

THIN SECTION LABEL ID: 402-U1614A-7H-2-W 40/43-TSB-TS#16**Group** Summaries

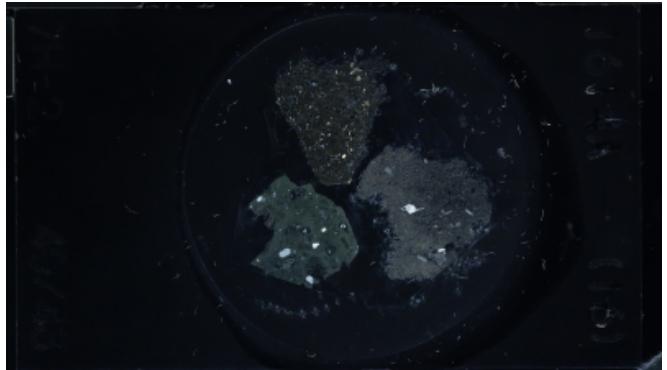
Sedimentary-rocks: Volcaniclastic rock with clasts of pyroxene and plagioclase

Plane-polarized



77111101

Cross-polarized



77111121

SEDIMENTARY ROCKS**Lithology full name:** volcaniclastic**Observer:****Summary of sediment features:** Clasts of pyroxene and plagioclase set in a highly altered matrix**Clast lithology principal name****Clast mineralogy**

Orthopyroxene, plagioclase

THIN SECTION LABEL ID: 402-U1614A-21X-1-W 36/39-TSB-TS#17**Group Summaries**Sedimentary-
rocks: Mudstone

Plane-polarized



77197121

Cross-polarized



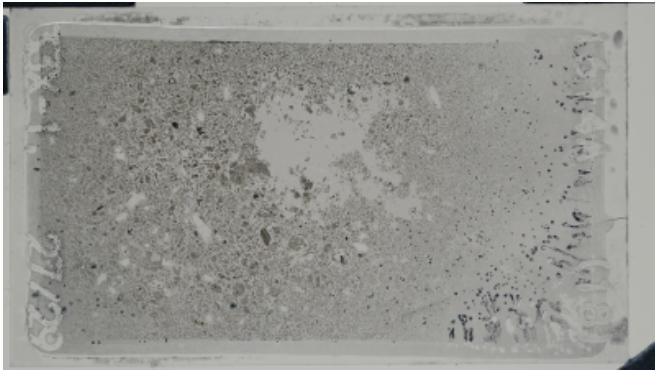
77197101

SEDIMENTARY ROCKS**Lithology full name:** mudstone**Observer:****Summary of sediment
features:** Extremely fine grained clastic sedimentary rock

THIN SECTION LABEL ID: 402-U1614A-33X-1-W 27/29-TSB-TS#18**Group Summaries**

Sedimentary-rocks: Volcaniclastic rock with clasts of orthopyroxene, clinopyroxene, and mica in a highly altered matrix

Plane-polarized



77197181

Cross-polarized



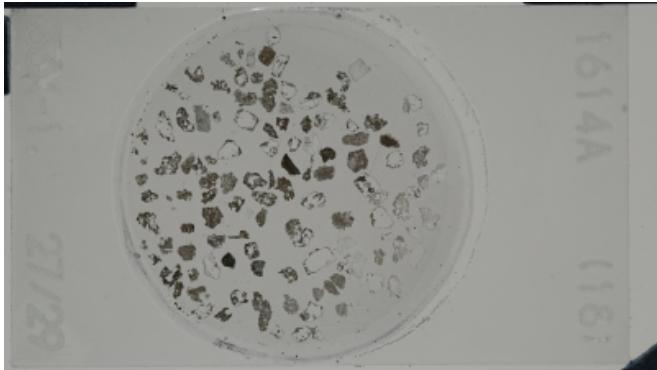
77197201

SEDIMENTARY ROCKS**Lithology full name:** volcaniclastic**Observer:****Summary of sediment features:** Clasts of orthopyroxene, clinopyroxene, and mica in a highly altered matrix

THIN SECTION LABEL ID: 402-U1614A-33X-1-W 27/29-TSB-TS#18b**Group** Summaries

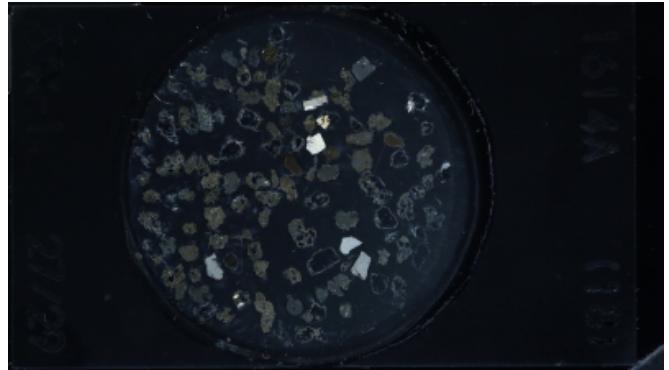
Sedimentary-rocks: Volcaniclastic rock with clasts of orthopyroxene, clinopyroxene, and mica in a highly altered matrix

Plane-polarized



77197141

Cross-polarized



77197161

SEDIMENTARY ROCKS**Lithology full name:** volcaniclastic**Observer:****Summary of sediment features:** Clasts of orthopyroxene, clinopyroxene, and mica in a highly altered matrix

THIN SECTION LABEL ID: 402-U1614A-33X-4-W 40/43-TSB-TS#19**Group Summaries**

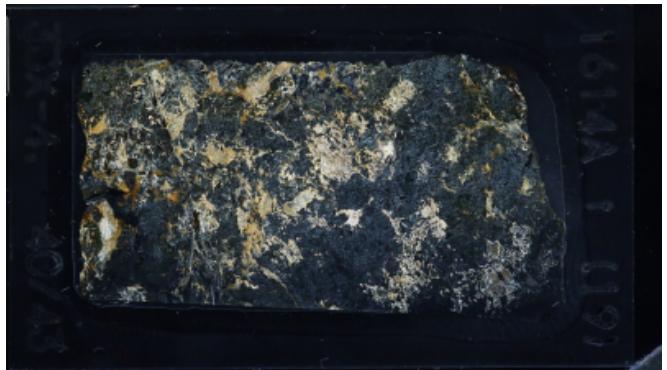
Igneous petrology: Serpentinized Iherzolite

Plane-polarized



77197221

Cross-polarized



77197241

IGNEOUS PETROLOGY**Lithology:** Iherzolite

Observer:

Interval domain no:

Domain description:

Serpentinized peridotite with secondary serpentine, amphibole and clay minerals

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	70		100				Altered to serpentine
Clinopyroxene	5				anhedral	subequant	
Orthopyroxene	23				subhedral	subequant	
Spinel	2	100			subhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614A-35G-CC-W 5/8-TSB-TS#20**Group Summaries**

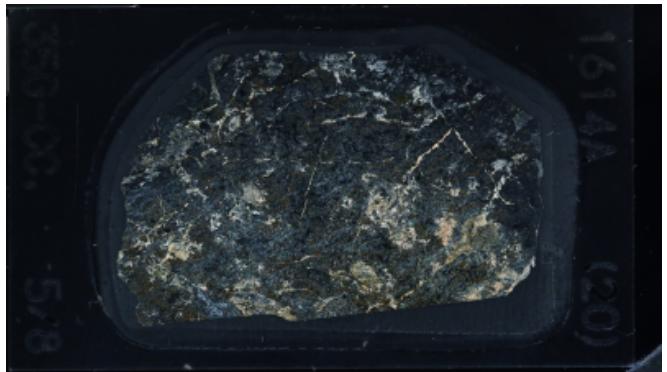
Igneous petrology: Serpentinized Iherzolite

Plane-polarized



77197281

Cross-polarized



77197261

IGNEOUS PETROLOGY**Lithology:** Iherzolite

Observer:

Interval domain no:

Domain description:

Serpentinized peridotite with secondary serpentine, amphibole and clay minerals

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	70		100				Altered to serpentine
Clinopyroxene	5				anhedral	subequant	
Orthopyroxene	23				subhedral	subequant	
Spinel	2	100			subhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-5R-1-W 6/8-TSB-TS#21**Group Summaries**

Igneous petrology: Biotite rich gabbro

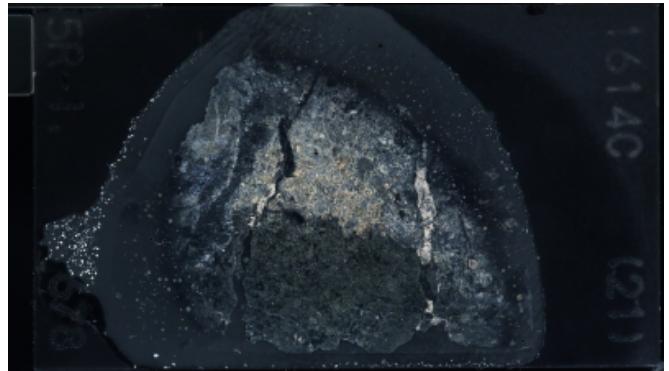
Alterations features: Phlogopite/biotite is chloritized by about 10 %. Plagioclase is 100 % altered. Biotite-rich area is surrounded by chloritized rim.

Plane-polarized



77436711

Cross-polarized



77436731

IGNEOUS PETROLOGY

Lithology: gabbro

Observer: TM

Interval domain no:

Domain description:

Biotite gabbro

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Plagioclase	30	0	100				
Amphibole	70	0					Potentially biotite, not amphibole

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-5R-1-W 113/115-TSB-TS#22**Group Summaries**

Igneous petrology: Plagioclase-bearing Iherzolite

Alterations features: Olivine is 99 % serpentinized and weathered. Most of orthopyroxene is replaced as bastite, partly rimmed and cut by fine-grained tremolite, talc, serpentine, chlorite aggregate. Plagioclase is 100 % sassuritized. Clinopyroxene is relatively less altered.

Plane-polarized



77436771

Cross-polarized



77436751

IGNEOUS PETROLOGY

Lithology: plagioclase-bearing Iherzolite

Observer: TM

Interval domain no:

Domain description:

Serpentinized plagioclase-bearing Iherzolite

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	68	0.5	99.5				
Plagioclase	10	0	100		anhedral	elongate	Chlorite formation
Clinopyroxene	5	50	50		anhedral	subequant	
Orthopyroxene	25	40	60		anhedral	subequant	
Spinel	2	90	10		anhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-5R-4-W 34/36-TSB-TS#23**Group Summaries**

Igneous petrology: Talc/Tremolite/Andradite rich rock surrounded by a serpentine/tremolite rind. Carbonate veins cross cut the sample

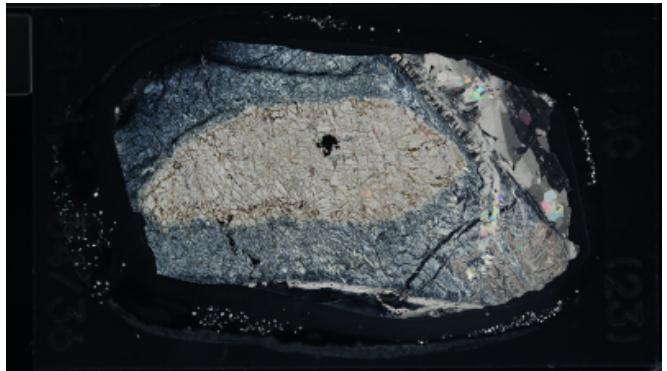
Alterations features: The original mineralogy is not estimated.

Plane-polarized



77436791

Cross-polarized



77436811

IGNEOUS PETROLOGY**Lithology:**

Observer: TM

Interval domain no: 1

Domain description:

Talc-tremolite-andradite rock surrounded by domain 2, and domain 3 cut.

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Amphibole	10					elongate	Metamorphosed tremolite
Spinel	2	90	10		anhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

Lithology:

Observer: TM

Interval domain no: 2

Domain description:

Serpentinite-tremolite rind (andradite ?)

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

Lithology:

Observer: TM

Interval domain no: 3

Domain description:

Carbonate vein with serpentinite clasts

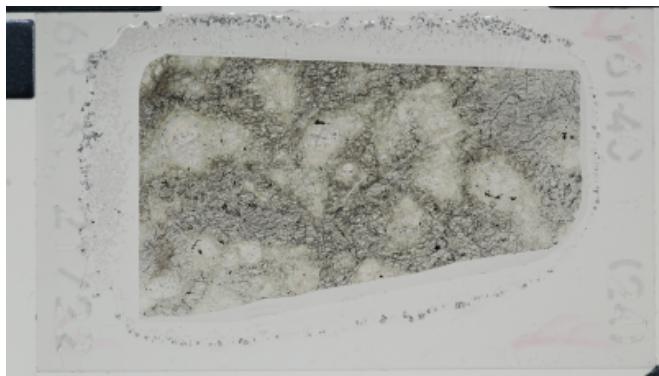
Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-6R-3-W 21/22-TSB-TS#24**Group Summaries**

Igneous petrology: Harzburgite

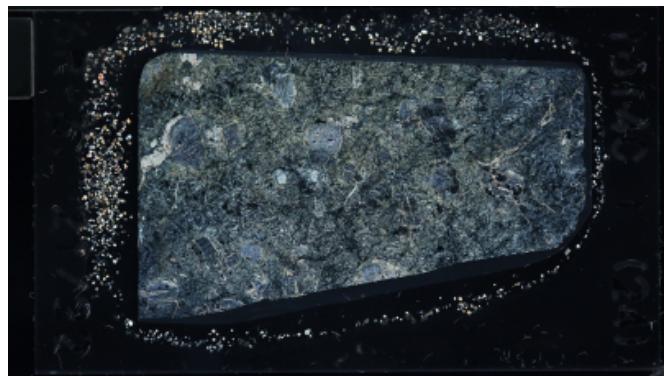
Alterations features: Olivine is considerably serpentinized/weathered, but olivine is found within the serpentine mesh texture. Large orthopyroxene porphyroblast is replaced by bastite and surrounded by tremolite-rich rim and cut by tremolite-rich veins.

Plane-polarized



77478171

Cross-polarized



77478191

IGNEOUS PETROLOGY

Lithology: harzburgite

Observer: TM

Interval domain no:

Domain description:

Harzburgite

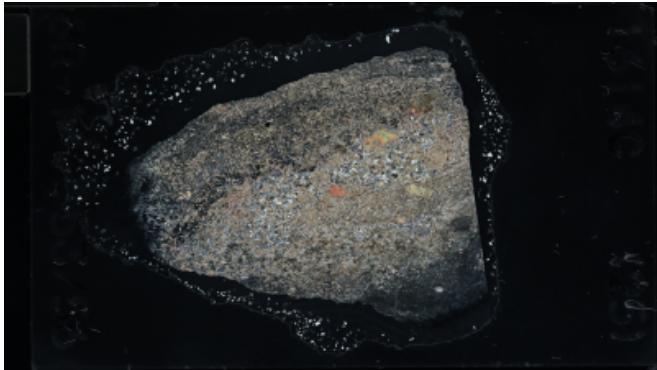
Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	85	10	90				
Clinopyroxene	3	20	80		anhedral	subequant	
Orthopyroxene	15	10	90		anhedral	subequant	Replaced by tremolite, serpentine
Spinel	2	90	10		anhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-8R-1-W 53/56-TSB#25-TS#25**Group Summaries**

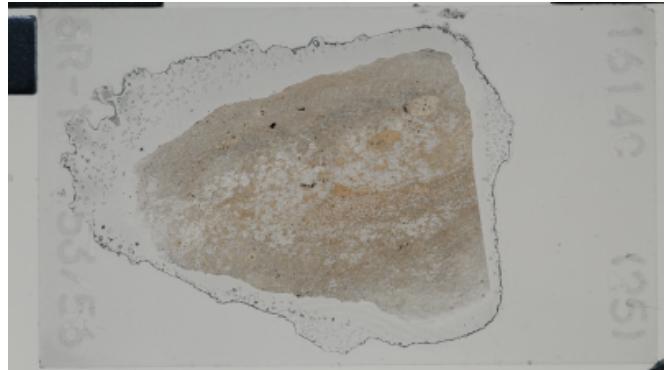
Igneous petrology: Biotite-plagioclase rock (rutile, titanite)

Plane-polarized



77478261

Cross-polarized



77478281

IGNEOUS PETROLOGY**Lithology:**

Observer: TM

Interval domain no:

Domain description:

Biotite-plagioclase rock (rutile, titanite)

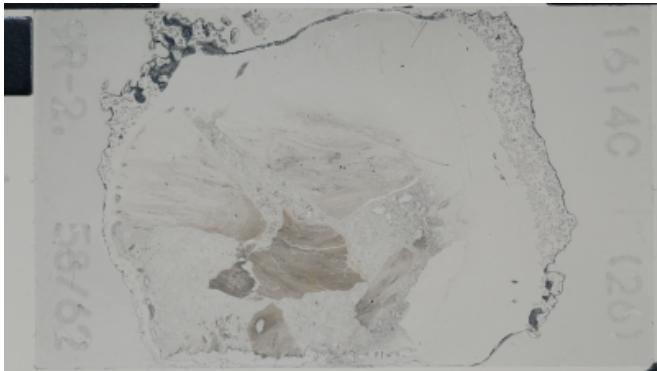
Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-9R-2-W 58/62-TSB#26-TS#26**Group Summaries**

Igneous petrology: Deformed serpentine(talc)-tremolite rocks in carbonate matrix

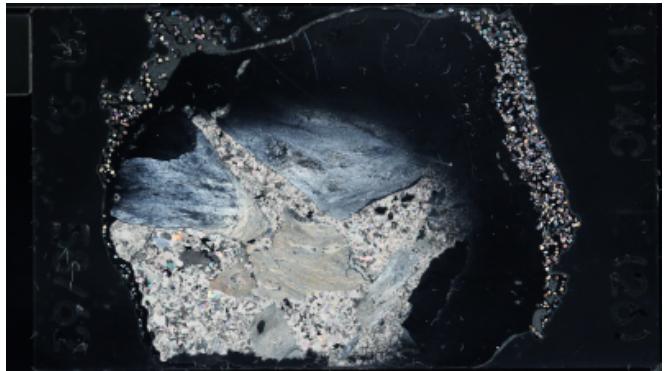
Alterations features: The original mineralogy is not estimated.

Plane-polarized



77478301

Cross-polarized



77478321

IGNEOUS PETROLOGY**Lithology:**

Observer: TM

Interval domain no: 1

Domain description:

Deformed serpentine(talc)-tremolite rocks in carbonate matrix

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

Lithology:

Observer: TM

Interval domain no: 2

Domain description:

Carbonate matrix including deformed domain1

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-10R-1-W 32/35-TSB#27-TS#27**Group Summaries**

Igneous petrology: Serpentinized Iherzolite with brown hornblende-tremolite-chlorite

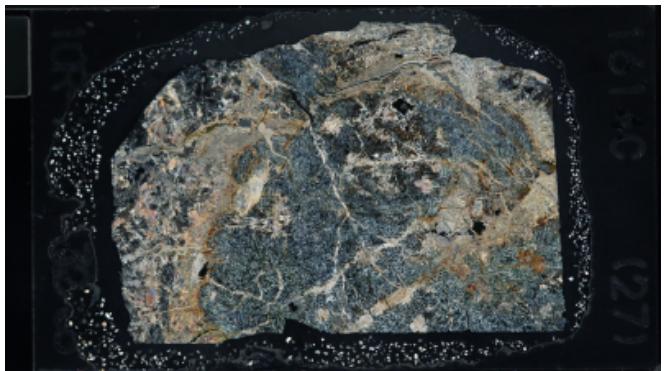
Alterations features: The host peridotite is almost serpentinized.

Plane-polarized



77478391

Cross-polarized



77478361

IGNEOUS PETROLOGY**Lithology:** Iherzolite

Observer: TM

Interval domain no: 1

Domain description:

Serpentinized Iherzolite with brown hornblende-tremolite-chlorite rock (domain2)

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	74	0	100				
Clinopyroxene	5	0	100				Replaced by tremolite
Orthopyroxene	20	0	100				Replaced by tremolite, serpentine
Spinel	1	90	10		anhedral	subequant	Chlorite is around spinel

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

Lithology:

Observer: TM

Interval domain no: 2

Domain description:

Brown hornblende-Tremolite-chlorite rock

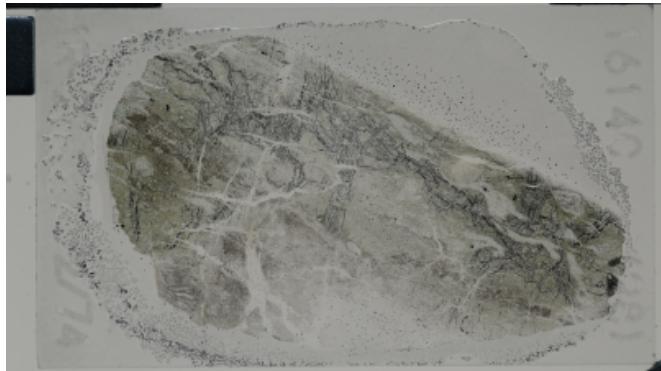
Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-11R-2-W 72/75-TSB#28-TS#28**Group Summaries**

Igneous petrology: Plagioclase-bearing Iherzolite cross-cut by tremolite-chlorite-talc rich vein

Alterations features: The host peridotite is totally serpentinized and cut by serpentine veins.

Plane-polarized



77478461

Cross-polarized



77478481

IGNEOUS PETROLOGY**Lithology:** plagioclase-bearing harzburgite

Observer: TM

Interval domain no:

Domain description:

Plagioclase-layer bearing harzburgite cut by gabbroic vein (tremolite-chlorite-talc vein)

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Plagioclase	3	0	100		anhedral	elongate	Chlorite formation
Clinopyroxene	2	0	100				Tremolite formation
Orthopyroxene	20	0	100				Replaced by tremolite, talc, serpentine
Spinel	1	90	10		anhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-11R-3-W 11/14-TSB#29-TS#29**Group Summaries**

Igneous petrology: Plagioclase-layers-rich Iherzolite

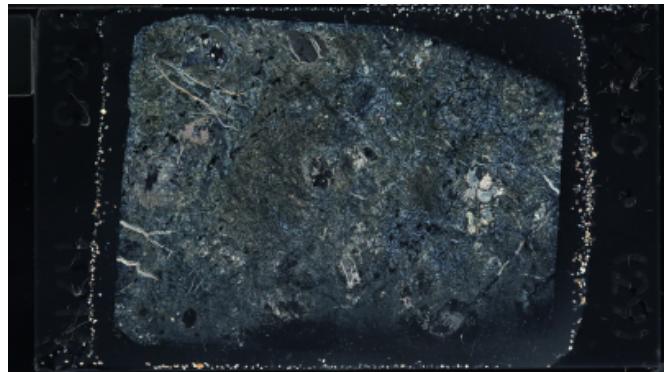
Alterations features: Olivine isserpentinized/weathered, but olivine is found within the serpentine mesh texture. Plagioclase is totally saussuritized. Clinopyroxene is well preserved from the serpentization. Large orthopyroxene porphyroblast is mostly replaced as bastite and is surrounded by tremolite-rich rim and cut by tremolite-rich veins.

Plane-polarized



77478521

Cross-polarized



77478501

IGNEOUS PETROLOGYLithology: **plagioclase-bearing Iherzolite**

Observer: TM

Interval domain no:

Domain description:

Plagioclase-layers-rich Iherzolite

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	65	15	85				
Plagioclase	5	0	100		anhedral	elongate	Plagioclase-rich layers, plagioclase replaced by chlorite
Clinopyroxene	5	40	60		anhedral	subequant	
Orthopyroxene	23	30	70		anhedral	subequant	
Spinel	2	90	10		anhedral	elongate	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-12R-4-W 47/49-TSB#30-TS#30**Group Summaries**

Igneous petrology: Plagioclase-bearing Iherzolite

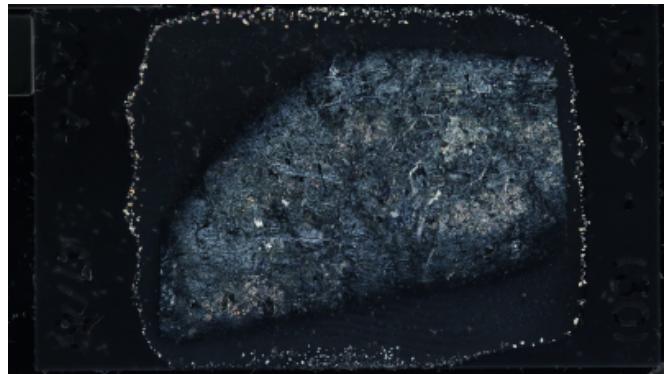
Alterations features: Olivine is considerably serpentinized/weathered, but olivine is found within the serpentine mesh texture. Plagioclase is totally saussuritized. Clinopyroxene is well preserved from the serpentinization. Large orthopyroxene porphyroblast is mostly replaced as bastite and is surrounded by tremolite-rich rim and cut by tremolite-rich veins.

Plane-polarized



77478541

Cross-polarized



77478561

IGNEOUS PETROLOGY

Lithology: plagioclase-bearing Iherzolite

Observer: TM

Interval domain no:

Domain description:

Plagiooclase-bearing Iherzolite

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	66	10	90				
Plagioclase	3	0	100		anhedral		Around spl now chlorite formation
Clinopyroxene	5	40	60		anhedral	subequant	locally concentrated
Orthopyroxene	25	30	70		anhedral	subequant	
Spinel	1	90	10		anhedral	subequant	Surrounded by chlorite (probably former plagioclase)

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-13R-1-W 29/31-TSB#31-TS#31**Group Summaries**

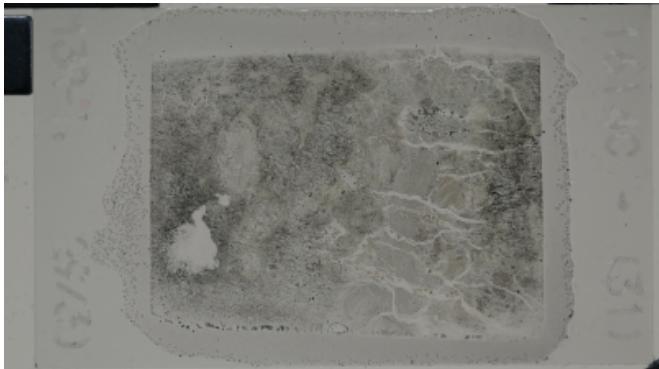
Igneous petrology:

5mm thick pyroxenite/gabbro vein-bearing Iherzolite

Alterations features:

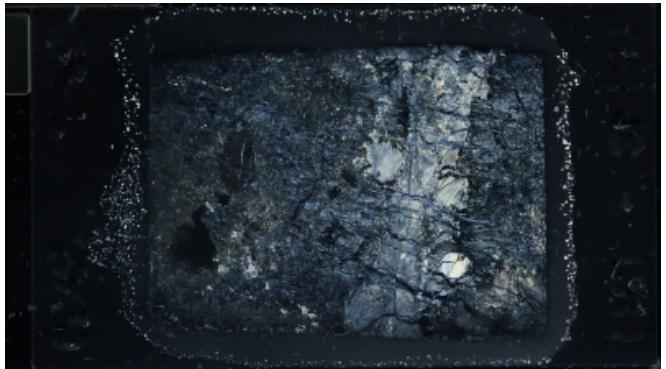
The former pyroxenite/gabbroic vein consists mainly of tremolite and chlorite. The host peridotite is significantly serpentinized.

Plane-polarized



77478601

Cross-polarized



77478581

IGNEOUS PETROLOGY**Lithology:** Iherzolite

Observer: TM

Interval domain no: 1

Domain description:

5mm thick pyroxenite/gabbro vein-bearing Iherzolite

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	74	5	95				
Clinopyroxene	5	20	80		anhedral	subequant	
Orthopyroxene	20	30	70		anhedral	subequant	
Spinel	1	90	10		anhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
0				

Lithology:

Observer: TM

Interval domain no: 2

Domain description:

Gabbro/Pyroxenite vein now altered

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
0				

THIN SECTION LABEL ID: 402-U1614C-14R-3-W 55/58-TSB#32-TS#32**Group Summaries**

Igneous petrology: Plagioclase-bearing Iherzolite

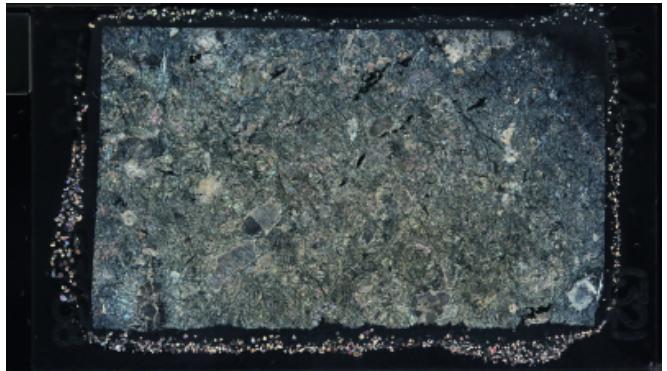
Alterations features: Less serpentinized

Plane-polarized



77541961

Cross-polarized



77541981

IGNEOUS PETROLOGY

Lithology: plagioclase-bearing Iherzolite

Observer: TM

Interval domain no:

Domain description:

Plagioclase-bearing Iherzolite, less serpentinized among cores

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	65	50	50		anhedral	subequant	
Plagioclase	2	0	100		anhedral		
Clinopyroxene	7	60	40		anhedral	subequant	
Orthopyroxene	25	50	50		anhedral	subequant	Rimmed by tremolite/serpentine
Spinel	1	95	5		anhedral	subequant	

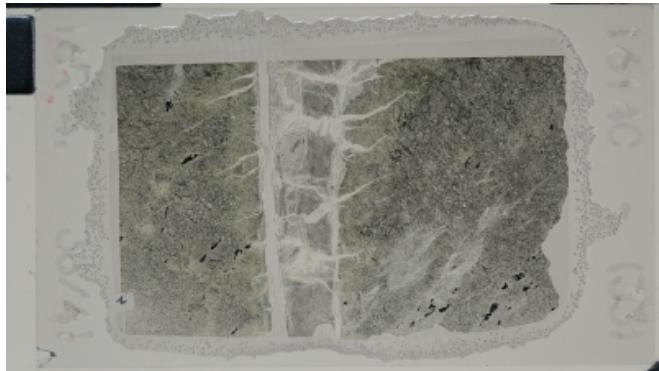
Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-16R-4-W 38/41-TSB#33-TS#33**Group Summaries**

Igneous petrology: Harzburgite with gabbroic/gabbroic vein (mainly replaced by tremolite)

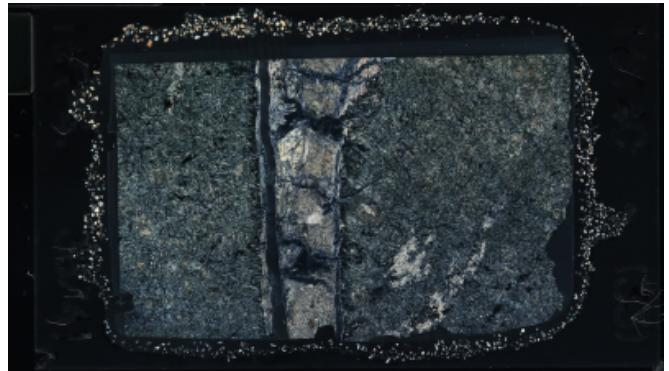
Alterations features: Olivine is 70 % serpentinized. Tremolite-chlorite veins cut peridotite.

Plane-polarized



77541941

Cross-polarized



77541921

IGNEOUS PETROLOGY**Lithology:** harzburgite

Observer: TM

Interval domain no: 1

Domain description:

Harzburgite with gabbroic/gabbroic vein
(mainly replaced by tremolite)

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	85	10	90				
Clinopyroxene	2	20	80		anhedral	subequant	
Orthopyroxene	12	5	95		anhedral	subequant	
Spinel	1	80	20		anhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

Lithology:

Observer: TM

Interval domain no: 2

Domain description:

Gabbroic/Pyroxenitic vein (tremolite)

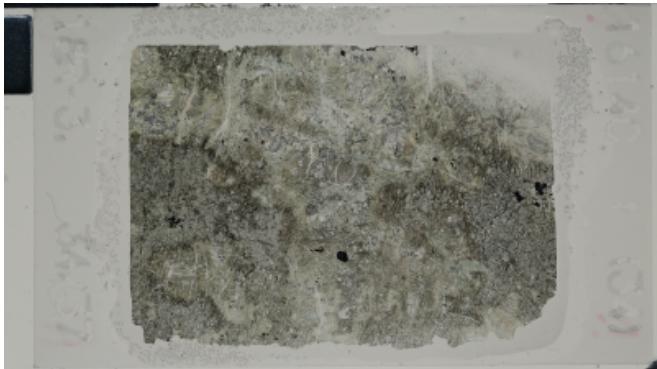
Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-18R-3-W 34/37-TSB#34-TS#34**Group Summaries**

Igneous petrology: Plagioclase-bearing Iherzolite, plagioclase is locally concentrated

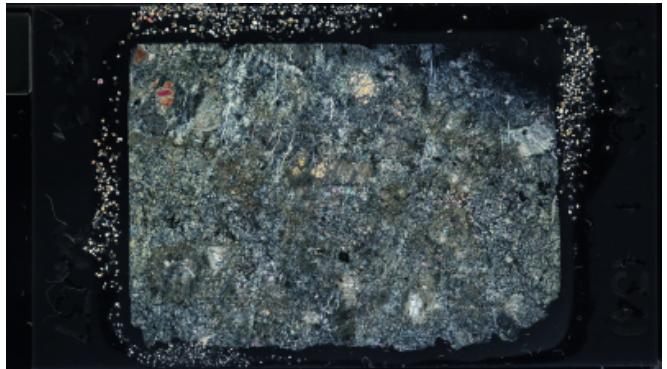
Alterations features: Olivine is serpentined/weathered. Plagioclase is totally saussuritized. Large orthopyroxene porphyroblast is surrounded by tremolite-rich rim and cut by tremolite-rich veins.

Plane-polarized



77541881

Cross-polarized



77541901

IGNEOUS PETROLOGY**Lithology:** plagioclase-bearing Iherzolite

Observer: TM

Interval domain no:

Domain description:

Plagioclase-bearing Iherzolite, plagioclase is locally concentrated

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	62	30	70				Partly antigorite formed?
Plagioclase	7	0	100		anhedral		
Clinopyroxene	5	60	10		anhedral	subequant	
Orthopyroxene	25	40	60		anhedral	subequant	
Spinel	1	95	5		anhedral		

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-19R-4-W 1/3-TSB#35-TS#35**Group Summaries**

Igneous petrology: Plagioclase-bearing websterite in Iherzolite

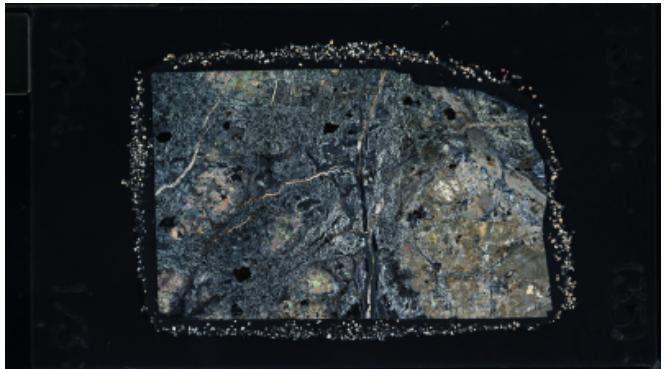
Alterations features: Plagiocalce is sassuritized.

Plane-polarized



77541861

Cross-polarized



77541841

IGNEOUS PETROLOGY**Lithology:** plagioclase-bearing

Observer: TM

Interval domain no: 1

Domain description:

Plagioclase-bearing websterite in Iherzolite

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Plagioclase	3	0	100		anhedral		
Clinopyroxene	85	80	20		anhedral	subequant	
Orthopyroxene	10	80	20		anhedral	subequant	
Spinel	2	95	5		anhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

Lithology: plagioclase-bearing Iherzolite

Observer: TM

Interval domain no: 2

Domain description:

Plagioclase peridotite (modal estimation is difficult because of limited area) with websterite (domain1)

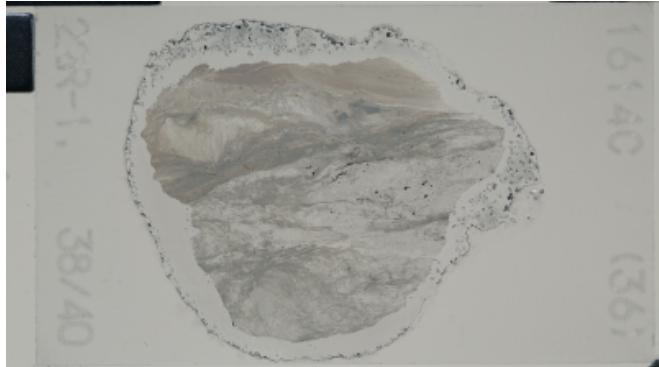
Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-22R-1-W 38/40-TSB#36-TS#36**Group Summaries**

Igneous petrology: Deformed talc-tremolite rock

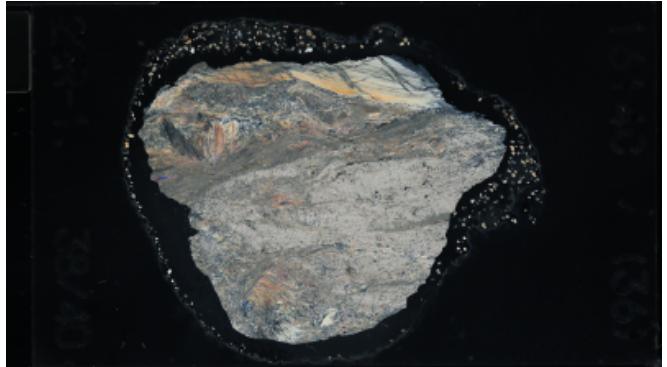
Alterations features: The original mineralogy is not estimated.

Plane-polarized



77541801

Cross-polarized



77541821

IGNEOUS PETROLOGY**Lithology:**

Observer: TM

Interval domain no:

Domain description:

Deformed talc-tremolite rock

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-22R-1-W 137/140-TSB#37-TS#37**Group Summaries**

Igneous petrology: Harzburgite with high-K vein

Alterations features: High-K vein is mostly replaced by tremolite and chlorite. Zircon is present.

Plane-polarized



77541781

Cross-polarized



77541761

IGNEOUS PETROLOGY**Lithology:** harzburgite

Observer: TM

Interval domain no: 1

Domain description:

Harzburgite with high-K vein

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	85	0	100				Opaque mineral is in the core of serpentine mesh texture.
Orthopyroxene	13	0	100		anhedral	subequant	
Spinel	2	90	10		anhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

Lithology:

Observer: TM

Interval domain no: 2

Domain description:

Biotite/phlogopite-rich layer now chloritized

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-26R-2-W 24/26-TSB#38-TS#38**Group Summaries**

Igneous petrology: Oxidized Plagioclase-bearing Iherzolite

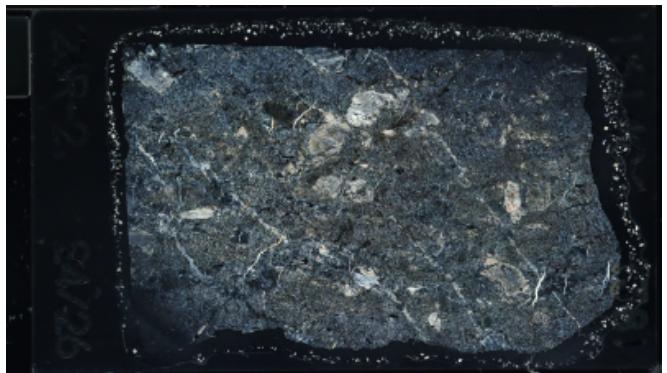
Alterations features: The host peridotite is totally serpentinized and cut by several generation of serpentine veins. Magnetite is partly replaced by hematite or other Fe-minerals.

Plane-polarized



77541661

Cross-polarized



77541641

IGNEOUS PETROLOGY

Lithology: plagioclase-bearing Iherzolite

Observer: TM

Interval domain no:

Domain description:

Oxidized Plagioclase-bearing Iherzolite

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	77	1	99				
Plagioclase	3	0	100				
Clinopyroxene	3	0	100		anhedral	subequant	
Orthopyroxene	15	0	100		anhedral	subequant	
Spinel	2	90	10		anhedral	elongate	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-27R-2-W 39/42-TSB#39-TS#39**Group Summaries**

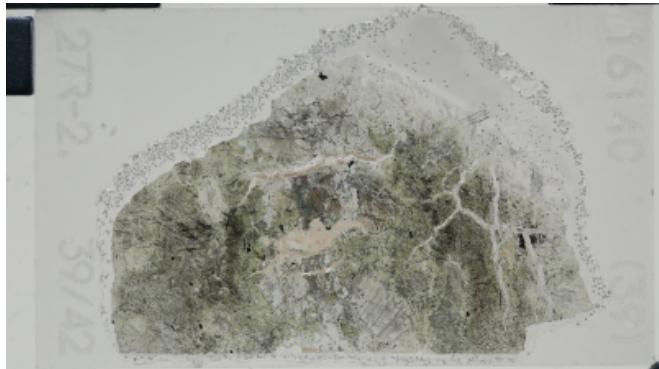
Igneous petrology:

Lherzolite with orthopyroxenite vein

Alterations features:

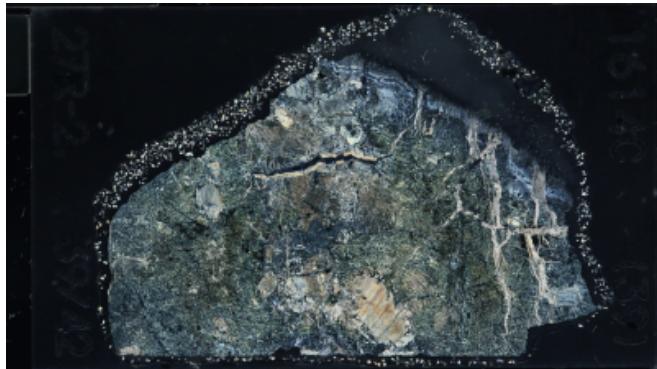
Orthopyroxene in orthopyroxenite is completely replaced as bastite with tremolite-rich rim. The host peridotite is significantly serpentinized.

Plane-polarized



77541681

Cross-polarized



77541701

IGNEOUS PETROLOGY**Lithology:** Lherzolite

Observer: TM

Interval domain no: 1

Domain description:

Lherzolite with orthopyroxenite vein
(domain2)

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	78	0.5	99.5				
Clinopyroxene	5	30	70		anhedral	subequant	
Orthopyroxene	15	5	95		anhedral	subequant	
Spinel	2	90	10		anhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

Lithology:

Observer: TM

Interval domain no: 2

Domain description:

Orthopyroxenite vein (now metamorphosed)

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			

THIN SECTION LABEL ID: 402-U1614C-28R-3-W 0/3-TSB#40-TS#40**Group Summaries**

Igneous petrology:

Plagioclase-rich layer bearing harzburgite cut by gabbroic vein (tremolite-chlorite-talc vein)

Alterations features:

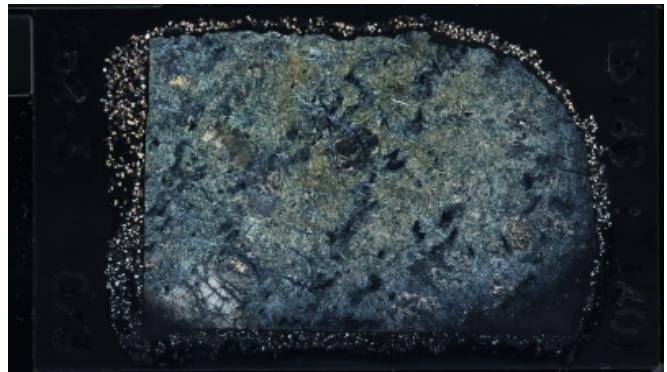
Olivine is considerably serpentinized/weathered, but olivine is found within the serpentine mesh texture. Plagioclase is totally sausuritized. Clinopyroxene is well preserved from the serpentinization. Large orthopyroxene porphyroblast is surrounded by tremolite-rich rim and cut by tremolite-rich veins.

Plane-polarized



77541741

Cross-polarized



77541721

IGNEOUS PETROLOGY**Lithology: plagioclase-bearing Iherzolite**

Observer: TM

Interval domain no:

Domain description:

Plagioclase-rich Iherzolite

Mineral	% Mineral	Original (%)	Altered (%)	Size AVE (mm)	Shape	Habit	Comments
Olivine	68	15	85				
Plagioclase	8	0	100		anhedral		Not always associated with spl
Clinopyroxene	7	60	70		anhedral	subequant	
Orthopyroxene	15	40	60		anhedral	subequant	Rimmed by tremolite
Spinel	2	90	10		anhedral	subequant	

Pl phenocryst (%)	Total phenocryst (%)	Biotite (%)	Quartz (%)	Quartz alteration intensity
	0			