

## APPENDIX III – PETROGRAPHIC DATA

---

### Codes

#### General

**N** – None, 0%

**R** – Rare, <1%

**S** – Some, 1-5%

**C** – Common, 5-25%

**VC** – Very common, 25-50%

**A** – Abundant, 50-75%

**VA** – Very abundant, >75%

#### Abrasion (Bioclasts)

**UA** – Unabraded

**SA** – Slightly abraded

**MA** – Moderately abraded

**StA** – Strongly abraded

**F** - Fractured

#### Shape (Siliciclasts)

**A** - Angular

**SA** – Sub-angular

**SR** – Sub-rounded

**R**- Rounded

**WR** – Well rounded

#### Sorting

**VP** – Very poorly sorted

**P** – Poorly sorted

**M** – Moderately sorted

**W** – Well sorted

**VW** – Very well sorted

#### Intrinsic/Extrinsic Cements

**Sp** – Coarse sparite

**MSp** – Microsparite

**Iso** – Isopachous sparite fringe

**Hm** – Homogenous micrite

**Pm** – Peloidal micrite

**Mm** – Microbioclastic micrite

#### Other Diagenetic

**PS** – Pressure dissolution

**V** – Veining

**Neo** – Neomorphic fabric

**Bio** - Biomoulds

**Bor** – Microborings

**Sty** - Microstylolites

Sample Number	3	3.1	16a	19	57.2	57.4	58.1
<b>Bioclast %</b>	62	57	60	1	0	5	50
Planktic Foraminifera	R	R	R	R		R	S
Benthic Foraminifera	R	R	R	R			R
Bryozoans	R	S	R				R
Echinoderms	R		R			R	
Bivalves	S	S	S				C
Brachiopods	C	C	C			S	R
Gastropods	S		R				
Red algae							
Barnacles	C	C	VC				S
Annelids	S						
Other							
Maximum size (mm)	6.0	6.0	4.0	0.25			13.0
Modal size 1 (mm)	5.0	5.0	3.0	0.15			0.4
Modal size 2 (mm)	0.5	1.0	0.3				
Abrasion	SA	SA	SA	SA			Sta
Size sorting	P	VP	M	M			P
<b>Siliciclastic %</b>	2	1	2	89	80	85	5
Quartz	S	S	S	R	S	C	S
Feldspar					C		
Rock fragments					VC		
Matrix (Clays)				VA	VC	A	
Other					Glass shards		
Modal size 1 (mm)	0.25	0.15	0.20	0.25	1.0	0.5	0.25
Modal size 2 (mm)					0.25		
Shape	SR	SR	SR	SA	SR/A	SA	SA
Sorting	M	M	M	M	VP	W	W
<b>Authigenic %</b>	7	5	5	13	0	5	3
Glauconite pellets	S	R	R	R		S	S
Glauconite infill	R	S	R				R
Pyrite grains				C		R	R
Pyrite infill	R	R	R				
<b>Cement %</b>	26	35	30	5	10	4	32
Extrinsic	Iso	Mm	Iso				Mm
Intrinsic	Sp	Mm	Iso				Mm
Other diagenetic features	Bio	Bor/Bio	Bio				Bio/Bor/Iso
<b>Empty Pore %</b>	3	2	3	0	10	1	10

Sample Number	61.1	61.2	61.3	74.1	74.2a	75	76
<b>Bioclast %</b>	55	70	72	57	52	54	52
Planktic Foraminifera	S	R	S	S	S	R	
Benthic Foraminifera	R	R	R	R	S	R	R
Bryozoans	VC	C	C	R	R		R
Echinoderms			S	S	S	R	R
Bivalves	S		S	C	C	R	C
Brachiopods	S		R	S	S	R	S
Gastropods							
Red algae							
Barnacles		R	R	R	R		C
Annelids							
Other							
Maximum size (mm)	1.0	2.0	1.5	4.0	4.0	1.0	15
Modal size 1 (mm)	0.2	0.5	0.25	2.0	2.0	0.2	1.0
Modal size 2 (mm)				0.3	0.2		0.4
Abrasion	MA	MA	MA	MA	MA	MA	MA
Size sorting	M	M	M	VP	VP	P	VP
<b>Siliciclastic %</b>	2	2	5	3	3	10	10
Quartz	S	S	S	S	S	C	C
Feldspar							
Rock fragments					R	R	R
Matrix (Clays)							
Other							
Modal size 1 (mm)	0.1	0.2	0.15	0.2	0.1	0.2	0.2
Modal size 2 (mm)				0.1			
Shape	SR	SR	SA	A	SA	SA	SA
Sorting	W	M	M	P	P	M	W
<b>Authigenic %</b>	7	7	7	10	15	20	7
Glauconite pellets	R	R	R	R	S	S	S
Glauconite infill	S	S	S	S	S	S	S
Pyrite grains	R	R			R	R	
Pyrite infill	R	R	R	S	S	S	
<b>Cement %</b>	35	20	15	30	30	21	30
Extrinsic	Sp	Sp	Sp				Sp
Intrinsic	Sp	Sp	Sp	Mm	Mm		Mm
Other diagenetic features				PS	PS	PS	Iso
<b>Empty Pore %</b>	1	1	1	0	0	1	1

Sample Number	79.1	86	89.1	89.6	92b	93a	98
<b>Bioclast %</b>	77	73	81	79	47	69	69
Planktic Foraminifera	R					R	R
Benthic Foraminifera	R			R		R	
Bryozoans					R	S	
Echinoderms	R			R			R
Bivalves	C	S	R		R	S	S
Brachiopods	S	R			S	R	S
Gastropods							
Red algae							
Barnacles	C	A	VA	VA	C	C	C
Annelids							
Other							
Maximum size (mm)	9.0	4.0	3.0		7.0	4.0	10.0
Modal size 1 (mm)	3.0	3.0	1.5		1.0	1.0	1.0
Modal size 2 (mm)							
Abrasion	MA	Sta	MA		MA	MA	Sta
Size sorting	P	W	W		P	M	P
<b>Siliciclastic %</b>	5	1	1	2	3	3	10
Quartz	S	R	R	S	S	S	C
Feldspar							
Rock fragments	S			R			
Matrix (Clays)							
Other							
Modal size 1 (mm)	2.0	0.2	0.1	0.1	0.25	0.2	0.2
Modal size 2 (mm)	0.15						
Shape	SA/R	SR	SR	SR	SR	SA	SA
Sorting	P	W	W	W	W	W	W
<b>Authigenic %</b>	2	1	1	3	7	3	10
Glauconite pellets		R	R	S	S		S
Glauconite infill					R	S	S
Pyrite grains	R	R		R	R		R
Pyrite infill	R		R		R		R
<b>Cement %</b>	15	5	7	15	40	10	10
Extrinsic		Iso	Iso	Iso	Iso	Iso	Iso
Intrinsic	Sp	Msp	Iso	Iso/Sp	Mm	Pm	Pm
Other diagenetic features	PS	PS		PS		PS	PS
<b>Empty Pore %</b>	1	20	10	1	3	15	1

Sample Number	105.1	105.2	107	117.1	117.2	117.3	117.5
<b>Bioclast %</b>	29	44	76	68	20	20	15
Planktic Foraminifera	R	R		R	R	R	S
Benthic Foraminifera	R	R		R	R	R	S
Bryozoans		R		R			
Echinoderms			R	R	R		
Bivalves	R	R	R	S	R	R	R
Brachiopods	R	R	R	C	S	R	R
Gastropods							
Red algae							
Barnacles	C	C	A	C	S	S	S
Annelids							
Other							
Maximum size (mm)	2.0	1.0	6.0	3.0	3.0	1.0	1.0
Modal size 1 (mm)	0.4	0.4	3.0	1.0	0.7	0.2	0.2
Modal size 2 (mm)							
Abrasion	MA	Sta	SA	MA	Sta	MA	MA
Size sorting	M	W	P	M	M	M	M
<b>Siliciclastic %</b>	40	25	1	15	71	10	10
Quartz	C	C	R	C	C	C	C
Feldspar							
Rock fragments	S	R					
Matrix (Clays)					A		
Other							
Modal size 1 (mm)	0.25	0.25	0.25	0.25	0.3	0.3	0.2
Modal size 2 (mm)							
Shape	SA	SA	SR	SA	SA	A	SA
Sorting	W	W	W	W	W	W	W
<b>Authigenic %</b>	10	10	1	3	3	3	3
Glauconite pellets	S	S	R	R	R	S	R
Glauconite infill	S	S	R	R	R	S	R
Pyrite grains	R	R		S	S		S
Pyrite infill	R	R		S	S	R	R
<b>Cement %</b>	20	20	15	10	5	66	71
Extrinsic		Iso	Iso	Mm/Pm			
Intrinsic	Pm	Pm	Pm	Mm/Pm	Mm/Pm	Pm	Mm
Other diagenetic features			Bio				
<b>Empty Pore %</b>	1	1	7	2	1	1	1

Sample Number	117.6	117.7	118.1	118.2	118.3	118.4	118.5b
<b>Bioclast %</b>	15	75	7	20	20	15	0
Planktic Foraminifera	R	R	R	R	R	R	
Benthic Foraminifera	R	R	R	R	R	R	
Bryozoans							
Echinoderms		R					
Bivalves	R	R		R	C	S	
Brachiopods	R	S	R	S	S	R	
Gastropods							
Red algae							
Barnacles	S	C	S	S	R		
Annelids							
Other							
Maximum size (mm)	4.0	4.0	0.4	1.0	6.0	5.0	
Modal size 1 (mm)	0.15	1.0		0.3	5.0	0.5	
Modal size 2 (mm)					0.4		
Abrasion	Sta	MA	Sta	MA	SA/F	MA	
Size sorting	M	M	M	M	M	P	
<b>Siliciclastic %</b>	66	3	75	30	70	15	89
Quartz	C	S	C	VC	C	C	C
Feldspar							S
Rock fragments		R				S	VA
Matrix (Clays)	A		A				
Other							
Modal size 1 (mm)	0.3	2.0	0.2	0.2	0.15	0.1	1.0
Modal size 2 (mm)		0.2					0.3
Shape	SA	SR	A	A	SR	SR/R	SA/WR
Sorting	W	M	W	W	W	M	P/VW
<b>Authigenic %</b>	3	5	2	4	5	5	0
Glauconite pellets	R	S	R	S	S	S	
Glauconite infill	R	S		R	R	S	
Pyrite grains	S	R	S	S	S	R	
Pyrite infill	S	R		R	R	R	
<b>Cement %</b>	15	15	15	45	4	64	5
Extrinsic							
Intrinsic	Mm/Pm	Sp	Mm/Pm	Mm	Mm	Pm/Mm	
Other diagenetic features							PS
<b>Empty Pore %</b>	1	2	1	1	1	1	6

Sample Number	118.6a	118.7	120.1	120.2	120.3	120.4	120.7
<b>Bioclast %</b>	5	2	15	50	82	30	73
Planktic Foraminifera		R	S	R		R	
Benthic Foraminifera	R	R	R	R		R	
Bryozoans				C	R	R	
Echinoderms					R	R	R
Bivalves	R	R	R	R	R	R	R
Brachiopods	R	R		R	S	S	R
Gastropods							
Red algae							
Barnacles				S	VC	C	C
Annelids							
Other							
Maximum size (mm)	2.0	2.0	0.5	1.0	4.0	4.0	7.0
Modal size 1 (mm)	1.0	0.4	0.2	0.5	2.0	0.4	3.0
Modal size 2 (mm)							
Abrasion	MA	MA	SA	MA	Sta	MA	MA
Size sorting	M	P	M	M	W	P	M
<b>Siliciclastic %</b>	60	93	10	10	5	7	3
Quartz	C	C		C	C	C	S
Feldspar	S						
Rock fragments	C		R				R
Matrix (Clays)							
Other							
Modal size 1 (mm)	1.0	0.1	0.2	0.2	0.1	0.1	0.2
Modal size 2 (mm)	0.15						
Shape	SA/WR	SA	SA	SR	SA	SR	SR
Sorting	P/VW	W	W	W	M	W	M
<b>Authigenic %</b>	1	2	5	7	1	3	1
Glauconite pellets	R	S	S	C		R	R
Glauconite infill		R	S		R	R	
Pyrite grains	R	R	S	R		R	R
Pyrite infill			R		R	R	
<b>Cement %</b>	33	2	70	32	10	60	20
Extrinsic				Iso		Mm/Iso	Iso
Intrinsic	Mm	Mm	Mm	Mm	Sp	Mm	Pm
Other diagenetic features					PS/Bor		Iso
<b>Empty Pore %</b>	1	1	0	1	2	0	3

Sample Number	120.8	120.9	123.3	124.1a	124.2a	128.1	128.3
<b>Bioclast %</b>	59	77	15	1	0	84	80
Planktic Foraminifera			C				
Benthic Foraminifera	R		R			R	R
Bryozoans	S	S					
Echinoderms		R	S				
Bivalves	S	R	R				
Brachiopods	S	R					
Gastropods				R			
Red algae							
Barnacles	S	VC				VC	VC
Annelids							
Other							
Maximum size (mm)	6.0	5.0	3.0	0.2		3.0	4.0
Modal size 1 (mm)	0.8	2.0	1.0			2.0	2.0
Modal size 2 (mm)			0.15				
Abrasion	MA	Sta	MA	SA		Sta	MA
Size sorting	P	M	P			W	M
<b>Siliciclastic %</b>	10	2	10	82	88	1	3
Quartz	C	S	C	C	C	R	S
Feldspar				C	C		
Rock fragments				VC	VC		R
Matrix (Clays)							
Other				R Mica			
Modal size 1 (mm)	0.2	0.15	0.2	0.30	0.9	0.1	0.2
Modal size 2 (mm)				0.15	0.2		
Shape	SA	SA	SA	SR/A	SR/A	SR	SA
Sorting	W	W	M	W/P	W/P	M	M
<b>Authigenic %</b>	10	3	10	1	1	1	2
Glauconite pellets	C	S	S	R	R		R
Glauconite infill	S		C			R	R
Pyrite grains	C	R			R		R
Pyrite infill	S					R	R
<b>Cement %</b>	20	15	65	15	10	10	10
Extrinsic	Iso	Iso					
Intrinsic	Sp/Mm	Sp/Pm	Mm			Iso	Sp
Other diagenetic features		PS/Bor				PS/Bio	PS/Bio
<b>Empty Pore %</b>	1	3	0	1	1	4	5

Sample Number	129.2	129.4	129.5b	129.6	129.7	129.8	129.9
<b>Bioclast %</b>	0	64	8	60	82	53	60
Planktic Foraminifera		R	R	R	R	R	S
Benthic Foraminifera		R	R	R	R	R	S
Bryozoans		S	R	R	S		S
Echinoderms		S			S	R	R
Bivalves		S		R	R	R	R
Brachiopods		C	R	S-C	S	C	C
Gastropods							
Red algae							
Barnacles		S		S	S		C
Annelids							
Other							
Maximum size (mm)		25.0	1.0		2.0	1.0	10.0
Modal size 1 (mm)		1.0	0.4		0.4	0.4	0.6
Modal size 2 (mm)							
Abrasion		MA	SA		MA	MA	MA
Size sorting		VP	M		M	M	M
<b>Siliciclastic %</b>	100	4	86	17	2	7	22
Quartz	C	S	S		S	C	S
Feldspar			R				
Rock fragments				R	R		
Matrix (Clays)	VA		VA				
Other							
Modal size 1 (mm)	0.1	0.2	0.2	1.0	0.2	0.15	0.2
Modal size 2 (mm)				0.1			
Shape	A	SA	SA	SR	SA	SA	SR
Sorting	VW	M	W	M	M	M	W
<b>Authigenic %</b>	0	1	1	3	1	15	7
Glauconite pellets		R	R	S	R	S	S
Glauconite infill				R		S	
Pyrite grains		R		R	R	S	S
Pyrite infill			R	R	R	S	
<b>Cement %</b>	0	30	1	18	15	25	10
Extrinsic		Iso	Iso	Iso	Iso		Iso
Intrinsic		Mm	Mm	Mm/Iso	Mm/Sp	Mm	Mm
Other diagenetic features			Bor			Bor	
<b>Empty Pore %</b>	0	1	4	2	0	0	1

Sample Number	129.10	129.11a	130.2	130.3	130.4	131.1	131.2b
<b>Bioclast %</b>	69	33	68	67	68	1	34
Planktic Foraminifera	R	S	R	R	S	R	S
Benthic Foraminifera	R	S	R	R	S		S
Bryozoans	R	R		R	S		C
Echinoderms		R	R		S		R
Bivalves	R	S		S	R		S
Brachiopods	C	R	R	C	S		S
Gastropods							
Red algae							
Barnacles	R	S	S	R	S		R
Annelids							
Other							
Maximum size (mm)	25.0	9.0	4.0	20.0	1.0		1.0
Modal size 1 (mm)	4.0	9.0	3.0	0.3	0.4	0.2	0.3
Modal size 2 (mm)	0.4	0.3	0.3				
Abrasion	MA	MA	MA	MA	MA	SA	MA
Size sorting	P	P	M	P	M	W	W
<b>Siliciclastic %</b>	10	12	1	17	10	91	55
Quartz	C	C	S	S	S	C	S
Feldspar			R	C	S		
Rock fragments			R	C	S		C
Matrix (Clays)						VA	
Other							
Modal size 1 (mm)	0.2	0.25	0.5	1.0	1.0	0.03	25.0
Modal size 2 (mm)				0.4	0.25		0.2
Shape	SA	SA	A	R/SA	SR/A	SA	R/SA
Sorting	W	W	M	W/M	M	VW	W/W
<b>Authigenic %</b>	10	35	1	1	2	2	1
Glauconite pellets	C	VC	R	R	R		
Glauconite infill							
Pyrite grains	S				S		R
Pyrite infill		C	Rr		S	S	
<b>Cement %</b>	10	20	30	15	20	5	10
Extrinsic		Iso	Iso				Hm/Iso
Intrinsic	Mm/Iso	Mm	Sp/Pm		Mm		Hm
Other diagenetic features	Bor				PS		
<b>Empty Pore %</b>	1	0	0	0	0	0	0

Sample Number	131.4	133.1	134.2	134.6b	134.8	134.9	
<b>Bioclast %</b>	69	76	76	79	78	82	
Planktic Foraminifera	R	R	R	R	R	R	
Benthic Foraminifera	R	R	R	R	R	R	
Bryozoans	C	R	S		R	R	
Echinoderms		C	S	R			
Bivalves	R	R	R	S	S	C	
Brachiopods	R	R	S	C	VC	S	
Gastropods							
Red algae							
Barnacles	R	C	C	C	C	C	
Annelids							
Other							
Maximum size (mm)	2.0	2.0	2.0	1.0	25.0	3.0	
Modal size 1 (mm)	0.6	0.4	0.3	0.6	0.4	0.3	
Modal size 2 (mm)							
Abrasion	MA	Sta	Sta	MA	MA	Sta	
Size sorting	M	W	W	W	P	M	
<b>Siliciclastic %</b>	15	1	1	2	1	1	
Quartz	S	R	S	S	R	R	
Feldspar	R						
Rock fragments	C						
Matrix (Clays)							
Other							
Modal size 1 (mm)	2.0	0.2	0.2	0.15	0.1	0.1	
Modal size 2 (mm)	0.3						
Shape	R/SA	SA	SR	SA	SA	SA	
Sorting	W/W	W	W	W	W	W	
<b>Authigenic %</b>	1	1	2	3	1	1	
Glauconite pellets	R	R	S	S	R		
Glauconite infill							
Pyrite grains		R		R	R	R	
Pyrite infill	R		R			R	
<b>Cement %</b>	15	20	20	15	20	15	
Extrinsic	Hm/Iso	Iso	Iso	Iso	Iso/Sp	Iso	
Intrinsic	Hm/Mm	Sp	Sp	Sp/Mm	Mm	Sp	
Other diagenetic features			PS		Bor		
<b>Empty Pore %</b>	0	2	1	1	0	1	

Sample Number	108.2	112.1	123.2		C6.13.0	C6.21.0	C6.35.1
<b>Bioclast %</b>	50	70	45		78	79	76
Planktic Foraminifera	S	S	S		S	R	R
Benthic Foraminifera	R	S	S		S	S	R
Bryozoans	R	R			R	R	S
Echinoderms	R		R		R		R
Bivalves	R	R	C		S	S	C
Brachiopods	R	VC			S	S	S
Gastropods							
Red algae							
Barnacles	C	R			C	C	C
Annelids							
Other							
Maximum size (mm)	1	20	10		3.0	3.0	22.0
Modal size 1 (mm)	0.3	20	0.2		0.3	0.2	0.6
Modal size 2 (mm)		0.15					
Abrasion	Sta	SA	MA		Sta	M	M
Size sorting	M	VP	P		P	M	P
<b>Siliciclastic %</b>	25	7	10		3	3	2
Quartz	C	S	C		S	S	S
Feldspar	C	S	R		R		
Rock fragments		S					
Matrix (Clays)							
Other							
Modal size 1 (mm)	0.3	0.2	0.2		0.2	0.2	0.2
Modal size 2 (mm)							
Shape	SR	WR	SA		SA	SR	SR
Sorting	VW	VW	M		W	W	W
<b>Authigenic %</b>	10	5	30		3	3	1
Glauconite pellets	S	R	VC		S	S	R
Glauconite infill	R	S	S				
Pyrite grains	R	R	R		R	R	
Pyrite infill	R	S	R				
<b>Cement %</b>	13	18	15		15	15	20
Extrinsic			Iso		Iso	Iso	Iso/Pm
Intrinsic	Sp	Mm	Mm		Sp	Sp	Sp
Other diagenetic features	Bio	Bor					Bor
<b>Empty Pore %</b>	2	0	0		1	0	1

