ASX and MEDIA RELEASE

16 September 2021

ALKANE RESOURCES LTD
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Near Mine Exploration at Tomingley Delivers Significant Intercepts

- **Regional exploration drilling completed in recent months tested targets adjacent to Tomingley, including extensions to the San Antonio and Roswell Deposits.**
- **Significant gold mineralisation identified at several prospect areas, all located within seven kilometres of the Tomingley Gold Operations (Tomingley) processing facility.**
- **Drilling at the McLeans Prospect, located between the Roswell Deposit and the Tomingley site, and adjacent to the underground exploration drive currently being developed, intersected significant gold mineralisation including intercepts of:**

MCP092	**34 metres grading 1.80g/t Au from 178 metres;**
incl	**3 metres grading 10.7g/t Au from 190 metres;**
and	**19 metres grading 1.25g/t Au from 242 metres;**
incl	**4 metres grading 3.39g/t Au from 256 metres.**
MCD009	**1 metres grading 3.32g/t Au from 326 metres;**
and	**4 metres grading 7.01g/t Au from 400 metres;**
incl	**1 metre grading 24.6g/t Au from 402 metres;**
and	**6.6 metres grading 2.80g/t Au from 420.6 metres;**
and	**5 metres grading 1.69g/t Au from 437 metres;**
incl	**2 metres grading 3.06g/t Au from 439 metres.**

- **Five deep diamond core drill holes to test below the current resource model, as well as infilling Inferred classified resources at Roswell.**
- **Results have been received from three of the five holes, raising the confidence within the Inferred Resource and the vertical continuation of the mineralised structures approximately 100m below the current resource estimation with significant results including:**

RWD052	**20.5 metres grading 2.83g/t Au from 374.8 metres;**
incl	**1 metres grading 32.3g/t Au from 381.8 metres;**
and	**9.4 metres grading 3.82g/t Au from 436 metres;**
and	**13 metres grading 0.86g/t Au from 528 metres.**

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RWD053	**31 metres grading 1.11g/t Au from 586 metres;**
incl	**7 metres grading 2.85g/t Au from 592 metres;**
and	**24.3 metres grading 1.12g/t Au from 631 metres;**
incl	**3 metres grading 2.78g/t Au from 649 metres.**
RWD050A	**0.9 metres grading 3.03g/t Au from 422.1 metres;**
and	**6 metres grading 1.01g/t Au from 501 metres;**
incl	**1 metres grading 3.03g/t Au from 504 metres;**
and	**5 metres grading 4.12g/t Au from 520.3 metres;**
incl	**1.7 metres grading 10.5g/t Au from 520.3 metres;**
and	**13 metres grading 0.45g/t Au from 530 metres.**

- **Sterilisation air-core drilling within the Roswell – San Antonio development site identified shallow gold mineralisation one kilometre southeast of Roswell at the Plains Prospect. Mineralisation intersected over a 300 metre strike length include:**

RWAC318	**5 metres grading 0.58g/t Au from 78 metres to end of hole.**
RWAC319	**4 metres grading 0.48g/t Au from 69 metres to end of hole;**
incl	**1 metres grading 1.06g/t Au from 72 metres to end of hole.**
RWAC331	**3 metres grading 0.66g/t Au from 21 metres.**

- **Drilling results at El Paso, Tomingley Two and Myalls United continue to support the case for these prospects potentially providing viable near mine gold resources with encouraging gold intercepts including:**

El Paso:	**EPP043**	**16 metres grading 2.69g/t Au from 79 metres;**
	incl	**6 metres grading 6.14g/t Au from 85 metres;**
	and	**5 metres grading 0.60g/t Au from 102 metres.**
Tomingley Two:	**TORC005**	**3 metres grading 0.90g/t Au from 102 metres;**
	and	**11 metres grading 1.70g/t Au from 158 metres;**
	incl	**4 metres grading 3.87g/t Au from 159 metres;**
	and	**5 metres grading 0.83g/t Au from 237 metres.**
Myalls United:	**MCD010**	**5 metres grading 1.51g/t Au from 341 metres;**
	incl	**1 metres grading 5.10g/t Au from 341 metres.**

- **Assay results are pending for two remaining deep diamond core drill holes at Roswell and follow up drilling is planned to recommence in October, following a period of sustained wet weather.**
- **The drilling is designed to follow up encouraging results at McLeans, El Paso and Plains prospects as well as targeting below and infilling of Inferred Resources at San Antonio and Roswell.**

Alkane Resources Limited (ASX: ALK) ('Alkane' or 'the Company') is pleased to announce the latest exploration results for drilling in the region around the Company's Tomingley Gold Operations (Tomingley) in Central New South Wales.

Alkane Managing Director, Nic Earner, said: *"These exploration results around Tomingley demonstrate the continued potential to both expand the existing resources as well as open up new exploration areas.*

Having highly prospective targets in such close proximity to existing and planned mining infrastructure, such as the McLeans Prospect which is close the planned exploration drive, gives us continued confidence in a mine life at Tomingley that could extend well beyond 2030."

Tomingley Gold Project (TGP)

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 (Tomingley), an open pit mine and underground operation with a 1Mtpa processing facility.

Over the past three years Alkane has conducted an extensive regional exploration program that led to the definition of Resources at the Roswell and San Antonio prospects. These are:

- Roswell Deposit: 10.1Mt @ 2.04g/t Au for 660koz (Indicated + Inferred Mineral Resource – *ASX Announcement 4 November 2020*)
- San Antonio Deposit: 7.3Mt @ 1.72g/t Au for 406koz (Inferred Mineral Resource – *ASX Announcement 16 February 2021*)

Alkane has continued consultation with its key stakeholders, including landholders and regulators, in relation to development plans at the TGP. The Company has begun to develop an exploration drive from Wyoming One underground mine to the Roswell deposit. The Company has also prepared detailed plans for both open-cut and underground mines beneath Roswell and San Antonio that extends the TGO mine's life to at least 2031 (refer *ASX Announcement 3 June 2021*). This current plan shows the production of approximately 745,000 ounces of gold with processing ramping to a 1.5 million tonne per annum feed rate. With detailed plans and initial consultation now complete, the Environmental Impact Statement is being prepared for submission in the December quarter. The expected timing of Project Approval is mid-2022.

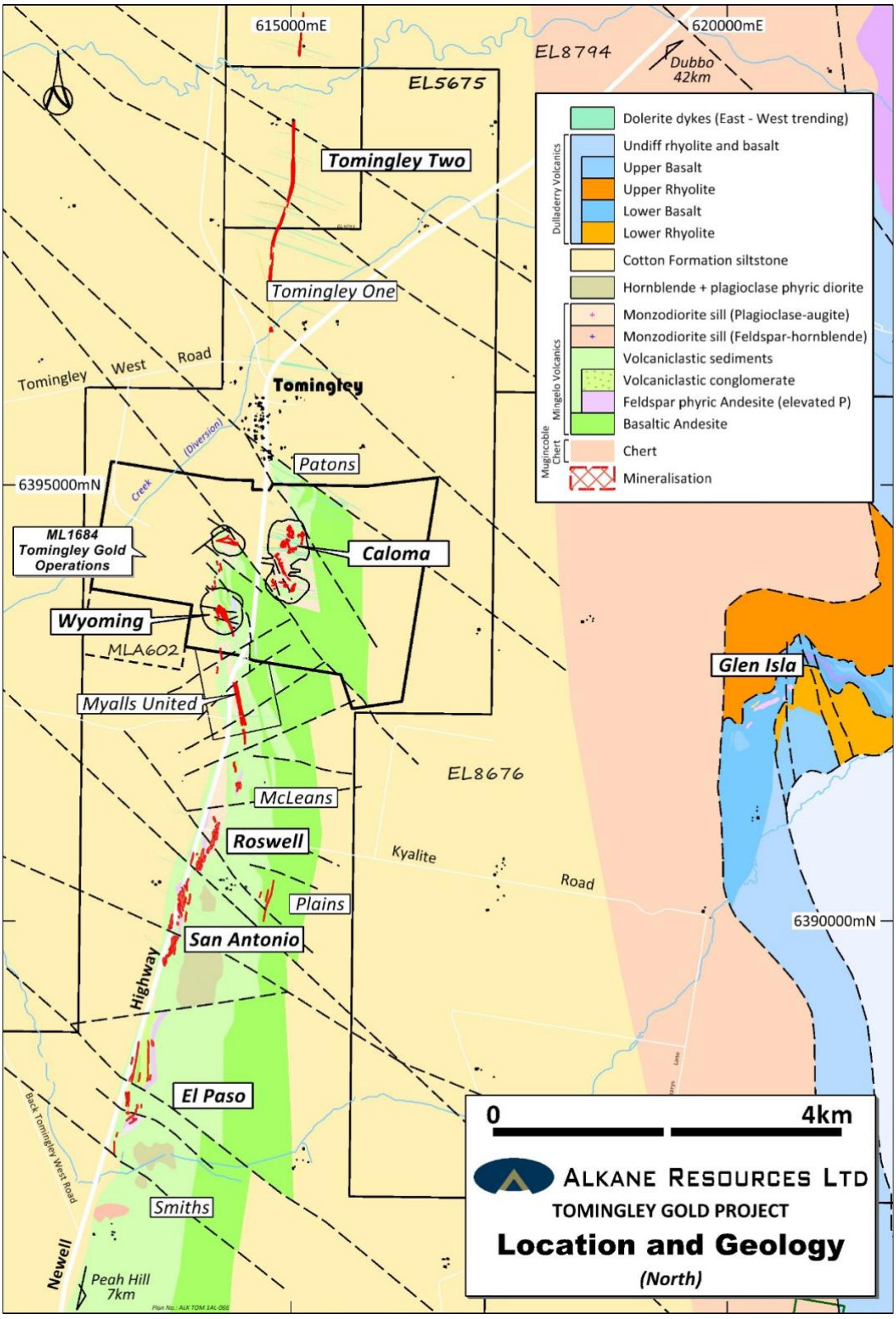
Regional exploration drilling has continued in amongst major resource drill outs of Roswell and San Antonio, testing McLeans, Myalls United, El Paso, Glen Isla and Tomingley Two prospects which are all located within 7km of the TGO processing facility. Mine development sterilisation air-core drilling was completed over planned infrastructure locations, identifying the Plains Prospect, approximately 600m east of the Roswell pit design and east of any planned works. Drilling also commenced on infilling the Roswell Inferred Resources and testing depth extensions to the mineralised structures beneath the estimated resource.

As part of the recent program, final assay results were received from 373 air-core (AC) drill holes for a total of 28,595 metres, and 26 reverse circulation (RC) drill holes and 13 diamond core (DD) drill holes were completed for a total of 13,073 metres.

The drilling undertaken:

- targeted previously shallowly tested mineralisation at the McLeans Prospect positioned between the historic Myalls United underground workings and the Roswell Deposit with 5 RC holes and 1 DD hole;
- infilled Inferred classified resources and targeted deep extensions to the Roswell Deposit with 3 DD holes;
- sterilisation drilling as part of the mine development work for the Tomingley Extension project totalling 373 AC holes and defining a new target, the Plains Prospect;
- tested beneath the historic Myalls United Mine and south of Wyoming One with 2 RC holes (1 abandoned) and 4 DD holes;
- tested the strike continuity of significant gold mineralisation previously intersected at Tomingley Two Prospect, approximately 5km north of TGO with 6 RC holes;

- tested co-incident IP and soil geochemistry anomalies at the Glen Isla Prospect approximately 6km east of TGO with 6 RC holes and 4 DD holes;
- targeted significant mineralisation in the southern section of the El Paso prospect with 7 RC holes and 1 DD hole; and
- as short campaigns over a 10 month period amongst the resource drilling campaigns at Roswell and San Antonio



McLeans Prospect

McLeans Prospect is positioned immediately north of the Roswell Deposit and south of the historic Myalls United Mine, 2km south of Tomingley. The prospect area has been previously tested by nominal 100 metre spaced air core and RAB drilling traverses, as well as 17 RC drill holes with shallow mineralisation and alteration evident over a 400-metre strike length. The mineralised bedrock is masked by approximately 1 to 20 metres of alluvial clays and sands.

McLeans was tested by 5 RC drill holes for a total of 1,348 metres, targeting deeper mineralisation below previously tested shallow mineralisation and/or alteration. MCP092 intersected significant gold mineralisation hosted within a feldspar phyric andesite with results of:

MCP092	**34 metres grading 1.80g/t Au from 178 metres;**
incl	**3 metres grading 10.7g/t Au from 190 metres;**
and	**19 metres grading 1.25g/t Au from 242 metres;**
incl	**4 metres grading 3.39g/t Au from 256 metres.**

MCP092 was followed up with a deeper diamond core drill hole, MCD009, to characterise the geology and structure to the significant gold intercepts. MCD009 identified a magnetic feldspar phyric andesite approximately 80 metres thick and thinning towards the surface, terminating below historic drilling (see following McLeans drill section). Multiple narrow high grade gold zones associated with either typical Tomingley-style sheeted quartz veins or as atypical pyrite-silica cemented breccia, hosted within and along the eastern contact of the andesite host. MCD009 reported significant gold intercepts of:

MCD009	**1 metre grading 3.32g/t Au from 326 metres;**
and	**4 metres grading 7.01g/t Au from 400 metres;**
incl	**1 metre grading 24.6g/t Au from 402 metres;**
and	**6.6 metres grading 2.80g/t Au from 420.6 metres;**
and	**5 metres grading 1.69g/t Au from 437 metres;**
incl	**2 metres grading 3.06g/t Au from 439 metres.**

This newly defined andesite unit hosting the high-grade mineralisation at McLeans correlates with the andesites that host the majority of the gold resources at the Roswell and San Antonio deposits. The andesite begins approximately 100 metres below the surface and had not been intersected by previous drilling. A strike length of at least 300 metres has been estimated from the magnetics (see following geology plan), with further drilling planned in November to determine its underground resource potential. The mineralisation is only 600 metres from the Roswell deposit and close to the Wyoming One to Roswell exploration drive

Roswell Deposit

Five deep diamond core drill holes were designed to test the depth extensions of the main andesite lodes and the western monzodiorite lode below the current resource estimation as well as infilling any Inferred classified resources at Roswell. Assay results have been received from two DD holes confirming the vertical continuation of the andesite mineralised structures approximately 100 metres below the current resource model with significant results of:

RWD053	**31 metres grading 1.11g/t Au from 586 metres;**
incl	**7 metres grading 2.85g/t Au from 592 metres;**
and	**24.3 metres grading 1.12g/t Au from 631 metres;**
incl	**3 metres grading 2.78g/t Au from 649 metres.**

RWD050A	**0.9 metres grading 3.03g/t Au from 422.1 metres;**

and	**6 metres grading 1.01g/t Au from 501 metres;**
incl	**1 metres grading 3.03g/t Au from 504 metres;**
and	**5 metres grading 4.12g/t Au from 520.3 metres;**
incl	**1.7 metres grading 10.5g/t Au from 520.3 metres;**
and	**13 metres grading 0.45g/t Au from 530 metres.**

Assay results were also received for diamond core drill hole, RWD052, infilling deep andesite mineralisation currently classified as Inferred, with assay results giving strong confidence to the estimation with:

RWD052	**20.5 metres grading 2.83g/t Au from 374.8 metres;**
incl	**1 metres grading 32.3g/t Au from 381.8 metres;**
and	**9.4 metres grading 3.82g/t Au from 436 metres;**
and	**13 metres grading 0.86g/t Au from 528 metres.**

Assay results are pending for the remaining two drill holes. A second phase of deeper drilling is planned to commence in November.

Plains Prospect

Assay results have been received from a 28,595 metre sterilisation air-core drilling program as part of development work for the Tomingley Gold Extension Project. The program was conducted on nominal 200 metre spaced traverses with drill holes spaced 40 metres apart, over areas of planned infrastructure and waste rock emplacement (WRE) areas. Anomalous gold or arsenic results were followed up with further infill air-core drilling to determine their significance. No significant gold or arsenic values were located within the planned infrastructure area. However low-grade gold and elevated anomalous arsenic was evident at the Plains Prospect, east of a planned temporary soil dump, approximately 1km southeast of the Roswell resource, with noteworthy results of:

RWAC291	**1 metres grading 0.79g/t Au from 78 metres.**
RWAC318	**5 metres grading 0.58g/t Au from 78 metres to end of hole.**
RWAC319	**4 metres grading 0.48g/t Au from 69 metres to end of hole;**
incl	**1 metres grading 1.06g/t Au from 72 metres to end of hole.**
RWAC331	**3 metres grading 0.66g/t Au from 21 metres.**
RWAC336	**3 metres grading 0.30g/t Au from 54 metres.**

Plains Prospect is positioned within the same northwest trending structural zone that hosts Roswell Deposit and is approximately 1km to the southeast of the 660koz gold deposit. Plains gold mineralisation is hosted within and along the western contact of a thick basaltic-andesite lava package. These lavas have been mapped over a 26km strike length from Tomingley to south of Peak Hill and are only tested previously by sparsely spaced shallow drilling. The low-grade gold and coincident arsenic values, including two air-core holes that terminated on mineralised quartz structures, has been intersected over a 300m strike length. Further air-core and RC drilling is planned for October to test these encouraging results.

Myalls United Prospect

Four diamond core holes and one RC drill hole were successfully completed testing the strike extensions and western extensions to the historic Myalls United mine (historic gold production of ~65,000oz). The drilling identified narrow high grade gold structures and broad low grade gold mineralisation. The

development of an exploration drive from the Wyoming One underground mine has begun and will further test the Myalls United Prospect during its development over the next 12 months. Significant gold results include:

MCD010	**5 metres grading 1.51g/t Au from 341 metres;**
incl	**1 metres grading 5.10g/t Au from 341 metres.**
MCD012	**1.2 metres grading 2.70g/t Au from 238 metres.**

El Paso Prospect

Exploration drilling focused on the southern and shallowest covered (20 to 30 metres) part of the El Paso Prospect where significant gold mineralisation has been intersected previously (EPP012 - 12m @ 4.99g/t Au from 108 m, 21m @ 2.38g/t Au from 141m, and 6m @ 10.65g/t Au from 168m - *ASX Announcement 17 May 2019*). One diamond core drill hole and 7 RC drill holes at southern El Paso has determined stratigraphy is rotated from north striking to northeast striking by a significant west-northwest trending fault. The stratigraphy is comprised of short discontinuous fragmented volcanic units including basaltic andesites and a magnetic andesite that correlates with the Roswell and San Antonio andesites that host most of the gold mineralisation at these deposits. The andesite also hosts significant gold mineralisation at El Paso. The recent drilling returned significant gold results of:

EPP038	**12 metres grading 1.22g/t Au from 40 metres;**
incl	**1 metres grading 10.4g/t Au from 51 metres.**
EPP043	**2 metres grading 0.81g/t Au from 37 metres;**
and	**16 metres grading 2.69g/t Au from 79 metres;**
incl	**6 metres grading 6.14g/t Au from 85 metres;**
and	**5 metres grading 0.60g/t Au from 102 metres;**
and	**2 metres grading 0.76g/t Au from 121 metres.**
EPD006	**1 metres grading 2.23g/t Au from 159 metres;**
and	**8 metres grading 0.34g/t Au from 224 metres.**

The next phase of exploration will focus on northern El Paso, in particular the magnetitic andesite unit that has only been previously tested only by shallow air-core and one diamond core drill hole (EPD002 - 8m @ 0.60g/t Au from 225m, hosted within andesite - *ASX Announcement 1 August 2017*).

Tomingley Two Prospect

Tomingley Two Prospect is located approximately 5km north of Tomingley within the northerly projection of Tomingley Gold Corridor. The gold mineralisation at Tomingley Two is defined as stratigraphic controlled and hosted in meta-mudstones similar to the Hangingwall Zone at Wyoming One. Six RC drill holes (including one abandoned) were completed along strike from previous identified gold mineralisation (TO225D – 4m @ 1.90g/t Au from 194m, 3.9m @ 2.40g/t Au from 212.4m, and 8.6m @ 1.28g/t Au from 254m; *ASX Announcement 10 April 2017*) defining mineralisation over 500m strike length that is open along strike and at depth. Significant gold assay results include:

TORC001	**2 metres grading 2.40g/t Au from 205 metres;**
TORC002	**6 metres grading 1.98g/t Au from 251 metres;**
incl	**2 metres grading 4.95g/t Au from 254 metres;**
and	**10 metres grading 0.64g/t Au from 264 metres;**
incl	**2 metres grading 2.48g/t Au from 265 metres.**

TORC005	**3 metres grading 0.90g/t Au from 102 metres;**
and	**11 metres grading 1.70g/t Au from 158 metres;**
incl	**4 metres grading 3.87g/t Au from 159 metres;**
and	**5 metres grading 0.83g/t Au from 237 metres.**
TORC006	**27 metres grading 0.46g/t Au from 180 metres;**
incl	**2 metres grading 1.21g/t Au from 180 metres;**
also	**2 metres grading 0.92g/t Au from 197 metres.**

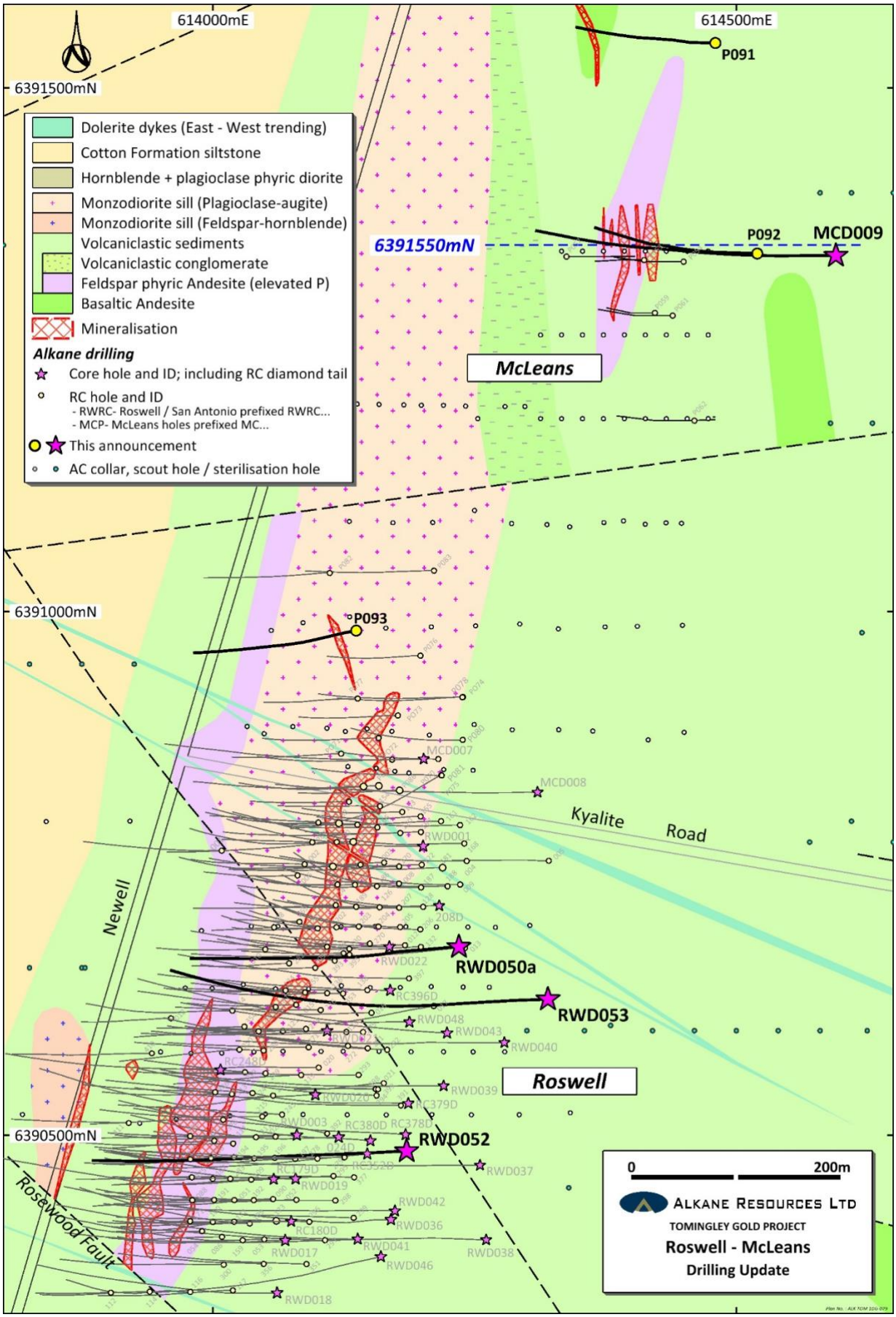
Glen Isla Prospect

Glen Isla Prospect is a large low-sulphidation epithermal gold system located 6km east of Tomingley. The prospect comprises outcropping and well-developed sinter terracing and numerous historic and previous broad low grade gold drill hole intersections (GIR031 – 51m @ 0.36g/t Au from 75m; *ASX Announcement 2 July 2018*) within extensively altered rhyolite volcanics. A dipole-dipole Induced Polarisation (IP) geophysical survey, together with a soil sampling survey were completed in August 2020. Coincident IP and geochemistry anomalies were then drill tested in February 2021 with 6 RC and 4 diamond core drill holes. Similar to the historic drilling, zones of extensive anomalous gold (eg GIRC035 – 270m @ 0.04g/t Au from 24m; using 0.01g/t Au cut-off) was intersected hosted with folded rhyolites. Significant gold results of greater than 0.25g/t gold include:

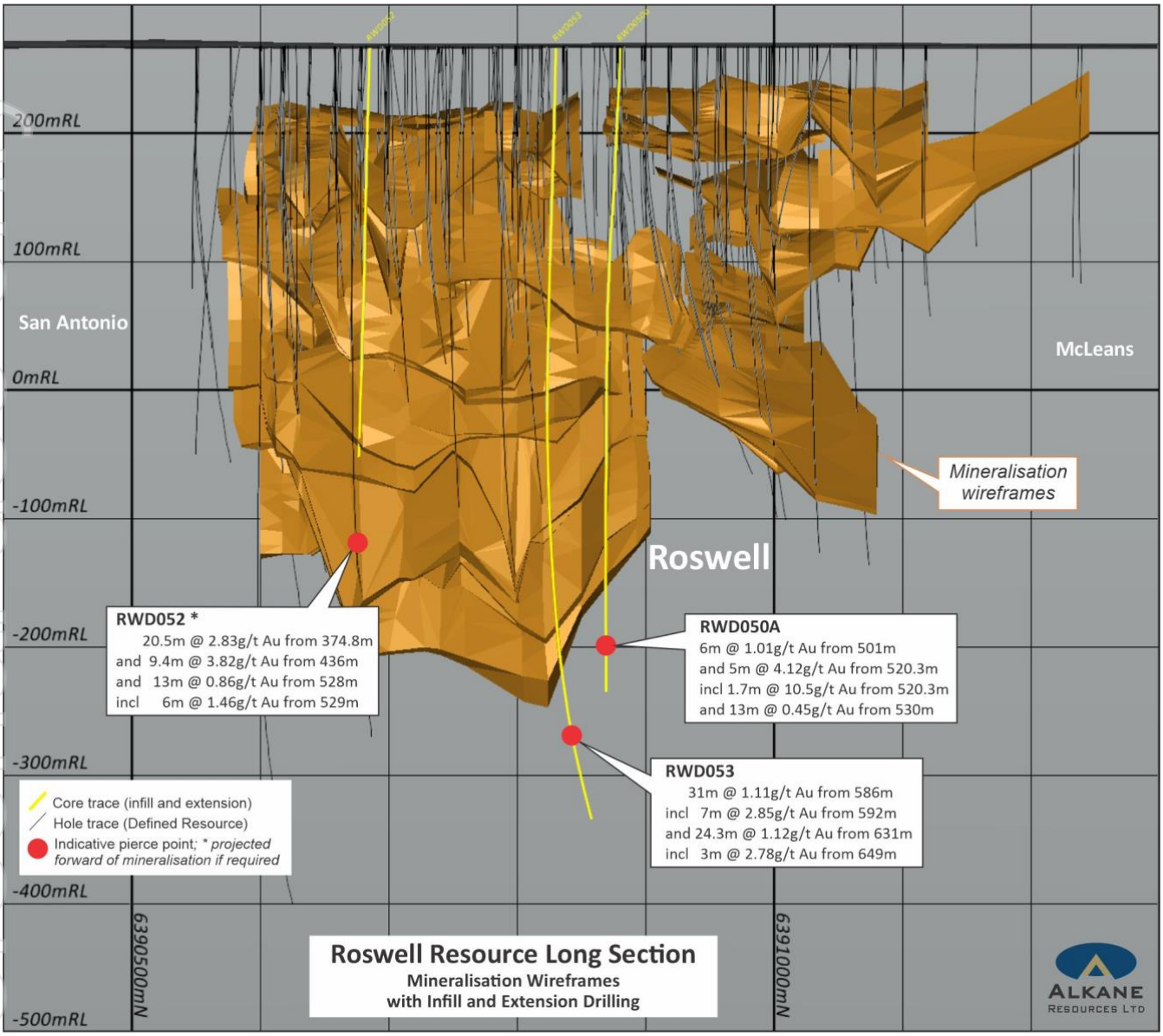
GIRC033	**13 metres grading 0.27g/t Au from 0 metres.**
GIRC037	**1 metres grading 0.42g/t Au from 18 metres;**
and	**10 metres grading 0.28g/t Au from 41 metres;**
and	**1 metres grading 0.37g/t Au from 67 metres.**

These broad, low grade gold results together with the presence of sinters are typical of an upper section of a fertile low sulphidation epithermal gold system. A drone-magnetic survey is near completion and is expected to aid targeting for possible deep, high grade gold feeder or 'bonanza' structures to the Glen Isla system.

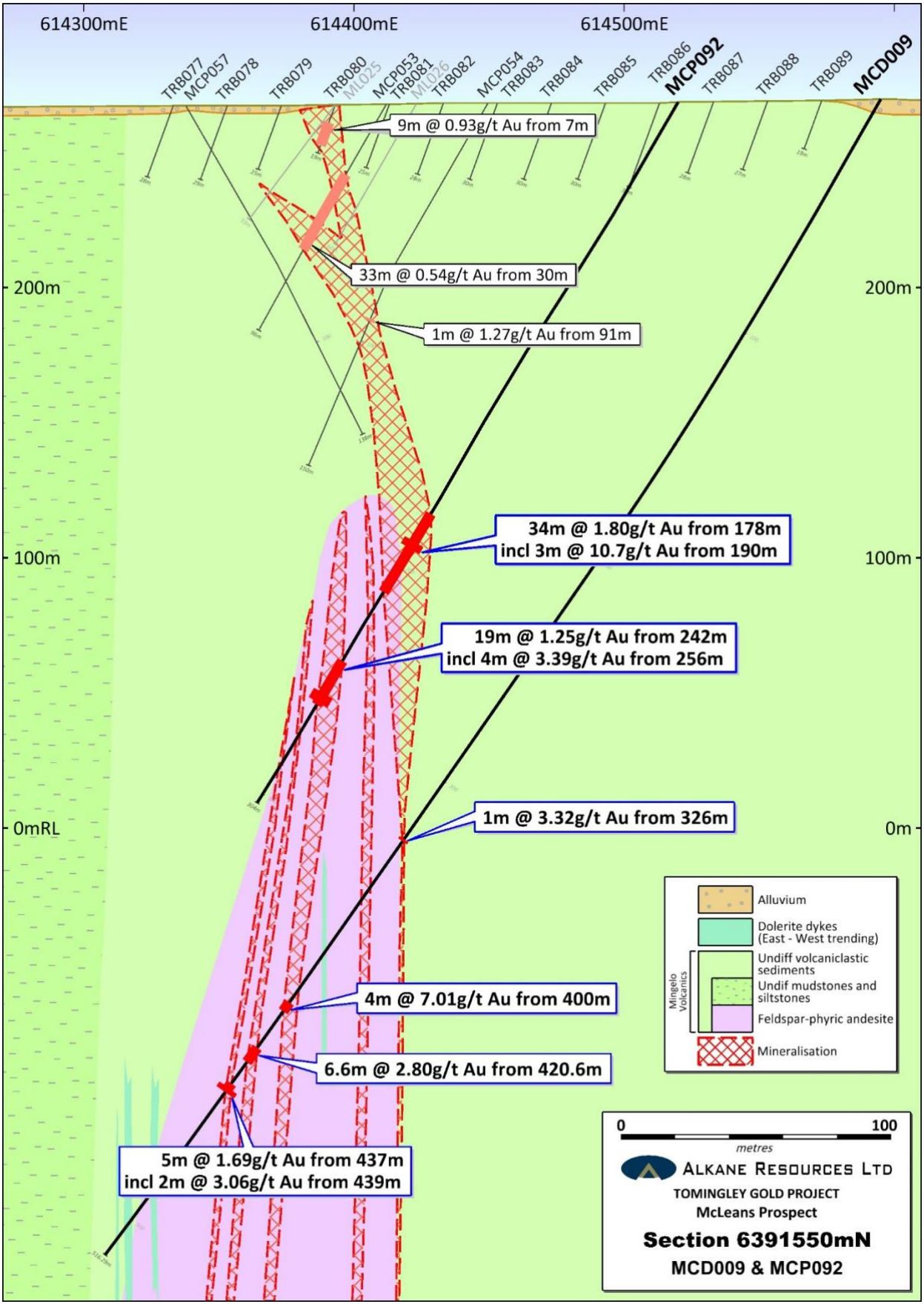
McLeans / Roswell Geology and Drill Hole Locations



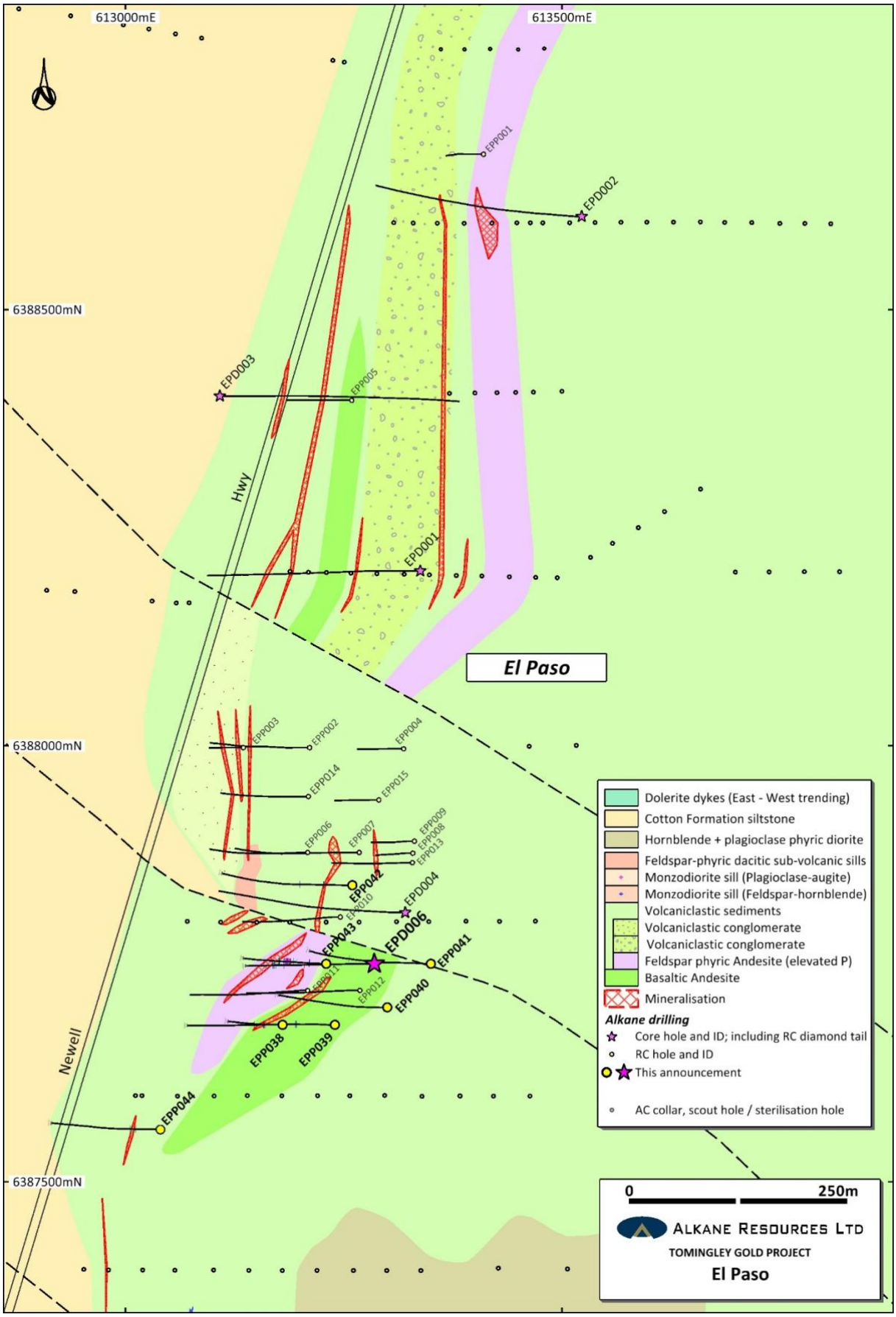
Roswell Long Section



McLeans Section



El Paso Geology and Drill Hole Locations



TOMINGLEY GOLD PROJECT SIGNIFICANT DRILLING RESULTS – September 2021 (>0.25g/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**
RWD050A	614235	6390880	266	-64	266	563.9	422.1	423	0.9	3.03	
and							469	470	1	0.78	
and							486	487	1	1.48	
and							501	507	6	1.01	
incl							504	505	1	3.03	
and							520.3	525.3	5	4.12	
incl							520.3	522	1.7	10.5	
and							530	543	13	0.45	
RWD052	614185	6390685	266	-61	267	567.5	374.8	395.3	20.5	2.83	**Roswell**
incl							381.8	382.8	1	32.3	
and							408	410	2	0.88	
and							436	445.4	9.4	3.82	
and							451	454	3	0.34	
and							528	541	13	0.86	
incl							529	535	6	1.46	
RWD053	614320	6390830	266	-61	270	705.4	586	617	31	1.11	
incl							592	599	7	2.85	
and							631	655.3	24.3	1.12	
incl							649	652	3	2.78	
MCD009	6391540	614595	269	-60	270	516.3	326	327	1	3.32	
and							338.6	340	1.4	0.70	
and							347.7	349	1.3	0.61	
and							379.1	380	0.9	0.96	
and							394	395	1	0.34	
and							397	398	1	0.28	
and							400	404	4	7.01	
incl							402	403	1	24.6	
and							416	417	1	0.51	
and							420.6	427.2	6.6	2.80	
and							437	442	5	1.69	**McLeans**
incl							439	441	2	3.06	
MCP089	6391974	614361	267	-60	270	250	*No significant results*				
MCP090	6392069	614557	269	-60	270	239	80	84	4	0.96	
and							168	174	6	0.64	
MCP091	6391743	614480	268	-57	270	251	*No significant results*				
MCP092	6391542	614520	269	-60	270	304	178	212	34	1.80	
incl							190	193	3	10.7	
and							219	224	5	0.59	
and							228	229	1	0.44	
and							242	261	19	1.25	
incl							256	260	4	3.39	
and							273	276	3	0.48	
and							286	289	3	0.78	
MCP093	6391182	614137	268	-60	260	304	61	63	2	0.53	

TOMINGLEY GOLD PROJECT SIGNIFICANT DRILLING RESULTS – September 2021 (>0.25g/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**
MCD010	6392594	614665	270	-50	227	537.6	341	346	5	1.51	**Myalls United**
incl							341	342	1	5.10	
MCD011	6392838	614651	269	-50	260	606.4	153	154	1	1.65	
and							338.6	339.6	1	1.03	
and							534	535	1	0.72	
and							546	547	1	0.51	
and							580	581	1	0.46	**Myalls United**
MCD012	6392960	614620	269	-50	270	780.3	238	239.2	1.2	2.70	
and							338	341	3	0.29	
and							731	732	1	0.39	
and							740	741	1	0.38	
WYRC001D	6393013	614365	267	-60	270	387.9	18	21	3	0.48	
WYRC002	6392853	614304	267	-55	270	124**	*Hole abandoned early*				
WYRC003	6392864	614303	267	-60	270	323	191	195	4	0.47	
EPD006	6387750	613285	266	-60	270	294	159	160	1	2.23	
and							206	207	1	0.90	
and							224	232	8	0.34	
EPP038	6387680	613180	266	-60	270	244	40	52	12	1.22	
incl							51	52	1	10.4	
and							67	68	1	0.50	
EPP039	6387680	613240	266	-60	270	244	86	89	3	0.59	
EPP040	6387700	613300	266	-60	270	244	*No significant results*				
EPP041	6387750	613350	266	-60	270	276	179	180	1	0.29	
EPP042	6387840	613260	267	-58	270	322	63	65	2	0.55	**El Paso**
and							118	119	1	0.52	
EPP043	6387750	613230	266	-60	270	184	37	39	2	0.81	
and							65	66	1	0.33	
and							72	74	2	0.29	
and							79	95	16	2.69	
incl							85	91	6	6.14	
and							102	107	5	0.60	
and							121	123	2	0.76	
EPP044	6387560	613040	266	-60	270	250	57	58	1	0.26	
and							59	60	1	0.45	
and							69	70	1	0.26	
and							71	72	1	0.28	
TORC001	6398491	615198	284	-60	270	274	205	207	2	2.40	
TORC002	6398691	615200	284	-65	270	298	143	145	2	0.66	
and							207	208	1	0.64	
and							251	257	6	1.98	
incl							254	256	2	4.95	**Tomingley Two**
and							264	274	10	0.64	
incl							265	267	2	2.48	
TORC003	6398890	615198	284	-60	270	160**	*Hole abandoned early*				
TORC004	6398979	615249	284	-60	270	214	*No significant results*				

TOMINGLEY GOLD PROJECT SIGNIFICANT DRILLING RESULTS – September 2021 (>0.25g/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**
TORC005	6399090	615200	283	-60	270	275	91	93	2	0.45	**Tomingley Two**
and							102	105	3	0.90	
and							158	169	11	1.70	
incl							159	163	4	3.87	
and							237	242	5	0.83	
and							253	256	3	0.32	
and							259	260	1	0.36	
TORC006	6398889	615168	284	-60	270	275	180	207	27	0.46	
incl							180	182	2	1.21	
also							197	199	2	0.92	
RWAC291	614690	6390300	266	-60	270	81	78	79	1	0.79	**Plains**
RWAC318	614770	6390300	266	-60	270	83*	78	83*	5	0.58	
RWAC319	614810	6390300	266	-60	270	73*	69	73*	4	0.48	
incl							72	73*	1	1.06	
RWAC331	614810	6390450	266	-60	270	54	21	24	3	0.66	
RWAC336	614710	6390000	266	-60	270	82	54	57	3	0.30	
GID001	621051	6393462	384	-63	237	298.4	*No significant results*				**Glen Isla**
GID002	621015	6393632	384	-62	120	281.2	*No significant results*				
GID003	620467	6393547	382	-47	197	320.4	*No significant results*				
GID004	620692	6393122	385	-70	295	395.1	*No significant results*				
GIRC032	621165	6393872	358	-55	127	352	*No significant results*				
GIRC033	621752	6394580	357	-67	76	178	0	13	13	0.27	
and							34	35	1	0.29	
GIRC034	620463	6392563	362	-60	68	304	*No significant results*				
GIRC035	620574	6392952	410	-61	289	352	*No significant results*				
GIRC036	620786	6392901	397	-52	302	328	*No significant results*				
GIRC037	620236	6392504	354	-50	350	250	18	19	1	0.42	
and							41	51	10	0.28	
and							67	68	1	0.37	

* hole ended in mineralisation. ** hole abandoned early. True widths are approximately 60% of intercept width.

Competent Person

Unless otherwise advised above or in the Announcements referenced, the information in this report that relates to exploration results, mineral resources and ore reserves is based on information compiled by Mr David Meates, MAIG, (Exploration Manager NSW) 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 consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Previous Information

The information in this report that relates to exploration results 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.

This document has been authorised for release to the market by Nic Earner, Managing Director.

ABOUT ALKANE - www.alkane.com.au - ASX: ALK

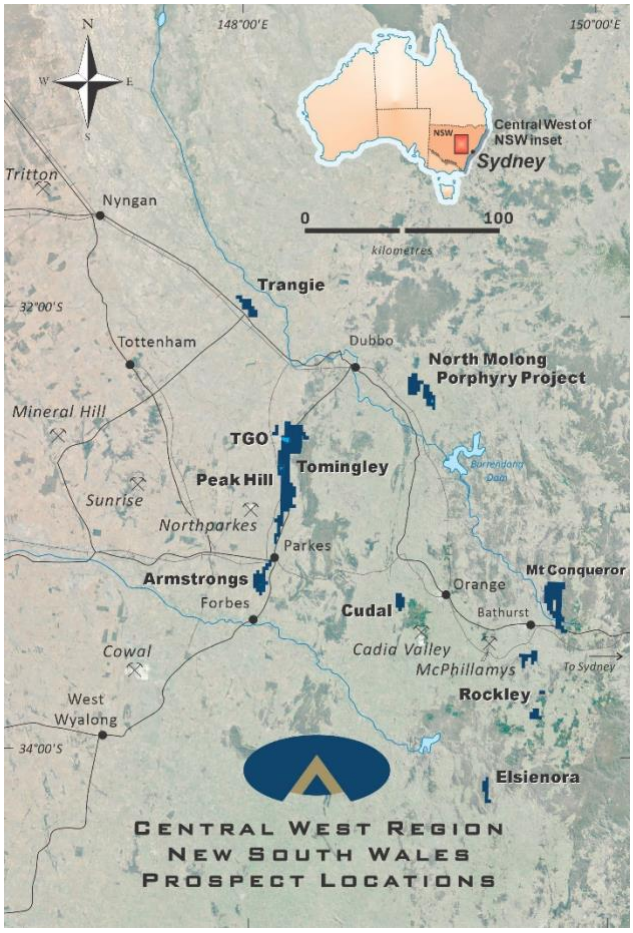
Alkane Resources is poised to become Australia's next multi-mine gold producer.

The Company's current gold production is from the Tomingley Gold Operations in Central West New South Wales, where it has been operating since 2014 and is currently expediting a development pathway to extend the mine's life beyond 2030.

Alkane has an enviable exploration track record and controls several highly prospective gold and copper tenements. Its most advanced exploration projects are in the tenement area between Tomingley and Peak Hill, which have the potential to provide additional ore for Tomingley's operations.

Alkane's exploration success includes the landmark porphyry gold-copper mineralisation discovery at Boda in 2019. With a major drill program ongoing at Boda, Alkane is confident of further consolidating Central West New South Wales' reputation as a significant gold production region.

Alkane's gold interests extend throughout Australia, with strategic investments in other gold exploration and aspiring mining companies, including ~19.8% of Genesis Minerals (ASX: GMD) and ~9.7% of Calidus Resources (ASX: CAI).



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 – Regional Exploration September 2021

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 (eg 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.*	• Diamond core drilling (DD) was undertaken by Ophir Drilling Pty Ltd • DD sample intervals were defined by geologist during logging to honour geological boundaries, cut in half by diamond saw, with half core sent to ALS Laboratories • RC drilling was undertaken by Strike Drilling Pty Ltd • Air-core (AC) drilling was undertaken by Durock Drilling Pty Ltd • RC and AC samples are collected at one metre intervals via a cyclone on the rig. The cyclone is cleaned regularly to minimise any contamination
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Sampling and QAQC procedures are carried out using Alkane protocols as per industry best practice
	• *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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• Core was laid out in suitably labelled core trays. A core marker (core block) was placed at the end of each drilled run (nominally 3m) and labelled with the hole number, down hole depth, length of drill run. Core was aligned and measured by tape, comparing back to this down hole depth consistent with industry standards. Half core is sampled with a Corewise automatic core saw. • RC and AC 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 are resplit using a cone splitter on the RC rig or a riffle splitter for AC sample into a separate calico at the time of drilling and re-submitted to the laboratory for re-assay. • Gold was determined by fire assay fusion of a 50g charge with an AAS analytical finish • A multi-element suite was determined using either aqua regia or a multi-acid digest with a ICP Atomic Emission Spectrometry or ICP Mass Spectrometry analytical finish.

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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 • Triple tube diamond drilling with PQ3/HQ3 wireline bit producing 83mm diameter (PQ3) and 61.1mm diameter (HQ3) sized orientated core. • Air-core (AC) drilling using 89mm rods and bit to refusal.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• DD - core loss was identified by drillers and calculated by geologists when logging. Generally ≥99% was recovered with any loss usually in portions of the oxide zone. • Triple tube coring was used at all times to maximise core recovery with larger diameter (PQ3) core or RC precollars used in the oxide zones. • RC and AC 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.*	• Sample quality is qualitatively logged • Core drilling completed using HQ triple tube where possible to maximise core recovery. • A high capacity RC rig was used to enable dry samples collected. Drill cyclone is cleaned between rod changes and after each hole to minimise cross-hole contamination. • A high capacity AC rig was used to maximise penetration through the clays to refusal on fresh bedrock. Drill cyclone was cleaned after each hole to minimise cross-hole contamination.
	• *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*	• Mostly logging was qualitative with visual estimates of the various characteristics. In addition, magnetic susceptibility data (quantitative) was collected as an aid for logging • All drill holes were geologically logged into Geobank Mobile, followed by validation before importing into Alkane's central Geobank database • All drill holes were logged by qualified and experienced geologists
	• *The total length and percentage of the relevant intersections logged*	• All drill holes were logged in full

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	• Core sawn with half core samples submitted for analysis
	• *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 are re-split using a cone splitter on the RC rig during the time of drilling or re-split using a riffle splitter for AC composites 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.*	• Samples were delivered by Alkane personnel to ALS Minerals Laboratory, Orange NSW. Crushed with 70% <2mm (ALS code CRU-31), split by riffle splitter (ALS code SPL-21), and pulverised 1000grm to 85% <75um (ALS code PUL-32). Crushers and pulverisers are washed with QAQC tests undertaken (ALS codes CRU-QC, PUL-QC).
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples*	• Internal QAQC system in place to determine accuracy and precision of assays
	• *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*	• Non-biased core cutting using an orientation line marked on the core • Duplicate RC samples are collected for both composite intervals and re-split intervals.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Sample are of appropriate size
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.*	• All samples were analysed by ALS Minerals • 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. • Other geochemical elements, DD samples are digested by near-total mixed acid digest with each element determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. RC and AC samples are digested by aqua regia with a ICP Atomic Emission Spectrometry for As, Cu, Ni, P, Ti only

Criteria	JORC Code explanation	Commentary
	• *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 geophysical tools were used to determine any element concentrations
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Full QAQC system in place including certified standards and blanks of appropriate matrix and concentration levels
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 Geobank Mobile in the field for validation, transfer and storage into Geobank 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
	• *Discuss any adjustment to assay data.*	• No adjustments made
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.*	• Drillholes are laid out using hand-held GPS (accuracy ±2m) then all RC and DD collars are DGPS surveyed accurately (± 0.1m) by trained surveyors on completion
	• *Specification of the grid system used.*	• GDA94, MGA (Zone 55)
	• *Quality and adequacy of topographic control.*	• DD and RC drillhole collars DGPS surveyed accurately (± 0.1m) by trained surveyors on completion
	• *Data spacing for reporting of Exploration Results..*	• At this exploration stage, data spacing is variable with the focus on identifying new zones of mineralisation

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *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*	• Majority of results are early stage, reconnaissance drilling. Two Roswell deep DD drill holes are within 100m of the Roswell resource and further infill drilling is necessary to establish grade continuity for the purposes of including these results into the resource estimation for Roswell.
	• *Whether sample compositing has been applied*	• No sampling compositing has been applied
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.*	• Drilling suggests a broadly sub vertical geometry
	• *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*	• Estimated true intervals at this early stage of drilling are possibly ~60% of downhole lengths
Sample security	• *The measures taken to ensure sample security.*	• All samples are bagged into tied calico bags, before being grouped into polyweave bags and transported ~2hr to ALS Minerals Laboratory in Orange by Alkane personnel. All sample submissions are documented via ALS tracking system with results reported via email • 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.*	• No audits or reviews have been conducted at this stage

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.*	• All five licences (EL5675, EL5830, EL5942, EL6085 and EL8676) in the Tomingley Gold Project are 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. EL675 expires on 17 January 2023. EL5830 expires on 4 April 2022. EL5942 expires on 3 May 2024. EL6085 expires on 19 May 2024. EL8676 expires on 27 November 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. • Work completed with EL8676 at the Glen Isla Prospect can be summarised as: North Mining Ltd (1986-1994) - Tenement-wide RAB, with a best result of 0.86g/t Au at Glen Isla. Follow up RC and diamond drilling at Glen Isla for 2,544m and 476m respectively. Croesus Mining NL (1996 – 2000) - IP survey and 8 RC holes for 1,242m Giralia Resources NL (2004 – 2014) – IP survey, 9 RC holes for 1,694m and 4 diamond hole for 644m
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 (Dulladery 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

Criteria	JORC Code explanation	Commentary
		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* ○ *hole length.*	• See body of announcement
	• *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.*	• All RC and DD drill holes have been reported in this announcement. • The AC drilling program is for sterilisation purposes with 373 holes completed for 28,595 metres of drilling. Only AC drill holes with samples assaying ≥0.25g/t Au have been reported. Impractical to list all holes completed.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	• Exploration results reported for uncut gold grades, grades 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 (>0.25g/t Au) are calculated using a broad lower cut of 0.2g/t Au although grades lower than this may be present internally (internal dilution). • No top cut has been used. • Short intervals of high grades that have a material impact on overall intersection are reported as separate (included) intervals
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 (eg 'down hole length, true width not known').*	• The mineralisation is structurally complex and the majority of drilling is reconnaissance in nature. Down hole lengths reported – true widths estimated to be 60% of the down hole lengths at El Paso, Roswell and Tomingley Two. Other prospects there is currently minimal understanding of the true widths.
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 showing geology with drill collars are included in the body of the announcement.

Criteria	JORC Code explanation	Commentary
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.*	• Comprehensive reporting has been undertaken with all DD and RC holes listed in the included table.
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.*	• Dipole-dipole Induced Polarisation (IP) survey was completed over Glen Isla Prospect. The survey parameters were 50m dipole-dipole array with a 16-channel roll-along approach. 7 lines were of varying length between 1.6km and 2.6km. The raw IP data was imported into Scientific Computing Applications TQIPdb software, which is used to view the raw decay curves for each individual reading. The data is then imported into Scientific Computing Applications Windisp software and presented as a pseudosection of the raw data. Alterrex Pty Ltd provided geophysical consulting services, producing 2D and 3D images for interpretation. Chargeability data was very noisy at depth and the chargeability data was cut below n=6 for the inversions. All the resistivity data was used. Some of the lithologies are resistive and the chargeability's were used to help identify anomalies that may be due to alteration. A number of anomalies were identified for drill testing with support from soil geochemistry. • Soil survey of 350 samples at Glen Isla was collected on a 100 x 100 m grid through the main hills and broadened to a 100 x 200 m grid to the north. Samples were collected to an average 25 cm depth and mostly sampled residual or colluvial soils in the hills and alluvial soils on the plains. Samples were collected by handheld shovel or pick and each was coarsely sifted (-1 mm mesh) in the field due to often wet conditions. Up to 500 g of the -1 mm fraction was collected for each sample and placed into numbered paper bags and sent to ALS Geochemistry in Orange for drying, sieving to -250 µm and pulverising to -75 µm for assay of 51 elements using an aqua regia digest with an ICP-MS finish (ALS method AuME-TL43). The soil program extended the anomalous Au and pathfinder geochemistry north into the rhyolite hills and has also identified an additional zone of coincident Au and pathfinders further to the north. The extension of anomalous Au and pathfinders corresponds strongly with the extents of the rhyolite outcrop/subcrop, that suggests a large hydrothermal system has affected the entire rhyolite body in the Glen Isla Prospect.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• It is recommended that further drilling is undertaken at these prospects to continue to define targets.
	• *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.