

CM 90-A
2 of 2



EXPLANATION

- Al Alluvium
- Tg Terrace gravels, clay gravels & siltclay
- Tn Hicky Formation (conglomerate & sandstone member)
- Tm Hicky Formation (sand member)
- TKr Lorainde shale (sandy clay)
- TKg Lorainde granodiorite
- pC1 Felsic quartz monzonite (intermediate grade) by sandstone & granite with subvolcanic quartz dirt
- UNCONFORMITY
- pC2 Biotite quartz granodiorite

SYMBOLS

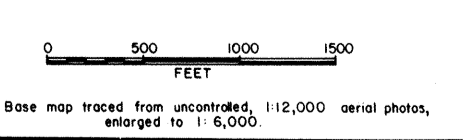
- Contour, dashed where inferred
- Fault, dashed where inferred
- Overturned anticline, syncline, dome, dashed where inferred
- Overturned syncline, where "checked" where inferred
- Strike and dip of horizon with rise of traction which localizes plane
- Vertical fracture
- Strike and dip of layering
- Vertical layering

Funded by Long Lac Mineral Exploration Inc.

<p>CARBINE MEMBER</p> <ul style="list-style-type: none"> pC1a Ripodolite pC1b Conglomerate sandstone + felsic tuff pC1c Ripodolite + calcareous sandstone pC1d Ripodolite (including some debris) to the north + intermediate volcanics to the north pC1e Ripodolite + felsic tuff + clay pC1f Debris, ripodolite, rhyolite + sandstone + clay pC1g Quartz porphyry <p>RAILROAD MEMBER</p> <ul style="list-style-type: none"> pC1h Clay (including ripodolite, intermediate volcanics & felsic tuff) pC1i Ripodolite + felsic tuff + clay pC1j Felsic volcanics, clay + silicification of (s) pC1k Quartz porphyry pC1l Quartz porphyry pC1m Quartz porphyry pC1n Quartz porphyry pC1o Siliceous sandstone + felsic to intermediate tuff & clays pC1p Ripodolite + fragmented breccia pC1q Mudstone + clay pC1r Intermediate felsic porphyry flow, locally brecciated & brecciated pC1s Fragmented quartz porphyry + clay breccia pC1t Quartz porphyry pC1u Siliceous green pC1v Quartz porphyry pC1w Quartz porphyry pC1x Quartz porphyry pC1y Quartz porphyry pC1z Quartz porphyry pC2a Felsic quartz monzonite (intermediate grade) by sandstone & granite with subvolcanic quartz dirt pC2b Felsic quartz monzonite (intermediate grade) by sandstone & granite with subvolcanic quartz dirt pC2c Felsic volcanics pC2d Felsic volcanics pC2e Felsic volcanics pC2f Felsic volcanics pC2g Felsic volcanics pC2h Felsic volcanics pC2i Felsic volcanics pC2j Felsic volcanics pC2k Felsic volcanics pC2l Felsic volcanics pC2m Felsic volcanics pC2n Felsic volcanics pC2o Felsic volcanics pC2p Felsic volcanics pC2q Felsic volcanics pC2r Felsic volcanics pC2s Felsic volcanics pC2t Felsic volcanics pC2u Felsic volcanics pC2v Felsic volcanics pC2w Felsic volcanics pC2x Felsic volcanics pC2y Felsic volcanics pC2z Felsic volcanics <p>IRON KING FORMATION</p> <ul style="list-style-type: none"> pC3a Ripodolite pC3b Ripodolite + calcareous sandstone pC3c Ripodolite + calcareous sandstone pC3d Ripodolite + calcareous sandstone pC3e Ripodolite + calcareous sandstone pC3f Ripodolite + calcareous sandstone pC3g Ripodolite + calcareous sandstone pC3h Ripodolite + calcareous sandstone pC3i Ripodolite + calcareous sandstone pC3j Ripodolite + calcareous sandstone pC3k Ripodolite + calcareous sandstone pC3l Ripodolite + calcareous sandstone pC3m Ripodolite + calcareous sandstone pC3n Ripodolite + calcareous sandstone pC3o Ripodolite + calcareous sandstone pC3p Ripodolite + calcareous sandstone pC3q Ripodolite + calcareous sandstone pC3r Ripodolite + calcareous sandstone pC3s Ripodolite + calcareous sandstone pC3t Ripodolite + calcareous sandstone pC3u Ripodolite + calcareous sandstone pC3v Ripodolite + calcareous sandstone pC3w Ripodolite + calcareous sandstone pC3x Ripodolite + calcareous sandstone pC3y Ripodolite + calcareous sandstone pC3z Ripodolite + calcareous sandstone <p>BOGGS MEMBER</p> <ul style="list-style-type: none"> pC4a Ripodolite pC4b Ripodolite + calcareous sandstone pC4c Ripodolite + calcareous sandstone pC4d Ripodolite + calcareous sandstone pC4e Ripodolite + calcareous sandstone pC4f Ripodolite + calcareous sandstone pC4g Ripodolite + calcareous sandstone pC4h Ripodolite + calcareous sandstone pC4i Ripodolite + calcareous sandstone pC4j Ripodolite + calcareous sandstone pC4k Ripodolite + calcareous sandstone pC4l Ripodolite + calcareous sandstone pC4m Ripodolite + calcareous sandstone pC4n Ripodolite + calcareous sandstone pC4o Ripodolite + calcareous sandstone pC4p Ripodolite + calcareous sandstone pC4q Ripodolite + calcareous sandstone pC4r Ripodolite + calcareous sandstone pC4s Ripodolite + calcareous sandstone pC4t Ripodolite + calcareous sandstone pC4u Ripodolite + calcareous sandstone pC4v Ripodolite + calcareous sandstone pC4w Ripodolite + calcareous sandstone pC4x Ripodolite + calcareous sandstone pC4y Ripodolite + calcareous sandstone pC4z Ripodolite + calcareous sandstone 	<p>PIPELINE MEMBER</p> <ul style="list-style-type: none"> pC5a Felsic to granitic sediments, calcareous pebbles, conglomerate, & "felsic volcanics" (felsic porphyry) sandstone pC5b Conglomerate pebbles + ripodolite to + clay + siliceous calcareous pebbles + clay + sand pC5c Clay + ripodolite + calcareous pebbles + sandstone pC5d Conglomerate sandstone, graywacke, clay + intermediate volcanics + felsic tuff pC5e Felsic volcanics pC5f Clay + siliceous sandstone + felsic tuff pC5g Felsic volcanics pC5h Ripodolite + calcareous sandstone pC5i Ripodolite + calcareous sandstone pC5j Ripodolite + calcareous sandstone pC5k Ripodolite + calcareous sandstone pC5l Ripodolite + calcareous sandstone pC5m Ripodolite + calcareous sandstone pC5n Ripodolite + calcareous sandstone pC5o Ripodolite + calcareous sandstone pC5p Ripodolite + calcareous sandstone pC5q Ripodolite + calcareous sandstone pC5r Ripodolite + calcareous sandstone pC5s Ripodolite + calcareous sandstone pC5t Ripodolite + calcareous sandstone pC5u Ripodolite + calcareous sandstone pC5v Ripodolite + calcareous sandstone pC5w Ripodolite + calcareous sandstone pC5x Ripodolite + calcareous sandstone pC5y Ripodolite + calcareous sandstone pC5z Ripodolite + calcareous sandstone <p>SPUD MOUNTAIN FORMATION</p> <ul style="list-style-type: none"> pC6a Intermediate tuff & calcareous sandstone pC6b Intermediate tuff & calcareous sandstone pC6c Intermediate tuff & calcareous sandstone pC6d Intermediate tuff & calcareous sandstone pC6e Intermediate tuff & calcareous sandstone pC6f Intermediate tuff & calcareous sandstone pC6g Intermediate tuff & calcareous sandstone pC6h Intermediate tuff & calcareous sandstone pC6i Intermediate tuff & calcareous sandstone pC6j Intermediate tuff & calcareous sandstone pC6k Intermediate tuff & calcareous sandstone pC6l Intermediate tuff & calcareous sandstone pC6m Intermediate tuff & calcareous sandstone pC6n Intermediate tuff & calcareous sandstone pC6o Intermediate tuff & calcareous sandstone pC6p Intermediate tuff & calcareous sandstone pC6q Intermediate tuff & calcareous sandstone pC6r Intermediate tuff & calcareous sandstone pC6s Intermediate tuff & calcareous sandstone pC6t Intermediate tuff & calcareous sandstone pC6u Intermediate tuff & calcareous sandstone pC6v Intermediate tuff & calcareous sandstone pC6w Intermediate tuff & calcareous sandstone pC6x Intermediate tuff & calcareous sandstone pC6y Intermediate tuff & calcareous sandstone pC6z Intermediate tuff & calcareous sandstone <p>DANDER SPRING MEMBER</p> <ul style="list-style-type: none"> pC7a Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7b Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7c Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7d Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7e Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7f Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7g Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7h Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7i Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7j Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7k Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7l Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7m Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7n Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7o Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7p Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7q Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7r Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7s Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7t Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7u Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7v Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7w Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7x Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7y Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz pC7z Conglomerate sandstone with intermediate grade intermediate tuff & felsic tuff + rhyolite + quartz
---	--

GEOLOGIC MAP OF THE BIG BUG METALLIC MINERAL DISTRICT, ARIZONA

by
PATRICK F. O'HARA



CM 90-A
2 of 2