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Mr Robert B Cleaver Chairman & CEO Goldstake Explorations Inc 2150 Winston Park Drive, Suite 204 Oakville, Ontario Canada L6H 5V1

Dear Robert,

## FIELD EXAMINATION - HOME OF BULLION PROSPECT, (EL23186), NORTHERN TERRITORY, AUSTRALIA

Further to your telephone request of 28<sup>th</sup> August I recently undertook a field examination of the Home of Bullion Cu-Zn-Pb-Ag-Au prospect in company with John Benger and contract geologist Wilson Gewargis on 16<sup>th</sup> and 17<sup>th</sup> September, 2006. I travelled to Alice Springs on 15<sup>th</sup> September, and we drove to Neutral Junction Homestead on the same day. During this trip we met with contract geologist Mike Green in Barrow Creek on 15<sup>th</sup> September, with ALS Laboratory staff, contract geologist Rudi Lennartz and surveyor Brian Blakeman in Alice Springs on 18-19<sup>th</sup> September. Prior to undertaking this field examination I reviewed relevant geological reports on the prospect made available by John Benger and/or obtained on the internet from the SEDAR website (www.sedar.com).

This prospect is located in the south-western part of EL 23186 (Northern Territory) on Neutral Junction Station, approximately 30 km east of Barrow Creek (on the Stuart Highway) and 320 km by road NNE of Alice Springs. The tenement, EL23186, was granted on 15<sup>th</sup> July 2002 and is currently held by Goldstake Explorations Inc (50%), Imperial Granite and Mineral Pty Ltd (25%) and Mr Robert B. Cleaver (25%).

In company with John Benger and Wilson Gewargis I examined the surface geology and old workings of this copper-zinc-lead-silver-gold prospect (both Main Lode and South Lode) on 16<sup>th</sup> September and the drill core from Goldstake's recent 2006 drilling programme on 17<sup>th</sup> September. I had previously reviewed reports by Madigan (1934), Blanchard (1936), Hossfeld (1937), Brittingham (1950), Sullivan (1950), Haines et al (1991) and Goldstake's consultant geologist McBride (2003, 2006).

I summarise below the main observations, results, conclusions and recommendations for this prospect. They were briefly summarised for you during my telephone call from Alice Springs on 19<sup>th</sup> September 2006.

- The historic reports on the old Home of Bullion mine (Madigan, 1934; Blanchard, 1936; Hossfeld, 1937; Brittingham, 1950, Sullivan, 1950; Thompson, 1950) contain a wealth of valuable survey, mining, geological, mineralogical, sampling and assay data on the surface and underground workings which should be utilised in producing an accurate 3-D model of the deposits. Some of these old reports (especially Madigan, 1934 and Hossfeld, 1937) provide comprehensive details of the geology and mineralisation within the old mine workings, including variations in mineralogy (oxide, supergene and primary zones), lode width, lode dip and strike, and offsets related to possible faulting. These data are especially invaluable for the old underground workings which are no longer accessible. Recorded mine production between 1923 and 1951 was approximately 6,100t of high-grade copper ore (Sullivan, 1953; Haines et al., 1991).
- 2. With regard to the historic "ore reserves" (Madigan, 1934; Blanchard, 1936; Hossfeld, 1937; Sullivan, 1950) it is clear that, for the Main Lode, there has been sufficient development and sampling work done to enable the "Mineral Resource" potential to be inferred within the

guidelines of the current (2004) Australian JORC Code for Ore Reserves and Mineral Resources (and its Canadian equivalent NI 43-101).

- 3. Hossfeld's detailed observations (1937, pages 5-8) that the Main Lode within the old workings has a strike length of 175m, is irregular in width but averages 2.5m (measured at 6.4m intervals along strike at surface) up to a maximum of 8.0m, increases in average width with depth (within the mine workings, which are up to 62.4m maximum depth) and dips northerly at angles ranging from 53 to 65 degrees gives a high degree of confidence in his data. Based on his observations and sampling in the Nos. 1 and 2 Shafts, he assumes the oxide zone extends to a vertical depth of approximately 100 feet (32m) and has an average grade of 3.76%Cu, 2.24%Pb, 41.0g/tAg and 0.61g/tAu. In the zone of supergene enrichment (characterised by the alteration of chalcopyrite to chalcocite and covellite), which he believed extends between vertical depths of approximately 100-200 feet (32-64m), Hossfeld (1937, page 9) was able to sample only one area the 143 feet (45.5m) level in the Main Shaft where he obtained 11.66%Cu, 0.71%Zn, 29.1g/tAg and 5.2g/t Au, with "appreciable" amounts of zinc. Our field examination of the surface outcrops along the full strike length of the Main Lode, within the oxide zone, confirmed the reliability of Hossfeld's detailed observations and gave us encouragement in using his data to develop a 3-D model of the geology and mineralisation of the Home of Bullion prospect.
- 4. The old workings (both open cuts and underground) have not been accurately surveyed by a qualified surveyor on behalf of Goldstake. There are no detailed topographic or mine survey plans (surface or underground), cross-sections or longitudinal sections for either the Main Lode or South Lode. Although this was also noted by McBride (2006, page 10) he did not recommend a detailed survey of the old surface workings be undertaken prior to drilling. This situation needs to be rectified before any further drilling is undertaken. With this in mind, John Benger and I met with Brian Blakeman of BBSurveys, Alice Springs, on 18<sup>th</sup> September. Brian could undertake such a survey in October for approximately A\$2,000 if confirmed. BBSurveys can not undertake the compilation of level plans, cross-sections and longitudinal sections to facilitate 3-D modelling and interpretation of the Home of Bullion geological data base. This work would have to be contracted out to a company (such as RME in Orange, or preferably one in Darwin).
- 5. The drill collars of Goldstake's recently completed drilling programme were surveyed by GPS, which has an accuracy of approximately plus/minus 3m for both Eastings and Northings, and plus/minus 10m for altitudes. This is unsatisfactory for a drilling programme designed to confirm known mineralisation and develop "Mineral Resources" and "Ore Reserves" within the requirements of the JORC Code (2004) or its Canadian equivalent.
- 6. The old workings (both open cuts and underground) have not been geologically mapped by Goldstake. There are no detailed geological plans (surface or underground), cross-sections or longitudinal sections for either the Main Lode or South Lode. Although this was noted by McBride (2006, page 10) he did not recommend that detailed geological mapping or costeaning be undertaken prior to drilling. This situation needs to be rectified before any further drilling is contemplated. The mapping, plotting and 3-D interpretation should take an experienced mine geologist less than a week to complete. With this in mind, John Benger and I met with Rudi Lennartz, a consultant mine geologist, in Alice Springs on 19<sup>th</sup> September. He could undertake such a mapping programme in mid-October if confirmed. His fees are A\$750/day, so this work would cost approximately A\$5,000. A further A\$5,000 should be allocated for interpreting the geological mapping, costeaning and drilling data on a 3-D model.
- 7. The old surface workings (on both the Main and South Lodes) show an abundance of geological features (including lithologies, structures, mineralisation, alteration and supergene enrichment) which could and should have been mapped, plotted and interpreted to produce a 3-dimensional model of the two lodes (Main and South) prior to the commencement of the recent drilling programme. This situation also needs to be rectified prior to any further drilling being planned or undertaken. Furthermore, areas of critical importance where outcrop is poor or non-existent have now been identified. A small programme of costeaning to obtain vital geological bedrock information should be undertaken at the same time as the area is geologically mapped in detail by a competent mine geologist. It should be undertaken and directed by the geologist doing the detailed mapping. Two days costeaning (machine and operator hire, plus location charges from Tennant Creek) would cost approximately A\$7,500, according to John Benger. Again, this programme should be confirmed to coincide with the geologist's mapping programme.

- 8. The most important and extensive old mine workings are on the Main Lode, which strikes approximately 108<sup>0</sup> (ESE-WNW) and dips steeply NNE. It is clear that the main ore shoot on this lode is terminated at the western end of the old workings on a strong N-S subvertical fault (Western Fault), such that the western strike continuation (of the Main Lode) appears to be displaced northwards but its outcrop has not been discovered due to surface scree. Similarly, it appears that the main ore shoot on the Main Lode is also terminated at the eastern end of the old workings on another N-S subvertical fault (Eastern Fault), such that the eastern strike continuation (the "Eastern Lode" in old reports e.g. Hossfeld, 1937, page 7-8) is displaced southwards. Although the actual N-S fault was not observed, the displacement of the Main Lode could clearly be seen eastwards from this postulated fault. These geological features should have been observed, mapped and plotted in 3-D prior to the commencement of Goldstake's recent drilling programme. Whilst time did not permit me to produce a detailed geological map of these features I sketched a diagrammatic plan in the field in the presence of John Benger and Wilson Gewargis and we reached consensus on the features observed and the most plausible explanation for the sudden termination of the old workings on the Main Lode.
- 9. Overall, the geological logging and selection of mineralised intersections for sampling by Wilson Gewargis (2006) of Goldstake's recent diamond drilling programme was done accurately and satisfactorily. He was unable to plot the results accurately (on plan, cross-sections or longitudinal section) as they had not been surveyed accurately, only by GPS.
- 10. Goldstake's recent drilling programme was not well designed (by McBride, 2006) because there was no detailed, accurate survey plan of the old workings and topography, nor were there detailed and accurate geological plans and sections. Thus the drilling programme was designed and proposed without a detailed and accurate 3-D model of the known mineral deposits (Main and South lodes) and their extensions along strike and down dip. Furthermore, the strike extensions of the known mineralisation in the old workings had not been traced along strike by costeaning. Not only this, but the sequence in which the proposed holes were to be drilled was not critically designed in terms of efficiency and cost-effectiveness.
- 11. Goldstake's recent drilling results, including mineralised intersections, are summarised in Table 1 at the end of this report. Fuller details, including location plan, sections, drill logs and assay results, are presented by Wilson Gewargis (September 2006) in his Summary Drilling Report.
- 12. The above comments (item 10) regarding the efficiency and effectiveness of the sequence in which the holes were drilled are exemplified by the fact that 7 holes (totalling 487.9m) out of a total of 15 holes (totalling 1,406.0m) failed to intersect the mineralised target zone; four of these drill holes (nos. HOB06/09, 10 11 & 12, totalling 236.9m) were drilled west of the Western Fault (see item 8 above) where the surface outcrop of the Main Lode has not been mapped and where it appears (but cannot be confirmed without costeaning) that the lode has been displaced northwards such that all four holes were drilled into the footwall and would not intersect the Main Lode; one of the best intersections of the Main Lode, in DDH no. HOB06/13, was drilled below one of the richest and widest sections of the lode in the old workings yet it was drilled at the end of the programme rather than at the beginning. Furthermore, there is almost 75m of potential lode to the west of this drill hole along strike that has not been tested! There is no need to enumerate all the examples to make the point. Future programmes should be well designed to obtain maximum information at minimum cost in the most efficient and effective manner. This entails optimising the sequence in which the holes are drilled rather than minimising the time delays involved in moving from one drill site to the next.
- 13. On a more positive note, mineralised intersections were obtained from 8 of the 13 diamond drill holes that intersected the Main Lode, namely DDH's HOB06/01, 02, 03, 05, 06, 07, 13 and 14 (see attached Table 1 for a detailed summary. These 8 intersections show considerable variations in width and Cu, Zn, Pb, Ag and Au grades. The grade variations are the result of primary grade variations and superimposed oxide zone leaching and secondary zone supergene enrichment. These variations require careful 3-D analysis once detailed survey plans and sections are available. The secondary and primary zones have not been thoroughly or adequately tested to date.
- 14. The main conclusions from the recent drilling programme are that it was poorly designed and executed, without prior surveying, costeaning or geological mapping, without detailed survey and geological plans, sections and a 3-D model, and without a logical order of sequencing the

holes to maximise the efficiency and cost-effectiveness of the programme. In spite of some disappointing results, in terms of the total number of intersections obtained compared to the total number and metrage of holes drilled, the "Mineral Resource" potential of both the Main and South lodes has not been not thoroughly tested and is essentially still the same as Goldstake originally envisaged. Further drilling is warranted once the surveying, costeaning, geological mapping and 3-D interpretation of all available data have been completed.

15. In order to properly test this mineral potential and develop it into "Mineral Resources" and "Ore Reserves" (as per the Australian 2004 JORC Code and its Canadian equivalent NI 43-101), I recommend that Goldstake: (a) engage a certified surveyor make a detailed and accurate survey of the immediate prospect area (measuring approximately 700m E-W by 500m N-S), as per my letter to BBSurveys dated 19/09/2006 (copy with John Benger); (b) engage an experienced geologist (preferably one with 3-D mine experience) to map the surveyed prospect area in detail, including old workings on both the Main and South lodes, design and supervise a small programme of costeaning to obtain bedrock data in critical areas, and produce a 3-D geological model of the deposits and their immediate environment. This work could be undertaken during October for a total cost of approximately A\$20,000. The results would allow the design of an optimal drilling programme to efficiently assess the mineral potential of the two main lodes at the Home of Bullion deposit in a logical, sequential and cost-effective manner.

Robert, I trust that this summary report on my recent literature review and field examination of the Home of Bullion prospect with John Benger and Wilson Gewargis has fully met your objectives. Please feel free to contact me at your convenience to discuss any points in this report. Thank you for entrusting me with this assignment. With kind regards.

Yours sincerely,

## Dr Roy Cox

Attached: Table 1 – Summary of "Home of Bullion" Drilling Results 2006