



## Detailed Heavy Mineral Analysis

Our Job No.: 08049  
Disc No.: -

Sample No: 163040

Overall Sample Assessment Negative

Your Project Code:

Sample Type (as collected): Loam  
Sample Type (as received): Loam  
Observed Sample Type: DMS Concentrate

Head Weight 24.36 kg

Wet Weight kg

### 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								Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
	+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						

Almandine			30	45	45					MW	pale pink	subangular to subrounded	frosted to glassy	transparent	irregular
Al-Spinel					Tr					W	grey-blue	subrounded to rounded	frosted to glassy	translucent to transparent	worn octahedra, many near spherical
Amphibole			15	15	15					W	dark bottle green	subrounded to rounded	frosted to glassy	translucent to transparent	elongate
Andalusite				Tr	Tr					W	peach pink	subangular to subrounded	glassy	transparent	blocky crystals
Biotite					Tr					W	dark brown	subrounded	pearly	translucent	thick flakes
Epidote			5	5	5					W	pale yellow-green	subrounded to rounded	frosted to glassy	transparent	irregular
Fe Oxide/Hydroxide			30	Tr	Tr					W	red-brown, brick red	rounded	earthy	opaque	irregular, smooth
Gahnite				Tr	Tr					W	aqua green	subrounded to rounded	frosted to glassy	translucent to transparent	worn octahedra
Ilmenite			Tr	Tr	Tr					W	silvery-black	subrounded to rounded	submetallic	opaque	finely frosted, pitted
Kyanite			5	10	10					W	colourless, sky blue	subrounded to subangular	pearly	transparent	bladed
Leucoxene			Tr	Tr	Tr					WW	beige, cream	rounded	porcelain-like	opaque	smooth, polished
Monazite					Tr					WW	yellow, yellow-orange	rounded	resinous	translucent	irregular, flattened
Orthopyroxene			Tr	Tr	Tr					W	beige	subangular to subrounded	pearly	translucent	finely striate laths
Rutile				Tr	Tr					W	cherry red, silvery-black	subrounded to rounded	submetallic	opaque to translucent	irregular, pitted on some
Spessartine			15	25	25					MW	pale pinkish-orange	subangular to subrounded	glassy to frosted	transparent	irregular
Sphene				Tr	Tr					W	greyish	subrounded to rounded	resinous	translucent to transparent	tabular, small inclusions
Staurolite			Tr	Tr	Tr					W	orange-brown	subrounded	glassy	transparent	irregular, small black inclusions
Tourmaline				Tr	Tr					W	pale black-brown	subrounded to rounded	glassy	transparent	smooth, irregular



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Overall Sample Assessment: **Negative**

Your Project Code:

Zircon			Tr	Tr	Tr				WW	colourless, peach	rounded	vitreous	transparent	near spherical to ovate
<b>TOTAL</b>	%	%	100%	100%	100%	%	%	%						

### What Has Been Observed?

Final Conc Weight 14.41 g Size Range -1.2+0.3 mm  
Weight Observed 14.41 g

Technician: LF

Date Observed: 15-Sep-08

Report Printed: 3/10/2008 9:02:17 AM

### Magnetic Fractions vs Size Fraction

mm	+2.0	+1.2	+0.8	+0.4	+0.3	+0.25	+0.20	+0.10
NM			All	All	All			
M6/7			All	All	All			
M4/5			All	All	All			

Comment about  
this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 08049  
Disc No.: -

Sample No: 163041

Overall Sample Assessment Negative

Your Project Code:

Sample Type (as collected):	Loam	Head Weight	24.5 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS 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									Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
	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				45	55	55				MW					
Al-Spinel						Tr				W					
Amphibole				10	10	10				W					
Epidote				5	5	5				W					
Fe Oxide/Hydroxide				30	Tr	Tr				W					
Gahnite					Tr	Tr				W					
Ilmenite					Tr	Tr				W					
Kyanite				Tr	10	10				W					
Leucoxene					Tr	Tr				WW					
Monazite						Tr				WW					
Orthopyroxene					Tr	Tr				MW					
Rutile					Tr	Tr				W					
Spessartine				10	20	20				MW					
Staurolite					Tr	Tr				W					
Tourmaline				Tr	Tr	Tr				W					
Zircon						Tr				W					
TOTAL		%	%	100%	100%	100%	%	%	%						



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## Detailed Heavy Mineral Analysis

Our Job No.: 08049  
Disc No.: -

Sample No: 163041

Overall Sample Assessment **Negative**

Your Project Code:

### What Has Been Observed?

Final Conc Weight 16.17 g Size Range -1.2+0.3mm

Weight Observed 16.17 g

#### Magnetic Fractions vs Size Fraction

mm	+2.0	+1.2	+0.8	+0.4	+0.3	+0.25	+0.20	+0.10
NM			All	All	All			
M6/7			All	All	All			
M4/5			All	All	All			

Technician: LF

Date Observed: 15-Sep-08

Report Printed: 3/10/2008 9:02:42 AM

Comment about  
this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 08049  
Disc No.: -

Sample No: 163042

Overall Sample Assessment Negative

Your Project Code:

Sample Type (as collected):	Loam	Head Weight	23.72 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS 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									Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
	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				32	55	55				MW					
Al-Spinel						Tr				WW					
Amphibole				20	15	10				W					
Epidote				15	10	5				W					
Fe Oxide/Hydroxide				20	Tr	Tr				W					
Gahnite					Tr	Tr				W					
Ilmenite					Tr	7				W					
Kyanite				3	10	8				W					
Leucoxene					Tr	Tr				WW					
Rutile					Tr	Tr				W					
Spessartine				10	10	15				MW					
Sphene					Tr	Tr				W					
Staurolite				Tr	Tr	Tr				W					
Tourmaline				Tr	Tr	Tr				W					
Zircon						Tr				WW					
TOTAL		%	%	100%	100%	100%	%	%	%						



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## Detailed Heavy Mineral Analysis

Our Job No.: 08049  
Disc No.: -

Sample No: 163042

Overall Sample Assessment **Negative**

Your Project Code:

### What Has Been Observed?

Final Conc Weight 48.23 g Size Range -1.2+0.3 mm

Weight Observed 48.23 g

### Magnetic Fractions vs Size Fraction

mm	+2.0	+1.2	+0.8	+0.4	+0.3	+0.25	+0.20	+0.10
NM			All	All	All			
M6/7			All	All	All			
M4/5			All	All	All			

Technician: LF

Date Observed: 15-Sep-08

Report Printed: 3/10/2008 9:03:06 AM

Comment about  
this sample:



Detailed Heavy Mineral Analysis

Our Job No.: 08049  
Disc No.: -

Sample No: 163043

Overall Sample Assessment Negative

Your Project Code:

Sample Type (as collected):	Loam	Head Weight	19.06 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS 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									Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
	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				55	55	55				MW					
Al-Spinel					Tr	Tr				W					
Amphibole				5	Tr	5				W					
Diopside						Tr				W					
Epidote					Tr	5				W					
Fe Oxide/Hydroxide				15	15	Tr				W					
Gahnite				Tr	Tr	Tr				W					
Ilmenite				Tr	Tr	5				W					
Kyanite				5	15	15				W					
Leucoxene				Tr	Tr	Tr				WW					
Monazite				Tr	Tr	Tr				WW					
Orthopyroxene					Tr	Tr				W					
Rutile				Tr	Tr	Tr				W					
Spessartine				20	15	15				MW					
Sphene					Tr	Tr				W					
Staurolite					Tr	Tr				W					
Tourmaline					Tr	Tr				W					
Zircon					Tr	Tr				W					
TOTAL		%	%	100%	100%	100%	%	%	%						



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## Detailed Heavy Mineral Analysis

Our Job No.: 08049  
Disc No.: -

Sample No: 163043

Overall Sample Assessment **Negative**

Your Project Code:

### What Has Been Observed?

Final Conc Weight 111.24000 g Size Range -1.2+0.3 mm

Weight Observed 70.185000 g

#### Magnetic Fractions vs Size Fraction

mm	+2.0	+1.2	+0.8	+0.4	+0.3	+0.25	+0.20	+0.10
NM			All	All	All			
M6/7			All	All	All			
M4/5			All	1/2	1/2			

Technician: LF

Date Observed: 16-Sep-08

Report Printed: 3/10/2008 9:03:30 AM

Comment about  
this sample:





Detailed Heavy Mineral Analysis

Our Job No.: 08049  
Disc No.: -

Sample No: 163044

Overall Sample Assessment Negative

Your Project Code:

Sample Type (as collected):	Loam	Head Weight	13.58 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS 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									Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
	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				35	35	35				MW					
Amphibole				Tr	5	5				W					
Biotite					Tr	Tr				MW					
Epidote				Tr	5	5				W					
Fe Oxide/Hydroxide				35	Tr	Tr				W					
Gahnite					Tr	Tr				W					
Ilmenite				Tr	5	5				W					
Kyanite				Tr	5	5				W					
Leucoxene					Tr	Tr				MW					
Monazite				Tr						W					
Muscovite					Tr	Tr				W					
Orthopyroxene				Tr	Tr	Tr				W					
Rutile					Tr	Tr				W					
Spessartine				30	35	30				W					
Staurolite					Tr	Tr				W					
Tourmaline				Tr	10	15				W					
TOTAL		%	%	100%	100%	100%	%	%	%						



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## Detailed Heavy Mineral Analysis

Our Job No.: 08049

Disc No.: -

Sample No:

163044

Overall Sample Assessment

**Negative**

Your Project Code:

### What Has Been Observed?

Final Conc Weight 3.7900001 g Size Range -1.2+0.3 mm

Weight Observed 3.7900001 g

### 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:

Technician: BJG

Date Observed: 16-Sep-08

Report Printed: 3/10/2008 9:03:55 AM



Detailed Heavy Mineral Analysis

Our Job No.: 08049  
Disc No.: -

Sample No: 163045

Overall Sample Assessment Negative

Your Project Code:

Sample Type (as collected):	Loam	Head Weight	16.88 kg
Sample Type (as received):	Loam	Wet Weight	kg
Observed Sample Type:	DMS 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									Wear	Overall Morph. Group	Total particles	No of particles probed	PRIORITY based on Morphology only)	PRIORITY based on morphology and Probe)
	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				50	65	45				MW					
Amphibole				Tr	Tr	Tr				W					
Anatase						Tr				W					
Barite				Tr	Tr	5				MW					
Epidote				Tr	5	5				W					
Fe Oxide/Hydroxide				15	Tr	Tr				W					
Gahnite						Tr				W					
Ilmenite				Tr	Tr	5				W					
Kyanite				5	5	5				W					
Leucoxene					Tr	Tr				W					
Monazite						Tr				W					
Muscovite						Tr				W					
Orthopyroxene					Tr	Tr				MW					
Rutile				Tr	Tr	Tr				W					
Spessartine				30	25	30				MW					
Staurolite				Tr	Tr	Tr				W					
Tourmaline				Tr	Tr	5				W					
Zircon						Tr				WW					
TOTAL		%	%	100%	100%	100%	%	%	%						



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## Detailed Heavy Mineral Analysis

Our Job No.: 08049  
Disc No.: -

Sample No: 163045

Overall Sample Assessment **Negative**

Your Project Code:

### What Has Been Observed?

Final Conc Weight 9.5199999 g Size Range -1.2+0.3mm

Weight Observed 9.5199999 g

### Magnetic Fractions vs Size Fraction

mm	+2.0	+1.2	+0.8	+0.4	+0.3	+0.25	+0.20	+0.10
NM			All	All	All			
M6/7			All	All	All			
M4/5			All	All	All			

Technician: BJG

Date Observed: 16-Sep-08

Report Printed: 3/10/2008 9:04:20 AM

Comment about  
this sample: