

APPIA ENERGY CORP.

MANAGEMENT'S DISCUSSION AND ANALYSIS

For the nine months ended June 30, 2019

APPIA ENERGY CORP.

Management's Discussion and Analysis – June 30, 2019 As of August 8, 2019

The following management's discussion and analysis ("MD&A") of the financial condition and results of operations of Appia Energy Corp. ("Appia" or the "Company") constitutes management's review of the factors that affected the Company's financial and operating performance for the nine months ended June 30, 2019. The MD&A was prepared as of August 8, 2019 and should be read in conjunction with the unaudited condensed interim financial statements for the three and nine months ended June 30, 2019, the ("Financial Statements") and the audited financial statements for the year ended September 30, 2018, including the notes thereto. Unless otherwise stated, all amounts discussed herein are denominated in Canadian dollars. The Financial Statements of the Company have been prepared in accordance with International Financial Reporting Standards ("IFRS") as described in Note 2 to the Financial Statements.

Executive Summary

Appia is a Canadian mineral exploration company listed on the Canadian Securities Exchange under the trading symbol "API", and in the USA the shares trade on the OTCQB platform as OTCQB: APAAF. In Germany the shares trade under the symbols A0I.F, A0I.MU and A0I.BE. Appia is focused on the Rare Earth Element deposits ("REE") at Alces Lake, particularly high priced "critical REE's", and on exploring high-grade, near-surface Uranium deposits in the Athabasca Basin area.

In the nine months ended June 30 2019, the Company raised a net \$1.8 million through the issue of flow-through share units and working capital units, as well as the exercise of some outstanding warrants. With a cash position of over \$800,000 at the beginning of the fiscal year, significant funding has been available for the 2019 exploration program.

In September 2018 the Company acquired a group of contiguous claims at Alces Lake, expanding the project size to 14,334 hectares (31,669 acres) of which only a very small area has been tested to date.

Assays from black heavy mineral sand layers from the Alces Lake shoreline were found to have high concentrations of REEs, comparable with major heavy mineral sands producers around the world. Additional samples will be collected this summer and the existence of high scandium concentrations will be further studied.

In March 2019 a total of 1,063 metres was drilled in eight holes on the Loranger uranium property. A combination of radioactivity, alteration, structural styles, and characteristic mineral assemblages share visual similarities with nearby basement-hosted Athabasca high-grade uranium deposits. Highlights of the winter drilling include 3.15 m of 0.032 wt% U₃O₈ at 96.75 m drill hole depth in hole LOR-19-03 and 0.7 m grading 0.066 wt% U₃O₈ at 105.5 m drill hole depth in hole LOR-19-02. The program has identified a 900 metre-long uranium mineralization trend.

The Company commenced this year's accelerated exploration program on the Alces Lake property in June and completed a ground gravity survey over 60,000 square metres by month-end. The plan is to complete up to 3000 metres of diamond drilling as well as geological mapping, radiometric prospecting, and continuing heavy mineral beach sampling on the newly acquired land package.

The analysis of assays from the 2018 summer program at Alces Lake were reported over the months of September through November 2018

The channel samples in 2018 assayed "high-grade" Rare Earth Oxides ("REOs") based on comparison with global REE deposit grades, and included high-priced "critical REE's", such as neodymium ("Nd"), praseodymium ("Pr") and dysprosium ("Dy"). Seven zones were excavated and outlined at surface. Twelve of 15 short drill holes in the summer 2018 program intersected mineralization, with ten intersecting high-grade Total REO** and critical REEs. Within 12 m true depth, three new sub-surface occurrences, without surface expression, were discovered under the Charles and Ivan zones.

To test the current gravity survey results, the first 2019 drill hole to be assayed, IV-19-03, reported an intersection of 11.65 m of semi-massive to massive monazite mineralization, indicating that gravity-high readings might be detecting high clusters of monazite beneath the surface. The assays for the 11.65 m intersection are 16.10 wt% TREO*, starting 10.25 m down hole, located 5 metres away from the 2018 IV-18-01 drill hole which assayed 15.56 wt% TREO* over 1.2 m.

“High-grade” REO is defined here as >1.897 wt% TREO** which represents >75th percentile for global REO deposits of advanced stage projects, Alces Lake is proving to be very high-grade, particularly in the “critical” REEs in short supply and in high demand for use in permanent magnets for electric motors and modern electronic applications.

Drilling has continued testing other geophysical gravity targets while at the same time following-up on previously discovered near surface REE zones such as discovered beneath the Ivan and Charles zones.

The Company also has a 100% interest in 12,545 hectares (31,000 acres), including rare earth element and uranium deposits over five mineralized zones in the Elliot Lake Camp, Ontario, which historically produced over 300 million pounds of U₃O₈ and is the only Canadian camp that has had significant rare earth element (yttrium) production. The deposits are largely unconstrained along strike and down dip.

Saskatchewan Properties

Alces Lake

The Company commenced this year’s accelerated exploration program on the Alces Lake property in June 2019, consisting of a ground gravity survey, up to 3000 metres of diamond drilling, geological mapping, radiometric prospecting, and continuing heavy mineral beach sand sampling on the 14,334 hectares (35,420 acres) project area.

Early years

Exploration between 2011 and 2016 at Alces Lake confirmed high-grade REE mineralization in multiple outcrops and boulders. A helicopter-borne geophysical and radiometric survey outlined extensive radioactive anomalous areas similar to those with known areas of surface REE mineralization.

2017

On October 31, 2017 the Company reported exceptional geochemical assay results from the ground prospecting and radiometric program on Alces Lake property. Rare Earth Oxides from surface samples grading as high as 49.64 weight % Total REO* were reported from the Ivan zone on the property.

Mineralization in five zones were reported to have uniformly high concentrations of critical REEs which are in scarce supply and high demand. Nd and Pr account for 20% and 5% of the Total REEs respectively, with prices for these REEs escalating since 2016.

Based on the average grades of the samples, which are rich in the critical REEs, (Nd, Pr, Dy), makes Alces Lake a high-value prospect. Monazite is the sole mineral host to the REEs at Alces Lake, and economic recovery of REEs from monazite on a global scale has proven to be quite successful since the 1950s.

2018

The 2018 summer program commenced with the construction of a semi-permanent work camp, a detailed ground radiometric survey covering 300 m by 150 m of the REE occurrences, overburden stripping and channel sampling of the known outcrops with favourable results from previous programs, such as the Wilson and Ivan zones, and the first-ever diamond drill program on the zones. A Kubota KX 121 excavator was brought to the site to expedite the surface stripping.

At the completion of the 2018 exploration program, the Company had;

- 1) exposed 7 REE showings at surface (6 of which host high-grade REOs; Bell, Charles, Dante, Dylan, Ivan and Wilson) within an area measuring 150 m x 100 m and open in all directions,
- 2) diamond saw-cut a total 437 m from 96 outcrop channels with 844 individual samples removed for analysis, and
- 3) completed 15 diamond drill holes into 3 zones (Charles, Wilson and Ivan). The diamond drill program confirmed depth extensions of all surface zones drilled, but more importantly, identified 3 new sub-surface zones (the high-grade REO Charles Lower zone, and the Ivan Middle and Ivan Lower zones).

Seven high-grade REO zones, enriched with critical REEs such as Nd, Pr, and Dy, have been identified at and just below the surface. The zones remain open in all directions. After applying a 4.0 wt% TREO sample cut-off, the zones have average grades which range from 8.868 wt% TREO* (Charles Lower) to 31.827 wt% TREO* (Dylan).

During the summer of 2018, 6 samples of black heavy mineral sand surface layers along a 500 m shoreline of Alces Lake, 2.3 km north of the current work on outcrops were collected and submitted to the Saskatchewan Research Council laboratory to analyze for REE and mineral concentrations. Each sample was processed by means of magnetic separation followed by grain size sorting to create 4 distinct sub-sample combinations; ferromagnetic and non-magnetic with grain size <0.25 (0.01 mm to 0.25 mm) or grain size >0.25 (0.25 mm to 1.0 mm).

Three REE-bearing minerals were identified in the non-magnetic sub-samples; monazite (average 0.80% concentration), xenotime (average 0.24% concentration), and zircon (average 3.14% concentration). The Study showed that first-pass magnetic separation concentrates both monazite and zircon into the non-magnetic sub-sample, whereas xenotime remains equally concentrated regardless of magnetic separation or grain size distribution.

The non-magnetic sub-samples are approximately 10 times more concentrated with respect to Total REO (average 0.386 wt% Total REO*) than the ferromagnetic samples (average 0.041 wt% Total REO*). The ratio of the individual REOs to Total REO in all four sub-samples are roughly the same.

Assays also revealed the presence of scandium (0.011 wt% Sc₂O₃) concentrated within the non-magnetic samples, and the sand samples are significantly enriched with heavy REEs ("HREEs") with respect to the high-grade monazite outcrops (i.e. 14.4% HREEs in the sands vs. 3.1% HREEs in the outcrops). Scandium is believed to be sourced from zircon, whereas the HREEs are believed to be sourced from xenotime, a well-known HREE host mineral. The remaining light REEs are interpreted to be sourced from monazite.

Additional exploration, mapping and sampling for heavy mineral beach sands will be completed during the summer 2019.

At the Alces Lake site, in September 2018 the Company staked a group of 15 contiguous mineral claims, expanding the project area to 14,334 hectares (35,420 acres). These claims, at Forget Lake and on the Oldman River, host monazite occurrences in the form of outcrops similar to those worked in the 2018 summer exploration program, approximately 8 km to the south and south-east respectively, of the current outcrops being worked.

The Oldman River monazite was historically never assayed for REEs but did return a partial analysis of 5.4 wt% Thorium ("Th") and 0.263 wt% U. As a proxy for REE concentration, the highest Th concentration from samples at Alces Lake returned 5.78 wt% Th*** and had 53.01 wt% TREO*.

2019

The field exploration crew mobilized to Alces Lake on June 6, 2019, and by June 26 completed a ground gravity geophysical survey over an area measuring 200 m x 300 m centred on the high-grade REE zones identified in 2018. These zones correlate very closely with recently identified gravity highs, suggesting monazite mineralization can be detected below the surface.

* see Appendix on last page for individual REO grades supporting reported TREO results

*** see comment below Appendix table on last page regarding Th value

To test the gravity survey results, the first drill hole assayed, IV-19-03, intersected 11.65 m of semi-massive to massive monazite mineralization, indicating that gravity-high readings might be detecting high clusters of monazite beneath the surface.

On July 26, 2019 assays were reported for the 11.65 m intersection to be 16.10 wt% TREO*, starting 10.25 m down hole, located 5 metres away from the 2018 IV-18-01 drill hole which assayed 15.56 wt% TREO* over 1.2 m.

Drilling has continued testing other geophysical gravity targets while at the same time following-up on previously discovered near-surface REE zones such as discovered beneath the Ivan and Charles zones.

Athabasca Basin

Loranger

The Loranger group of mineral claims in the Athabasca Basin was acquired by staking in March 2016, and shares similar geological and geophysical signatures to known high-grade, high-tonnage uranium deposits in the Basin such as NexGen Energy's Arrow deposits, Cameco's Rabbit Lake/Collins Bay/Eagle point deposits which have produced over 300 M lbs U₃O₈, and others.

In April 2017 the Company reported the completion of the first seven holes of the diamond drilling program on the Loranger property with the geochemical assay results reported in a news release May 24, 2017. Six of the seven holes intersected U₃O₈ for up to 70+metres. In June 2017 a 117 km ground prospecting and a radiometric survey was completed, identifying far more radioactive occurrences than reported in historical records.

In March 2019 a total of 1,063 metres was drilled in eight holes on the Loranger property. A combination of radioactivity, alteration, structural styles, and characteristic mineral assemblages share visual similarities with nearby basement-hosted Athabasca high-grade uranium deposits. Highlights of the winter drilling include 3.15 m of 0.032 wt% U₃O₈ at 96.75 m drill hole depth in hole LOR-19-03 and 0.7 m grading 0.066 wt% U₃O₈ at 105.5 m drill hole depth in hole LOR-19-02. The program has identified a 900 metre-long uranium mineralization trend on the Property.

Together with the 2017 drill program, only 5 of the 22 gravity low targets on Loranger have now been tested with 15 drill holes totalling 2,524 metres. Only 2.3 km of the total 94 km of conductive strike length has so far been tested.

North Wollaston & Eastside

In December 2017 the North Wollaston property was acquired by staking. Historic ground exploration discovered four uranium bearing zones at surface in outcrops and boulders returning up to 0.495 wt % U₃O₈, and three of seven regional exploration drill holes intersecting elevated uranium values (> 100 ppm uranium) and/or radioactivity (> 200 cps).

Follow-up ground prospecting on the Eastside and North Wollaston properties will prioritize exploration on trend with high-uranium content outcrops and continue to explore the up-ice directions of uraniferous boulders in the search for other surface uranium showings.

An airborne radiometric, EM and magnetic survey is planned for the North Wollaston property in 2019, to be followed by further ground work the following year.

The Eastside property was acquired by staking in June 2017. Historic prospecting identified three outcrop samples along a 1.7 km geological strike which returned 2,538 ppm, 6,650 ppm and 7,575 ppm uranium. Five boulders of similar lithological provenance to the outcrops, and located down-ice from the outcrops, returned greater than 1,000 ppm uranium. A detailed airborne radiometric, magnetic and VLF-EM survey of 1,178 line-kilometres was flown over the property in September 2017 and identified new radiometric anomalies that were not identified in historic prospecting reports.

Ontario Properties

Appia holds over 13,008 hectares (32,143 acres) encompassing five mineralized zones in the Elliot Lake area of northern Ontario. The zones are called Teasdale, Banana Lake, Canuc, Bouck Lake and Buckles Lake. The Elliot Lake area produced some 360 M lbs. of U₃O₈ from 13 underground mines between 1955 and 1996, and is the only mining camp in Canada that had significant historical commercial REE production.

No work was been carried out in recent years, as the current market for uranium oxide and REEs does not warrant additional work at this time

Teasdale Lake Zone

The following two tables set out the resources reported in the NI 43-101 report entitled "Update Report on the Appia Energy Corp. Uranium-Rare Earth Property, Elliot Lake District, North-Central Ontario, Canada," by Watts Griffis and McOuat ("WGM") dated July 30, 2013 which has been filed on SEDAR (www.sedar.com). It should be noted that the contents for the rare earth components are for rare earth metals, whereas it has become more common to report the contents as equivalent rare earth oxides.

Table 1
Summary of Teasdale Zone Uranium and Rare Earth Mineral Resource Estimate

Zone	Tonnes ('000)	Tons ('000)	TREE (lbs/ton)	U ₃ O ₈ (lbs/ton)	Average Thickness (m)	Contained TREE ('000 lbs)	Contained U ₃ O ₈ ('000 lbs)
INDICATED RESOURCES							
UR	6,733	7,422	4.20	0.484	4.61	31,199	3,593
IQ	3,006	3,314	1.98	0.259	2.27	6,578	0.857
LR	3,355	3,699	2.68	0.958	2.60	9,912	3,544
Total	13,095	14,435	3.30	0.554	9.48	47,689	7,995
INFERRED RESOURCES							
UR	18,326	20,201	3.87	0.421	4.33	78,080	8,498
IQ	10,209	11,254	1.64	0.184	2.78	18,464	2,070
LR	9,972	10,992	3.33	0.869	2.71	36,631	9,564
Total	38,507	42,447	3.14	0.474	9.82	133,175	20,115

- Note:
1. Mineral Resources effective 30 July, 2013
 2. Mineral Resources are estimated at a cut-off value of \$100 per tonne, using a uranium price of US\$70/lb U₃O₈, a TREE price of \$78/kg, and a C\$:US\$ exchange rate of 1:0.9. TREE includes all the REE elements from lanthanum to lutetium plus yttrium.
 3. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There are no known specific problems at this date.
 4. The quantity and grade of reported Inferred Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as an Indicated or Measured Mineral Resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Mineral Resource category.
 5. The Mineral Resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council December 11, 2005.
 6. Specific Gravity of 2.85 tonnes/m³ (or 3.14 tons/m³) was used.
 7. Indicated amounts may not precisely sum due to rounding.

Table 2
Individual REE Resource Grade Composition Summary

Zone	Light REE (grams/tonne)						Heavy REE (grams/tonne)									
	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Y
INDICATED RESOURCES																
UR	540	951	93.9	313	51.7	1.9	32.8	3.9	17.2	2.7	7.0	0.9	5.5	0.8	6.8	72.9
IQ	256	452	44.9	148	24.4	1.0	14.7	1.8	7.7	1.2	3.1	0.4	2.5	0.4	3.6	30.6
LR	332	596	59.4	201	35.1	1.7	23.2	3.0	14.2	2.3	5.9	0.8	4.5	0.6	3.3	58.1
Average	422	745	73.8	247	41.1	1.7	26.2	3.2	14.3	2.3	5.8	0.8	4.6	0.7	5.2	59.4
INFERRED RESOURCES																
UR	498	876	85.9	285	47.2	1.8	29.3	3.5	15.9	2.5	6.5	0.9	5.3	0.8	6.8	67.9
IQ	213	374	37.0	122	20.0	0.8	12.3	1.4	6.4	1.0	2.6	0.4	2.2	0.3	3.3	26.5
LR	417	747	73.9	249	43.4	1.9	28.5	3.6	16.4	2.6	6.6	0.9	5.2	0.7	4.5	66.4
Average	401	709	69.9	232	39.0	1.6	24.6	3.0	13.5	2.1	5.5	0.7	4.4	0.6	5.3	56.5

Historical Estimates

Table 3
1979 Historical U₃O₈ Estimates on Appia's Elliot Lake Properties

<u>Zone</u>	<u>Quantity</u> (tons)	<u>Grade</u> (lbs U ₃ O ₈ /ton)	<u>Contained U₃O₈</u> (lbs)
Teasdale Lake Zone	17,458,200	1.206	20,787,200
Buckles Zone (Gemico Block #3)	42,800,000	0.38	16,264,000
Bouck Zone (Gemico Block #10)	20,700,000	0.75	15,525,000
Banana Lake Zone	175,800,000	0.76	133,608,000
Canuc Zone	<u>7,000,000</u>	<u>1.86</u>	<u>13,020,000</u>
Total	263,758,200	0.76	199,204,200

The foregoing historical resources were not estimated in accordance with definitions and practices established for the estimation of Mineral Resources and Mineral Reserves by the Canadian Institute of Mining and Metallurgy. As such, the historical resources are not compliant with Canada's security rule NI 43-101, and are unreliable for investment decisions. Neither Appia nor its Qualified Persons have done sufficient work to classify the historical resources as mineral resources under current mineral resource terminology and are not treating the historical resources as current mineral resources. Nevertheless, most of the historical resources were estimated by mining companies active in the Elliot Lake camp using assumptions, methods and practices that were accepted at the time, and based on corroborative mining experience.

Banana Lake Zone

Based on drilling by Appia during 2007, a subsequent Mineral Resource estimate for the Banana Lake Zone was prepared in 2011 by WGM in accordance with the provisions of NI 43-101. Some of Appia's drilling included holes that were wedged from historical drill holes that Appia re-entered. This resource, first reported in Workman and Breede (2011), is summarized in Table 4. A single hole drilled in 2012 to 1,647 metres did not encounter the typical geological formation with assays returning no significant values of U₃O₈, thorium or REEs. WGM, however, is of the belief that this hole did not materially impact the potential for additional resources in the Banana Lake Zone.

. Table 4
Summary of Banana Lake Zone Mineral Resource Estimate

Category	Tons (‘000)	Specific Gravity (tons/m ³)	lbs. U ₃ O ₈ /ton	Total lbs U ₃ O ₈ (‘000)
Inferred Resources	30,315	3.14	0.912	27,638

- Notes:
1. Effective, 1 April, 2011
 2. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
 3. The quantity and grade of reported Inferred Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as an Indicated or Measured Mineral Resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Mineral Resource category.
 4. The Mineral Resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council December 11, 2005.
 5. A cut-off grade of 0.6 lb. U₃O₈ was used
 6. Specific Gravity of 2.85 tonnes/m³ (or 3.14 tons/m³) was used.
 7. Indicated amounts may not precisely sum due to rounding.

Summary:

The Company is considering the next stage of the Teasdale exploration and evaluation. The longer-term outlook for uranium prices is positive and the successful recovery of the REEs, particularly the critical elements of the total rare earths encountered, is very encouraging. Factors favourable for the project include the following:

- new mine infrastructure development would be in brownfield areas already disturbed by industrial and mining activity;
- water, electrical, transportation and communications infrastructure is in place or close at hand;
- the recovery of uranium from Elliot Lake ore is well known. Based on Teasdale Lake test results, the recovery of REEs appears to face no significant technical uncertainties;
- Appia is not responsible in any manner for potential future environmental impacts arising out of historical mining operations or waste disposal; and,
- The Cameco uranium refinery is located approximately 60 km away, near Blind River.

The National Instrument 43-101 (“NI 43-101”) report on the Elliot Lake properties completed in 2013 incorporated a new concept of simultaneously mining a nine metre high underground zone, including the Upper Reef, the Rare Earth Elements in the Intermediate Quartzite Zone and the Lower Reef. With the REE content by weight being over six times the uranium content, the economic value of the mineralized zone has been greatly enhanced. A significant portion of the previously categorized Inferred Resources was upgraded to Indicated Resources, and additional resources were defined.

Appia holds over 13,008 hectares (32,143 acres) encompassing five mineralized zones in the Elliot Lake area of northern Ontario. The zones are called Teasdale, Banana Lake, Canuc, Bouck Lake and Buckles Lake. The Elliot Lake area produced some 360 M lbs. of U₃O₈ from 13 underground mines between 1955 and 1996 and is the only mining camp in Canada that had significant historical commercial REE production (yttrium).

More work to expand the Resources at Teasdale and the preparation of a Preliminary Economic Analysis of the project will be contingent on an improved price for uranium and a clearer picture of supply and demand for REEs.

Overall Outlook

The Company's exploration program on the Alces Lake property is proceeding at an accelerated pace, and weather permitting, will continue until the end of September 2019. The program includes ground gravity surveys exploring for subsurface REE zones, up to 3000 metres of diamond drilling, geological mapping, radiometric prospecting, and additional exploration, mapping and sampling of heavy mineral sand accumulations along the beaches of Alces Lake.

The progress at Alces Lake last summer and this year has been very exciting, with the current drill core assays confirming the 2018 TREO grades of the channel sampling and initial drill holes, ranking among the highest in the world. Drilling this year is exploring the depth of the mineralized zones, as well as expanding the known zones and new targets.

The results of exploration to date and a better understanding of the value of the Alces Lake mineralization assisted in raising \$3.2 million since July, 2018, securing the financing for the 2019 exploration program, as well as working capital.

The drill program on the Loranger property in March, 2019 succeeded in providing additional insight to guide further exploration. Only 5 of 22 identified targets have been drilled to date.

An airborne VTEM/radiometric survey is planned for North Wollaston, to be followed-up with ground prospecting.

The 2012 drilling at the Teasdale Zone of Elliot Lake and the change in the proposed mine plan resulted in very significant quantities of REEs being reported, with a large increase in the Indicated category and an overall increase in the Indicated and Inferred Resources. The preliminary metallurgical test recovery of 90% for uranium and 80% to 90% for most REEs is very encouraging. There have been significant developments in the separation of individual REEs from the composite ore which suggests that these test results can be improved upon.

More work to expand the Resources at Teasdale and the preparation of a Preliminary Economic Analysis of the project will be contingent on an improved price for uranium and a clearer picture of supply and demand for REEs. Critical REEs, such as Nd, Pr, and Dy are currently experiencing strong price increases.

The tsunami in Japan resulted in the shut-down of all of its 54 nuclear reactors, resulting in a severe drop in uranium prices. Thirty-six reactors in all are expected to be restarted. Nine reactors are currently operating, with an additional six having received approval to restart. Projections indicate that perhaps 20 will be operating by the end of 2019.

There are currently 64 reactors reported to be under construction around the world. A reactor start-up requires twice as much uranium in its first year of operation, and normal industry practice is to build up a stockpile to ensure a seven year supply, but with the current low spot price of uranium, operators have adopted a wait-and-see attitude on pricing, are not rebuilding their stockpiles to "normal" levels, and are not actively seeking to sign long-term delivery contracts.

The United States has about 100 reactors in operation, and recently announced the intent to extend the life of its operating reactors from 60 to 80 years, in recognition of the clean energy aspect of nuclear power. The USA does not have the capability of economically supplying more than a fraction of its required uranium oxide domestically at current prices.

China has 42 operating nuclear reactors, 16 reactors under construction and a further 43 planned as part of the plan to reduce the use of coal for generating electricity. Thermal coal in Asia is currently selling at US\$110 per tonne, an added incentive to move to nuclear power. The production of REEs requires a lot of electric power.

Kazatomprom, Kazakhstan's largest uranium producer (25% of global output), cut production by 7% in 2018.

Cameco has indefinitely shut down the McArthur River mine, is using up its inventory of mined uranium and is expected to be purchasing up to 30 million pounds annually on the spot market in order to satisfy its contractual delivery requirements. As it would likely take an estimated 12 to 18 months to restart the McArthur River mine,

Cameco will need to continue to purchase up to 30 million pounds annually until a restart proceeds. This is expected to have an effect on spot prices, which in 2018 rose by almost 20% but is currently still only about US\$25 per pound.

The uranium demand forecast shows an increase from China, and by 2021 known supply sources are projected to be unable to match demand. Industry opinion is that a contract price of US\$60 per pound is needed before any new mining project advances. The World Nuclear Association recently projected an annual production shortfall of 50 million pounds in the near future.

The US Government Accountability Office released a report in 2016 indicating that the Department of Defense has not addressed defining which of the REEs are critical regarding supply, although at various times 15 REEs were identified as critical for weapon-related applications by the military. The Department of Defense has agreed to work toward a department-wide strategy for securing its critical REE supply chain.

China has controlled most of the world supply of REEs but is reported to be unable to supply its own requirements. Known current mine production is less than consumption. Demand is expected to increase by 58% by 2020, with known supply sources not able to meet this demand.

The political stability of countries supplying the uranium and REE market has caused concern in the United States, as it relies on imports of uranium for reactors and for the supply of REEs required by the defence industry, for electronics and high strength magnets needed in the electric vehicle and wind farm applications. A proposal is under consideration in the US to ban the acquisition of sensitive REE materials, such as neodymium-iron boron magnets, from non-allied foreign nations.

Results of Operations

Exploration expenses incurred for the three months ended June 30, 2019 were \$359,765 (2018 - \$154,486) almost all on the Alces Lake Project, which is continuing in the fourth quarter ending on September 30, 2019. Exploration and evaluation costs totalled \$826,938 for the nine-month period (2018 - \$244,912). Costs incurred in the quarter ended December 31, 2018 were \$122,847, largely for the evaluation of the Alces Lake summer channel sampling and drilling program.

During the quarter the Company spent \$65,190 on exploration equipment, adding to the \$346,678 spent the previous summer on equipment and the construction of a semi-permanent camp at Alces Lake. These costs have been capitalized and are being amortized over their useful lives, expected to be three or four years.

Total general and administrative expenses for the three months ended June 30, 2019 were \$151,336 compared to \$105,577 in the same period in 2018. The increase in professional fees to \$18,925 (2018 - \$14,721), increase in management fees and salaries to \$34,800 (2018 - \$28,863) and increase in non-cash, share-based compensation to \$23,411 from \$nil in 2018 account for most of the difference.

General and administrative expenses for the nine months ended June 30, 2019 were \$413,473, comparable to \$400,505 in the same period in 2018. The drop in non-cash share-based compensation for consultants to \$36,119 (2018 - \$79,276) offset the increases in management fees and salaries to \$114,500 (2018 - \$93,750) and shareholder communication to \$150,638 (2018 - \$137,710). Considerable management time was spent this year on presentations relating to fund raising, as well as the actual time involved in the private placement of flow-through and working capital units.

The Company's net loss and comprehensive loss (exploration and administration) for the three and nine months ended June 30, 2019 was \$530,961 and \$1,289,716, compared to \$210,178 and \$651,216 in 2018.

Selected Quarterly Information

2018 - 2019	Jun 30, 2019	Mar 31, 2019	Dec 31, 2018	Sep 30, 2018
	\$	\$	\$	\$
Net loss and comprehensive loss	(530,961)	(520,534)	(238,222)	(722,971)
Net loss per share – basic and diluted	(0.00)	(0.00)	(0.00)	(0.01)
Total assets	2,692,429	2,753,935	2,690,479	2,018,637
2017 - 2018	Jun 30, 2018	Mar 31, 2018	Dec 31, 2017	Sep 30, 2017
	\$	\$	\$	\$
Net loss and comprehensive loss	(270,178)	(167,679)	(213,360)	(242,544)
Net loss per share – basic and diluted	(0.00)	(0.00)	(0.00)	(0.01)
Total assets	1,730,441	1,866,897	2,009,164	2,167,541

Capital Resources and Liquidity

At June 30, 2019, the Company had working capital of \$704,892 (after providing \$743,583 owing to related parties) compared to working capital of \$188,213 as at September 30, 2018 and \$297,625 at August 8, 2019 (after providing for \$704,730 owing to related parties).

On July 24, 2018, the Company closed a non-brokered private placement with the sale of 910,000 flow-through units (“FT Units”) at \$0.19 per FT Unit for gross proceeds of \$172,900 and 5,160,000 working capital units (“WC Units”) at \$0.17 per WC Unit for proceeds of \$877,200, for an aggregate \$1,050,100.

Each FT Unit consists of one common share and one half of a share purchase warrant entitling the holder to purchase one common share for one full warrant at a price of \$0.30 until January 24, 2020. Each WC Unit comprises one common share and one common share purchase warrant entitling the holder to purchase one common share at a price of \$0.30 until January 24, 2020. The Company paid cash finder’s fees of \$19,868.

In the event that the closing price of the Common Shares on either the CSE or the OTCQB is at least \$0.45 for ten consecutive trading days after at least four months from the closing date, the final exercise date would be accelerated to 30 days after the ten consecutive closing prices are established.

On December 31, 2018 the Company closed a non-brokered private placement of 2,189,500 FT Units for gross proceeds of \$602,112 and the first tranche of a non-brokered private placement of up to 4,000,000 WC Units with the sale of 1,425,000 WC Units for gross proceeds of \$342,000.

Each FT Unit was priced at \$0.275 and consists of one common share and one-half of a share purchase warrant. Each full warrant entitles the holder to purchase one common share at a price of \$0.40 per FT Warrant Share for 12 months from closing. Broker warrants exercisable at \$0.275 for 12 months from closing for 175,160 common shares were issued to finders.

Each WC Unit was priced at \$0.24 and consists of one common share and one common share purchase warrant. Each WC Warrant entitles the holder to purchase one common share at a price of \$0.35 per WC Warrant Share for 24 months from closing.

On January 16, 2019 the Company closed the final tranche of the non-brokered private placement of 1,884,121 WC Units for aggregate gross proceeds of \$482,159.

All securities issued pursuant to the above referenced private placements were subject to a statutory four month hold period.

On April 5, 2019 the Company closed a non-brokered private placement of 1,000,000 flow-through shares for gross proceeds of \$400,000. Each flow-through share was priced at \$0.40. Proceeds from the Offering are expected to be used for drilling and exploration on the Company's Alces Lake Property as well as other properties in Saskatchewan. An eligible finder was paid a cash fee of \$24,000 and issued 60,000 FT broker warrants. Each FT broker warrant entitles the holder to acquire one common share at a price of \$0.40 for twelve months from closing. All securities issued are subject to a statutory four month hold period expiring on August 9, 2019.

The Company has no operating revenue and has historically funded its operations with equity based private placements. The Company's future exploration plans are contingent on raising capital resources, and has financial resources to fund its planned exploration program and administration costs for the next twelve months.

The Company's ability to meet its obligations and continue as a going concern is dependent on the ability to identify and complete future financings. While the Company has been successful in raising financings, there can be no assurance that it will be able to do so in the future.

Common Share Data

The Company is authorized to issue an unlimited number of no par value common shares. The following table provides the details of changes in the number of issued common shares.

	Number #	Amount \$
Balance, September 30, 2017	52,332,007	9,623,555
Flow-through units private placement July 24, 2018	910,000	172,900
Working capital units private placement July 24, 2018	5,160,000	877,200
Less: Value associated with warrants issued	-	(137,422)
Share issue costs	-	(27,878)
Balance, September 30, 2018	58,402,007	10,508,355
Flow-through units private placement December 31, 2018	2,189,500	602,112
Working capital units private placement December 31, 2018	1,425,000	342,000
Working capital units private placement January 16, 2019	1,884,121	452,189
Flow-through units private placement April 5, 2019	1,000,000	400,000
Less: Value associated with warrants issued	-	(107,862)
Warrants exercised	411,840	111,811
Share issue costs	-	(122,619)
Balance, June 30, 2019	65,312,468	12,185,986

Common share purchase stock options

The Company has a stock option plan (the "Plan") for the benefit of directors, officers and consultants. The total number of shares which may be reserved and set aside for issuance to eligible persons may not exceed 10% of the issued and outstanding common shares.

As at June 30, 2019, 4,050,000 common shares were reserved for the exercise of stock options granted under the Plan.

The following table provides the details of changes in the number of issued common share purchase options during the period:

	Options	Weighted-average exercise price \$
Outstanding at September 30, 2017	3,850,000	0.28
Expired	(300,000)	0.30
Granted	200,000	0.30
Outstanding at September 30, 2018	3,750,000	0.28
Granted	300,000	0.40
Outstanding at June 30, 2019	4,050,000	0.29
Exercisable at June 30, 2019	3,850,000	0.29

On June 30, 2018 300,000 options at \$0.30 expired unexercised.

On August 1, 2018 the Company granted 200,000 options to purchase common shares exercisable at \$0.30 per share for five years to one consultant.

On May 15, 2019 the Company granted 300,000 options to purchase common shares exercisable at \$0.40 per share for three years to one consultant.

A summary of the outstanding stock options as at June 30, 2019 is as follows:

Number of stock options	Number exercisable	Remaining contractual life	Exercise price per share	Expiry date
500,000	500,000	21.5 months	\$0.10	April 14, 2021
100,000	100,000	25.7 months	\$0.30	August 22, 2021
2,950,000	2,950,000	31 months	\$0.30	February 1, 2022
300,000	100,000	34.5 months	\$0.40	May 15, 2022
200,000	200,000	49 months	\$0.30	August 1, 2023
4,050,000	3,850,000			

Warrants

On certain issuances of common shares, the units include warrants entitling the holder to acquire additional common shares of the Company, and the Company also grants warrants as consideration for services associated with the private placement of such issues.

The following table provides the details of changes in the number of outstanding common share purchase warrants:

	Number of shares	Value \$
Balance September 30, 2017	9,140,009	478,548
Expired, unexercised broker warrants	(35,000)	(3,393)
Expired, unexercised	(375,000)	(11,187)
Private placement warrants issued	5,615,000	137,422
Balance September 30, 2018	14,345,009	601,390
Expired, unexercised	(2,888,169)	(230,574)
Warrants exercised	(411,840)	(30,494)
Private placement warrants issued	4,772,364	107,862
Balance June 30, 2019	15,817,364	448,184

A summary of the outstanding warrants is:

	Number of shares	Remaining contractual life	Exercise price per share	Expiry date
Warrants	75,000	2.3 months	\$0.30	September 8, 2019
Warrants	5,615,000	6.8 months	\$0.30	January 24, 2020
Warrants	4,950,000	30.7 months	\$0.30	January 20, 2022
Warrants	405,000	31 months	\$0.30	January 30, 2022
Warrants	1,425,000	18 months	\$0.35	December 31, 2020
Warrants	1,094,750	6 months	\$0.40	December 31, 2019
Warrants	175,160	6 months	\$0.275	December 31, 2019
Warrants	133,333	6.5 months	\$0.24	January 15, 2020
Warrants	1,884,121	6.5 months	\$0.35	January 15, 2020
Warrants	60,000	9.2 months	\$0.40	April 5, 2020
Balance, June 30, 2019	15,817,364			

The number of common shares outstanding on August 8, 2019 was 65,312,468. Taking into account outstanding share purchase options and warrants, the fully diluted number of common shares that could have been outstanding on August 8, 2019 was 85,179,832.

Related Party Transactions

During the three and nine months ended June 30, 2019, the Company incurred related party expenses totaling \$63,985 (2018 – \$54,779) and \$194,158 (2018 – 155,658). These expenses related to management fees paid or payable to key management personnel; Tom Drivas, Chief Executive Officer, Frank van de Water, Chief Financial Officer, James Sykes, Vice-President, Exploration and Development, and office administration services paid to Romios Gold Resources Inc., a company with a number of common directors and officers. The amount charged for office administration services is included under office and general expenses. At June 30, 2019, \$611,730 (2018 - \$576,730) of accumulated related party expenditures was payable to Tom Drivas and \$37,621 (2018 - \$17,635) was payable to the other officers.

Share-based compensation to key management and directors for the period ended June 30, 2019 was \$nil (2018 - \$76,589).

Key management personnel were not paid post-retirement benefits, termination benefits, or other long-term benefits during the period ended June 30, 2019 and 2018.

During the three and nine months ended June 30, 2019, the Company incurred expenses of \$3,000 (2018 – \$4,000) and \$12,500 (2018 – \$13,500) for independent directors' fees. At June 30, 2019, \$93,000 (2018 - \$76,500) of accrued directors' fees was outstanding.

During the three and nine months ended June 30, 2019, the Company incurred expenses of \$7,540 (2018 - \$6,721) and \$29,495 (2018 - \$15,163) for legal fees to a law firm related to a director of the Company, William R. Johnstone. At June 30, 2019 \$1,232 (2018 – \$5,029) was payable to this related party.

As disclosed in Note 5 to the financial statements, the Company's major exploration property in Ontario was acquired from a related party.

Carrying value of exploration and evaluation assets

The Company regularly reviews the carrying value of its properties to determine whether the cost of these assets will be recoverable from future cash flows or from the proceeds of their disposal. Assumptions underlying the cash flow estimates would include the forecasted prices for uranium and rare earth elements, planned production levels,

and operating, capital, exploration and reclamation costs, which are all subject to risks and uncertainties. Management has determined that there is no impairment of the carrying value of its exploration properties.

Off-Balance Sheet Arrangements

The Company does not have any off-balance sheet arrangements.

Financial Instruments and Other Instruments

The Company is required to disclose information about the fair value of its financial assets and liabilities. Fair value estimates are made at the balance sheet dates, based on relevant market information and information about the financial instrument. These estimates are subjective in nature and involve uncertainties in significant matters of judgment and therefore cannot be determined with precision. Changes in assumptions could significantly affect these estimates.

The Company's financial instruments recognized in the balance sheet consist of cash and cash equivalents, HST/GST receivable and current liabilities. The fair value of these financial instruments approximates their carrying value due to the short maturity or current market rate associated with these instruments.

Risk Factors

There are a number of risks that could affect Appia's business prospects. They include the speculative nature and the ability to finance the exploration and development of the Company's mineral properties, operating hazards, environmental and other government regulations, competition in the marketplace, markets for the Company's securities and the demand for uranium and rare earth elements. The Company's viability will depend on defining recoverable and economic resources and establishing positive comprehensive feasibility studies leading to production decisions. After completion of positive feasibility studies, the Company's success is dependent on maintaining the title and beneficial interest in the properties, obtaining the necessary governmental approvals and the successful financing, construction and operation of a facility to profitably extract the contained metals.

Financial Capability and Additional Financing

The Company had a cash position of \$859,505 and working capital of \$297,625 at August 8, 2019, (after providing for \$704,730 owing to related parties), has no source of operating income and has no assurance that additional funding will be available to it for further exploration and development of its projects. Although the Company has been successful in the past in financing its activities through the sale of equity securities, there can be no assurance that it will be able to obtain sufficient financing in the future to continue as a going concern.

Land access

Under the modified Mining Act (Ontario), the Company is required to obtain permits to conduct exploration and evaluation activities on its Ontario properties. The Ontario Government is required to consult with the First Nations in order to reach agreement to permit activity in areas considered to have been historically inhabited. The impact of any possible delays on the Company's intended activity is unknown.

Special Note Regarding Forward-Looking Statements

Certain statements in this MD&A may constitute "forward-looking" statements which involve known and unknown risks, uncertainties and other factors which may cause the actual results to differ materially from the statements made. When used in this report, the words "estimate", "believe", "anticipate", "intend", "expect", "plan", "may", "should", and "will", are intended to identify forward-looking statements, and reflect the current expectations of the management of the Company with respect to future events, and are subject to risks and uncertainties, such as reduced funding and general economic and market factors. New risk factors may arise from time to time and it is not possible for management of the Company to predict all of those risk factors or the extent to which any factor or combination of factors may cause actual results, performance or achievements of the Company to be materially

different from those expressed or implied in such forward-looking statements. Investors should not place undue reliance on forward-looking statements as a prediction of actual results. The Company does not undertake or assume any obligation to update these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events, except as required by law.

Additional Information

- (1) Additional information may be found on the Company's website at www.appiaenergy.ca and on SEDAR.
- (2) The technical information included in this MD&A regarding Saskatchewan was reviewed and approved by Thomas Skimming, P.Eng, a Director of Appia, a Qualified Person as defined by National Instrument 43-101, and the technical information regarding the Elliot Lake properties has been reviewed and approved by Al Workman, P.Geo. Senior Geologist, Watts, Griffis and McOuat Ltd., a Qualified Person in accordance with the Canadian regulatory requirements as set out in NI 43-101.

Appendix – Individual REO grades supporting reported TREO grades

Program Year	Sample Source	La ₂ O ₃ (wt%)	CeO ₂ (wt%)	Pr ₆ O ₁₁ (wt%)	Nd ₂ O ₃ (wt%)	Sm ₂ O ₃ (wt%)	Eu ₂ O ₃ (wt%)	Gd ₂ O ₃ (wt%)	Tb ₄ O ₇ (wt%)	Dy ₂ O ₃ (wt%)	Ho ₂ O ₃ (wt%)	Er ₂ O ₃ (wt%)	Yb ₂ O ₃ (wt%)	Lu ₂ O ₃ (wt%)	Y ₂ O ₃ (wt%)	ThO ₂ (wt%)	U ₃ O ₈ (wt%)	TREO (wt%)	CREO (wt%)
Reference - pages 2 and 4																			
2019	IV-19-003	3.550	7.820	0.860	3.080	0.410	0.000	0.220	0.020	0.040	0.000	0.000	0.000	0.000	0.090	2.070	0.050	16.100	4.000
2018	IV-19-001	3.730	7.550	0.870	2.680	0.360	0.000	0.200	0.010	0.030	0.000	0.010	0.000	0.000	0.100	1.800	0.060	15.560	3.610
Reference - page 2																			
2017	Outcrop (cut)	10.731	23.708	3.008	9.506	1.426	0.016	0.662	0.056	0.124	0.011	0.091	0.003	0.001	0.292	5.505	0.199	49.638	12.711
Reference - page 3																			
2018	Charles Lower	2.149	4.255	0.488	1.529	0.214	0.003	0.121	0.006	0.022	0.003	0.007	0.001	0.000	0.069	1.109	0.034	8.868	2.049
2018	Dylan	7.407	15.841	1.719	5.444	0.708	0.010	0.407	0.020	0.066	0.008	0.021	0.001	0.000	0.174	3.842	0.100	31.827	7.259
2018	sand - NM	0.082	0.169	0.019	0.055	0.009	0.001	0.006	0.001	0.005	0.001	0.002	0.003	0.001	0.032	0.038	0.003	0.386	0.081
2018	sand - FM	0.006	0.018	0.002	0.007	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.001	0.003	0.007	0.001	0.041	0.011
2018	Ivan-L4**	12.343	26.186	2.875	9.260	1.171	0.016	0.663	0.033	0.110	0.013	0.035	0.002	0.000	0.302	6.179	0.143	53.007	12.293

The REEs Thulium (Tm) and Promethium (Pm) are not reported because they are both extremely scarce in nature, and Pm forms as a product of spontaneous fission of U-238

TREO = Total Rare Earth Oxide = sum of La₂O₃+CeO₂+Pr₆O₁₁+Nd₂O₃+Sm₂O₃+Eu₂O₃+Gd₂O₃+Tb₄O₇+Dy₂O₃+Ho₂O₃+Er₂O₃+Yb₂O₃+Lu₂O₃+Y₂O₃

CREO = Critical Rare Earth Oxide = sum of Pr₆O₁₁+Nd₂O₃+Eu₂O₃+Tb₄O₇+Dy₂O₃

	Highlighting Nd grades associated with high-grade TREO
	Highlighting Pr grades associated with high-grade TREO
	Highlighting "high-grade" TREO and CREO (i.e. >1.897 wt% TREO)
	Indicates light rare earth elements (LREEs; La, Ce, Pr, Nd, Sm)
	Indicates heavy rare earth elements (HREEs; Eu, Gd, Tb, Dy, Ho, Er, Yb, Lu, Y)
	Indicates radioactive elements (not a rare earth element)

n/a = not applicable

Conditions Used for Reporting Composite Results

- a cut-off grade of 4.0 wt% TREO was applied to all individual samples used in composite grade calculations
- maximum internal dilution along channel lines and/or drill holes does not exceed 2.0 m
- true thicknesses have not been determined

Sand - Magnetic Separation Results: "NM" = non-magnetic, "FM" - ferro-magnetic

***NOTE on Th: the Th value mentioned on page 3 is calculated using the ThO₂ value associated with Ivan-L4 (6.179 wt% ThO₂) divided by the conversion factor (1.0690) noted in the last row of the table

[Note: >1.897 wt% TREO represents >75th percentile for global REO deposit grades of advanced stage-projects \(excluding Gakara, Steenkampskraal and Mount Weld CLD deposits\). The global REO deposit information was derived from publicly available information as of January 31, 2018, from individual company websites, SEDAR technical report filings, and the Technology Metals Research Advanced Rare Earth Projects Index \(http://www.techmetalsresearch.com/metrics-indices/tmr-advanced-rare-earth-projects-index/\)](http://www.techmetalsresearch.com/metrics-indices/tmr-advanced-rare-earth-projects-index/)