ASX Release
31 October, 2016

Great Western Exploration Limited
ABN 53 123 631 470
ASX Code: GTE

Success starts with Opportunity
GTE is an experienced exploration company focussed on the discovery of high value base metal, nickel and gold deposits.

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Board of Directors
Kevin Somes – Chairman
Jordan Luckett – Managing Director
Craig Mathieson – Non-Executive
Terry Grammer – Non-Executive
Justin Barton – Company Secretary

Quarterly Report
September 2016

Highlights

• Shareholders approve the acquisition of Vanguard Exploration Limited (“Vanguard”)
• Great Western Exploration Limited (“the Company”) has received more than 90% acceptances from the Vanguard shareholders to date.
• The Company can now move to compulsory acquire the remaining shares if required.
• Vanguard made a promising new gold-silver discovery with bonanza grades at its Ives Find project located in the Yandal greenstone belt.
• The Ives Find project has drill ready targets set once the capital raising is complete.
• There is an increase in activity in the Yerrida district with a number of companies entering into JVs or completing capital raisings adjacent to the Company’s areas further demonstrating the potential value of its strategic Yerrida land position.
• This activity appears to be in relation to copper – gold exploration in the northern regions and cobalt exploration in southern regions.
During the Quarter, Great Western Exploration Limited’s (“GTE”; the Company”) shareholders approved the acquisition of Vanguard Exploration Limited (“Vanguard”) at the General Meeting of Shareholders held on the 25th October 2016 (see announcement dated 26th October 2016). The Company has also been notified that over 90% of Vanguard shareholders have accepted the offer which will allow the Company to compulsory acquire the remaining Vanguard shares if required.

Now that the statutory requirements have been completed the Company can now pursue further corporate opportunities and start work at its newly acquired projects and resume exploration at its current projects.

Figure 1. Location of GTE and Vanguard’s North Yilgarn projects
The immediate focus of the Company is to complete the capital raising that is required as part of the conditions of the Vanguard acquisition. Once this is completed the Company will be focussing on gold exploration with drilling initially planned at the Ives Find project and then test the Finlayson Prospect. The Company already has the necessary drilling approvals at Ives Find.

At the Company’s Yerrida projects there has been a noticeable increase of activity with Sandfire Resources Limited (“Sandfire”) announcing it had entered into a JV to acquire a further 1,000 km² within the Yerrida basin adjacent to GTE’s own projects. This in addition to the approximately 1,300 km² Sandfire have acquired in its own right within the last 6 months taking their total area in the Yerrida basin to approximately 2,300 km² and in some places completely surround GTE tenements.

Also adjacent to the Company’s tenements in the southern area of the Yerrida, two ASX listed companies, Metalicity Limited (“Metalicity”) and Dragon Energy Limited (“Dragon Energy”), have announced cobalt projects. Dragon Energy recently purchased their project that it says has significant historic cobalt intersections of up to 80 m @ 0.77% cobalt in diamond drilling while, Metalicity has announced cobalt anomalies in historical RAB drilling up to 0.64% cobalt.

While the Company remains focussed on the gold and lithium potential of the Ives Find project, as well as the gold potential of its Finlayson prospect, it will monitor the progress of the cobalt exploration along its southern boundary.

More importantly these activities emphasise the strategic value of the Company’s Yerrida project. Furthermore, the Yerrida region will see a significant increase of exploration activity adjacent to the Company’s projects in the next 12 months, particularly by Sandfire who are clearly the best explorers in the region. If this work subsequently leads to a new discovery it will have an immediate positive affect on the Company’s share price.

**Ives Find Gold-Lithium Project – Vanguard (100%)**

**Gold**

The Ives Find project area is located approximately 65 kilometres southeast of Wiluna and lies within the world-class Yandal Gold Province (fig 2). Exploration by Vanguard has established the presence of high-grade gold in drilling. In addition to the gold mineralisation there are also significant silver assays (table 1).

The project is well located in terms of infrastructure with two mills within trucking distance, one at Wiluna and the second at Bronzewing located 55 km to the south, which is currently on care and maintenance.

Earlier this year, Vanguard made a new high grade gold discovery along strike of the historical Ives Find gold workings. The best results from the reverse circulation ("RC") drilling completed by Vanguard to date are summarised in Table 1.
Table 1 High grade results from Vanguard Drilling at Ives Find using a 10 g/t gold threshold.

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<th>Hole No</th>
<th>Depth From</th>
<th>Depth to</th>
<th>Interval (m)</th>
<th>Gold Au g/t</th>
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Figure 2. Location of Ives Find in the Yandal belt, Western Australia
Drilling completed by Vanguard identified three high grade veins; Bell Miner, Duck & Duckling. The drilling also demonstrated gold mineralisation extending approximately 1 km south east of the historical Ives Find gold workings (fig 3). Further drilling is required at all three prospects. There is also potential for further discoveries of similar high grade veins as there are a number of geochemical anomalies that remain untested. By example, the Duckling vein was a new discovery as a result of drill testing surface geochemical anomaly. Also of interest in the Vanguard drilling is an end of hole high grade intersection of 1 m @ 1.5% tungsten (IFRC015 from 46 m depth).

**Figure 3:** Drill hole collar location map for all Vanguard RC drilling at Ives Find showing high grade intersected over 1 km of strike length.

In terms of gold exploration, the Company believes there is also potential for much wider zones of gold mineralisation along the granite – greenstone contact where surface mapping indicates shearing but has not yet been drilled.
The Company intends to prioritise drilling at Ives Find targeting gold once the capital raising is complete. The Company already has the necessary drilling approvals at Ives Find.

**Lithium, Tantalum and Tungsten**

In addition to the gold potential, the ground is also prospective for lithium as the granite that hosts the gold mineralisation at Ives Find is rich in high field strength elements (“HFSE”). These granite types are known economic sources of tin and tungsten as well as rare – element pegmatites. These pegmatites are important economic sources of lithium and tantalum (also known as LCT pegmatites). There are many pegmatites outcropping throughout the project area that are spatially related to this granite and there has been no previous exploration for lithium in this area.

The GSWA mapped in a large area of pegmatite outcrop and further field checking identified pegmatites in number of locations over strike length of approximately 6 km and in some areas these are up to 300 m in width (fig 4). Minerals that have been observed in hand specimen include spessartine (Mn rich garnet), green muscovite and white k-feldspar. There are additional minerals that are either tourmaline and/or tantalite as well as fluorite and/or spodumene. In WA, there are Pegmatites with similar mineral assemblages which contain economic amounts of lithium. There is also abundant manganese oxide coating of the host basalts adjacent to the pegmatite intrusions.

The following table lists the main guidelines published by the United States Geological Survey (“USGS”) for the exploration and discovery of economic lithium – tantalum pegmatites (LCT pegmatites):

**Table 2. The USGS guidelines for lithium exploration**

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<th>USGS Lithium Exploration Guidelines</th>
<th>Ives Find Project</th>
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<td>The potential for giant LCT pegmatite deposits are within Archaean aged rocks</td>
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<td>All LCT pegmatites were emplaced into orogenic hinterlands, even those now in the cores of Precambrian cratons.</td>
<td>✓</td>
</tr>
<tr>
<td>LCT pegmatites represent the most highly differentiated and last to crystallize components of certain granitic melts.</td>
<td>✓</td>
</tr>
<tr>
<td>Parental granites are typically peraluminous, S-type granites. The genetic links between a pegmatite and its parental granite have been established through various lines of evidence. In the clearest cases, the two can be linked by physical continuity (Greer Lake, Canada) (Ć S-t and others, 2005).</td>
<td>✓</td>
</tr>
<tr>
<td>The identification of possible granitic parents is a key step in evaluating a region for LCT pegmatite potential. Fertile, peraluminous granites typically contain coarse muscovite that is green rather than silvery; potassium feldspar that is white rather than pink; and accessory garnet, tourmaline, fluorite, and (or) cordierite (Selway and others, 2005). Fertile granites have high caesium, lithium, rubidium, tin, and tantalum, and low calcium, iron and magnesium</td>
<td>✓</td>
</tr>
<tr>
<td>The most evolved pegmatites may contain orange, manganese-rich spessartine</td>
<td>✓</td>
</tr>
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</table>
All of these criteria are observed at Ives Find.

Yerrida Project

The Company currently has approximately 1,300 km² of area within the Yerrida Basin. The area starts from 17 km south east ("SE") of the Monty copper deposit (25 km SE of Degrussa) and extends approximately 120 km to the SE (fig 4). The Company believes the project is prospective for copper massive sulphide, nickel-cobalt massive sulphide and gold.

To date the Company has identified four prospects; Goodin (copper), New Springs (nickel-cobalt), Chisel (copper) and Finlayson (gold). The Finlayson prospect is within the Cunyu JV tenements owned by Glencore where the Company is earning 70%.

While the Company did not complete any field work at its Yerrida projects this quarter there has been a noticeable increase of activity in the district with Sandfire Resources Limited ("Sandfire") announcing it had entered into a JV to acquire a further 1,000 km² within the Yerrida basin adjacent to GTE’s areas. This, in addition to the approximately 1,300 km² Sandfire have acquired in its own right within the last 6 months, takes their total area in the Yerrida basin to approximately 2,300 km² and in some places surround GTE tenements (fig 5).

Also adjacent to the Company’s tenements in the southern area of the Yerrida, two ASX listed companies, Metalicity Limited ("Metalicity") and Dragon Energy Limited ("Dragon Energy"), have announced cobalt projects. Dragon Energy recently purchased their project that it says has significant
historic cobalt intersections of up to 80 m @ 0.77% cobalt in diamond drilling while Metalicity has announced cobalt anomalies in historical RAB drilling up to 0.64% cobalt.

This emphasises the strategic value of the Company’s Yerrida tenements. Also there will be a lot of exploration activity adjacent to the Company’s areas over the next 12 months and if this activity results in a new discovery in the district it will have an immediate positive affect on the Company’s share price.

Figure 5. Regional map showing GTE, Sandfire, Metalicity and Dragon Energy Areas in the Yerrida Basin

*Note the areas outside of those shown above are covered by tenements owned by various companies and individuals which are not shown. There are no remaining areas available.
Cobalt

Australia is the world’s fourth largest producer of cobalt and the majority of the production is a by-product of nickel laterite and nickel sulphide mining. The two biggest producers in WA are Glencore’s Murrin Murrin nickel (laterite) mine and BHP’s Nickel West (sulphide) operations. There is also significant cobalt in the newly discovered Nova nickel-cobalt sulphide deposit.

The Company has been exploring for magmatic nickel – cobalt massive sulphide deposits targeting the mafic volcanic sequences along the eastern margin of the Yerrida as well as the Cunyu Sill, where the New Springs prospect is located. During this process the Company identified the strongest regional cobalt geochemical anomalies in the GSWA regional stream database and these are mostly retained within the company’s project areas (fig 6).

Figure 6. Cobalt (ppm) regional geochemical map derived from the GSWA Yerrida regional soil and stream data
During the last quarter, ASX listed companies Metalicity and Dragon Energy announced cobalt projects in the southern region of the Yerrida basin adjacent to GTE tenements. These companies have stated that they are following up historical diamond and RAB drilling that contains anomalous cobalt.

Dragon Energy reported it acquired the Tabac Cobalt Prospect (fig 5) that has significant historic cobalt intersections of up to 80 m @ 0.77% cobalt in diamond drilling. It also reported it just completed a capital raising that was oversubscribed indicating that there is a building demand for cobalt investments. Metalicity also announced cobalt anomalies in historical RAB drilling up to 0.64% cobalt.

Both companies have reported they are targeting sedimentary hosted cobalt, a style of mineralisation that has not been recognised by the Company or other previous explorers in the Yerrida Basin. While the Company will continue to focus on magmatic nickel-cobalt, as it is a known style of mineralisation that occurs in the similar Proterozoic and Archaean mafic igneous sequences in WA and elsewhere in the world, it will monitor the work completed by these other companies as the target stratigraphy continues into the Company’s areas.

If their work does demonstrate that a new style of cobalt mineralisation exists in the Yerrida basin then the company is well positioned as it has large areas of similar stratigraphy and also retains the most anomalous cobalt areas in the region (fig 6).

**Finlayson Prospect (Cunyu JV GTE earning 70%)**

The Cunyu JV is a Joint Venture (“JV”) between the Company and Glencore, whereby the Company is earning 70%. The project was initially acquired by Jubilee Resources Limited for potential Norilsk style magmatic nickel sulphide mineralisation.

Drilling has confirmed the presence mafic –ultramafic sequences with traces of nickel sulphides along strike to the north west of some of WA’s largest nickel deposits near Wiluna. Furthermore, a number of regional interpretations show the extension of the Bardoc and/or Perseverance faults through the project area.

Work completed by the Company identified the Finlayson gold prospect where drilling intersected a large mineralised shear that likely forms part of the Bardoc/Perseverance shear zone which hosts many major gold mines along strike including the Plutonic gold mine (~5 million ounces) 70 km to the north west and the Wiluna gold mine (~5 million ounces) approximately 70 km to the south east (fig 1).

The drilling was successful in demonstrating that the Finlayson prospect is prospective for gold. The Company’s interpretation indicates that the gold is occurring within what could be an extensive hydrothermal system within a 2 kilometres wide structural corridor (fig 7). This is similar in size and geological setting as the Wiluna gold deposits located 70 km along strike to the southeast.
The Finlayson prospect is a high priority gold target and is scheduled to be drill tested following the initial drilling at Ives Find, most likely during the March quarter next year.

**Chisel Prospect (GTE 100%)**

The Chisel prospect is located approximately 40 km northwest ("NW") of Wiluna and 14 km north ("N") of the Magellan lead mine (fig 1). The company believes the area is prospective for massive copper sulphide and silver-lead-zinc style mineralisation and has historical base metal anomalies in historic drilling that have not been followed up.

Most of the exploration in the region was completed by RSG in the early to mid-1990s that resulted in the discovery of the Magellan lead mine. The high level of base metal anomalist that was encountered led RSG to refer to the region as base metal corner in their reports.
The Company believes that the Chisel prospect is prospective for VHMS style copper mineralisation similar to the Degrussa and Monty deposits. Three RC holes were completed this year to determine the nature of the base metal anomalism in an historical intersection of 2 m @ 3.2% copper, 8 g/t silver, 0.296 g/t gold and 0.12% zinc from a single diamond hole (DDH7) drilled in 1994. The main interest in the historical diamond drill hole was the juxtaposition of base metal mineralisation and “peperite” which is a diagnostic feature of Degrussa and Monty style massive copper mineralisation.

The drilling demonstrated a similar geology to Degrussa where mafic volcanics have erupted and/or intruded into a sedimentary sequence forming peperite and hydrothermal alteration. The drilling intersected wide zones (>50 m) of strongly altered medium and fine grained basaltic (mafic) volcanic sequences with locally intense carbonate and pyrite alteration which is indicative of a large hydrothermal system.

![Figure 8: Target Area for VHMS mineralisation at Chisel.](image)

Four potential VHMS horizons have been identified using path finder geochemistry where there has been a combination is barium, silver, cobalt, copper, manganese, iron, molybdenite and zinc enrichment.

Approximately 6 km to the south of Chisel an historical drill hole intersected 2 m @ 85 g/t silver from 44 m (bottom of hole) that also requires further follow-up work (fig 8).
These positive results allow the Company to now proceed with ground EM covering a block 1 km wide and 5 km long to the southeast to target the area adjacent to the Perseverance fault where there is a gravity anomaly co-incident with a complex structural intersection (fig 8).

New Springs Prospect (GTE - 100%)
The New Springs prospect is located approximately 90 km NW of Wiluna within a layered mafic intrusion colloquially referred to as the Cunyu Sill. The Company believes the Cunyu Sill is prospective for magmatic massive nickel – cobalt sulphide similar to the Nova deposit.

The nickel potential of the prospect was first recognised by the GSWA in the late 1990s and Rio Tinto reported in the early 2000s that the area was prospective for Norilsk style massive nickel sulphide mineralisation based on whole rock geochemistry. This was before discovery of either Nova or Nebo nickel deposits in WA.

The prospect also exhibits the criteria set out in the United States Geological Survey (“USGS”) exploration guidelines for magmatic nickel massive sulphide published in 2010 following a worldwide study to determine a deposit model to facilitate the assessment for undiscovered, potentially economic magmatic Ni-Cu±PGE sulphide deposits. The USGS concluded the regional geological guide for magmatic nickel mineralisation are as follows:

- Province boundaries, rifts, and deeply penetrating faults that can allow for efficient transport of magma through the crust.
- Small- to medium-sized differentiated mafic and (or) ultramafic dykes and sills,
- Deposits are generally not hosted in thick, large-layered intrusions.
- Sulphur-bearing crustal rocks into which the layered mafic rocks are intruded.

All of these criteria are either directly observed or can be reasonably interpreted to occur at New Springs where the GSWA has interpreted sulphur bearing crustal rocks, province boundaries, rifts within the Yerrida basin.

The project is also strongly anomalous (> 20 times background) in nickel, copper, cobalt, gold and PGEs with the peak nickel values of 574 ppm and 221 ppm and maps out a broad area that is enriched in nickel, copper, cobalt, Gold and PGEs co-incident with the layered mafic – ultramafic sequence (Fig 9).

This compares well with the Nova nickel deposit which is also hosted in gabbro-pyroxenite sequence where a similar regional geochemical survey was completed over the Fraser Range that identified a nickel anomaly with a peak value of 271 ppm that ultimately led to the discovery of Nova.

There are a number of EM anomalies where the airborne surveys have covered areas within the dolerite-gabbro-pyroxenite sequences that are of interest to the Company. Three of these anomalies were selected for detailed plate modelling on the basis of the proximity to the pyroxenite outcrop and elevated nickel, copper and gold in the regional soil sampling along strike of these anomalies (fig 10 & Fig 11).
Figure 9. GSWA regional geology overlain by the regional gridded nickel response ratios. Also shown is the location of the two maximum nickel and the maximum gold assay at the New Springs prospect from the regional geochemistry database in relation to the gabbro and pyroxenite outcrops.

Figure 10. Some features of interest in the regional aeromagnetic data may represent smaller distinct layers or intrusions within a larger intrusive body.
Figure 11. Two of the airborne EM Plate models in 3d (yellow plates in figure 4) with proposed drilling overlain by gold in regional soil sampling (800 m line spacing). The plate models are also co-incident with elevated nickel and copper in regional soils.

Further work to be completed includes ground EM planned to allow more precise 3D modelling and then carry out drilling.

Goodin Prospect (GTE-100%)

The Goodin prospect is located just 25 km and 17 km south east of Degrussa and Monty respectively. The Company has 8 remaining untested EM anomalies at the Goodin prospect along the “Degrussa” trend which occur at or near the Johnson Cairn – mafic volcanic contact along the western half of the projects.

The Company recently recognized a second Monty trend in both the aeromagnetic and regional soils dataset and has so far identified two high priority structural targets with copper & gold enrichment in soils co-incident with gravity anomalies along this trend (fig 12).

The next phase of exploration will be to carry out EM surveys to cover the Monty trend and then drilling to test the remaining targets at the Goodin prospect and any new targets identified along the Monty trend following the EM survey.
**Figure 12.** Map showing copper enrichment mapping a fault that is trending towards Monty located 16 km along strike to the northwest. Area A is a high priority structural target co-incident with copper in soil enrichment located 30 km along strike from Monty.

**Fairbairn Copper Project – Vanguard (100%)**

The Fairbairn project area is located approximately 170 kilometres north of Wiluna and is situated on the Jenkins-Goodin Fault Zone along strike for the Degrussa copper deposit (fig 4). Historical documents reported chalcopryte within the project including 4 m @ 2.43% Cu in drilling.

The Company believes this prospect is prospective for Proterozoic copper (porphyry and VHMS) and Archaean lode gold. A number of prospective areas have been identified that require geophysical surveys to be completed.
Figure 13: Location of Fairbairn along the Jenkins-Goodin fault

J A Luckett
Managing Director

Competent Person Statement
The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Jordan Luckett who is a member of the Australian Institute of Mining and Metallurgy. Mr Luckett is an employee of Great Western Exploration Limited and 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 Luckett consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.
## Tenement Schedule

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