ASX and MEDIA RELEASE

23 September 2019

ALKANE RESOURCES LTD
ABN 35 000 689 216

Roswell and San Antonio Resource Definition Drilling Update

- **A 60,000 metre resource definition drilling program on the San Antonio and Roswell prospects began in mid-June. Assay results have now been received for the second 5,000 metres.**

- **Latest significant intercepts from the San Antonio prospect include:**

RWRC097	**42 metres grading 2.61g/t Au from 42 metres;**
incl	**12 metres grading 6.70g/t Au from 48 metres.**
RWRC101	**24 metres grading 6.30g/t Au from 147 metres;**
incl	**12 metres grading 9.92g/t Au from 147 metres.**
RWRC103	**9 metres grading 2.33g/t Au from 24 metres;**
and	**44 metres grading 2.76g/t Au from 45 metres;**
incl	**3 metres grading 16.6g/t Au from 57 metres.**
RWD005	**4 metres grading 14.6g/t Au from 252 metres;**
incl	**2 metres grading 26.1g/t Au from 254 metres.**

- **Latest significant intercepts from the Roswell prospect include:**

RWRC090	**45 metres grading 3.66g/t Au from 195 metres;**
incl	**9 metres grading 9.64g/t Au from 220 metres.**
RWRC109	**24 metres grading 5.33g/t Au from 186 metres;**
incl	**3 metres grading 16.0g/t Au from 188 metres;**
also	**3 metres grading 21.8g/t Au from 194 metres.**

- **This resource definition drilling is part of an extensive regional exploration program focused on the immediate mine area to the south of Tomingley with the aim of providing additional ore feed, either at surface or underground, in the future to Tomingley Gold Operations (TGO).**

CONTACT : **NIC EARNER, MANAGING DIRECTOR, ALKANE RESOURCES LTD, TEL +61 8 9227 5677**
INVESTORS : NATALIE CHAPMAN, CORPORATE COMMUNICATIONS MANAGER, TEL +61 418 642 556
MEDIA : HILL+KNOWLTON STRATEGIES: MARCHA VAN DEN HEUVEL, TEL +61 2 9286 1226 OR +61 468 960 457

Ground Floor, 89 Burswood Road, Burswood WA 6100, AUSTRALIA (PO Box 4384, Victoria Park WA 6979, AUSTRALIA)
Telephone: +61 8 9227 5677 Facsimile: +61 8 9227 8178 www.alkane.com.au mail@alkane.com.au

Tomingley Gold Project

Alkane Resources Ltd 100%

The Tomingley Gold Project (TGP) covers an area of approximately 440km^2 stretching 60km north-south along the Newell Highway from Tomingley in the north, through Peak Hill and almost to Parkes in the south. The TGP contains Alkane's currently operating Tomingley Gold Operations (TGO), an open pit mine with a 1Mtpa processing facility that is transitioning to underground through 2019.

Over the last year Alkane has conducted an extensive regional exploration program with the objective of defining additional resources that have the potential to be mined either via open pit or underground operations and fed to TGO. The program has yielded broad, shallow high grade intercepts that demonstrate potential for material project life extension and show that a return to open pit mining and / or underground extension is possible with appropriate resource confirmation, landholder agreement and regulatory approvals.

San Antonio - Roswell Prospect Resource Definition Drilling

Significant broad high grade results were reported from the completion of a 17,519 metre RC and diamond core drilling program for the Roswell and San Antonio prospects (ASX announcements 1 February 2019, 29 March 2019 and 12 June 2019) 3km to 4km south of TGO as well as the El Paso prospect (ASX announcement 17 May 2019). A conceptual Exploration Target was subsequently reported (ASX announcement 9 July 2019).

A 60,000 metre resource definition drilling program was initiated in June 2019 at the Roswell and San Antonio prospects. The first round of results for the initial 5,000 metres were announced 12 August 2019. Assay results have now been received for the next 5,000 metres of drilling.

The drilling is being undertaken:

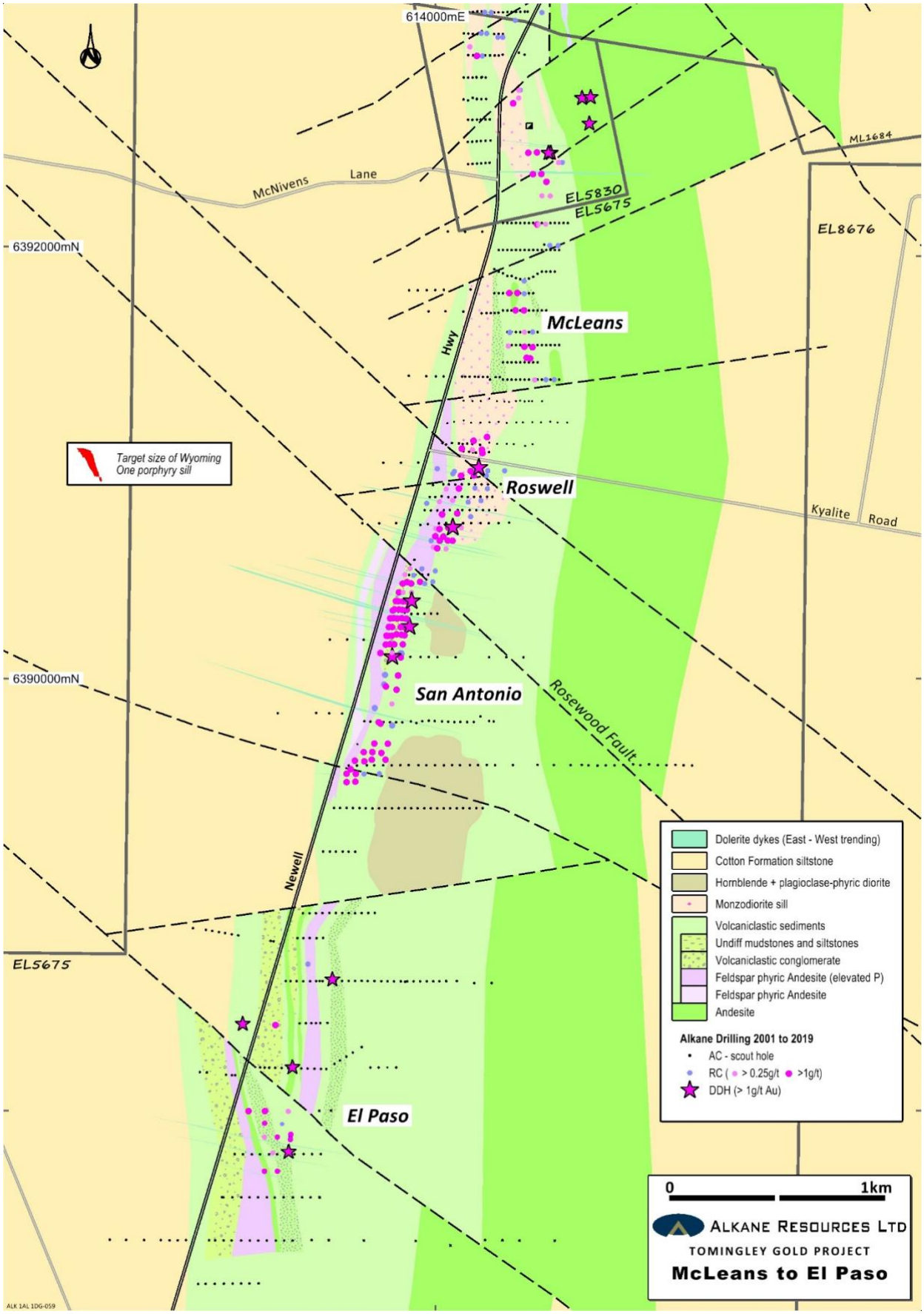
- to seek to define an initial inferred resource at the Roswell and San Antonio prospects with a nominal 40 metre by 40 metre drill hole spacing to a 200 metre vertical depth;
- is part of a 60,000 metres drilling program comprising approximately 10,000 metres of diamond core drilling and 50,000 metres of RC drilling.

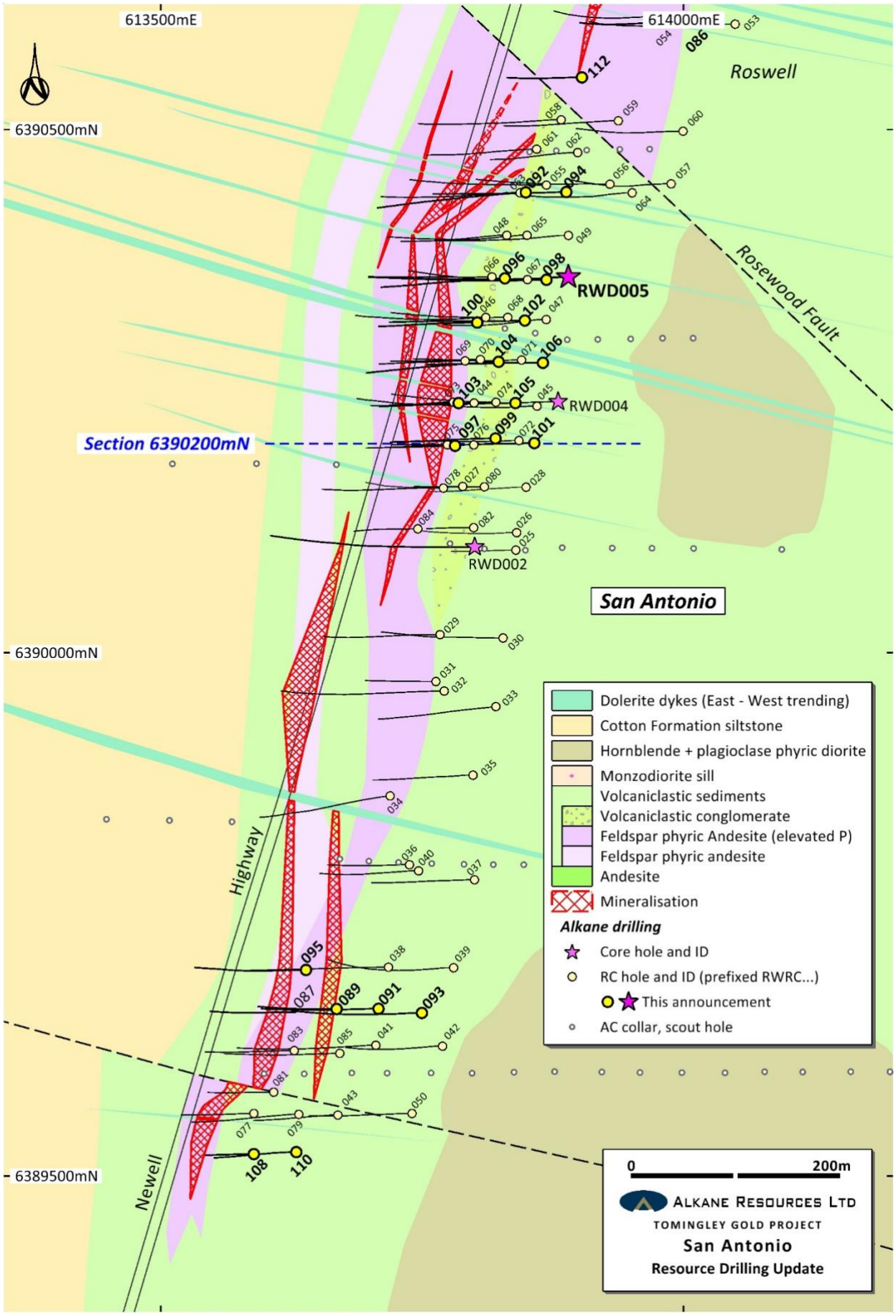
For the drilling being reported:

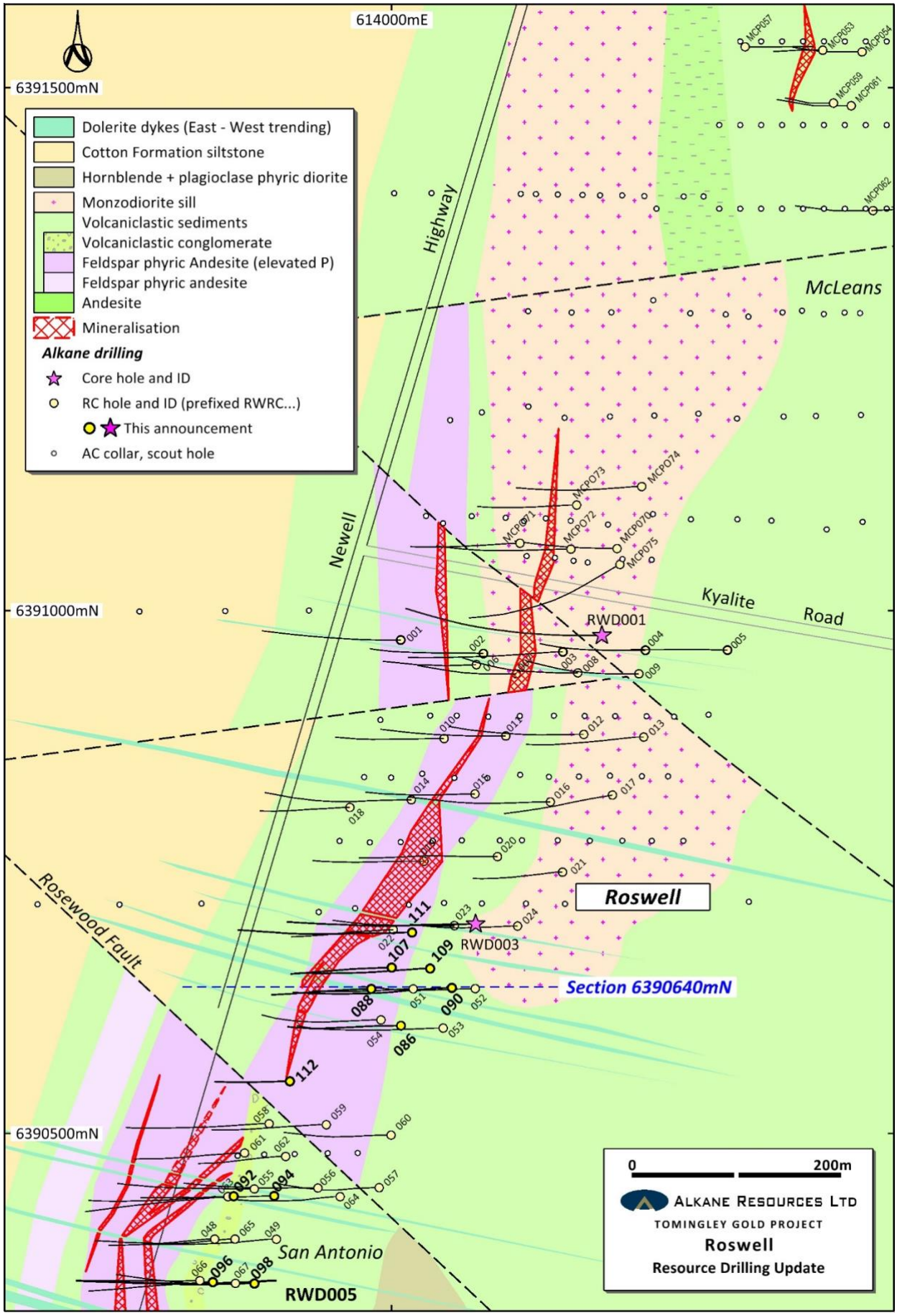
- assay results were received for the second 5,000 metres targeting the San Antonio and Roswell prospects;
- 3 metre composite samples were assayed however, where strong mineralisation is observed by the site geologist it was directly assayed at 1 metre intervals. Assaying of 1 metre re-split samples of 3 metre composites is underway;
- these drilling results comprise of 27 RC holes (5,279m) and 1 diamond core drill hole (392.2m), focused on the Roswell prospect and San Antonio prospect and its southern extensions; and
- representative sections for Roswell N390640 (RWRC051, 052, 068 and 090) and San Antonio N6390200 (RWRC072, 075, 076, 097, 099, 101) are included on pages 6 and 7.

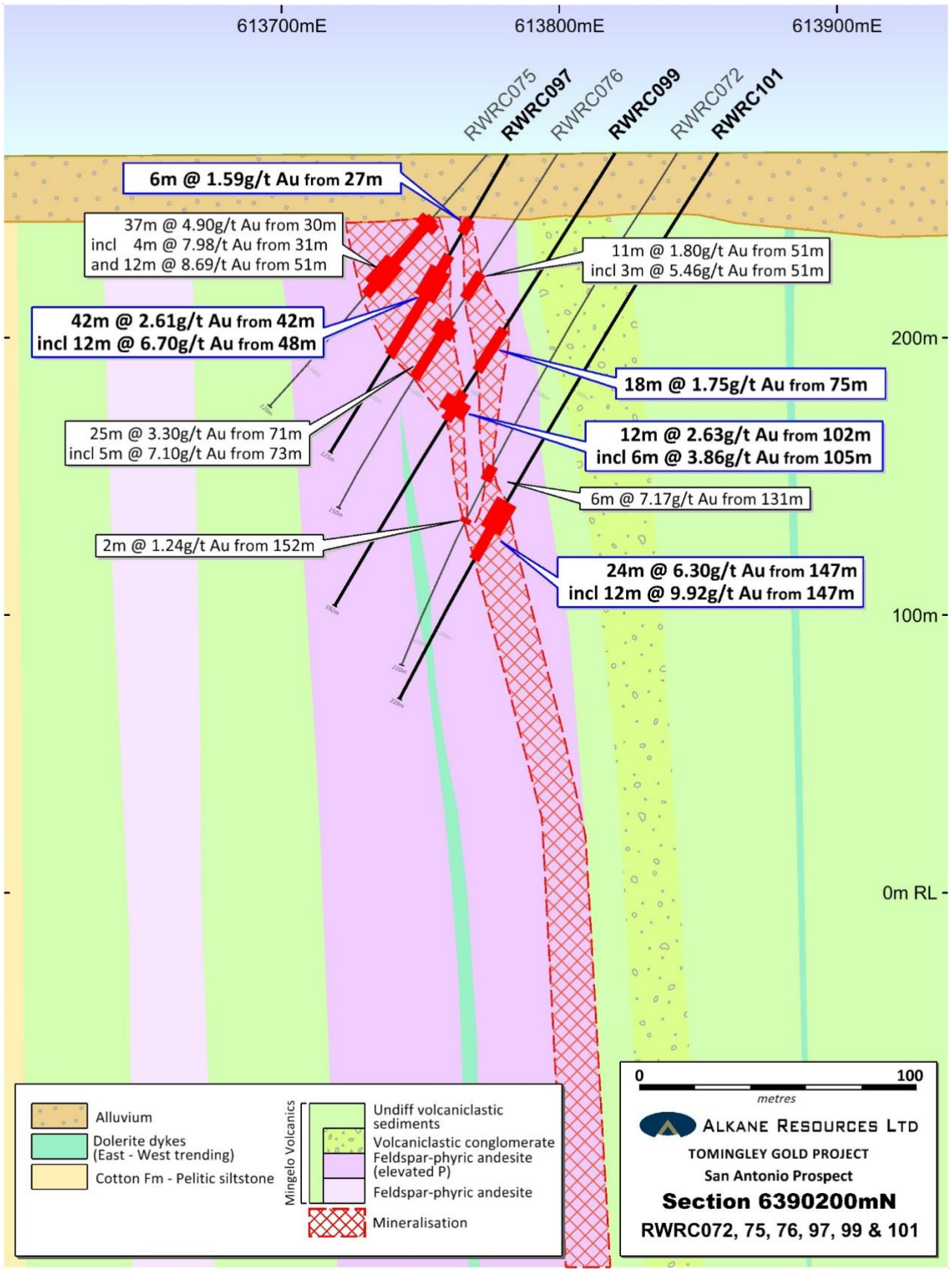
The San Antonio prospect remains open to the south but difficult conditions are causing early abandonment of drilling. Different drilling techniques will be trialled to successfully test this prospective area.

All assay results of >0.5g/t Au are summarised in the Table below. The exploration results detailed below have been prepared and reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.


614000mE
6392000mN
6390000mN
McNivens
Lane
ML1684
EL5830
EL5675
EL8676
McLeans
Hwy
Roswell
Kyalite
Road
San Antonio
Rosewood Fault
Newell
El Paso
EL5675
Target size of Wyoming One porphyry sill
Dolerite dykes (East - West trending)
Cotton Formation siltstone
Hornblende + plagioclase-phyric diorite
Monzodiorite sill
Volcaniclastic sediments
Undiff mudstones and siltstones
Volcaniclastic conglomerate
Feldspar phyric Andesite (elevated P)
Feldspar phyric Andesite
Andesite
Alkane Drilling 2001 to 2019
AC - scout hole
RC (> 0.25g/t >1g/t)
DDH (> 1g/t Au)
0
1km
ALKANE RESOURCES LTD
TOMINGLEY GOLD PROJECT
McLeans to El Paso
ALK 1AL 1DG-059


613500mE
614000mE
6390500mN
6390000mN
6389500mN
Roswell
Rosewood Fault
Highway
Newell
Section 6390200mN
RWD005
RWD004
RWD002
San Antonio
Dolerite dykes (East - West trending)
Cotton Formation siltstone
Hornblende + plagioclase phyric diorite
Monzodiorite sill
Volcaniclastic sediments
Volcaniclastic conglomerate
Feldspar phyric Andesite (elevated P)
Feldspar phyric andesite
Andesite
Mineralisation
Alkane drilling
Core hole and ID
RC hole and ID (prefixed RWRC...)
This announcement
AC collar, scout hole
0
200m
ALKANE RESOURCES LTD
TOMINGLEY GOLD PROJECT
San Antonio
Resource Drilling Update


614000mE
6391500mN
6391000mN
6390500mN
Dolerite dykes (East - West trending)
Cotton Formation siltstone
Hornblende + plagioclase phyric diorite
Monzodiorite sill
Volcaniclastic sediments
Volcaniclastic conglomerate
Feldspar phyric Andesite (elevated P)
Feldspar phyric andesite
Andesite
Mineralisation
Alkane drilling
Core hole and ID
RC hole and ID (prefixed RWRC...)
This announcement
AC collar, scout hole
Highway
Newell
McLeans
Kyalite Road
Rosewood Fault
San Antonio
Roswell
Section 6390640mN
RWD001
RWD003
RWD005
MCP057
MCP053
MCP054
MCP059
MCP061
MCP062
MCP073
MCP074
MCP071
MCP072
MCP070
MCP075
0
200m
ALKANE RESOURCES LTD
TOMINGLEY GOLD PROJECT
Roswell
Resource Drilling Update


613700mE
613800mE
613900mE
RWRC075
RWRC097
RWRC076
RWRC099
RWRC072
RWRC101
6m @ 1.59g/t Au from 27m
37m @ 4.90g/t Au from 30m
incl 4m @ 7.98/t Au from 31m
and 12m @ 8.69/t Au from 51m
11m @ 1.80g/t Au from 51m
incl 3m @ 5.46g/t Au from 51m
42m @ 2.61g/t Au from 42m
incl 12m @ 6.70g/t Au from 48m
200m
18m @ 1.75g/t Au from 75m
25m @ 3.30g/t Au from 71m
incl 5m @ 7.10g/t Au from 73m
12m @ 2.63g/t Au from 102m
incl 6m @ 3.86g/t Au from 105m
6m @ 7.17g/t Au from 131m
2m @ 1.24g/t Au from 152m
24m @ 6.30g/t Au from 147m
incl 12m @ 9.92g/t Au from 147m
100m
0m RL
Alluvium
Dolerite dykes
(East - West trending)
Cotton Fm - Pelitic siltstone
Mingelo Volcanics
Undiff volcaniclastic sediments
Volcaniclastic conglomerate
Feldspar-phyric andesite (elevated P)
Feldspar-phyric andesite
Mineralisation
0
100
metres
ALKANE RESOURCES LTD
TOMINGLEY GOLD PROJECT
San Antonio Prospect
Section 6390200mN
RWRC072, 75, 76, 97, 99 & 101

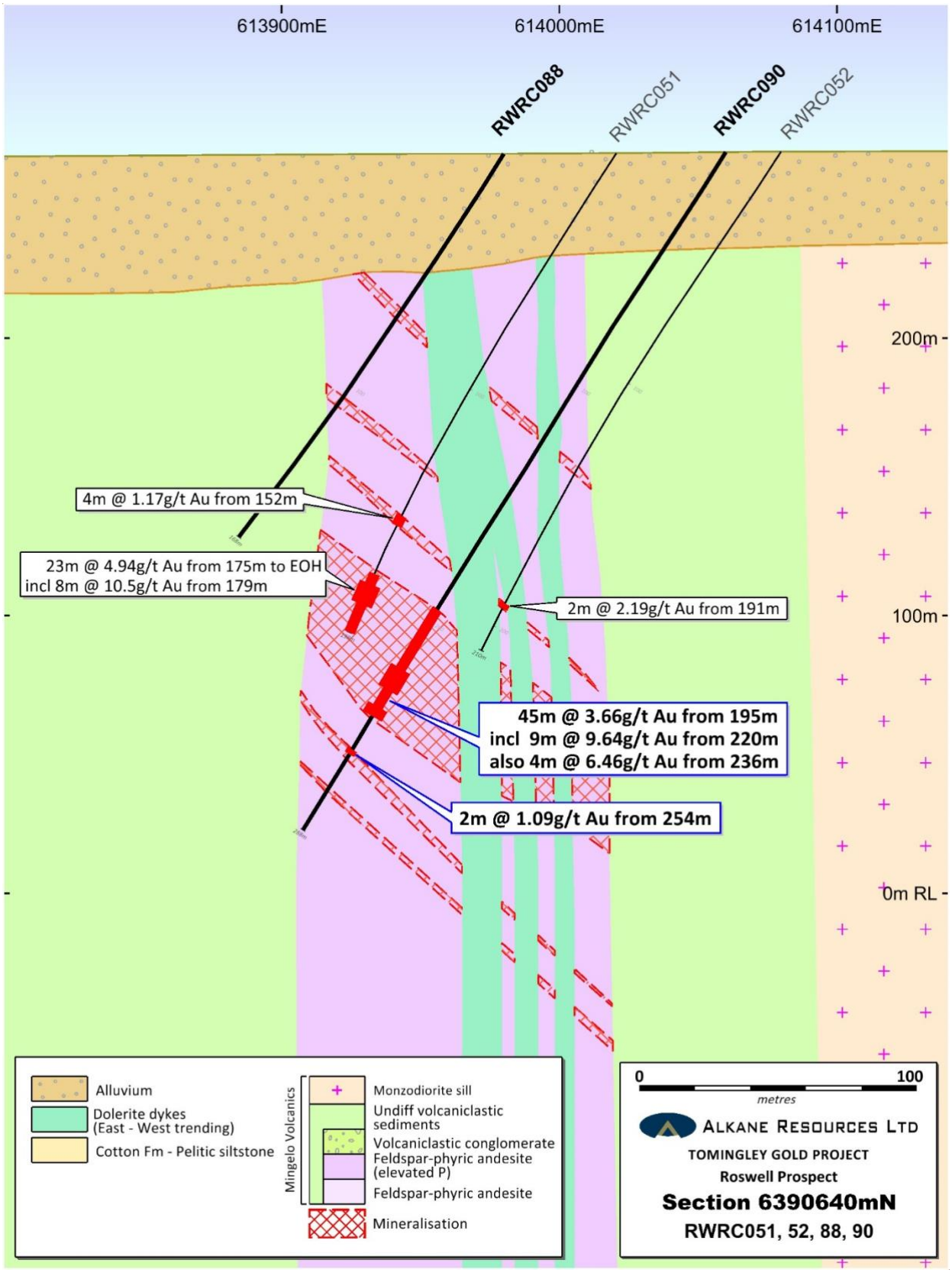

613900mE
614000mE
614100mE
RWRC088
RWRC051
RWRC090
RWRC052
200m
100m
0m RL
4m @ 1.17g/t Au from 152m
23m @ 4.94g/t Au from 175m to EOH
incl 8m @ 10.5g/t Au from 179m
2m @ 2.19g/t Au from 191m
45m @ 3.66g/t Au from 195m
incl 9m @ 9.64g/t Au from 220m
also 4m @ 6.46g/t Au from 236m
2m @ 1.09g/t Au from 254m
Alluvium
Dolerite dykes
(East - West trending)
Cotton Fm - Pelitic siltstone
Mingelo Volcanics
Monzodiorite sill
Undiff volcaniclastic sediments
Volcaniclastic conglomerate
Feldspar-phyric andesite (elevated P)
Feldspar-phyric andesite
Mineralisation
0
100
metres
ALKANE RESOURCES LTD
TOMINGLEY GOLD PROJECT
Roswell Prospect
Section 6390640mN
RWRC051, 52, 88, 90

Table 1 - TOMINGLEY GOLD PROJECT RC AND DIAMOND DRILLING – September 2019 (>0.5g/t Au)											
Hole ID	**Easting (MGA)**	**Northing (MGA)**	**RL (m)**	**Dip**	**Azimuth (Grid)**	**Total Depth**	**Interval From (m)**	**Interval To (m)**	**Intercept (m)**	**Au (g/t)**	**Prospect**
RWD005	613890	6390359	267	-60	270	392.2	252	256	4	14.6	
incl							254	256	2	26.1	
and							259	260	1	0.88	
and							262	273	11	0.97	
incl							269	270	1	3.84	
and							367	369	2	1.30	
RWRC087	613629	6389657	266	-58	270	150	No significant results				
and							87	89	2	1.02	
and							135	139	4	2.03	
incl							137	138	1	5.13	
and							158	162	4	1.38	
and							166	167	1	1.27	
and							202	204	2	0.56	
RWRC089	613668	6389660	266	-58	270	144	37**	38	1	17.1	
and							45	47	2	0.60	
and							50	60	10	2.44	
incl							53	56	3	4.60	
and							87	89	2	1.82	
and							92	96	4	2.80	
incl							92	93	1	7.36	
RWRC091	613708	6389660	266	-58	270	216	72	78	6	1.60	
and							138	147	9	2.14	
incl							144	147	3	4.06	**San Antonio**
and							153	162	9	2.51	
RWRC092	613849	6390440	266	-57	270	234	123	135	12	0.59	
and							198	204	6	2.34	
RWRC093	613749	6389656	266	-58	270	246	237	246	9	0.87	
RWRC094	613888	6390440	267	-58	270	234	87	93	6	1.19	
and							135	138	3	0.82	
and							171	201	30	0.72	
incl							183	186	9	2.26	
and							210	213	3	0.83	
RWRC095	613639	6389697	266	-58	270	204	No significant results				
RWRC096	613829	6390358	266	-58	270	204	27	33	6	0.81	
and							51	57	6	0.55	
and							147	162	15	0.92	
RWRC097	613781	6390198	266	-60	270	125*	27	33	6	1.59	
and							42	84	42	2.61	
incl							48	60	12	6.70	
RWRC098	613869	6390356	267	-58	270	222	207	210	3	4.32	
RWRC099	613820	6390205	267	-58	270	192	75	93	18	1.75	
and							102	114	12	2.63	
incl							105	111	6	3.86	
RWRC100	613803	6390316	266	-50	270	144	75	84	9	6.19	
incl							78	81	3	11.9	

Table 1 - TOMINGLEY GOLD PROJECT RC AND DIAMOND DRILLING – September 2019 (>0.5g/t Au)											
Hole ID	**Easting (MGA)**	**Northing (MGA)**	**RL (m)**	**Dip**	**Azimuth (Grid)**	**Total Depth**	**Interval From (m)**	**Interval To (m)**	**Intercept (m)**	**Au (g/t)**	**Prospect**
and							93	120	27	1.32	
incl							111	114	3	3.60	
RWRC101	613857	6390200	267	-58	270	228	147	171	24	6.30	
incl							147	159	12	9.92	
RWRC102	613848	6390318	267	-58	270	252	135	138	3	1.98	
and							204	219	15	0.53	
and							222	238	16	2.58	
incl							225	228	3	7.02	
and							241	244	3	0.87	
RWRC103	613785	6390239	266	-57	270	138	24	33	9	2.33	
and							45	89	44	2.76	
incl							57	60	3	16.6	
and							94	98	4	1.46	
incl							96	97	1	4.35	
and							103	104	1	2.79	**San Antonio**
and							114	117	3	1.47	
RWRC104	613823	6390278	267	-57	270	210	66	69	3	0.59	
and							78	81	3	2.90	
and							84	86	2	2.19	
and							101	115	14	2.09	
incl							102	104	2	6.23	
RWRC105	613839	6390239	267	-58	270	210	84	87	3	0.70	
and							96	99	3	1.26	
and							102	115	13	1.85	
incl							105	107	2	4.87	
and							121	132	11	1.50	
and							139	140	1	0.72	
RWRC106	613865	6390277	267	-58	270	198	126	129	3	5.74	
RWRC108	613589	6389521	265	-58	270	87*	84	87*	3	1.13	
RWRC110	613630	6389523	266	-58	270	141*	69	72	3	0.79	
and							135	141*	6	1.31	
RWRC086	614009	6390603	266	-58	270	210	63**	64	1	0.72	
and							87	89	2	1.02	
and							135	139	4	2.03	
incl							137	138	1	5.13	
and							158	162	4	1.38	
and							166	167	1	1.27	
and							202	204	2	0.56	
RWRC088	613980	6390638	266	-58	270	168	70	71	1	0.87	**Roswell**
and							106	107	1	0.73	
RWRC090	614058	6390639	267	-58	270	288	140	141	1	0.56	
and							195	240	45	3.66	
incl							196	197	1	8.01	
also							220	229	9	9.64	
also							236	240	4	6.46	
and							246	248	2	0.55	

Table 1 - TOMINGLEY GOLD PROJECT RC AND DIAMOND DRILLING – September 2019 (>0.5g/t Au)											
Hole ID	**Easting (MGA)**	**Northing (MGA)**	**RL (m)**	**Dip**	**Azimuth (Grid)**	**Total Depth**	**Interval From (m)**	**Interval To (m)**	**Intercept (m)**	**Au (g/t)**	**Prospect**
and							254	256	2	1.09	
and							272	274	2	0.70	
RWRC107	614000	6390659	266	-58	270	174	66	72	6	0.69	
and							108	115	7	1.12	
and							124	138	14	1.90	
incl							128	132	4	3.68	
RWRC109	614037	6390658	267	-58	270	234	57	66	9	0.62	
and							93	96	3	0.57	
and							121	122	1	0.82	**Roswell**
and							154	162	8	0.98	
and							186	210	24	5.33	
incl							188	191	3	16.0	
also							194	197	3	21.8	
and							223	227	5	1.45	
RWRC111	614020	6390692	267	-58	270	300	279	285	6	1.25	
RWRC112	613903	6390550	267	-58	270	126	No significant results				

* hole abandoned early. ** From base of alluvium. True widths are approximately 60%.

Competent Person

Unless otherwise advised above, the information in this report that relates to exploration results being reported for the first time is based on information compiled by Mr David Meates MAIG, (Alkane Senior Exploration Geologist) who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Meates has provided his prior written consent to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to previously reported exploration results and exploration targets is extracted from the Company's ASX announcements noted in the text of the announcement and are available to view on the Company's website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcements and that the form and context in which the Competent Person's findings are presented have not been materially altered.

Disclaimer

This report contains certain forward looking statements and forecasts, including possible or assumed reserves and resources, production levels and rates, costs, prices, future performance or potential growth of Alkane Resources Ltd, industry growth or other trend projections. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of Alkane Resources Ltd. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. Nothing in this report should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference in this document have been, and will be, prepared in accordance with the JORC classification system of the Australasian Institute of Mining, and Metallurgy and Australian Institute of Geoscientists.

ABOUT ALKANE - www.alkane.com.au - ASX: ALK and OTCQX: ANLKY

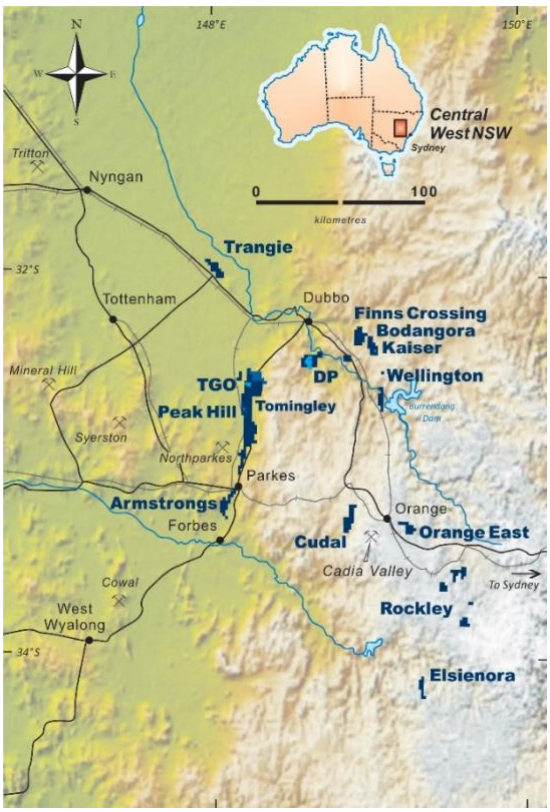
Alkane is a gold production company with a multi-commodity exploration and development portfolio. Alkane's projects are predominantly in the Central West region of NSW, but extend throughout Australia.

Alkane's gold production is from the Tomingley Gold Operations (TGO) which has been operating since early 2014. Alkane has investments in other gold exploration and development companies.

Alkane's most advanced gold exploration projects are in the 100% Alkane owned tenement area between TGO and Peak Hill and have the potential for sourcing additional ore for TGO.

Alkane has other 100% owned exploration tenements in Central Western NSW prospective for gold and copper.

Alkane's largest non-gold project is the Dubbo Project (DP), a large in-ground resource of zirconium, hafnium, niobium, yttrium and rare earth elements. As it is an advanced polymetallic project outside China, it is a potential strategic and independent supply of critical minerals for a range of sustainable technologies and future industries. It has a potential mine life of 75+ years. The DP is development ready, subject to financing, with the mineral deposit and surrounding land acquired and all major State and Federal approvals in place.



The following tables are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of exploration results.

JORC Code, 2012 Edition – Table 1 TOMINGLEY GOLD PROJECT

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	RC samples are collected at one metre intervals via a cyclone on the rig. The cyclone is cleaned regularly to minimise any contamination. Half core samples are collected at generally one metre intervals.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	Drilling, sampling and QAQC procedures are carried out to industry standards.
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	RC Drilling – the total sample (~20-30kg) is delivered via cyclone into a large plastic bag which is retained for future use if required. A sub-sample of approximately 1kg is spear sampled from each plastic bag and composited to make a 3 metres sample interval. If strong mineralisation is observed by the site geologist this is sampled as a final 1m interval instead. The 1m intervals forming composite samples assaying ≥0.20 g/t Au or with high As are resplit using a cone splitter on the rig into a separate calico at the time of drilling and re-submitted to the laboratory for re-assay. Core is cut in half using an Almonte diamond cutting saw. All samples sent to laboratory are crushed and/or pulverised to produce a ~100g pulp for the assay process. Gold was determined by fire assay fusion of a 50g charge with an AAS analytical finish. A multi-element suite was determined using an aqua regia or multi-acid digest with an AES, MS analytical finish.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Reverse circulation (RC) drilling using 110mm rods 144mm face sampling hammer. Core drilling completed as an HQ tail on an air-core precollar. Core orientated using a Reflex tool
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	Sample quality is assessed by the sampler by visual approximation of sample recovery and if the sample is dry, damp or wet.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	A high capacity RC rig was used to enable dry samples collected. Drill cyclone and sample buckets are cleaned between rod changes and after each hole to minimise cross-hole contamination. Core drilling completed using HQ triple tube to maximise core recovery
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	There is no known relationship between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Each one metre interval is geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage).
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	All logging is qualitative with visual estimates of the various characteristics.

Criteria	JORC Code explanation	Commentary
		A representative sample of each one metre interval is retained in chip trays for future reference. Half core samples are retained in trays for future reference.
	• *The total length and percentage of the relevant intersections logged.*	All samples have been geologically logged by qualified geologists.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	Core is cut with half core submitted to the laboratory.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	Each one metre interval is spear sampled with 3m composite samples collected in a calico sample bag and forwarded to the laboratory. Where strong mineralisation is observed by the site geologist, instead of compositing, this is individually sampled from the cone splitter on the RC rig as a 1 metre interval into a calico bag and forwarded to the laboratory. The 1m intervals forming composite samples assaying ≥0.20 g/t Au or with high As are resplit using a cone splitter on the rig during the time of drilling and re-submitted to the laboratory for re-assay. Laboratory Preparation – the entire sample (~3kg) is dried and pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples are discarded. A pulp sample (±100g) is stored for future reference.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	ALK sampling techniques are of industry standard and considered adequate.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	Field duplicate samples collected at every stage of sampling to control procedures - ~1:50 alternating with CRM.
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	Duplicate samples are collected for both composite intervals and re-split intervals. Duplicates generally show excellent repeatability.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Sample sizes are industry standard and considered appropriate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Gold is determined using a 50g charge fused at approximately 1100°C with alkaline fluxes, including lead oxide. The resultant prill is dissolved in aqua regia with gold determined by flame AAS. For other geochemical elements, samples are digested by aqua regia or multi-acid with each element determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. These additional elements are generally only used for geological interpretation purposes, are not of economic significance and are not routinely reported.
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	No down hole geophysical logging or hand held XRF analyses undertaken.
	• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	Commercially prepared Certified Reference Materials (CRM) are inserted at 1 in 50 samples. CRM's are not identifiable to the laboratory. Field duplicate samples are inserted at 1 in 50 samples (alternate to CRM's). Laboratory QAQC sampling includes insertion of CRM samples, internal duplicates and screen tests. This data is reported for each sample submission. Failed standards result in re-assaying of portions of the affected sample batches.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	Drill data is compiled and collated, and reviewed by senior staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary.
	• *The use of twinned holes.*	No twinned holes have been drilled at this stage of exploration.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	All drill hole logging and sampling data is entered directly into field data entry spreadsheets for transfer and storage in an industry standard access database with verification protocols in place. All primary assay data is received from the laboratory as electronic data files which are imported into sampling database with verification procedures in place. QAQC analysis is undertaken for each laboratory report. Digital copies of Certificates of Analysis (COA) are stored in a central database with regular (daily) backup. Original survey data is stored on site. Data is also verified on import into various software packages.
	• *Discuss any adjustment to assay data.*	No assay data was adjusted.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Drill holes are laid out using hand held GPS (accuracy ± 2m) then DGPS surveyed accurately (± 0.1m) on completion.
	• *Specification of the grid system used.*	MGA (Zone 55), GDA94
	• *Quality and adequacy of topographic control.*	As noted above, all drill holes DGPS surveyed accurately (± 0.1m) on completion.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	The exploration results are part of a 40 metre by 40 metre drill hole grid pattern.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	No resource estimations have been undertaken yet.
	• *Whether sample compositing has been applied.*	3m sample composites collected as described above.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Early phase drilling at San Antonio prospect, however core holes RWD002 and RWD004 measured mineralised structures dipping 70° - 85° to the east. Drill holes are collared 58° to the west which is considered practical for a drill rig and approximately 60% to intersecting the mineralised structures. Early phase drilling at Roswell prospect, however core holes RWD001 and RWD003 measured mineralised veins dipping 53° to the east. Drill holes are collared 58° to the west which is considered practical for a drill rig and approximately 90% to intersecting the mineralised veins.
	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	It is not thought that drilling direction will bias assay data significantly.
Sample security	• *The measures taken to ensure sample security.*	All samples are bagged in tied numbered calico bags, grouped into larger tied polyweave bags and transported 1.5 hour to ALS in Orange by Alkane personnel. All sample submissions are documented via ALS tracking system and all assays are reported via email.

Criteria	JORC Code explanation	Commentary
		Sample pulps are returned to site and stored for an appropriate length of time (minimum 3 years). The Company has in place protocols to ensure data security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	The Company does not routinely have external consultants verify exploration data until resource estimation procedures are deemed necessary.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	Drilling completed on exploration licence number 5675 is owned 100% by Alkane.
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	All exploration licences are in good standing. EL5675 expires on 17 January 2023
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Significant exploration has been completed in the area by Alkane since 2001 and the Tomingley Gold Mine was commissioned in 2014. Minor work was completed by previous companies in EL5675 area covered by this announcement but many holes did not penetrate the cover sequence.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Mineralisation at Tomingley is associated with quartz veining and alteration focused within porphyritic sub-volcanic andesite sills and adjacent volcaniclastic sediments. The deposits appear to have formed as the result of a competency contrast between the porphyritic sub-volcanic sills and the surrounding volcaniclastic sediments, with the sills showing brittle fracture and the sediments ductile deformation, and have many similarities to well documented orogenic - lode-style gold deposits. Geological nature of the Tomingley Deposits is well documented elsewhere. Geological nature of Peak Hill is well documented elsewhere. Geological nature of Glen Isla is fine grained low-sulfidation epithermal Au mineralisation that was discovered in Middle Devonian continental felsic volcanic sequences (Dulladerry Volcanics) in the Young Zone. The gold prospective Dulladerry Volcanics host a number of low sulfidation epithermal occurrences including the Mt Aubrey gold deposit (120,000 t @ 3.3 g/t Au) and are broadly similar in age (~370Ma) to dates published (~350 - 360 Ma) for volcanic units that host well known Drummond Basin epithermal Au deposits in north Queensland. Dulladerry Volcanics include flow banded rhyolites and quartz feldspar porphyries and are locally bimodal, with amygdaloidal basalts identified at Glen Isla and Mt Aubrey.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth*	See body of announcement and figures.

Criteria	JORC Code explanation	Commentary
	○ *hole length.*	
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	Required information on all drill holes included in body of announcement.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	Exploration results reported – for uncut gold grades; grades are calculated by length weighted average.
	• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*	Reported intercepts are calculated using a lower cut of 0.5g/t Au. No top cut has been used.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results -* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	The mineralisation is structurally complex and drilling is reconnaissance in nature and there is currently minimal understanding of the true widths. Down hole lengths reported – true widths estimated to be 60% of the down hole length.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Plans and sections are included in the body of the announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All completed drill holes are listed with samples assaying significant gold of ≥0.5g/t Au have been reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No other exploration data is available to assist in interpretation
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	The current drilling is part of a 60,000 metre resource definition program. Further drilling to test lateral extensions are also ongoing.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	See figures included in the announcement.