

Expedition 341 S. Alaska Margin:

W419
Site:

E
Hole:

2H
Core:

1A
Section:

2.00m CSF-A
Top Depth:

Major Lithology: ^{Silty Mud}..... Minor Lithology:.....

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Childress	Date: July 13 2013
0										
10										
20										
30										
40	silty mud		10Y 4/1	(slight to med.)	none	5 clasts >2mm				
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										

Expedition 341 S. Alaska Margin: U1419 Site: E Hole: 2H Core: 2A Section: 10.50m CSF-A Top Depth:

Major Lithology: silty MUD Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Childress	Date: July 13 2013
0						72mm				
10						9 12				
20										
30	silty mud		10Y 4/1	Y P CON (slight to mod.)	none	26				
40										
50							SS50	silty mud		
60										
70										
80										
90						86 87				
100										
110										
120										
130										
137										
140	mud		N4			139 142				
150						148				

Expedition 341 S. Alaska Margin:

U1419

E

2H

3A

12.00m CSF-A

Site:

Hole:

Core:

Section:

Top Depth:

Major Lithology: Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by:	Date:
									Childress	July 13 2013
0										
10										
20										
30										
40	mud		N4	kyccos (mod)	none			- messed up by splitting wire (along core entire way - slight to mod)		
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										

Expedition 341 S. Alaska Margin: U1419 E 2H 4A 13.50m CSF-A
 Site: Hole: Core: Section: Top Depth:

Major Lithology: Mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Childress	Date: July 13 2013
0										
10										
20						19(2?)				
30										
40	mud		Z4	none (slight mod.)	none					
45										
50										
60										
70										
80										
90										
100										
110										
120										
126								@ 126cm: 4cm meta siltstone		
130										
140										
150										

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 2H Section: SA Top Depth: 0-149

Major Lithology: mud Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0	<u>mud</u>		<u>U4</u>			<u>present</u>			<u>HB, 07-13-13</u>
10	<u>o</u>					<u>o</u>		<u>pebble 1.5 cm</u>	
30	<u>□</u>					<u>□</u>		<u>granule</u>	
40	<u>□</u>					<u>□</u>		<u>2 cm pebble</u>	
50	<u>□</u>					<u>□</u>		<u>1 cm pebble</u>	
65	<u>□</u>					<u>o</u>		<u>granule</u>	
80	<u>o</u>					<u>o</u>		<u>granule</u>	
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: 5 Core: 2H Section: 6A Top Depth: 0-140

Major Lithology: mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0	<u>mud</u>		<u>10Y4/1</u>				<u>1</u>		<u>AB, 07-13-13</u>
10									
20									
30	<u>○</u>					<u>○</u>		<u>argillite pebble, 7 cm, rounded in WH!</u>	
40									
50									
60							<u>S160</u>	<u>diatom mud w. forams</u>	
70									
80									
90									
100									
110									
120									
130									
140	<u>○</u>					<u>○</u>		<u>argillite, angular, 3 cm</u>	
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 2H Section: 7A Top Depth: 0-60

Major Lithology: mud Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0	<u>mud</u>		<u>10Y4/1</u>			<u>Present</u>			<u>AB, 07-13-13</u>
10	<u>0</u>					<u>0</u>		<u>sandst., 2.5 cm, subang.</u>	
20									
30									
40							<u>540</u>	<u>mud</u>	
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: Σ Core: 2H Section: CC Top Depth: 0-20

Major Lithology: med Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0	<u>med</u> <u>0</u>		<u>10Y4/1</u>			<u>0</u>	<u>1</u>	<u>argillite, 2 cm, subrounded</u>	<u>AB, 07-13-13</u>
10									
20	<u>PAL</u>								
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: W1419 E 34 Hole: 1 Core: 0-146c
 Section: Top Depth:

Major Lithology: Mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								siltstone @ 0-6c	JM 14.2.13
10								just mud	
20									
30			10Y 4/1	drilling disturb.	0				
40				worm tubes (high) drilling disturb.					
50									
60									
70									
80					0				
90								shell fragment @ 90c	
100			10Y 4/1						
110								111-115c sand patch with best	
120					0				
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: W14 19 Hole: E Core: 3H Section: 2 Top Depth: 0-

Major Lithology: Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								med w/ disp. clasts	JK 14.7.13
10					0				
20			N4						
30			h	/					
40			10Y 4/1						
50				/	0			in-bact shell @ 55	
60									
70									
80					0				
90				/					
100									
110									
120				/	0				
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41419 E Hole: 3H Core: 3A Section: 0-145
 Top Depth:

Major Lithology: Mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-3 cm = silty / fine sand lamina	JM 147.13
10								8-9 cm = sand lamina, fine quartz	
20			N4	/	0			just mud with dispersed clasts	
30			to						
40			to 4/1						
50				/					
60					0				
70									
80									
90									
100				/					
110									
120					0				
130				/					
140									
150									

Expedition 341 S. Alaska Margin:

Site: 674 19 Hole: E Core: 3H Section: 4 Top Depth: 0-145

Major Lithology: sd

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								just mud with dispersed clasts	JM 14773
10									
20			N4	/					
30					0				
40									
50									
60			N4						
70				/					
80			<u>2.5% sp</u>		0			77-79c: ash, gray (silt, fine sand) brown/green glass, + 10% sand grains	
90									
100									
110			N4		0				
120									
130				/					
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 34 Section: 5 Top Depth: 0-145cm

Major Lithology: Mud

Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								just mud with dispersed clasts	JM 14.7.13
10			N4		0			- color changes from N4 to 10Y 4/1 (very subtle)	
20				/					
30									
40					0				
50									
60									
70									
80				/	0				
85							JS (8.5)	mud with diatoms	
90									
100									
110			10Y 4/1						
120					0				
130				/					
140			10Y 4/1						
143-145								143-145cm: former bearing coarse sand patch	
150									

Expedition 341 S. Alaska Margin: L1419 E 3H 6 0-146
 Site: Hole: Core: Section: Top Depth:

Major Lithology: h-d Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0			10Y					0-24 cm mud with diatoms few shell nodules	JM 147.13
10			4/1	/	SS/SK				
20									
30								24-146 cm: just mud subtle color changes N4-10Y 4/1	
40					o				
50				/					
60									
70			N4						
80					o				
90									
100									
110				/					
120					o				
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41419 E Hole: 3H Section: 7 Top Depth: 0-105cm

Major Lithology: M-sd

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								clayey mud with dispersed clasts	JM 14.2.13
10					0			- subtle color changes N4-10x4/7	
20			N4	/					
30									
40				/	2			42-47cm: muddy sand sed (fine)	
50									
60									
70			N4		0				
80				/					
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41419 Hole: E Core: 3A Section: CC Top Depth: 0-18

Major Lithology: Mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0									JM 14.2.17
10			N4 to N4 + 1/2	/	0			mud with dispersed clasts	
20	PAC							18-23: sample	
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: G1419 Hole: E Core: 44 Section: 1A Top Depth: 0-151c

Major Lithology: Mud Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								- mud - mussel-like throughout core -> very sandy	JM 14.7.13
10									
20									
30				N4					
40									
50									
60									
70					dashed				
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: W1419 Hole: E Core: 6H Section: 1 Top Depth: 0-145cm

Major Lithology: Mud

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-60cm: very coarse like (heavy)	JM 147.13
10									
20									
30			N4		0				
40				beaut					
50									
60								60-145cm: slight to moderate coarse like	
70								and with dispersed clasts	
80									
90									
100			N4	slight to moderate	0				
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 6H Section: 2 Top Depth: 0-412

Major Lithology: h-d

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-18cm: coarse like	JH 14.7.13
10	mud	/		look like	/				
20			N4					just mud	
30	mud			slight	0				
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41413 E Hole: 6H Section: 3 Top Depth: 0-106

Major Lithology: mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								mud with dispersed clasts	JM 14.7.13
10									
20			N4						
30									
40									
50									
60									
70			N4						
80									
90									
100								90-106 - : coarse like (ochre)	
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41419 Hole: E Core: 6H Section: CC Top Depth: 0-80

Major Lithology: Mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0	Mud		N4	scattered	/			just mud	JH 14.7.13
10	PAL								
20									
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41419 Hole: E Core: 8H Section: 1 Top Depth: 0-130

Major Lithology: mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								totally destroyed mud JM 14.7.13	
10									
20									
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41419 Hole: E Core: PH Section: 2 Top Depth: 0-67

Major Lithology: Mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								Totally destroyed mud	JM 14.7.13
10									
20									
30			N4	how much					
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: L1419 E Hole: 84 Core: CC Section: 0-30
 Site: Hole: Core: Section: Top Depth:

Major Lithology: Mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0									DM 147.93
10			N4	Worm tubes				destroyed - - d	
20									
30	PAL						30-35		
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 9H Section: 1 Top Depth: 0-145cm

Major Lithology: mud

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-12cm: coarse like mud (heavily disturbed)	JM 147/13
10									
20									
30									
40			N4						
50	mud								
60									
70				heavily disturbed					
80									
90									
100									
110			N4						
120									
130			N4						
140				moderate					
150									

Expedition 341 S. Alaska Margin:

Site: U1415 Hole: E Core: 9H Section: 2 Top Depth: 0-91cm

Major Lithology: m-d Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0									JM 14.7.13
10			N4						
20							SS (20)	diats - heavy mud	
30								greenish gray to gray	
40								no Y H/A to N4	
50			10Y 4.1	horizontal splay to nodules					
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 47419 Hole: E Core: 17H Section: 1 Top Depth: 0-145cm

Major Lithology: md

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0									JK 14.7.13
10								5 cm thick metasiltstone	
20									
30				/				clayey mud with dispersed clasts	
40								- subtle color changes (10 x 411 / N4)	
50			N4						
60									
70									
80				/				81-83 cm: fine to medium sand	
90									
100									
110			N4					112-113 cm: fine to medium sand facies	
120									
130				/					
140								big granitoid @ 134-140 cm (in 4H) - phi 5 x 6 cm	
150									

Expedition 341 S. Alaska Margin:

Site: 47419 E Hole: 11H Core: 2 Section: 0-143cm Top Depth:

Major Lithology: Mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								- clayey mud with silt/sand laminae	JM 147-13
10					○			5-3cm sand laminae (fine to medium)	
20									
30			N4					26-27cm silt laminae	
40									
50									
60					○			silt to very fine sand laminae	
70				slight lamination				(~0.5-1cm thick)	
80									
90									
100			N4					fine sand (ferruginous mineral) beds (~1cm thick)	
110					○				
120							55 (114)		
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 11H Section: 3 Top Depth: 0-145cm

Major Lithology: hd Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-80 cm silty hd	JM 14793
10									
20					0				
30			N4						
40									
50									
60									
70					0				
80									
90			N4						
100								94-112 cm: discontinuous silt patches	
110								sand (fine to med) patch @ 110-120 cm	
120					0				
130									
140								silt lamina @ 138-139 cm	
150									

Expedition 341 S. Alaska Margin:

Site: 41413 E MH 4 Section: 0-146
 Hole: Core: Section: Top Depth:

Major Lithology: Mud

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								clayey mud with dispersed clasts - few black nodules	JM 14.7.13
10									
20									
30			N4	/					
40			to						
50			10Y 4/1		slight				
60									
70									
80				/					
90									
100									
110				/					
120			10Y 4/1					115-138c : db - us sandy mud layers	
130							SS (134)	- diatom - Spongy mud with sand	
140			N4						
150			to 10Y 4/1						

Expedition 341 S. Alaska Margin:

Site: LM419 Hole: E Core: 11H Section: 5 Top Depth: 0-146

Major Lithology: Mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0									JM 147/13
10			N4					clayey mud - few shale nodules	
20			to						
30			to 4/2		slight				
40									
50									
60				horizontal cracks					
70			N4	slight					
80									
90					0				
100									
110									
120			N4					110-146: dispersed fine sand patches (discontinuous), irregular shape	
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: MH Section: 6 Top Depth: 0-149

Major Lithology: Mud Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0			NK					0-9 cm: sandy (fine to med) mud	JM 14.7.13
10								9-149 cm: clayey mud with few black wottles	
20					/				
30									
40									
50			NK						
60									
70									
80					/				
90									
100			NK						
110								fine sand patch @ 65-71 cm	
120									
130					/				
140									
150								granite? big calc crystals (in UH) @ 104-109 cm	

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 7H Section: 7 Top Depth: 0-124

Major Lithology: Mud Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								clayey mud	JM 14.7.13
10			10Y					- N4 to 10Y 4/1	
20			4/1					- few black <u>mottles</u>	
30			5						
40			N4						
50				horizontal cracks (slight)					
60					slight				
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin: U1419 E MH CC 0-14
 Site: Hole: Core: Section: Top Depth:

Major Lithology: sd Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0	<u>sd</u>		<u>10Y 4/1</u>	/	<u>SGP</u>			<u>creamy (clayey) mud with fine black wattle</u>	<u>JM 14.7.13</u>
20	<u>PAL</u>						<u>14 19</u>		
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41419 Hole: E Core: 12H Section: 1 Top Depth: 0-150cm

Major Lithology: Mud Minor Lithology: Silt

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								clayey mud - few black mottles - subtle color changes	JM 14.7.13
10									
20			N4						
30			lo						
40			10% 4/1						
50									
60									
70					slight				
80									
90									
100									
110									
120									
130									
140						SS 140	→ end (with few diatoms)		
150									

Expedition 341 S. Alaska Margin:

Site: 41419 Hole: E Core: 12H Section: Z Top Depth: 0-151cm

Major Lithology: Mud

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-98cm clayey mud - few black nodules	JM 14.7.13
10									
20									
30									
40									
50								1cm waddy sand patch @ 50cm	
60								shell fragment @ 65cm	
70									
80									
90									
100								96-151cm: mud with silt	
110								very fine sand & silt laminae @ 117-131cm	
120					0			~ 0.8cm thick, sharp boundaries	
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 12H Section: 3 Top Depth: 0-149

Major Lithology: M-d

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-56cm: <u>M-d with silt</u>	JM 14.7.13
10			N4		0				
20				/					
30									
40									
50									
60								56-149cm: <u>interbedded M-d & silt, sharp lower boundaries</u>	
70			N3					<u>↳ sometimes very fine sand</u>	
80							SS (80)	<u>→ clear sand</u>	
90				/	0				
100									
110									
120									
130								129-149cm: <u>interbedded silt & very fine sand</u>	
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 12H Section: ← Top Depth: 0 - 150cm

Major Lithology: h-d

Minor Lithology: silt

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:	
0				↑				JM 14.7.13		
10									0-119cm: mud-silt mix (vertical stratification)	
20										
30										
40										
50			N3			sandier (light)				
60										
70										
80										
90										
100										
110										
120								119-150cm: interbedded mud & silt		
130										
140			N3		/					
150										
150										

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 12H Section: 5 Top Depth: 0-109

Major Lithology: Mud

Minor Lithology: silt

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-35 cm: interbedded mud & silt	DM 147/13
10			N3	/	0				
20									
30									
35								35-109 cm: sudden increase in mud/silt mix	
40									
50									
60									
70			N3	high silt in					
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

U1419 E 12H CD 0-18
 Site: Hole: Core: Section: Top Depth:

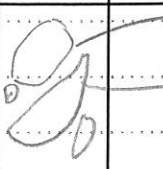
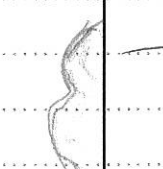
Major Lithology: Mud Minor Lithology: silt

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0									JM 14.7.13
10			NK	high	/			silt / mud mix white sand-in	
20	DAL						18 23		
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Saw cut!

Expedition 341 S. Alaska Margin: U1419 E 134 1 0-142
Site: Hole: Core: Section: Top Depth:

Major Lithology: Diamict Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0				?				(sands) clast-rich diamict	JM 14.7.13
10				?	0			section - probably heavily disturbed due to ruck-in (maybe just the lower part...)	
20									
30			N4					clasts: granules, pebbles of siltstone, granitoids, greenstone, quartz, pebbles up to 3cm	
40				?					
50									
60									
70									
80					0				
90				?					
100									
110								saw-in, flow-in?	
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 47419 E Hole: 13H Core: 2 Section: 0-145cm Top Depth:

Major Lithology: Diarict Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								(sandy) clast-rich diarict with lighter mud laminae (d beds ~ 4cm)	JM 147.13
10				0	/			(For clast lithologies see Section 1)	
20				0	/			intra-laminated diarict	
30									
40							SS (42)	lighter mud laminae = mud with diatoms !!!	
50					/				
60			N4						
70				0					
80					/				
90									
100									
110									
120				0	/				
130					/				
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41419 E Hole: 13H Core: 3 Top Depth: 0-125cm

Major Lithology: Diaict Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								clast-rich diaict (sandy)	JM 14.7.13
10					0				
20			M4	/			SS (20)	→ sandy mud	
30								clasts: siltstone, granitoids, greenstone, quartz	
40			M5		0				
50									
60			M3	/					
70									
80					0				
90									
100				/					
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 E Hole: 13H Core: 4 Section: 0-72cm
 Top Depth:



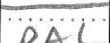
Major Lithology: silice Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-22cm : dark-w/ dia-ict	JM 14.7.13
10			N4		0				
20									
30				slight sanding	0			22-61cm : med w/ dispersed clasts (w/ dia-ict)	
40									
50			N4						
60					0			61-72cm : dark-w/ dia-ict	
70			N4						
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 47419 E Hole: 13H Core: CC Section: 0-19

Major Lithology: Diamicton Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								sandy diamicton diamicton interbedded with slightly mudrier (less coarse) beds (~2)	JM 14.2.13
10			N4	/	0				
20							13 24		
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419

Hole: E

Core: 14H

Section: 1A

Top Depth: 0-142

Major Lithology: last m & muddy diamic

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0			N3						HB, 07-14-13
10									
20								(U4) slightly lighter grey laminae with fewer and smaller clasts	
30									
40									
50								siltstone 12 sandst 11 gravel 11 shale 1	
60									
70									
80									
90									
100								(U5) slightly lighter grey laminae with fewer and smaller clasts	
110									
120									
130							S130	muddy silt	
140									
150									

Expedition 341 S. Alaska Margin:

U14B

Σ

14H

2A

0-146

Site:

Hole:

Core:

Section:

Top Depth:

Major Lithology: *clst and muddy drinst*

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0			N3						AB, 07-14-13
10									
20								clst III	
25								siltstone III III	
30								quartzite I	
35								sandst. III	
40								argillite III	
45								basalt III	
50								veiqtz I	
55								clst II	
60									
70									
80									
90									
100									(N4) slightly lighter grey laminae with fewer to no clasts, and smaller clasts
110									
120									
130							SS127		silty sand
140									
150									

Expedition 341 S. Alaska Margin: U1419 E 14H 3A 76.58m CSF-A
 Site: Hole: Core: Section: Top Depth:

Major Lithology: Mud w/ common clasts Minor Lithology: MUD

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by:	Date:
									Childress	July 14 2013
0										
10										
20										
30										
40	mud w/ common clasts		N4		none	present		- clasts include: siltstone, sandstone, granitoid, volcanics (basalt), argillite, mudstone, rhyolite - up to 2.5cm		
50							S550	muddy silt; no bio		
60										
70										
80										
80	diatom ooze w/ dispersed clasts		10Y 4/1		BOWED	6 clasts > 2mm + many coarse sand (~1mm)	S583	diatom ooze clasts: sandstone, siltstone, quartz, up to ~1cm		
90										
100										
110										
120										
130										
140										
150										

Expedition 341 S. Alaska Margin:

U1419

E

14H

4A

77.73m CSF-A

Site:

Hole:

Core:

Section:

Top Depth:

Major Lithology: Mud w/ Dispersed clasts

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by:	Date:
									Childress	July 14 2013
0										
10										
20										
30	mud w/ dispersed clasts		10Y 4/1		none	14 clasts > 2mm		- clasts include: granitoid, siltstone, quartz, sandstone, metasilstone		
40						+ many coarse (within) sand		- w/ rind @ 54cm		
50							SS50	silty mat, m. bud		
60				crack						
70										
80										
82	END									
90										
100										
110										
120										
130										
140										
150										

Expedition 341 S. Alaska Margin:

U1419
Site:

E
Hole:

14H
Core:

CC-A
Section:

78.55m CSF-A
Top Depth:

Major Lithology: Mud w/ Dispersed clasts

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by:	Date:
									Childress	July 14 2013
0	mud w/ dispersed clasts		10Y 4/1	slight	none	l > 2mm + many coarse (< 1mm) sand		siltstone (1cm) @ 8cm		
10	PAL						PAL			
20										
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										

Expedition 341 S. Alaska Margin:

Site: 47419 Hole: E Core: 15A Section: 1 Top Depth: 0-145

Major Lithology: M-d Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-40cm: coarse like	JM 14.7.13
10			10Y 4/1	to surface to 15 cm					
20									
30									
40								- very fine sand	
50									
60									
70			10Y 4/1						
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41419 E Hole: 15H Section: 2 Top Depth: 0-

Major Lithology: M-d

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								- very fine mud with few black nodules	JM 14.7.13
10			10v						
20			4/1		slight				
30									
40									
50								shell fragment @ 48cm	
60									
70									
80									
90			N4						
100								Silty mud patches	
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

U1419 E 15H 3 0-68cm
 Site: Hole: Core: Section: Top Depth:

Major Lithology: M-1 Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0									JH 14.7.13
10								very fine mud	
20			N4						
30									
40									
50			10/1 4/1	slight to mod. horiz. arth.					
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 15H Section: CC Top Depth: 0-150

Major Lithology: M-d Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0			10Y 4/2	/	/			masselike (but undisturbed?) mud	JM 14.7.13
20	PAL								
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: G1419 E Hole: 16H Core: 1 Section: 0-126c
 Top Depth:

Major Lithology: Mud

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0									JK 147.13
10			10Y 4/1 to 10Y 3/1		/			clayey mud subtle color changes	
20									
30									
40	void			34 42					
50								mud	
60									
70									
80									
90									
100			10Y 4/1 to 10Y 2/4						
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: 41419 E Hole: 17H Section: 1 Top Depth: 0-141cm

Major Lithology: M-d

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								clayey m-d - black matter	JM 14.7.13
10			10Y 4/1						
20									
30									
40									
50									
60									
70								shell fragments @ 72cm	
80								shell fragments @ 79 & 81cm	
90			10Y 3/1						
100							SS (100)	diatom ooze with volc. ash	
110									
120								sandy mud patch 115cm	
130			10Y 4/1						
140								black (meta)siltstone @ 135-140cm Ø 4 x 3 cm (in WH)	
150									

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 17H Section: 2 Top Depth: 0-142

Major Lithology: Mud

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								0-49 cm mud	JH 14.7.13
10			10x 4/1					- like few black clottes	
20							SS (2)	<u>→ mud</u>	
30									
40			10x 3/1						
50								49-142 cm: silty mud	
60									
70			10x 4/1						
80									
90			N4						
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1419 E 17H 3 Hole: 0-126
 Core: Section: Top Depth:






Major Lithology: Mud (Diacrit) Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0								mud with dispersed clasts	JM 14.7.13
10								black siltstone (φ 4cm) @ 9-12cm (i.e. 17H)	
20									
30			N4						
40				volcanic sand @ 33-34cm			SS (44)	→ mud	
50									
60		(100+ many clasts to be counted)						60-126cm: clast-rich diacritic	
70								many pebbles (1-2cm φ)	
80			N3						
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: U1499 E Hole: 17H Core: 4 Section: 0-66
 Top Depth:

Major Lithology: Dia-ict Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0									JM 14.7.13
10					○			clast-ict dia-ict	
20				/					
30			N3						
40				/	○				
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

Site: L1419 E Hole: 17H Core: CC Section: 0-23cm
 Top Depth:

Major Lithology: Dia-ict Minor Lithology: _____

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: <u>JM</u>	Date: <u>14.7.13</u>
0										
10			<u>N3</u>	<u>/</u>	<u>/</u>			<u>clast-rich dia-ict</u> <u>(pebbles ~ 1-2cm ϕ)</u>		
25-31	<u>PAL</u>						<u>25-</u> <u>31</u>			
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										

Expedition 341 S. Alaska Margin:

Site: 41419 Σ Hole: 18H Core: 1A Section: 0-136
 Top Depth:

Major Lithology: mud w. common clasts Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0	↙		N3						AB, 07-14-13
10								siltstone # # # 1	
20								granite # # # basalt sandst # # #	
30								argillite chert gneiss gabbro	
50								mud w/ clay	
120	↙							volcaniclastic siltstone	
140									

Expedition 341 S. Alaska Margin:

U1419 E 18H CC 0-27
 Site: Hole: Core: Section: Top Depth:

Major Lithology: *wind w. common clasts* Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Date:
0	↙		N3	quartz - in situ				siltst II sandst III basalt I asph. like I	HB, 07-14-13
25	PAL								
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									

Expedition 341 S. Alaska Margin:

U1419 Site: E Hole: 12H Core: 1A Section: 94.10 m C&F-A Top Depth:

Major Lithology: Mud w/ Abundant clasts Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by:	Date:
									Childress	July 14 2013
0										
10	mud w/ abundant clasts		N4		none	present		clasts include: siltstone, granitoid, argillite, volcanic, sandstone, quartz up to 5.5cm clasts		
20										
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
146										
150										

Expedition 341 S. Alaska Margin:

11419

E

19H

2A

95.56 m CSF-A

Site:

Hole:

Core:

Section:

Top Depth:

Major Lithology: MUD w/ Abundant clasts

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by:	Date:
									Childress	July 14 2013
0										
10										
20	mud w/ abundant clasts		N4		none	present		- clasts include: volcanic (basalt), siltstone, sandstone, quartz, argillite up to 3cm		
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
142										
150										

Expedition 341 S. Alaska Margin:

11419

E

19H

3A

96.98

Site:

Hole:

Core:

Section:

Top Depth:

Major Lithology: Mud w/ common clasts

Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Childress	Date: July 14 2013
0										
10										
20										
30	mud w/ common clasts		N4	cracks ↓ mod. to high)		present		clast include: siltstone, rhyolite, argillite, quartz, volcanics, granitoid up to 3cm		
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										

Expedition 341 S. Alaska Margin:

Site: U1419 Hole: E Core: 19H Section: 4A Top Depth: 98.03

Major Lithology: Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by: Childress	Date: July 14 2013
0										
10				S K C K	none					
20	mud w/ common clasts		N4	N (mod. to high)		present		clasts: granitoid, siltstone, sandstone, mudstone, up to 2.5cm.		
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										

Expedition 341 S. Alaska Margin: U1419 E 12H 00-A 98.54 m CSF-A
 Site: Hole: Core: Section: Top Depth:

Major Lithology: Mud w/ common CLASTS Minor Lithology:

Offset (cm)	Lithology	Sed. Structures	Color	Drilling disturb.	Bioturb.	Accessories: (i.e. - shells, worm tubes, clasts, etc.)	Samples	Core Description: comments, contacts, recommended photos, other	Logged by:	Date:
									Childress	July 14 2013
0										
10	mud w/ common clasts		N4	CS K Z (mod for)	none	present		clasts include: siltstone, granitoid, volcanic, sandstone, quartz cracks @ 9, 13cm, slight		
30	PAL						PAL			
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										