



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000027

Overall Sample Assessment: **Positive**

Your Project Code: McArthur River NT

Sample Type (as collected): Stream Sediment Head Weight: 52.7 kg
 Sample Type (as received): Stream Sediment Wet Weight: kg
 Observed Sample Type: MI Concentrate

Diamond Number of particles in each size fraction Total particles Description of these particles
 mm +2.0 +1.2 +.8 +.4 +.3 +.25 +.20 +.10

Key Minerals Number of particles in each size fraction Assessment Wear Total particles No of particles probed
 mm +2.0 +1.2 +.8 +.4 +.3 +.25 +.20 +.10

| | | | | | | | | | | | | |
|--------------------|--|--|--|---|--|---|--|--|---|-----|---|--|
| Chromite/Cr-Spinel | | | | 1 | | 1 | | | A | UNK | 2 | |
|--------------------|--|--|--|---|--|---|--|--|---|-----|---|--|

Other Minerals % Percentage of particles in each size fraction Wear Colour Angularity Lustre Transparency Form/Shape
 mm +2.0 +1.2 +.8 +.4 +.3 +.25 +.20 +.10

| mm | +2.0 | +1.2 | +.8 | +.4 | +.3 | +.25 | +.20 | +.10 | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|--------------------|------|------|-----|-----|-----|------|------|------|------|--------|------------|--------|--------------|-------------------------|
| Anatase | | | | Tr | Tr | | 5 | | LA | | | | | |
| Barite | | | | Tr | Tr | | Tr | | LA | | | | | |
| Corundum | | | | Tr | Tr | | Tr | | MA | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 75 | | 55 | | | | | | | |
| Ilmenite | | | | | Tr | | Tr | | HA | | | | | |
| Leucoxene | | | | Tr | 10 | | 15 | | HA | | | | | |
| Micrometeorites | | | | | Tr | | | | | | | | | 2 grains |
| Phosphate | | | | Tr | 15 | | 15 | | HA | | | | | |
| Pyrite | | | | Tr | Tr | | Tr | | LA | | | | | |
| Rutile | | | | Tr | Tr | | Tr | | MA | | | | | |
| Tourmaline | | | | Tr | Tr | | Tr | | HA | | | | | |
| Zircon | | | | | Tr | | 10 | | HA | | | | | some more fresh euhedra |

TOTAL % % % 100% 100% % 100% %

What Has Been Observed?

Final Conc Weight: 0.56 g Size Range: -0.5+0.2 mm
 Weight Observed: 0.56 g

Technician: LF

Date Observed: 20-Aug-10

Report Printed: 8/09/2010 3:01:45 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +.8 | +.4 | +.3 | +.25 | +.20 | +.10 |
|--------|------|------|-----|-----|-----|------|------|------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

| | |
|---------------------------|-------------------|
| Sample No: | MCH000028 |
| Overall Sample Assessment | Negative |
| Your Project Code: | McArthur River NT |

| | | | |
|-----------------------------|-----------------|-------------|----------|
| Sample Type (as collected): | Stream Sediment | Head Weight | 42.08 kg |
| Sample Type (as received): | Stream Sediment | Wet Weight | kg |
| Observed Sample Type: | MI Concentrate | | |

| Diamond | Number of particles in each size fraction | | | | | | | | Total particles | Description of these particles |
|---------|---|------|------|------|------|------|-------|-------|-----------------|--------------------------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | |

| Key Minerals | Number of particles in each size fraction | | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|--------------|---|------|------|------|------|------|-------|-------|------------|------|-----------------|------------------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | |

| Other Minerals | % Percentage of particles in each size fraction | | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|--------------------|---|------|------|------|------|------|-------|-------|------|--------|------------|--------|--------------|------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | | | |
| Almandine | | | | | | | | Tr | | MA | | | | |
| Anatase | | | | | Tr | Tr | | 10 | | HA | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 75 | | | 35 | | MA | | | | |
| Leucoxene | | | | | Tr | 20 | | 50 | | HA | | | | |
| Phosphate | | | | | Tr | 5 | | Tr | | HA | | | | |
| Rutile | | | | | Tr | Tr | | Tr | | HA | | | | |
| Tourmaline | | | | | | Tr | | Tr | | HA | | | | |
| Zircon | | | | | | Tr | | 5 | | HA | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | |

What Has Been Observed?

| | | | |
|-------------------|--------|------------|------------|
| Final Conc Weight | 0.16 g | Size Range | -0.5+0.2mm |
| Weight Observed | 0.16 g | | |

Technician: LF

Date Observed: 25-Aug-10

Report Printed: 8/09/2010 3:02:13 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000029

Overall Sample Assessment: **Negative**

Your Project Code: McArthur River NT

| | | | |
|-----------------------------|-----------------|-------------|----------|
| Sample Type (as collected): | Stream Sediment | Head Weight | 39.54 kg |
| Sample Type (as received): | Stream Sediment | Wet Weight | kg |
| Observed Sample Type: | MI Concentrate | | |

| Diamond | Number of particles in each size fraction | | | | | | | | Total particles | Description of these particles |
|---------|---|------|------|------|------|------|-------|-------|-----------------|--------------------------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | |

| Key Minerals | Number of particles in each size fraction | | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|--------------|---|------|------|------|------|------|-------|-------|------------|------|-----------------|------------------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | |

| Other Minerals | % Percentage of particles in each size fraction | | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|----------------|---|------|------|------|------|------|-------|-------|------|--------|------------|--------|--------------|------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | | | |

| | | | | | | | | | | | | | | | |
|--------------------|---|---|---|------|------|---|------|----|--|----|--|--|--|--|--|
| Anatase | | | | Tr | Tr | | | Tr | | MA | | | | | |
| Corundum | | | | | | | | Tr | | MA | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 95 | | | 90 | | HA | | | | | |
| Haematite | | | | | Tr | | | | | HA | | | | | |
| Kyanite | | | | | | | | Tr | | HA | | | | | |
| Leucoxene | | | | Tr | 5 | | | 10 | | HA | | | | | |
| Phosphate | | | | Tr | Tr | | | Tr | | HA | | | | | |
| Pyrite | | | | | | | | Tr | | MA | | | | | |
| Rutile | | | | | Tr | | | Tr | | HA | | | | | |
| Tourmaline | | | | Tr | Tr | | | Tr | | HA | | | | | |
| Zircon | | | | | Tr | | | Tr | | HA | | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | | |

What Has Been Observed?

Final Conc Weight: 0.3800000 g | Size Range: -0.5+0.2 mm
Weight Observed: 0.3800000 g

Technician: JED

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:02:39 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000030

Overall Sample Assessment: **Negative**

Your Project Code: McArthur River NT

| | | | |
|-----------------------------|-----------------|-------------|----------|
| Sample Type (as collected): | Stream Sediment | Head Weight | 41.58 kg |
| Sample Type (as received): | Stream Sediment | Wet Weight | kg |
| Observed Sample Type: | MI Concentrate | | |

Diamond

| mm | Number of particles in each size fraction | | | | | | | | Total particles | Description of these particles |
|----|---|------|------|------|------|-------|-------|-------|-----------------|--------------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | |

Key Minerals

| mm | Number of particles in each size fraction | | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|----|---|------|------|------|------|-------|-------|-------|------------|------|-----------------|------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | |

Other Minerals

| mm | % Percentage of particles in each size fraction | | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|----|---|------|------|------|------|-------|-------|-------|------|--------|------------|--------|--------------|------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | | | |

| | | | | | | | | | | | | | | | |
|--------------------|---|---|---|------|------|---|------|----|----|--|--|--|--|--|--|
| Anatase | | | | Tr | Tr | | | 5 | MA | | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 95 | | | 85 | MA | | | | | | |
| Leucoxene | | | | Tr | 5 | | | 10 | HA | | | | | | |
| Phosphate | | | | Tr | Tr | | | Tr | HA | | | | | | |
| Pyrite | | | | Tr | Tr | | | Tr | MA | | | | | | |
| Rutile | | | | | Tr | | | Tr | HA | | | | | | |
| Tourmaline | | | | | | | | Tr | HA | | | | | | |
| Zircon | | | | | Tr | | | Tr | HA | | | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | | |

What Has Been Observed?

Final Conc Weight: 0.8500000 g | Size Range: -0.5+0.2 mm

Weight Observed: 0.8500000 g

Technician: BJK

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:03:04 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000031

Overall Sample Assessment: **Negative**

Your Project Code: McArthur River NT

Sample Type (as collected): Stream Sediment Head Weight: 45.2 kg
 Sample Type (as received): Stream Sediment Wet Weight: kg
 Observed Sample Type: MI Concentrate

Diamond

| mm | Number of particles in each size fraction | | | | | | | | Total particles | Description of these particles |
|----|---|------|------|------|------|-------|-------|-------|-----------------|--------------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | |

Key Minerals

| mm | Number of particles in each size fraction | | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|----|---|------|------|------|------|-------|-------|-------|------------|------|-----------------|------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | |

Other Minerals

| mm | % Percentage of particles in each size fraction | | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|----|---|------|------|------|------|-------|-------|-------|------|--------|------------|--------|--------------|------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | | | |

| | | | | | | | | | | | | | | | |
|--------------------|--|---|---|-----|------|------|--|----|------|----|--|--|--|---------|--|
| Anatase | | | | | Tr | | | Tr | | MA | | | | | |
| Barite | | | | | | | | Tr | | MA | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 95 | | | 85 | | HA | | | | | |
| Leucoxene | | | | | 5 | | | 15 | | HA | | | | | |
| Micrometeorites | | | | Tr | | | | | | | | | | 1 grain | |
| Phosphate | | | | Tr | Tr | | | Tr | | HA | | | | | |
| Rutile | | | | | Tr | | | Tr | | HA | | | | | |
| Tourmaline | | | | | Tr | | | Tr | | HA | | | | | |
| Zircon | | | | | Tr | | | Tr | | HA | | | | | |
| TOTAL | | % | % | % | 100% | 100% | | % | 100% | % | | | | | |

What Has Been Observed?

Final Conc Weight: 0.44 g Size Range: -0.5+0.2mm
 Weight Observed: 0.44 g

Technician: JED

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:03:31 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

| | |
|---------------------------|-------------------|
| Sample No: | MCH000032 |
| Overall Sample Assessment | Positive |
| Your Project Code: | McArthur River NT |

| | | | |
|-----------------------------|-----------------|-------------|---------|
| Sample Type (as collected): | Stream Sediment | Head Weight | 44.8 kg |
| Sample Type (as received): | Stream Sediment | Wet Weight | kg |
| Observed Sample Type: | MI Concentrate | | |

Diamond

| mm | Number of particles in each size fraction | | | | | | | Total particles | Description of these particles |
|----|---|------|------|------|------|-------|-------|-----------------|--------------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | |

| Key Minerals | mm | Number of particles in each size fraction | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|--------------------|----|---|------|------|------|------|-------|-------|------------|------|-----------------|------------------------|
| | | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | |
| Chromite/Cr-Spinel | | | | | | 1 | | | | A | LA | 1 |
| Chromite/Cr-Spinel | | | | | | | | 1 | | A | HA | 1 |

Other Minerals

| | mm | % Percentage of particles in each size fraction | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|--------------------|----|---|------|------|------|------|-------|-------|------|--------|------------|--------|--------------|------------|
| | | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | | | |
| Anatase | | | | | Tr | Tr | | 5 | | HA | | | | |
| Barite | | | | | | Tr | | Tr | | MA | | | | |
| Corundum | | | | | | Tr | | Tr | | MA | | | | |
| Fe Oxide/Hydroxide | | | | | 100 | 100 | | 85 | | HA | | | | |
| Ilmenite | | | | | | Tr | | Tr | | HA | | | | |
| Leucosene | | | | | | Tr | | 10 | | HA | | | | |
| Phosphate | | | | | Tr | Tr | | Tr | | HA | | | | |
| Pyrite | | | | | Tr | Tr | | Tr | | MA | | | | |
| Rutile | | | | | | Tr | | Tr | | HA | | | | |
| Tourmaline | | | | | Tr | Tr | | Tr | | HA | | | | |
| Zircon | | | | | | Tr | | Tr | | HA | | | | |
| TOTAL | | % | % | % | 100% | 100% | | % | 100% | % | | | | |

What Has Been Observed?

| | | | |
|-------------------|--------|------------|------------|
| Final Conc Weight | 0.17 g | Size Range | -0.5+0.2mm |
| Weight Observed | 0.17 g | | |

Technician: JED
Date Observed: 23-Aug-10
Report Printed: 8/09/2010 3:03:57 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

| | |
|---------------------------|-------------------|
| Sample No: | MCH000033 |
| Overall Sample Assessment | Unresolved |
| Your Project Code: | McArthur River NT |

| | | | |
|-----------------------------|-----------------|-------------|---------|
| Sample Type (as collected): | Stream Sediment | Head Weight | 40.6 kg |
| Sample Type (as received): | Stream Sediment | Wet Weight | kg |
| Observed Sample Type: | MI Concentrate | | |

Diamond

| mm | Number of particles in each size fraction | | | | | | | | Total particles | Description of these particles |
|----|---|------|------|------|------|-------|-------|-------|-----------------|--------------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | |

Key Minerals

| mm | Number of particles in each size fraction | | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|----|---|------|------|------|------|-------|-------|-------|------------|------|-----------------|------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | |

| | | | | | | | | | | | | | |
|--------------------|--|--|--|--|---|--|--|--|--|---|----|---|--|
| Chromite/Cr-Spinel | | | | | 1 | | | | | B | HA | 1 | |
|--------------------|--|--|--|--|---|--|--|--|--|---|----|---|--|

Other Minerals

| mm | % Percentage of particles in each size fraction | | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|----|---|------|------|------|------|-------|-------|-------|------|--------|------------|--------|--------------|------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | | | |

| | | | | | | | | | | | | | | | |
|--------------------|--|--|--|--|----|----|--|----|--|----|--|--|--|--|--|
| Almandine | | | | | Tr | | | | | MA | | | | | |
| Anatase | | | | | Tr | Tr | | 10 | | MA | | | | | |
| Fe Oxide/Hydroxide | | | | | 95 | 80 | | 65 | | MA | | | | | |
| Leucoxene | | | | | Tr | 10 | | 20 | | HA | | | | | |
| Phosphate | | | | | 5 | 10 | | Tr | | HA | | | | | |
| Rutile | | | | | Tr | Tr | | Tr | | HA | | | | | |
| Tourmaline | | | | | Tr | Tr | | Tr | | HA | | | | | |
| Zircon | | | | | | | | 5 | | HA | | | | | |

| | | | | | | | | | | | | | | | |
|--------------|---|---|---|------|------|---|------|---|--|--|--|--|--|--|--|
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | | |
|--------------|---|---|---|------|------|---|------|---|--|--|--|--|--|--|--|

What Has Been Observed?

| | | | |
|-------------------|-------------|------------|-------------|
| Final Conc Weight | 0.3500000 g | Size Range | -0.5+0.2 mm |
| Weight Observed | 0.3500000 g | | |

Technician: BJB

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:04:23 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|----|------|------|------|------|------|-------|-------|-------|
|----|------|------|------|------|------|-------|-------|-------|

| | | | | | | | | |
|--------|--|--|--|-----|-----|--|-----|--|
| NotMag | | | | All | All | | All | |
|--------|--|--|--|-----|-----|--|-----|--|

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000034

Overall Sample Assessment: **Negative**

Your Project Code: McArthur River NT

| | | | |
|-----------------------------|-----------------|-------------|----------|
| Sample Type (as collected): | Stream Sediment | Head Weight | 37.52 kg |
| Sample Type (as received): | Stream Sediment | Wet Weight | kg |
| Observed Sample Type: | MI Concentrate | | |

| Diamond | Number of particles in each size fraction | | | | | | | | Total particles | Description of these particles |
|---------|---|------|------|------|------|------|-------|-------|-----------------|--------------------------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | |

| Key Minerals | Number of particles in each size fraction | | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|--------------|---|------|------|------|------|------|-------|-------|------------|------|-----------------|------------------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | |

| Other Minerals | % Percentage of particles in each size fraction | | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|----------------|---|------|------|------|------|------|-------|-------|------|--------|------------|--------|--------------|------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | | | |

| Other Minerals | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|--------------------|----|------|------|------|------|------|-------|-------|-------|------|--------|------------|--------|--------------|------------|
| Anatase | | | | | | Tr | | Tr | | MA | | | | | |
| Biotite | | | | | | Tr | | Tr | | | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 100 | | 100 | | | HA | | | | | |
| Leucoxene | | | | | | Tr | | Tr | | HA | | | | | |
| Phosphate | | | | | | Tr | | Tr | | HA | | | | | |
| Pyrite | | | | | | | | Tr | | MA | | | | | |
| Rutile | | | | | | | | Tr | | HA | | | | | |
| Tourmaline | | | | | | Tr | | Tr | | HA | | | | | |
| Zircon | | | | | | Tr | | Tr | | HA | | | | | |
| TOTAL | | % | % | % | 100% | 100% | % | 100% | % | | | | | | |

What Has Been Observed?

Final Conc Weight: 0.3800000 g | Size Range: -0.5+0.2mm
Weight Observed: 0.3800000 g

Technician: JED

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:04:48 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000035

Overall Sample Assessment: **Positive**

Your Project Code: McArthur River NT

Sample Type (as collected): Stream Sediment Head Weight: 40.46 kg
 Sample Type (as received): Stream Sediment Wet Weight: kg
 Observed Sample Type: MI Concentrate

Diamond

| mm | Number of particles in each size fraction | | | | | | | | Total particles | Description of these particles |
|----|---|------|------|------|------|-------|-------|-------|-----------------|--------------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | |

Key Minerals

| mm | Number of particles in each size fraction | | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|----|---|------|------|------|------|-------|-------|-------|------------|------|-----------------|------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | |

| | | | | | | | | | | | | |
|--------------------|--|--|--|--|--|--|--|---|---|----|---|--|
| Chromite/Cr-Spinel | | | | | | | | 1 | A | HA | 1 | |
|--------------------|--|--|--|--|--|--|--|---|---|----|---|--|

Other Minerals

| mm | % Percentage of particles in each size fraction | | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|----|---|------|------|------|------|-------|-------|-------|------|--------|------------|--------|--------------|------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | | | |

| | | | | | | | | | | | | | | | |
|--------------------|---|---|---|------|------|---|------|----|----|--|--|--|--|--|--|
| Anatase | | | | Tr | Tr | | | Tr | MA | | | | | | |
| Biotite | | | | | Tr | | | Tr | | | | | | | |
| Corundum | | | | | | | | Tr | MA | | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 95 | | | 90 | HA | | | | | | |
| Kyanite | | | | | | | | Tr | HA | | | | | | |
| Leucoxene | | | | Tr | 5 | | | 10 | HA | | | | | | |
| Phosphate | | | | Tr | Tr | | | Tr | HA | | | | | | |
| Rutile | | | | | Tr | | | Tr | HA | | | | | | |
| Tourmaline | | | | | Tr | | | Tr | HA | | | | | | |
| Zircon | | | | | Tr | | | Tr | HA | | | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | | |

What Has Been Observed?

Final Conc Weight: 0.2 g | Size Range: -0.5+0.2mm
 Weight Observed: 0.2 g

Technician: JED

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:05:16 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000036

Overall Sample Assessment: **Positive**

Your Project Code: McArthur River NT

Sample Type (as collected): Stream Sediment Head Weight: 40.62 kg
 Sample Type (as received): Stream Sediment Wet Weight: kg
 Observed Sample Type: MI Concentrate

Diamond Number of particles in each size fraction Total particles Description of these particles
 mm +2.0 +1.2 +.8 +.4 +.3 +.25 +.20 +.10

Key Minerals Number of particles in each size fraction Assessment Wear Total particles No of particles probed
 mm +2.0 +1.2 +.8 +.4 +.3 +.25 +.20 +.10

| | | | | | | | | | | | | | |
|--------------------|--|--|--|--|---|--|--|--|--|---|----|---|--|
| Chromite/Cr-Spinel | | | | | 1 | | | | | A | HA | 1 | |
|--------------------|--|--|--|--|---|--|--|--|--|---|----|---|--|

Other Minerals % Percentage of particles in each size fraction Wear Colour Angularity Lustre Transparency Form/Shape
 mm +2.0 +1.2 +.8 +.4 +.3 +.25 +.20 +.10

| mm | +2.0 | +1.2 | +.8 | +.4 | +.3 | +.25 | +.20 | +.10 | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|--------------------|------|------|-----|------|------|------|------|------|------|--------|------------|--------|--------------|------------|
| Anatase | | | | | Tr | | 10 | | MA | | | | | |
| Corundum | | | | | Tr | | | | MA | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 90 | | 60 | | MA | | | | | |
| Ilmenite | | | | | Tr | | | | HA | | | | | |
| Leucoxene | | | | Tr | 10 | | 30 | | HA | | | | | |
| Phosphate | | | | Tr | Tr | | Tr | | HA | | | | | |
| Rutile | | | | | | | Tr | | HA | | | | | |
| Tourmaline | | | | | Tr | | Tr | | HA | | | | | |
| Zircon | | | | | Tr | | Tr | | HA | | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | |

What Has Been Observed?

Final Conc Weight: 0.1500000 g Size Range: -0.5+0.2mm
 Weight Observed: 0.1500000 g

Technician: BJB

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:05:41 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +.8 | +.4 | +.3 | +.25 | +.20 | +.10 |
|--------|------|------|-----|-----|-----|------|------|------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000037

Overall Sample Assessment: **Negative**

Your Project Code: McArthur River NT

| | | | |
|-----------------------------|-----------------|--------------|----------|
| Sample Type (as collected): | Stream Sediment | Head Weight: | 40.98 kg |
| Sample Type (as received): | Stream Sediment | Wet Weight: | kg |
| Observed Sample Type: | MI Concentrate | | |

| Diamond | Number of particles in each size fraction | | | | | | | | Total particles | Description of these particles |
|---------|---|------|------|------|------|------|-------|-------|-----------------|--------------------------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | |

| Key Minerals | Number of particles in each size fraction | | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|--------------|---|------|------|------|------|------|-------|-------|------------|------|-----------------|------------------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | |

| Other Minerals | % Percentage of particles in each size fraction | | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|----------------|---|------|------|------|------|------|-------|-------|------|--------|------------|--------|--------------|------------|
| | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | | | |

| Other Minerals | mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|--------------------|----------|----------|----------|-------------|-------------|----------|-------------|----------|----------|------|--------|------------|--------|--------------|------------|
| Anatase | | | | | | Tr | | Tr | | HA | | | | | |
| Corundum | | | | | | Tr | | Tr | | MA | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 100 | | | 95 | | HA | | | | | |
| Ilmenite | | | | | | Tr | | Tr | | HA | | | | | |
| Kyanite | | | | | | | | Tr | | HA | | | | | |
| Leucoxene | | | | Tr | Tr | | | 5 | | HA | | | | | |
| Micrometeorites | | | | | | | | Tr | | | | | | 3 grains | |
| Phosphate | | | | | | Tr | | Tr | | HA | | | | | |
| Rutile | | | | | | Tr | | Tr | | HA | | | | | |
| Zircon | | | | | | Tr | | Tr | | HA | | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | % | | | | | | |

What Has Been Observed?

Final Conc Weight: 0.18 g | Size Range: -0.5+0.2mm
Weight Observed: 0.18 g

Technician: JED

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:06:06 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000038

Overall Sample Assessment: **Unresolved**

Your Project Code: McArthur River NT

Sample Type (as collected): Stream Sediment Head Weight: 42.2 kg
 Sample Type (as received): Stream Sediment Wet Weight: kg
 Observed Sample Type: MI Concentrate

Diamond Number of particles in each size fraction Total particles Description of these particles
 mm +2.0 +1.2 +.8 +.4 +.3 +.25 +.20 +.10

Key Minerals Number of particles in each size fraction Assessment Wear Total particles No of particles probed
 mm +2.0 +1.2 +.8 +.4 +.3 +.25 +.20 +.10

| | | | | | | | | | | | | |
|--------------------|--|--|--|--|--|--|---|--|---|----|---|--|
| Chromite/Cr-Spinel | | | | | | | 1 | | B | HA | 1 | |
|--------------------|--|--|--|--|--|--|---|--|---|----|---|--|

Other Minerals % Percentage of particles in each size fraction Wear Colour Angularity Lustre Transparency Form/Shape
 mm +2.0 +1.2 +.8 +.4 +.3 +.25 +.20 +.10

| Other Minerals | mm | +2.0 | +1.2 | +.8 | +.4 | +.3 | +.25 | +.20 | +.10 | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|--------------------|----|------|------|-----|------|------|------|------|------|------|--------|------------|--------|--------------|------------|
| Anatase | | | | | Tr | Tr | | 25 | | MA | | | | | |
| Fe Oxide/Hydroxide | | | | | 100 | 90 | | 45 | | MA | | | | | |
| Leucoxene | | | | | Tr | 10 | | 25 | | HA | | | | | |
| Phosphate | | | | | Tr | Tr | | 5 | | HA | | | | | |
| Rutile | | | | | | Tr | | Tr | | HA | | | | | |
| Tourmaline | | | | | | Tr | | Tr | | HA | | | | | |
| Zircon | | | | | | | | Tr | | HA | | | | | |
| TOTAL | | % | % | % | 100% | 100% | % | 100% | % | | | | | | |

What Has Been Observed?

Final Conc Weight: 0.6500000 g Size Range: -0.5+0.2mm
 Weight Observed: 0.6500000 g

Technician: BJB

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:06:32 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +.8 | +.4 | +.3 | +.25 | +.20 | +.10 |
|--------|------|------|-----|-----|-----|------|------|------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000039

Overall Sample Assessment: **Negative**

Your Project Code: McArthur River NT

| | | | |
|-----------------------------|-----------------|-------------|----------|
| Sample Type (as collected): | Stream Sediment | Head Weight | 42.54 kg |
| Sample Type (as received): | Stream Sediment | Wet Weight | kg |
| Observed Sample Type: | MI Concentrate | | |

Diamond

| mm | Number of particles in each size fraction | | | | | | | | Total particles | Description of these particles |
|----|---|------|------|------|------|-------|-------|-------|-----------------|--------------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | |

Key Minerals

| mm | Number of particles in each size fraction | | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|----|---|------|------|------|------|-------|-------|-------|------------|------|-----------------|------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | |

Other Minerals

| mm | % Percentage of particles in each size fraction | | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|----|---|------|------|------|------|-------|-------|-------|------|--------|------------|--------|--------------|------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | | | |

| | | | | | | | | | | | | | | | |
|--------------------|---|---|---|------|------|---|------|----|----|--|--|--|--|--|--|
| Anatase | | | | | Tr | | | Tr | HA | | | | | | |
| Biotite | | | | | Tr | | | Tr | HA | | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 100 | | | 95 | HA | | | | | | |
| Leucoxene | | | | Tr | Tr | | | 5 | HA | | | | | | |
| Phosphate | | | | Tr | Tr | | | Tr | HA | | | | | | |
| Rutile | | | | | Tr | | | Tr | HA | | | | | | |
| Tourmaline | | | | | Tr | | | Tr | HA | | | | | | |
| Zircon | | | | | Tr | | | Tr | HA | | | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | | |

What Has Been Observed?

Final Conc Weight: 1.1300000 g | Size Range: -0.5+0.2 mm
Weight Observed: 1.1300000 g

Technician: JED

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:06:57 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000040

Overall Sample Assessment: **Negative**

Your Project Code: McArthur River NT

| | | | |
|-----------------------------|-----------------|--------------|---------|
| Sample Type (as collected): | Stream Sediment | Head Weight: | 40.1 kg |
| Sample Type (as received): | Stream Sediment | Wet Weight: | kg |
| Observed Sample Type: | MI Concentrate | | |

Diamond

| mm | Number of particles in each size fraction | | | | | | | | Total particles | Description of these particles |
|----|---|------|------|------|------|-------|-------|-------|-----------------|--------------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | |

Key Minerals

| mm | Number of particles in each size fraction | | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|----|---|------|------|------|------|-------|-------|-------|------------|------|-----------------|------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | |

Other Minerals

| mm | % Percentage of particles in each size fraction | | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape |
|----|---|------|------|------|------|-------|-------|-------|------|--------|------------|--------|--------------|------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | | | |

| | | | | | | | | | | | | | | |
|--------------------|---|---|---|------|------|---|------|----|----|--|--|--|--|--|
| Anatase | | | | | Tr | | | 15 | MA | | | | | |
| Corundum | | | | | Tr | | | | MA | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 100 | | | 75 | MA | | | | | |
| Leucoxene | | | | Tr | Tr | | | 10 | HA | | | | | |
| Phosphate | | | | Tr | Tr | | | Tr | HA | | | | | |
| Rutile | | | | | | | | Tr | HA | | | | | |
| Tourmaline | | | | | | | | Tr | HA | | | | | |
| Zircon | | | | | Tr | | | Tr | HA | | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | |

What Has Been Observed?

Final Conc Weight: 0.2 g | Size Range: -0.5+0.2 mm
Weight Observed: 0.2 g

Technician: BJB

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:07:25 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000041

Overall Sample Assessment: **Negative**

Your Project Code: McArthur River NT

Sample Type (as collected): Stream Sediment Head Weight: 39.24 kg
 Sample Type (as received): Stream Sediment Wet Weight: kg
 Observed Sample Type: MI Concentrate

Diamond Number of particles in each size fraction Total particles Description of these particles

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | |
|----|------|------|------|------|------|-------|-------|-------|--|
|----|------|------|------|------|------|-------|-------|-------|--|

Key Minerals Number of particles in each size fraction Assessment Wear Total particles No of particles probed

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | |
|----|------|------|------|------|------|-------|-------|-------|--|--|
|----|------|------|------|------|------|-------|-------|-------|--|--|

Other Minerals % Percentage of particles in each size fraction Wear Colour Angularity Lustre Transparency Form/Shape

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | | | |
|----|------|------|------|------|------|-------|-------|-------|--|--|--|--|--|--|
|----|------|------|------|------|------|-------|-------|-------|--|--|--|--|--|--|

| | | | | | | | | | | | | | | |
|--------------------|---|---|---|------|------|---|------|----|--|----|--|--|--|--|
| Anatase | | | | | Tr | | | Tr | | HA | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 100 | | | 95 | | HA | | | | |
| Ilmenite | | | | | | | | Tr | | HA | | | | |
| Kyanite | | | | | Tr | | | Tr | | HA | | | | |
| Leucoxene | | | | Tr | Tr | | | 2 | | HA | | | | |
| Phosphate | | | | Tr | Tr | | | Tr | | HA | | | | |
| Rutile | | | | | Tr | | | Tr | | HA | | | | |
| Tourmaline | | | | | Tr | | | Tr | | HA | | | | |
| Zircon | | | | | Tr | | | 3 | | HA | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | |

What Has Been Observed?

Final Conc Weight: 1.22 g Size Range: -0.5+0.2mm
 Weight Observed: 1.22 g

Technician: JED

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:07:51 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



DIATECH
HEAVY MINERAL SERVICES

Ph 61 8 9361 2596

Fx 61 8 9470 1504

Detailed Heavy Mineral Analysis

Our Job No.: 10065

Disc No.: -

Sample No:

MCH000042

Overall Sample Assessment

Negative

Your Project Code:

McArthur River NT

Sample Type (as collected): Stream Sediment

Head Weight 36.76 kg

Sample Type (as received): Stream Sediment

Wet Weight kg

Observed Sample Type: MI Concentrate

Diamond

| mm | Number of particles in each size fraction | | | | | | | Total particles | Description of these particles |
|----|---|------|------|------|------|-------|-------|-----------------|--------------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | |
| | | | | | | | | | |

Key Minerals

| mm | Number of particles in each size fraction | | | | | | | Assessment | Wear | Total particles | No of particles probed |
|----|---|------|------|------|------|-------|-------|------------|------|-----------------|------------------------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | |
| | | | | | | | | | | | |

Other Minerals

| mm | % Percentage of particles in each size fraction | | | | | | | Wear | Colour | Angularity | Lustre | Transparency | Form/Shape | |
|--------------------|---|------|------|------|------|-------|-------|------|--------|------------|--------|--------------|------------|-------|
| | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | | | | | | | +0.10 |
| Anatase | | | | | Tr | | 20 | | | | | | | MA |
| Epidote | | | | | Tr | | | | | | | | | MA |
| Fe Oxide/Hydroxide | | | | 100 | 90 | | 60 | | | | | | | MA |
| Leucoxene | | | | Tr | 10 | | 15 | | | | | | | HA |
| Phosphate | | | | Tr | Tr | | Tr | | | | | | | HA |
| Rutile | | | | | Tr | | Tr | | | | | | | HA |
| Tourmaline | | | | | Tr | | Tr | | | | | | | HA |
| Zircon | | | | | Tr | | 5 | | | | | | | HA |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | |

What Has Been Observed?

Final Conc Weight 0.3 g | Size Range -0.5+0.2 mm

Weight Observed 0.3 g

Technician: BJB

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:08:19 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000043

Overall Sample Assessment: **Negative**

Your Project Code: McArthur River NT

Sample Type (as collected): Stream Sediment Head Weight: 34.62 kg
 Sample Type (as received): Stream Sediment Wet Weight: kg
 Observed Sample Type: MI Concentrate

Diamond Number of particles in each size fraction Total particles Description of these particles

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | |
|----|------|------|------|------|------|-------|-------|-------|--|
|----|------|------|------|------|------|-------|-------|-------|--|

Key Minerals Number of particles in each size fraction Assessment Wear Total particles No of particles probed

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | |
|----|------|------|------|------|------|-------|-------|-------|--|--|
|----|------|------|------|------|------|-------|-------|-------|--|--|

Other Minerals % Percentage of particles in each size fraction Wear Colour Angularity Lustre Transparency Form/Shape

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | | | |
|----|------|------|------|------|------|-------|-------|-------|--|--|--|--|--|--|
|----|------|------|------|------|------|-------|-------|-------|--|--|--|--|--|--|

| | | | | | | | | | | | | | | |
|--------------------|---|---|---|------|------|---|------|----|--|----|--|--|----------|--|
| Anatase | | | | | Tr | | | Tr | | HA | | | | |
| Corundum | | | | | | | | Tr | | MA | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 100 | | 100 | | | HA | | | | |
| Leucoxene | | | | Tr | Tr | | Tr | | | HA | | | | |
| Micrometeorites | | | | | | | | Tr | | | | | 2 grains | |
| Phosphate | | | | | Tr | | Tr | | | HA | | | | |
| Rutile | | | | | Tr | | Tr | | | HA | | | | |
| Tourmaline | | | | | Tr | | Tr | | | HA | | | | |
| Zircon | | | | | Tr | | Tr | | | HA | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | |

What Has Been Observed?

Final Conc Weight: 1.3800000 g Size Range: -0.5+0.2mm
 Weight Observed: 1.3800000 g

Technician: JED

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:08:45 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 10065
Disc No.: -

Sample No: MCH000044

Overall Sample Assessment: **Negative**

Your Project Code: McArthur River NT

Sample Type (as collected): Stream Sediment Head Weight: 33.62 kg
 Sample Type (as received): Stream Sediment Wet Weight: kg
 Observed Sample Type: MI Concentrate

Diamond Number of particles in each size fraction Total particles Description of these particles

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | |
|----|------|------|------|------|------|-------|-------|-------|--|
|----|------|------|------|------|------|-------|-------|-------|--|

Key Minerals Number of particles in each size fraction Assessment Wear Total particles No of particles probed

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | |
|----|------|------|------|------|------|-------|-------|-------|--|--|
|----|------|------|------|------|------|-------|-------|-------|--|--|

Other Minerals % Percentage of particles in each size fraction Wear Colour Angularity Lustre Transparency Form/Shape

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 | | | | | | |
|----|------|------|------|------|------|-------|-------|-------|--|--|--|--|--|--|
|----|------|------|------|------|------|-------|-------|-------|--|--|--|--|--|--|

| | | | | | | | | | | | | | | |
|--------------------|---|---|---|------|------|---|------|----|----|--|--|--|--|--|
| Almandine | | | | | | | | Tr | MA | | | | | |
| Anatase | | | | | Tr | | | 3 | HA | | | | | |
| Corundum | | | | | | | | Tr | MA | | | | | |
| Fe Oxide/Hydroxide | | | | 100 | 100 | | | 95 | HA | | | | | |
| Ilmenite | | | | | Tr | | | | HA | | | | | |
| Kyanite | | | | | | | | Tr | HA | | | | | |
| Leucoxene | | | | Tr | Tr | | | Tr | HA | | | | | |
| Phosphate | | | | | Tr | | | Tr | HA | | | | | |
| Rutile | | | | | | | | Tr | HA | | | | | |
| Tourmaline | | | | Tr | Tr | | | Tr | HA | | | | | |
| Zircon | | | | | | | | 2 | HA | | | | | |
| TOTAL | % | % | % | 100% | 100% | % | 100% | % | | | | | | |

What Has Been Observed?

Final Conc Weight: 0.1 g Size Range: -0.5+0.2 mm
 Weight Observed: 0.1 g

Technician: JED

Date Observed: 23-Aug-10

Report Printed: 8/09/2010 3:09:11 PM

Magnetic Fractions vs Size Fraction

| mm | +2.0 | +1.2 | +0.8 | +0.4 | +0.3 | +0.25 | +0.20 | +0.10 |
|--------|------|------|------|------|------|-------|-------|-------|
| NotMag | | | | All | All | | All | |

Comment about this sample: