


Figure 4. Ladybird Prospect – Cross Section B - B'

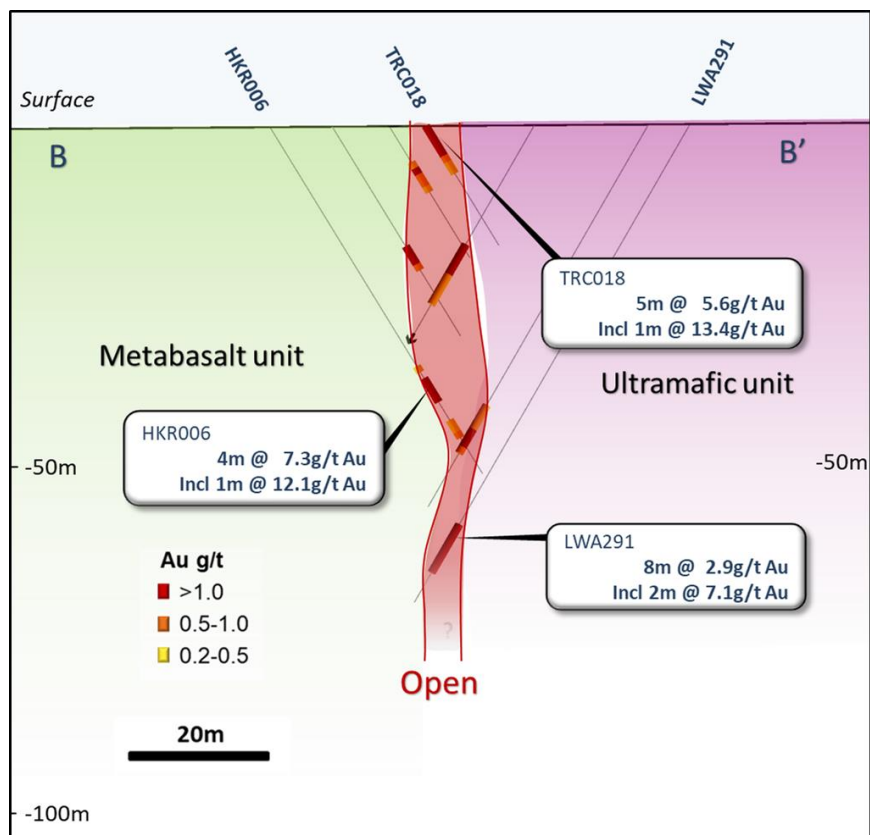
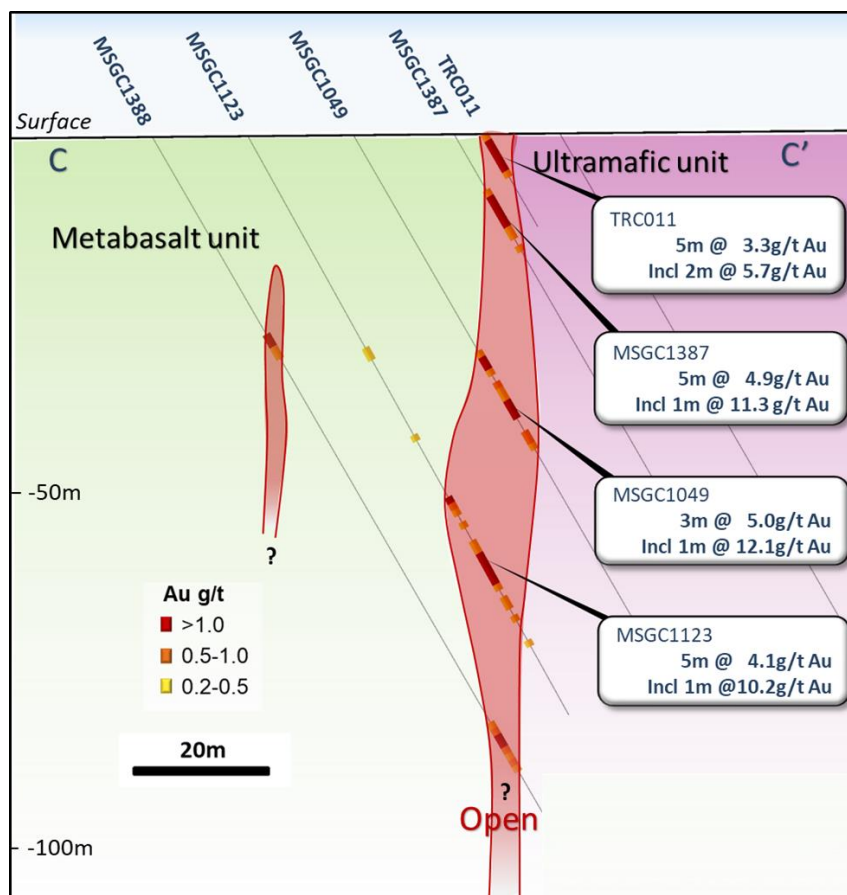


Figure 5. Ladybird Prospect – Cross Section C - C'



Local Geology

The greenstone sequence in the Ladybird area is weathered and lateritised to the extent that only the quartz-magnetite BIF/chert horizons form prominent outcrops. The mafic and ultramafic units occur as low-lying areas or low hills.

Gold mineralisation at Ladybird occurs within a sub-vertical dipping BIF/chert unit that has a strike of approximately 300 degrees. The BIF/chert unit is located at or near the contact between a mafic unit (to SW) and an ultramafic unit (to NE). A parallel BIF/chert unit occurs approximately 10 to 15m away to the south-west. Metabasalt generally separates the two chert units.

The gold mineralisation is associated with quartz veining, and the mineralised BIF occurs discontinuously over 1.5km. The depth of weathering is approximately 45-65m. In general, the Ladybird deposit has a NW strike and dips approximately 75 to 90 degrees to the SW.

Mineral Resource Estimation

Alto Metals Ltd has commissioned Dr Spero Carras of Carras Mining Pty Ltd to prepare a JORC (2012) Mineral Resource Estimate for the Ladybird deposit. This should be completed by February 2019.

Further RC drilling is planned to test the strike and down-dip extensions to the mineralisation and potentially expand the mineralised area.

ABOUT ALTO AND THE SANDSTONE GOLD PROJECT

Alto holds ~800km² of the prospective Archaean Sandstone Goldfield, 600km north of Perth in the East Murchison Mineral Field of Western Australia. Since acquiring the Project in June 2016, Alto has compiled and reviewed a large legacy database ahead of a series of focused exploration and drilling campaigns which commenced in late-2016.

Alto's goal is the delineation of a +1 million ounce JORC 2012 Mineral Resource that could become the basis for a re-establishment of standalone oxide and primary gold mining and milling operations.

Table 2. Sandstone Gold Project – Summary of Total Mineral Resources (JORC 2012)

Deposit	Classification	Reporting cut-off (g/t Au)	Tonnage (kt)	Grade (g/t Au)	Contained Gold (oz)
Lord Henry ¹	Indicated	0.8	1,200	1.6	65,000
TOTAL INDICATED			1,200	1.6	65,000
Lord Henry ¹	Inferred	0.8	110	1.3	4,000
Lord Nelson ²	Inferred	0.8	980	2.2	68,000
Indomitable Camp ³ + Vanguard Camp	Inferred	0.5	2,580	1.49	124,000
TOTAL INFERRED			3,670	1.66	196,000
TOTAL INDICATED & INFERRED			4,870	1.67	261,000

Footnote 1. AME ASX Release 16 May 2017. "Maiden Lord Henry JORC 2012 Mineral Resource of 69,000oz."

Footnote 2. AME ASX Release 28 April 2017. "Lord Nelson Mineral Resource Increased to 68,000oz."

Footnote 3. AME ASX Release 25 Sept 2018. "Maiden Gold Resource at Indomitable & Vanguard Camps, Sandstone WA"

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Competent Person Statement

The information in this Report that relates to Exploration Results is based on information compiled by Mr Dermot Ryan, who is an employee of XServ Pty Ltd and a Director and security holder of the Company. Mr Ryan is a Fellow of the Australasian Institute of Mining and Metallurgy (CP Geology) and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Historic exploration results referred to in this Report were previously reported by qualified geologists employed by ASX listed companies Western Mining Corporation Ltd, Elmina NL, Herald Resources Ltd and Troy Resources NL. Alto Metals Limited understands that this information has not been updated since to comply with the JORC Code 2012, but believes the information has not materially changed since it was last reported.

Forward Looking Statements:

Certain statements in this document are or maybe “forward-looking statements” and represent Alto’s intentions, projections, expectations or beliefs concerning among other things, future exploration activities. The projections, estimates and beliefs contained in such forward-looking statements don’t necessarily involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Alto, and which may cause Alto’s actual performance in future periods to differ materially from any express or implied estimates or projections. Nothing in this document is a promise or representation as to the future. Statements or assumptions in this document as to future matters may prove to be incorrect and differences may be material. Alto does not make any representation or warranty as to the accuracy of such statements or assumptions.

References

- Bell, S.L. (1994) The Ladybird Prospect Mining Lease M57/88 East Murchison Mineral Field, Western Australia. Annual Report on Development and Exploration for the Period 12th July 1993 to 11th July 1994. Elmina NL. WAMEX a41939.
- Bell, S.L. (1995) The Ladybird Prospect Mining Lease M57/88 East Murchison Mineral Field, Western Australia. Annual Report on Development and Exploration for the Period 12th July 1994 to 11th July 1995. Elmina NL. WAMEX a46539.
- Chapple, L. (1998) Edale JV Project M57/1, 22, 23, 68, 87, 88 and E57/196. Annual Report for the Year Ending 7th February 1998. Herald Resources Limited. WAMEX Reference a53669.
- Chen, S.F., Morris, P.A. and Pirajno, F. (2005) Occurrence of komatiites in the Sandstone greenstone belt, north-central Yilgarn Craton. Australian Journal of Earth Sciences, 52:6, 959-963, DOI:10.1080/08120090500304240.
- Chen, S.F. (2005) *Geology of the Atley, Rays Rocks and southern Sandstone sheets, 1:100,000 Series Explanatory Notes*. Geological Survey of Western Australia, Perth.
- Department of Mines (1954) List of Cancelled Gold Mining Leases. Western Australia Department of Mines. 1954.
- Dexter, S. (2008) Sandstone Project, Sandstone, Western Australia. Combined Annual Report for the Period 1st January 2008 to 31st December 2009. Troy Resources NL. WAMEX Reference a82122.
- Dexter, S. (2009) Sandstone Project, Sandstone, Western Australia. Combined Annual Report for the Period 1st January 2007 to 31st December 2007. Troy Resources NL. WAMEX Reference a77701.
- Dixon, K. (2001) Annual Report. Exploration Licences E57/196, M57/21, 22, 23, 68, 87, 88. Edale Project, Sandstone Region, Western Australia. 7th February 2000 to 6th February 2001. Troy Resources NL. WAMEX Reference a62664.
- Dixon, K. (2002) Annual Report. Exploration Licences E57/196, M57/21, 22, 23, 68, 87, 88. Edale Project, Sandstone Region, Western Australia. 7th February 2001 to 6th February 2002. Troy Resources NL. WAMEX Reference a64672.
- Dixon, K. (2003) Edale Project, Sandstone Region, Western Australia. Combined Annual Report for the Period 7th February 2002 to 6th February 2003. Exploration Licences E57/196, M57/21, 22, 23, 68, 87, 88. Troy Resources NL. WAMEX Reference a66401.
- Greenway, L. (1999) Herald Resources Limited Annual Technical Report on Mineral Activities Edale JV Project for the Year Ending 6th February 1999, E57/196, M57/21, M57/22, M57/23, M57/68, M57/87, M57/88. East Murchison Mineral Field. GSWA Reference C82/1994. Herald Resources Limited. WAMEX Reference a57913.
- Hayden, P. (1985) Annual Report. Exploration Licence 57/5 "Rafferty's" and Mineral Claims 57/4816, 4818 and 4820 at Sandstone. 18th December 1983 to 17th December 1984. Western Mining Corporation Limited. WAMEX a15036.
- Hayden, P. (1986) Terminal Report. Relinquished Portion of Exploration Licence 57/5 "Rafferty's" and Mineral Claims 57/4818 and 4820 at Sandstone. 18th December 1984 to 17th December 1985. Western Mining Corporation Limited. WAMEX a17798.
- Hayden, P. (1987a) Annual Report, Retained Portion of Exploration Licence E57/5 "Rafferty's" at Sandstone. 18th December 1985 to 17th December 1986. Western Mining Corporation. WAMEX Reference A19638.
- Hayden, P. (1987b) Terminal Report, Relinquished Portion of Exploration Licence E57/5 "Rafferty's" at Sandstone. 18th December 1985 to 17th December 1986. Western Mining Corporation. WAMEX Reference A19639.

References (Continued)

Hayden, P. (1990)	Terminal Report, Exploration Licence E57/5 "Rafferty's" at Sandstone. 18 th December 1982 to 11 th July 1988. Western Mining Corporation. WAMEX Reference A31975.
Hronsky, J.M.A. (1992a)	Annual Report Mining Lease M57/88 (Mt Breen) at Sandstone. 12 th July 1990 to 11 th July 1991. Western Mining Corporation. WAMEX Reference a35756.
Hronsky, J.M.A. (1992b)	Terminal Report on Surrendered Portion of Mining Lease M57/88 (Mt Breen) at Sandstone. 12 th July 1988 to 11 th October 1989. Western Mining Corporation. WAMEX Reference a35522.
Lowe, K. & Ross, A.F. (2007)	Troy Resources NL: Sandstone Project, Mid-West Region Western Australia. June 2007. <i>NI43-101 Technical Report prepared by Snowden for Troy Resources NL.</i>
Mazonni, P.P. (1992)	Annual Report. Mining Lease 57/88 (Mt Breen) at Sandstone. 12 th July 1991 to 11 th July 1992. Western Mining Corporation Limited. WAMEX a36537.
Norum, E. (1997)	1997 Annual Technical Report on Mineral Activities Sandstone Gold Project, M57/21, 22, 23, 68, 87, 88 & E57/196, East Murchison Mineral Field. DME Reference C82/1994. Herald Resources Limited. WAMEX Reference a50701.
PCF Capital Group (2014)	Sandstone Mineral Exploration Package Information Memorandum. 19 th February 2014.
Ringrose, C. (2000)	Annual Report. Exploration Licences E57/196, M57/21, 22, 23, 68, 87, 88. Sandstone Edale Project, Sandstone Region, Western Australia. 7 th February 1999 to 6 th February 2000. Troy Resources NL. WAMEX Reference a60307.
Rogers and Watts (1972)	Geological Report on Six Claim Groups in the Sandstone Area. Report for Seeko Nickel NL. 5 th May 1972. WAMEX Reference a5826.
Rogers, K.A. (1996)	Sandstone Project. East Murchison Mineral Field, Western Australia. Combined Annual Report on Exploration and Development for the Period 7 th February 1995 to 6 th February 1996. Elmina NL. WAMEX a49722.
Troy Resources NL (2009)	Sandstone Gold Project. Information Memorandum, July 2009.
Troy Resources NL (2011)	Sandstone Gold Project. Information Memorandum, May 2011.
Western Mining Corporation (1982)	Annual Report, Temporary Reserve 7380H, Sandstone, East Murchison Mineral Field – Black Range District. 18 th January 1981 to 17 th December 1982. WAMEX Reference A11862.
Western Mining Corporation (1985)	Annual Report, Retained Portion of Exploration Licence E57/5 "Rafferty's" and Mineral Claim 57/4816 at Sandstone. 18 th December 1984 to 17 th December 1985. WAMEX Reference A17799.

APPENDIX 1. Significant AC & RC Historical Drilling Intercepts at the Ladybird Prospect +1.0g/t Au

Hole ID	Drill Type	East GDA94	North GDA94	M RL AHD	Depth (m)	Dip (deg)	Azimuth (deg)	From (m)	To (m)	Interval (m)	Grade (g/t Au)
HKR005	RC	740663	6887228	499	22	-60	45	7	8	1	2.52
HKR006	RC	740652	6887216	499	58	-60	45	42	46	4	7.3
Incl								44	45	1	12.09
HKR008	RC	740702	6887192	500	52	-60	45	35	36	3	2.21
HKR009	RC	740732	6887194	500	28	-60	45	8	9	1	2.45
HKR010	RC	740747	6887185	500	28	-60	45	10	14	4	1.3
HKR011	RC	740736	6887174	500	64	-60	45	38	39	1	1.44
and								41	42	1	1.3
HKR013	RC	740775	6887164	500	46	-60	45	21	25	4	2.31
Incl								24	25	1	5.57
HKR015	RC	740788	6887149	501	22	-60	45	17	18	1	1.32
HKR016	RC	740815	6887152	501	28	-60	45	4	11	7	3.65
Incl								9	10	1	7.32
HKR017	RC	740799	6887137	5001	64	-60	45	25	26	1	2.51
and								49	53	4	5.09
Incl								50	51	1	12.8
HKR019	RC	740834	6887122	501	58	-60	45	43	45	2	2.18
HKR020	RC	740861	6887120	501	40	-60	45	5	7	2	6.89
Incl								5	6	1	12.33
LBRC2	RC	740811	6887147	501	100	-60	45	16	24	8	2.9
LWA289	AC	740681	6887238	500	75	-60	205	20	25	5	2.2
LWA290	AC	740687	6887254	500	64	-60	205	51	54	3	2.82
Incl								52	53	1	5.4
LWA291	AC	740690	6887259	500	80	-60	205	67	75	8	2.91
and								68	70	2	7.05
MSGC1045	RC	740501	6887312	499	90	-60	45	39	41	2	4.19
Incl								39	40	1	7
MSGC1046	RC	740620	6887232	499	85	-60	45	47	49	2	3.9
MSGC1048	RC	740691	6887202	500	85	-59.5	45	28	30	2	3.85
and								33	34	1	1.24
MSGC1049	RC	740821	6887132	501	85	-60	45	36	38	2	2.66
and								43	46	3	5.04
Incl								44	45	1	12.1
MSGC1050	RC	740882	6887092	502	85	-59	45	37	40	3	5.09
Incl								37	38	1	11.3
and								44	45	1	1.69
MSGC1051	RC	740942	6887052	502	85	-59	45	47	49	2	2.48
MSGC1117	RC	740509	6887321	498	55	-60	45	13	20	7	3.07
Incl								14	16	2	7.6
MSGC1118	RC	740490	6887301	498	93	-61	45	63	66	3	4.85
Incl								64	65	1	8.7
MSGC1120	RC	740631	6887243	499	60	-60	44	16	19	3	2.35

APPENDIX 1. (cont'd) Significant Historical Drilling Intercepts at the Ladybird Prospect +1.0g/t Au

Hole ID	Drill Type	East GDA94	North GDA94	M RL AHD	Depth (m)	Dip (deg)	Azimuth (deg)	From (m)	To (m)	Interval (m)	Grade (g/t Au)
MSGC1121	RC	740681	6887192	500	80	-61	45	55	58	3	1.98
MSGC1122	RC	740761	6887172	500	60	-60	45	21	24	3	6.46
Incl								22	23	1	10.7
MSGC1123	RC	740811	6887121	501	93	-61	45	58	59	1	1.32
and								67	72	5	4.13
Incl								68	69	1	10.2
MSGC1158	RC	740451	6887361	498	60	-61.5	45	22	23	1	2.24
MSGC1161	RC	740751	6887164	500	60	-61.5	45	43	46	3	1.93
MSGC1162	RC	740791	6887152	501	48	-61.5	45	8	13	5	29.4
Incl								8	9	1	67
and								9	10	1	48
and								10	11	1	28
and								31	33	2	2.04
MSGC1163	RC	740851	6887111	501	72	-61.5	45	1	2	1	2.25
and								41	44	3	1.6
MSGC1164	RC	740891	6887102	502	48	-60	45	17	18	1	1.48
MSGC1382	RC	740471	6887332	498	69	-60	45	34	38	4	1.83
MSGC1383	RC	740522	6887282	498	63	-60	45	56	63	7	1.13
MSGC1384	RC	740697	6887209	500	33	-60	45	11	14	3	3.11
Incl								11	12	1	7.1
MSGC1385	RC	740721	6887181	500	51	-60	45	36	41	5	4.6
Incl								39	40	1	7.2
MSGC1386	RC	740781	6887143	500	76	-60	45	49	51	2	1.68
MSGC1387	RC	740831	6887142	501	60	-60	45	10	15	5	4.86
Incl								13	14	1	11.3
MSGC1388	RC	740801	6887112	501	111	-60	45	32	34	2	1.12
and								97	99	2	2.56
MSGC1389	RC	740842	6887102	501	93	-60	45	69	70	1	2.68
and								75	76	1	1.84
TRC010	RC	740857	6887117	501	30	-60	45	12	15	3	8.49
Incl								13	14	1	17.6
TRC011	RC	740835	6887144	501	15	-60	45	1	6	5	3.32
Incl								2	4	2	5.65
TRC012	RC	740782	6887168	500	20	-60	45	6	10	4	1.57
TRC013	RC	740764	6887176	500	20	-60	45	10	15	5	1.42
TRC014	RC	740728	6887187	500	46	-60	45	21	23	2	1.24
TRC015	RC	740711	6887173	500	76	-60	45	60	65	5	1.8
TRC016	RC	740659	6887221	499	35	-60	45	20	23	3	3.12
TRC017	RC	740799	6887157	501	30	-60	45	11	14	3	1.82
TRC018	RC	740672	6887226	499	20	-60	45	0	5	5	5.59
Incl								3	4	1	13.4
TRC020	RC	740590	6887259	499	43	-60	45	32	34	2	1.37
TRC022	RC	740537	6887297	498	37	-60	45	25	27	2	1.99
TRC023	RC	740487	6887339	498	25	-60	45	9	11	2	2.26

JORC 2012 TABLE 1 REPORT, SANDSTONE PROJECT WA

Ladybird Prospect

SECTION 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	<p>Drilling carried out by Western Mining Corporation (1988-1990) and Elmina NL (1993)</p> <ul style="list-style-type: none"> Reverse Circulation (RC) drilling was used to collect samples over 1m intervals via a cyclone and riffle splitter unless the sample was too damp or puggy in which case the sample was grabbed from throughout the bag. From the bulk 1m RC samples, a sample was collected then submitted to the laboratory for analysis. WMC drill assays were assayed at a WMC laboratory using their own aqua regia style of analysis. Elmina reportedly submitted RC 1m drill samples for fire assay at Analabs or Ultratrace in Perth. <p>Drilling carried out by Herald Resources Limited (1998-1999)</p> <ul style="list-style-type: none"> Rotary air blast (RAB) drilling was used to obtain 4m composites using a scoop off each 1m sample heap, with the majority of significant intersections >0.2ppm Au re-sampled at 1m intervals and sent to Analabs Perth for aqua regia AAS gold determination. Drill assays from RAB drill samples are not being used in the Alto Metals Resource Estimation. RC drilling was used to collect samples over 1m intervals. All dry RC samples were split at 1m intervals using a 3-tier riffle splitter, with the excess collected in plastic bags and left on site. Wet samples were generally grabbed by hand. RC samples were also collected in 2m or 4m composites which were sent to Analabs Laboratory in Perth for initial analysis by aqua regia AAS to a lower detection limit of 0.02ppm Au. For samples returning significant results the corresponding 1m resplits were sent for further analysis by Fire Assay to a lower detection limit of 0.01ppm Au. <p>Drilling carried out by Troy Resources NL (2001-2009)</p> <ul style="list-style-type: none"> RC drilling was used to obtain samples which were passed directly from the in-line cyclone through a rig mounted multi-tier riffle splitter. Samples were collected in 1m intervals into bulk plastic bags and 1m 3kg calico bags (which were retained for later use). RAB drilling was used to obtain samples, which were collected in 1m intervals and laid on the ground. Air-core (AC) drilling was used to obtain samples via a cyclone every for each 1m interval, which was laid on the ground. From the bulk samples (RAB, AC or RC), a 5m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. The composite samples were then sent to the laboratory for analysis. Any composite sample that assayed >0.1 g/t Au was revisited and the 1m samples re-submitted for gold assay. Troy RAB, AC and RC samples were assayed at Analabs Perth by 50gm aqua regia digest followed by DIBK extraction Flame Atomic Absorption Spectrometry. The technique had a lower detection limit of 0.01ppm Au. Drill assays from RAB drill samples are not being used in the Alto Metals Resource Estimation.

Criteria	Commentary																																																	
Drilling techniques	<ul style="list-style-type: none">Drilling techniques have included RAB, AC and RC as per the table below. <table><tr><th></th><th colspan="2">RAB</th><th colspan="2">AIR-CORE</th><th colspan="2">RC</th></tr><tr><th></th><th>Holes</th><th>Metres</th><th>Holes</th><th>Metres</th><th>Holes</th><th>Metres</th></tr><tr><td>WMC (1988-1990)</td><td></td><td></td><td></td><td></td><td>38</td><td>2,726</td></tr><tr><td>Elmina (1993)</td><td></td><td></td><td></td><td></td><td>3</td><td>300</td></tr><tr><td>Herald (1998-1999)</td><td>35</td><td>1,070</td><td></td><td></td><td>16</td><td>658</td></tr><tr><td>Troy (2001-2002)</td><td>6</td><td>178</td><td>3</td><td>219</td><td>14</td><td>443</td></tr><tr><td>Total</td><td>41</td><td>1,248</td><td>3</td><td>219</td><td>71</td><td>4,127</td></tr></table> <ul style="list-style-type: none">Drill assays from AC and RC drilling are being used in the Alto Mineral Resource Estimation.Drill assays from RAB drill samples are not being used in the Alto Metals Resource Estimation.		RAB		AIR-CORE		RC			Holes	Metres	Holes	Metres	Holes	Metres	WMC (1988-1990)					38	2,726	Elmina (1993)					3	300	Herald (1998-1999)	35	1,070			16	658	Troy (2001-2002)	6	178	3	219	14	443	Total	41	1,248	3	219	71	4,127
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Drill sample recovery	<ul style="list-style-type: none">WMC and Elmina noted on the logging sheets where samples were wet. Comments on recovery were also noted on the logging sheets where relevant. There is no other information on sample recovery.Alto has no quantitative information on Troy or Herald RAB, AC and RC sample recovery. There were no reported sample recovery issues.Alto reviewed the WMC and Elmina logging sheets to determine if a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. The review concluded that there were no issues.																																																	
Logging	<ul style="list-style-type: none">WMC drill logging was reported on log sheets with laboratory assay data typically for each metre.The logging was commentary based with no specific geological codes used for events such as top of fresh rock, base of oxidation etc. However, the logging and descriptions are of sufficient quality that the lithologies drilled can be correlated with later logging carried out by Herald and Troy, who used detailed logging codes.All drill holes were logged however no detailed information is available on the logging methods used by Herald and Troy for the Ladybird drill holes.Detailed logging codes were used, and it is considered that the drill holes were logged with a sufficient level of detail to support a mineral resource estimate.																																																	
Subsampling techniques and sample preparation	<p>Drilling carried out by WMC (1988-1990) and Elmina (1993)</p> <ul style="list-style-type: none">1m samples were collected via a cyclone and riffle splitter unless the sample was too damp or puggy in which case the sample was grabbed from throughout the bag.No composite sampling was undertaken.WMC drill assays were assayed at a WMC laboratory using their own aqua regia style of analysis.Elmina reportedly submitted drill samples for fire assay at Analabs or Ultratrace in Perth. <p>Drilling carried out by Herald (1998-1999)</p> <ul style="list-style-type: none">For samples obtained from RAB drilling, 4m composites were collected using a scoop off each 1m sample heap, with the majority of significant intersections >0.2ppm Au re-sampled at 1m intervals and sent to Analabs Perth for aqua regia AAS gold determination.All dry RC samples were split at 1m intervals using a 3-tier riffle splitter, with the excess collected in plastic bags and left on site. Wet samples were generally grabbed by hand.2m or 4m composite samples were collected from the 1m samples and typically assayed at Analabs Perth for aqua regia AAS.1m resplit samples were submitted to Analabs Perth for Fire Assay.																																																	

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Subsampling techniques and sample preparation	<p>Drilling carried out by Troy (2001 - 2002)</p> <ul style="list-style-type: none"> • RC drilling was used to obtain samples which were passed directly from the in-line cyclone through a rig mounted multi-tier riffle splitter. Samples were collected in 1m intervals into bulk plastic bags and 1m 3kg calico bags (which were retained for later use). • RAB drilling was used to obtain samples, which were collected in 1m intervals and laid on the ground. • AC drilling was used to obtain samples via a cyclone every for each 1m interval, which were laid on the ground. • From the bulk samples (RAB, AC or RC), a 5m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • The composite samples were then sent to the laboratory for analysis. Any composite sample that assayed >0.1 g/t Au was revisited and the 1m samples re-submitted for gold assay. • Troy RAB, AC and RC samples were assayed at Analabs Perth by 50gm aqua regia digest followed by DIBK extraction Flame Atomic Absorption Spectrometry. The technique had a lower detection limit of 0.01ppm Au. • Troy's RAB, AC and RC samples were assayed at Analabs Perth by 50g aqua regia digest followed by DIBK extraction Flame Atomic Absorption Spectrometry.
Quality of assay data and laboratory tests	<p>Assaying and Laboratory Procedures</p> <ul style="list-style-type: none"> • The Fire Assay method is considered to be a total extraction technique. • The Aqua Regia technique is considered to be a partial extraction technique where gold encapsulated in refractory sulphides or some silicate minerals may not be fully dissolved, resulting in partial reporting of gold content. • There is no information available to Alto to indicate that the gold at the Ladybird deposit is refractory gold. <p>Drilling carried out by WMC, Elmina and Herald (1988-1999)</p> <ul style="list-style-type: none"> • There is no available information on the protocols used by WMC, Elmina or Herald. • Laboratory Repeat assays were reported for Elmina and Herald drill assays and reviewed by Alto. • Where Troy drill holes were identified within close proximity to WMC, Elmina and Herald drill holes the drilling assay data showed an acceptable correlation. • There were no anomalous assays reported by WMC, Elmina or Herald that could not be explained. <p>Drilling carried out by Troy (2001 - 2002)</p> <ul style="list-style-type: none"> • For Troy RC drilling, an average of 1 field duplicate, 1 blank and 1 standard was submitted for every 50 samples. • For Troy RAB and AC drilling, field duplicates and standards were used at 1:50 however no blank samples were routinely used in RAB or AC drilling. • Troy engaged Maxwell to undertake periodic audit of the exploration QAQC data. • Troy's reported QA/QC methodology and data from other prospect areas in the Sandstone area at the time Troy was exploring at Ladybird, were reviewed in the absence of field QA/QC data specific to the Ladybird deposit. • Laboratory Repeat assays were reported for Troy drill assays.

Criteria	Commentary																																								
Verification of sampling and assaying	<ul style="list-style-type: none">• Drilling carried out by WMC, Elmina, Herald and Troy Resources NL was compiled by Alto from WA Dept Mines Open File records (WAMEX).• Data was transferred from WAMEX digital files to Alto’s database. The original WAMEX files were generally in excel or text format and were readily imported into Alto’s database. For some of the earlier reports (ie WMC) the data was manually entered into Excel.• All collar, survey and assay data was checked by printing all original data records and checking against a printed database used for Alto’s resource estimate.• The data was also checked using various methods in Datashed, ArcGIS and Micromine. Google Earth satellite imagery was also used to check collar positions where historical evidence was visible in satellite imagery.• Adjustment to assay data has been made where values below the analytical detection limit have been replaced with half the lower detection limit value (0.01 ppm Au).• Troy engaged Maxwell to undertake independent periodic audit of their exploration QAQC data on a monthly basis. <p>Twinned Holes</p> <ul style="list-style-type: none">• Drill holes were identified that occur proximal to each other and were drilled by different companies. Drill hole details are included in the table below. <table><tr><th>Twin</th><th>Company</th><th>Hole ID</th><th>Easting GDA94</th><th>Northing GDA94</th><th>Dip (deg)</th><th>Azimuth (deg)</th><th>Depth (m)</th></tr><tr><td>Twin 1</td><td>Troy</td><td>TRC011</td><td>740835</td><td>6887144</td><td>-60</td><td>045</td><td>15</td></tr><tr><td>Twin 1</td><td>WMC</td><td>MSGC1387</td><td>740831</td><td>6887142</td><td>-60</td><td>045</td><td>60</td></tr><tr><td>Twin 2</td><td>Troy</td><td>TRC010</td><td>740857</td><td>6887117</td><td>-60</td><td>045</td><td>30</td></tr><tr><td>Twin 2</td><td>Herald</td><td>HKR020</td><td>740861</td><td>6887120</td><td>-60</td><td>045</td><td>40</td></tr></table> <ul style="list-style-type: none">• The mineralised intervals and in particular the high-grade intersections showed an acceptable correlation.	Twin	Company	Hole ID	Easting GDA94	Northing GDA94	Dip (deg)	Azimuth (deg)	Depth (m)	Twin 1	Troy	TRC011	740835	6887144	-60	045	15	Twin 1	WMC	MSGC1387	740831	6887142	-60	045	60	Twin 2	Troy	TRC010	740857	6887117	-60	045	30	Twin 2	Herald	HKR020	740861	6887120	-60	045	40
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Location of data points	<ul style="list-style-type: none">• The grid used for the project area is GDA94, Map Grid of Australia 94, Zone 50.• Western Mining reported all RC drill collars in AMG (AGD84). The coordinates (Easting and Northing) were located within the AMG coordinated grid established by independent contract surveyors.• Herald reported that most old and new drill hole collars (iw WMC, Elmina, Herald) had been surveyed by MHR Surveyors Pty Ltd using a differential GPS to an expected accuracy of <0.1m for horizontal and vertical readings, which were relative to the adjacent government survey station “Breen”.• The collar locations for all Troy Resources RAB, AC and RC drill hole collars were reported as being determined by DGPS.• In Troy’s 2002 Mineral Resource Estimate, Troy reported all WMC, Elmina, Herald and Troy drill hole locations in AMG (AGD84).• In November 2018, Alto staff visited the Ladybird deposit to undertake a site inspection and check the easting and northing of historical drill collar locations using a hand-held GPS unit to verify that there had been no issues with local grid conversions or AMG to GDA transformations of the historical collar data.• The collar heights as used in the Alto database for the Resource Estimate were determined by Alto by intersecting the collar location with Shuttle Radar Tomography Mission (SRTM) 30m data.• There were no issues with respect to collar survey locations for Ladybird drill holes.• A compass and clinometer was used by Troy to set up the dip and azimuth of Troy AC and																																								

Criteria	Commentary
	<p>RC drill holes.</p> <ul style="list-style-type: none"> The dip and azimuth of all WMC, Elmina and Herald drill holes were reported however there are no details available on the method used to determine the dip and azimuth. The 3 Elmina RC drill holes were recorded on the original log sheets as vertical. Drill sections produced by Herald show the Elmina RC drill holes were drilled at -60 degrees to 045. Alto reviewed the sections, geological interpretation, assay results, Elmina's discussion about the drilling and concluded that the drill holes were most likely drilled at -60 degrees to 045 and that the original log sheets had not been correctly documented. Alto staff also inspected the collar of Elmina RC drill hole LBRC002 and confirmed the dip and azimuth to be -60 degrees to 045 degrees. Alto staff also checked the dip and azimuth of additional drill collars in the field where possible.
Data spacing and distribution	<ul style="list-style-type: none"> The drill hole orientation is typically -60 degrees dip to 045 degrees. RC drill holes are generally on 20-70m spaced sections along a strike length of approximately 300m and are spaced at 10-20m intervals on section. Maximum drill depth is 111m (MSGC1388) with an average drill depth of 56m.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Geological structures have been interpreted from drilling and surface geological mapping. The prospect area comprises mafic and ultramafic rocks intercalated with thin sedimentary marker beds of chert and banded iron formation (BIF). The stratigraphy strikes NW-SE and has sub-vertical dips. Mineralisation at the Ladybird deposit occurs within a sub-vertical dipping BIF/chert unit that has a strike of approximately 300 degrees. The BIF/chert unit is located at or near the contact between a mafic unit (SW side) and an ultramafic unit (NE side). Drill orientation was typically -60° to 045° which was designed to intersect mineralisation perpendicular to the strike of the BIF/chert unit. Sample bias is not considered to be an issue due to the well-defined geological structures and appropriate orientation of drilling.
Sample security	<ul style="list-style-type: none"> No sample security details are available for WMC, Elmina or Herald drill samples. Troy reported that their drill samples were collected in a labelled and tied calico bag. Up to six calico bags are then placed in a larger polyweave bag that is labelled with the laboratory address and sender details and tied with wire. The polyweave bags were picked up by a courier firm who counted the number of polyweave bags before taking them to the Mt Magnet depot. The samples were picked up by the courier's road train and transported to Perth. Upon receipt of the samples the laboratory checked the sample IDs and total number of samples and notified Troy of any differences from the sample submission form.
Audits and reviews	<ul style="list-style-type: none"> Alto has reviewed and compiled the technical data for Ladybird internally. No independent audit had been previously carried out. Troy engaged Maxwell to undertake periodic independent audit of Troy's exploration QAQC data. A Mineral Resource Estimate has previously been carried out at Ladybird by; <ul style="list-style-type: none"> ➤ WMC (1992) ➤ Elmina (1994) ➤ Herald (1999) ➤ Troy (2002)

SECTION 2 - Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Mineral tenement and land tenure	<ul style="list-style-type: none"> Ladybird is located on Exploration Licence 57/1031, granted on 20 September 2016 to Sandstone Exploration Pty Ltd, a wholly owned subsidiary of ASX listed AME. E57/1031 is currently in good standing with the Department of Mines, Industry Regulation and Safety. E57/1031 is part of AME's Sandstone Gold Project. The total project area covers approximately 800 km² with five exploration licences all granted on 20 September 2016 and two prospecting licences granted on 11 June 2016. The following royalties apply: <ul style="list-style-type: none"> ➤ 2% of the Gross Revenue is payable to a third party ➤ 2.5% payable to the State Government There are no registered heritage sites proximal to the Ladybird deposit. There are no current known impediments to obtaining a licence to operate in the area.
Exploration done by other parties	<ul style="list-style-type: none"> Historically gold was first discovered in the Sandstone area in the 1890's. In 1911, small-scale mining activity was undertaken at the Lady Mary prospect located along strike approximately 1km northwest of Ladybird. In the 1970s, Seeko Nickel carried out nickel exploration within the general area. WMC commenced gold exploration commenced in 1979 and carried out surface geochemistry, geological mapping, RC drilling and resource estimation. Elmina and Herald completed RAB and RC drilling and resource estimation in the 1990's. Troy completed RAB, AC and RC drilling and resource estimation in the early 2000's.
Geology	<ul style="list-style-type: none"> The prospect area comprises mafic (Metabasalt) and ultramafics intercalated with thin sedimentary marker beds of chert and banded iron formation (BIF). The stratigraphy strikes NW-SE and has sub-vertical dips. The greenstone sequence in the Ladybird area is weathered and lateritised to the extent that only the quartz-magnetite BIF/chert horizons form prominent outcrops. The mafic and ultramafic units usually occur as low-lying areas or low hills. Mineralisation at the Ladybird deposit occurs within a sub-vertical dipping BIF/chert unit that has a strike of approximately 300 degrees. The BIF/chert unit is located at or near the contact between a mafic unit (SW side) and an ultramafic unit (NE side). A parallel BIF/chert unit occurs approximately 10 to 15m away to the south-west. Metabasalt generally separates the two chert units. Drilling has indicated that the south-west chert unit has limited mineralisation. Metabasalts to the SW of the main chert unit are fine grained and massive. Thin sections produced by WMC revealed that the rocks are composed dominantly of acicular/plumose plagioclase and amphibole (with possible relic pyroxenes). The ultramafic rocks to the NE of the main chert unit are brown, silicified, foliated amphibole-chlorite schists however differentiates include possible olivine cumulate textured rocks. Mineralisation is associated with quartz veining, however there appears to be no obvious cross-cutting structural control on the deposit. The mineralised BIF at the Ladybird deposit occurs discontinuously over 1.5km. Depth of weathering is interpreted from drilling data to be approximately 45-65m. The water table is reported as between 9m and 19m below surface. In general, the Ladybird deposit is sub-vertical, flat (ie no plunge) and has a NW strike.

Criteria	Commentary																																																	
Drill hole information	<ul style="list-style-type: none">A summary of all drilling at the Ladybird deposit is included in the table below.A summary of all significant intercepts is included in a table accompanying this JORC Table.Troy AC drill holes were orientated at -60° dip to 205 degrees.All other drill holes were orientated at -60° dip to 045 degrees.Drill assays from RAB drill samples are not being used in the Alto Mineral Resource Estimation. <table><tr><th></th><th colspan="2">RAB</th><th colspan="2">AIR-CORE</th><th colspan="2">RC</th></tr><tr><th></th><th>Holes</th><th>Metres</th><th>Holes</th><th>Metres</th><th>Holes</th><th>Metres</th></tr><tr><td>WMC (1988-1990)</td><td></td><td></td><td></td><td></td><td>38</td><td>2,726</td></tr><tr><td>Elmina (1993)</td><td></td><td></td><td></td><td></td><td>3</td><td>300</td></tr><tr><td>Herald (1998-1999)</td><td>35</td><td>1,070</td><td></td><td></td><td>16</td><td>658</td></tr><tr><td>Troy (2001-2002)</td><td>6</td><td>178</td><td>3</td><td>219</td><td>14</td><td>443</td></tr><tr><td>Total</td><td>41</td><td>1,248</td><td>3</td><td>219</td><td>71</td><td>4,127</td></tr></table>		RAB		AIR-CORE		RC			Holes	Metres	Holes	Metres	Holes	Metres	WMC (1988-1990)					38	2,726	Elmina (1993)					3	300	Herald (1998-1999)	35	1,070			16	658	Troy (2001-2002)	6	178	3	219	14	443	Total	41	1,248	3	219	71	4,127
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Data aggregation methods	<ul style="list-style-type: none">A summary of significant results is included in the table below.Where AME has reported WMC, Elmina, Herald or Troy grades, a 1.0g/t cut-off grade has been applied.No metal equivalents have been used or reported.The reported grades are uncut.																																																	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none">Mineralisation at the Ladybird deposit occurs within a sub-vertical dipping BIF/chert unit that has a strike of approximately 300 degrees.Drill orientation was typically -60° to 045° which was designed to intersect mineralisation perpendicular to the strike of the BIF/chert unit.The mineralisation is steeply dipping and drill intercepts are reported as down hole widths not true widths.																																																	
Diagrams	<ul style="list-style-type: none">Diagrams including drill hole location plan and representative sections are included to accompany this JORC table.																																																	
Balanced reporting	<ul style="list-style-type: none">All significant drill assay results (+1.0g/t Au) have been included in a table attached to this report.																																																	
Other substantive exploration data	<ul style="list-style-type: none">There is no other material information available for the Resource area at this stage.																																																	
Further work	<ul style="list-style-type: none">Alto Metals is currently preparing a JORC 2012 Mineral Resource Estimate for Ladybird. Further drilling may be carried out in future to provide appropriate bulk density measurements and samples for metallurgical testwork. Geotechnical work for pit slope analysis may also be undertaken. Further exploration drilling may also be carried out.																																																	