# RAU PROPERTY

| Grid East | Grid North | Easting | Northing | Elev. | Depth (m) |
|---|---|---|---|---|---|
| | | 424603 | 6823543 | 1426 | 272.80 |

**ZONE:**

**SECTION:**

**HOLE:** ARM-10-01

**CLAIM:** YB15757

Contractor: Top Rank Drilling

Drill:

Core size: NTW & BTW

Casing depth: 6.10 (m) in / out

Drilling dates: July 9 - July 12, 2010

Geology logged by: Oliver Fu

**SURVEY**

| Depth (m) | Azimuth | Dip | Method | Depth (m) | Azimuth | Dip | Method |
|---|---|---|---|---|---|---|---|
| collar | 200 | -50.0 | compass | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

**TARGET:** Silver soil anomaly

**SUMMARY**

| From (m) | To (m) | Interval | Unit | Comments |
|---|---|---|---|---|
| 0.00 | 6.10 | 6.10 | OVB | Overburden |
| 6.10 | 90.83 | 84.73 | PHY/SLT | Phyllite interbedded with siltstone |
| 90.83 | 135.50 | 44.67 | PHY/SLT | Phyllite interbedded with siltstone. Moderately strong pyrite mineralization |
| 135.50 | 272.80 | 137.30 | SLT/PHY | Phyllite interbedded with siltstone |
| EOH | | | | |

**SAMPLES**

Numbers: E146801 to E146905

Total: 105

Batch: 1, 2, 3

Date Sent:

Certificate:

**COMMENTS**

## GEOLOGY LOG

HOLE: ARM-10-01

| INTERVAL | | | SUB-INTERVAL | | | LITHOLOGY | | | STRUCTURE | | | | ALTERATION | | | | | | MINERALS | | | | | | | Photo | DETAILED DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | Other | | | | | Other | | Other | | | |
| From (m) | To (m) | Interval (m) | From (m) | To (m) | Interval (m) | Unit | Modifier | Texture | Type | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Jarosite | Silicification | | | Type | Intensity | Pyrite | | | Type | Intensity | Type | Intensity | | |
| 0.00 | 6.10 | 6.10 | | | | OVB | | | | | | | | | | | | | | | | | | | | | Overburden. No recovery |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.10 | 90.83 | 84.73 | | | | PHY/ SLT | | AN | FO | 70 | | | | | | | | | w | | | | | | | | Black, sooty, aphanitic, non-calcareous, highly fissile phyllite interbedded with a grey, aphanitic siltstone. Disseminated pyrite varies intensity between minor to moderate, and occurs as disseminations or as lenticular aggregates. Soft, dense yellowish-brown jarosite occurs as a massive coating interstitially and on fractures. A yellowish clay-like residue remains on fingers touched. Note: Jarosite alteration resembles limonite. Siltstone and phyllite interbeds vary in thickness between 0.1 to 10 cm wide. Few white quartz veins occur throughout. Veins are between 2 to 25 mm wide, and have a slight stylolitic appearance. Slickensides are common throughout the unit. Locally, the foliation surrounds lenticular siltstone competent masses. Occasionally there is a light purplish-blue (?), hard, non-calcareous coating along fractures. Note: Siltstone layers vary between shades light to dark shakes of gray. |
| | | | 13.76 | 15.80 | 2.04 | PHY/ SLT | | | | | | | ms | | | | | | | | | | | | | | Massive jarosite occurs interstitially and as a coating on fractures. |
| | | | 18.49 | 19.25 | 0.76 | PHY/ SLT | | | | | | | w | | | | | | | | | Li | f | | | | Rusty limonitic patches occur along fractures and within seams. Some patches are subrounded and between 3 to 12 mm wide. Quartz filled gashes with limonitic wisps occur between 19.13-19.25 m. |
| | | | 19.25 | 26.86 | 7.61 | PHY | | | FO | 74 | | | | | | | | | f | | | | | | | | Black sooty phyllite with fine grained disseminated pyrite. Pyrite mainly occurs as disseminated or lenticular masses. Cross cutting quartz veins range in size between 2 to 7 mm. |
| | | | 27.20 | 27.25 | 0.05 | SLT | | | VN | 40 | | | | | | | | | | | | | | | | | Light green chlorite crystals occur within a quartz vein that cuts across the SLT/PHY interbeds |
| | | | | | | | | | BD | 65 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | BD->VN | | 178 | | | | | | | | | | | | | | | | |
| | | | 32.31 | 49.10 | 16.79 | SLT/ PHY | | | | | | | | s | | | | | ms | | | | | | | | Fine to medium grained, subhedral to euhedral, disseminated pyrite crystals occur throughout. Pyrite mineralization varies intensity between weak to moderately strong. White quartz veins are randomly oriented, and vary in size between 1 to 2 mm. |

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)

## GEOLOGY LOG

| INTERVAL | | | SUB-INTERVAL | | | LITHOLOGY | | | STRUCTURE | | | | ALTERATION | | | | | | MINERALS | | | | | | | PHOTO | DETAILED DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | Other | | | | | Other | | Other | | | |
| From (m) | To (m) | Interval (m) | From (m) | To (m) | Interval (m) | Unit | Modifier | Texture | Type | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Jarosite | Silicification | | | Type | Intensity | Pyrite | | | Type | Intensity | Type | Intensity | | |
| | | | 57.30 | 74.35 | 17.05 | SLT/ PHY | | | | | | | | m | | | | | ms | | | | | | | | Light green, hard, non-calcareous, 'frothy', porous mineral occurs in zones with a high concentration of vugs (unlikely malachite or chrysocola). Lens shaped vugs are common throughout the interval. Fine grained pyrite occurs as disseminations or as lenticular lenses. Pyrite appears slightly botryoidal on few surfaces (74.5 m). The siltstone layer appears weakly crackled. |
| | | | 58.00 | 60.15 | 2.15 | BX | | | | | | | | | | | | | | | | | | | | | Whitish-grey, moderately soft, non calcareous slump breccia with hard, angular, siltstone clasts. Clasts range in size between 3 to 15 mm. This unit occurs within an interbedded siltstone/phyllite unit. |
| | | | 61.46 | 61.51 | 0.05 | SLT/ PHY | | | VN | 65 | | | | s | | | | | | | | | | | | | Black siliceous phyllite vein cross-cutting an interbedded siltstone & phyllite unit. Fine grain pyrite crystals occur along the borders of the vein. |
| | | | | | | | | | BD | 65 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | BD->VN | | 79 | | | | | | | | | | | | | | | | |
| | | | 69.92 | 70.67 | 0.75 | PHY | | AN | | | | | | | | | | | m | | | | | | | | Black, aphanitic, sooty phyllite with medium grained, subrounded, subhedral pyrite crystals. Pyrite also occurs as 1 mm wide lenses. |
| | | | 72.14 | 72.21 | 0.07 | SLT/ PHY | | | VN | 48 | | | | | | | | | | | | | | | | | White quartz vein (7 mm) cross-cutting bedding. |
| | | | | | | | | | BD | 70 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | BD->VN | | 196 | | | | | | | | | | | | | | | | |
| | | | 78.70 | 81.73 | 3.03 | PHY | | | | | | | | | | | | | f | | | | | | | | Black, aphanitic, sooty phyllite with fine grained, disseminated pyrite. |
| | | | 86.93 | 87.60 | 0.67 | PHY | | | | | | | | | | | | | f | | | | | | | | Black, aphanitic, sooty phyllite with fine grained, disseminated pyrite. Pyrite lenses are 1 mm wide. |
| | | | 87.60 | 87.72 | 0.12 | PHY | | | | | | | | | | | | | | | | | | | | | Quartz infilled fractures between 5 to 13 mm wide. |
| | | | 88.75 | 90.65 | 1.90 | BX | | | | | | | | | | | | | | | | | | | | | Whitish-grey, moderately soft, non calcareous slump breccia with hard, angular, siltstone clasts. Clasts range in size between 3 to 15 mm. This unit occurs within an interbedded siltstone/phyllite unit. |

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)

# GEOLOGY LOG

| INTERVAL | | | SUB-INTERVAL | | | LITHOLOGY | | | STRUCTURE | | | | ALTERATION | | | | | | MINERALS | | | | | | | PHOTO | DETAILED DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | Other | | | | | | Other | | Other | | | |
| From (m) | To (m) | Interval (m) | From (m) | To (m) | Interval (m) | Unit | Modifier | Texture | Type | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Jarosite | Silicification | | | Type | Intensity | Pyrite | | | Type | Intensity | Type | Intensity | | |
| 90.83 | 135.50 | 44.67 | | | | PHY/ SLT | | AN | BD | 65 | | | | w | | | | | ms | | | | | | | | Black, aphanitic phyllite interbedded with an aphanitic siltstone of varying between light to dark shades of grey. Phyllite and siltstone interbeds vary in size from 2 mm to 1 m wide. Black phyllitic layers host the majority of pyrite. Pyrite mainly occurs as disseminations or as lenses between 1 to 2 mm wide. Occasionally occurs within siltstone concentrations as fine to medium grained, subhedra to euhedral, cubic pyrite crystals. Siltstone is usually medium to medium grey, and has a slight brecciated overprint. Few zones contain a bright white, soft, non-calcareous coating on fractured surfaces. This bright coating/alteration(?) also occurs as veinlets between 1 to 3 mm wide, and infills fractures. The entire section is moderately hard to hard and weakly to moderately silicified. |
| | | | 93.10 | 93.50 | 0.40 | PHY | | AN | BD | 65 | | | | | | | | | m | | | | | | | | Black, aphanitic phyllite with fine to medium |
| | | | 102.90 | 103.41 | 0.51 | | | | VN | 25 | | | | | | | | | | | | | | | | | White quartz vein cross-cutting a phyllite unit. Pale forest green, chloritic hue occurs within the vein. |
| | | | | | | | | | BD | 60 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | BD->VN | | 238 | | | | | | | | | | | | | | | | |
| | | | 104.10 | 104.90 | 0.80 | PHY | | AN | BD | 55 | | | | | | | | | m | | | | | | | | |
| | | | 109.12 | 110.20 | 1.08 | PHY | | AN | BD | 60 | | | | | | | | | m | | | | | | | | |
| | | | 115.40 | 132.93 | 17.53 | | | | | | | | | | | | | | | | | | | | | | White, semi-crystalline quartz veins are common and vary in size between 6 cm to 1.5 m. Veins have undergone minor to moderate alteration, and contain subangular to angular, empty vugs. Pale forest green, chloritic hue occurs locally within quartz veins. |
| | | | 129.50 | 156.50 | 27.00 | SLT/ PHY | | AN | BD | 84 | | | | | | | | | ms | | | | | | | | Light grey, lathe shaped siltstone masses hosting fine to medium grained pyrite crystals. Black sooty phyllite layers surround these siltstone masses. Note: Bedding at 84 deg. only occurs between 129.5 to 131.45 m. |
| | | | 131.45 | 132.93 | 1.48 | | | | VN | | | | | | | | | | | | | | | | | | White, semi-crystalline, sugary quartz vein |
| | | | 133.90 | 134.55 | 0.65 | PHY | | AN | | | | | | | | | | | ms | | | | | | | | |
| | | | 134.85 | 135.50 | 0.65 | PHY | | AN | | | | | | | | | | | ms | | | | | | | | Black, aphanitic and rubbly. Few 2-6 cm competent phyllite sections. Pyrite is disseminated throughout. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)

## GEOLOGY LOG

| INTERVAL | | | SUB-INTERVAL | | | LITHOLOGY | | | STRUCTURE | | | | ALTERATION | | | | | | MINERALS | | | | | | | | DETAILED DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | Other | | | | | | Other | | Other | | | |
| From (m) | To (m) | Interval (m) | From (m) | To (m) | Interval (m) | Unit | Modifier | Texture | Type | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Jarosite | Silicification | | | Type | Intensity | Pyrite | | | Type | Intensity | Type | Intensity | Photo | |
| 135.50 | 272.80 | 137.30 | | | | SLT/ PHY | | AN | | | | | m | | | | | | m | | | | | | | | Light grey, aphanitic siltstone interbedded with black, sooty, aphanitic phyllite. Contacts between boundaries are diffuse. Disseminated fine grain pyrite occurs throughout. Occasionally pyrite occurs as medium to coarse grained, subhedral to euhedral, cubic crystals. Whitish-grey quartz veins cross-cut the unit at random angles, and range in size between 1 to 20 mm. Unit contains local brecciated pockets which contain aphanitic clasts between 0.2 to 10 cm wide. Dark reddish-maroon hematite staining occurs on most fractured surfaces Locally, light yellowish-tan jarosite alteration occurs alongside hematitic stained fractures. |
| | | | 136.85 | 137.90 | 1.05 | SLT | | AN | | | | | | | | | | | | | | | | | | | Dark reddish-maroon hematitic stringers roughly 1 mm wide. Appear to be infilling interstitial space between brecciated zones. Very poor recovery in this interval. |
| | | | 158.72 | 272.80 | 114.08 | PHY | | AN | FO | 60 | | | | s | | | | | s | | | | | | | | Black, aphanitic, hard, sooty, quartz flooded phyllite with fine to coarse grained pyrite. White veins are stylolitic in appearance and range in size between 1 to 5 mm. Pyrite occurs adjacent to and within quart veins. Patchy, cloudy white siltstone nodules contain medium to coarse grained pyrite crystals. Siltstone nodules range in size between 0.5 to 5 cm. Interval also contains few light to medium grey, brecciated, aphanitic siltstone layers which host disseminated pyrite. These layers range in size from 25 cm to 1 m. |
| | | | 191.20 | 259.53 | 68.33 | PHY/ SLT | | | BD | 58 | | | m | | | | | | f | | | | | | | | Pale yellowish-orange to tan, soft, speckled jarosite coating is common on core. Rock fabric appears to surround lathe shaped, augen-like siltstone nodules. |
| | | | 209.70 | 210.40 | 0.70 | PHY | BX | | | | | | | | | | CLY | s | w | | | | | | | | Black sooty, pervasive clay alteration. Phyllite appears brecciated. Pyrite is fine grained and disseminated. |
| | | | 212.00 | 247.00 | 35.00 | | | | | | | | | | | | | | f | | | | | | | | Dark forest green chlorite occurs within white quartz veins, and along fractures. |
| | | | 214.50 | 215.10 | 0.60 | | | | VN | | | | w | | | | | | | | | | | | | | Cloudy white quartz vein with fine grain chlorite grains speckled throughout the matrix. Weakly jarosite altered. |
| | | | 220.75 | 220.83 | 0.08 | | | | VN | | | | w | | | | | | | | | | | | | | |
| | | | 226.60 | 227.08 | 0.48 | PHY | BX | | | | | | | | | | CLY | s | w | | | | | | | | Black sooty, pervasive clay alteration. Phyllite appears brecciated. Pyrite is fine grained and disseminated. |
| | | | 253.12 | 253.46 | 0.34 | PHY | BX | | | | | | | | | | CLY | s | w | | | | | | | | |

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)

# GEOLOGY LOG

| INTERVAL | | | SUB-INTERVAL | | | LITHOLOGY | | | STRUCTURE | | | | ALTERATION | | | | | | MINERALS | | | | | | | | PHOTO | DETAILED DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | Other | | | | | | Other | | Other | | | |
| From (m) | To (m) | Interval (m) | From (m) | To (m) | Interval (m) | Unit | Modifier | Texture | Type | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Jarosite | Silicification | | | Type | Intensity | Pyrite | | | Type | Intensity | Type | Intensity | | |
| | | | 257.60 | 268.95 | 11.35 | | | | | | | | | | | | | | | | | | | | | | Opaque orange to yellow, soft, platy mineral(?) that occurs on few fractured surfaces. |
| EOH | | | | | | | | | | | | | | | | | | | | | | | | | | | |

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)