

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 13, 2011		CORE INTERVAL 0 - 150 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 1	
EASTING 478604		NORTHING 5429101		SYMBOL LEGEND	
DESCRIBED BY BEM		PAGE OF 1 2		<div> <div></div> clayey silt <div></div> clay ball <div></div> pebbles </div> <div> <div></div> roots <div></div> bioturbated </div> <div> <div></div> sand <div></div> organic patches </div>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-25cm clayey silt with sand - with black organic staining and oxidized patches - roots present at top - very dark grayish brown. - Strong HCl reaction	λ λ	
10			2.5Y 3/2			
20						
30			2.5Y 4/3	25-46cm - vf to fine sand - olive brown. - clay balls in places - black organic mottling - strong HCl reaction		
40			2.5Y 4/3			
50				46-150 - sandy silty clay - bioturbated (96-92cm) - moderate HCl reaction - white precipitation + pebbles below 98cm to base - oxidized organic patches		
60						
70			2.5Y 4/3	- pebbles look both like shale + carbonate mostly 2-3mm diameter but up to 1cm - olive brown	$?$ $?$ $?$ $?$	
80						
90						
100						

#1

-95-106
Specific Gravity

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 13, 2011		CORE INTERVAL 0 - 10 ft 0 - 150 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Pup 1	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101					
DESCRIBED BY BEM		PAGE 2 OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100						
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

Same as above

DIAMICTON
(95-150 cm)

#1

112-122 cm
Pebble Count.

122-123 Carbon + CaCO₃

124-130
Extra Sample

150

NOTES





$D = 3.05 \text{ m}$

0	- 10	ft
0	- 150	cm


SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 13, 2011	CORE INTERVAL 10 - 151 ft 0 - 150 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 2A
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND  pebbles  sand stringer  silty clay  silt
DESCRIBED BY BEM	PAGE 1 OF 2 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0-97 cm				very dark gray diamicton - very stiff + dry - silty clay with pebbles - pebbles are 2-35 mm across - mixed pebble lithologies but carbonates are obvious (+shale?) - strong HCl reaction throughout - pebbles are sub-rounded to rounded DIAMICTON		#2 63-72 pebbles 85-87 cm carbon carbonate 87-94 extra

NOTES

GEOLOGICAL SURVEY OF CANADA

3.05-4.57m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 13, 2011	CORE INTERVAL 10 - 15 ft 0 - 150 cm
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CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 2A
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EASTING 478604	NORTHING 5429101
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DESCRIBED BY BEM	PAGE 2
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SYMBOL LEGEND			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)
Deformation
Core state
Colour (munsell)

Sedimentologic Description

Lithology and Sedimentary Structure

Subsamples

100				97-150 cm		
				- Dark grayish brown		
				- very stiff + dry.		
110				- cilt/u.f. sand with pebbles - less than above		
				- pebbles are sub-angular to sub-rounded		
120				- Carbonate lithology		
				- strong HCl reaction		
130				- pebbles 5-30mm diameter		
				- between 100-113cm discontinuous sandy stringers.		
140				- Diamicton		
150						
160						
170						
180						
190						
200						

NOTES

3065-4.57m

PAGE	1
OF	1

SEDIMENT CORE SUBSAMPLE INFORMATION

#2

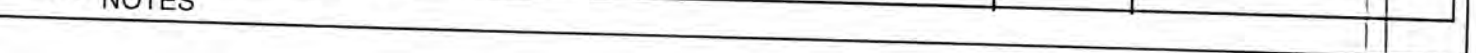
NOTES

4.57-6.10m

CORE DESCRIPTION							
Core							
Depth (cm)							
Information							
Plate							
or (munsell)							

Core	Depth (cm)	Deformation	Core state	Colour (munsell)
1	0-10			
2	10-20			
3	20-30			
4	30-40			
5	40-50			
6	50-60			
7	60-70			
8	70-80			
9	80-90			
10	90-100			

Stratigraphic Description	Lithology and Sedimentary Structure	Subsamples
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GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 13, 2011	CORE INTERVAL	15 - 20 ft 0 - 148 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 2B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE OF	22		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
150				Same as above but less pebbly		
110						
120						
130						
140						
150						148 END
160						
170						
180						
190						
200						

NOTES

4.57-6.10m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 13, 2011	CORE INTERVAL	15 - 20 0 - 148	ft cm
SAMPLE TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	100008	
EASTING	478604	SAMPLED BY	BEM	PAGE OF	1 1	
NORTHING	5429101					
SAMPLED FOR						

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

6.10 - 7.62 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 13, 2011	CORE INTERVAL	20 - 25 ft 0 - 152 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 3A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	1 2	<div> sand </div> <div> clay balls </div> <div> cobbles </div>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0-51 cm				clayey - Poorly sorted sand (fine to v coarse) - Oxidized - contains clay balls - looks massive - dark grayish brown - Stiff + dry - strong HCl reaction		
51-152 cm				- very dark gray - very stiff + dry - DIAMICTON - matrix is clay-rich - sparse pebbles occur with some concentrated zones - strong HCl reaction - pebbles mostly small (2-3mm) but up to 8mm		#4 - 72-78cm extra - 78-80 carbonat CaCO_3 - 80-86 pebbles

NOTES

GEOLOGICAL SURVEY OF CANADA

6.10-7.62m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 13, 2011	CORE INTERVAL	20 - 25 ft 0 - 152 cm
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CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 3A
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EASTING	478604
NORTHING	5429101

SYMBOL LEGEND			
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

DESCRIBED BY	BEM	PAGE OF	2 / 2
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CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				<p>- below 106 looks cemented - cannot scrap to see anything</p>		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

152
END

NOTES

6.10 - 7.62m	
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OF 1






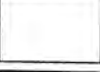
SEDIMENT CORE SUBSAMPLE INFORMATION

#4

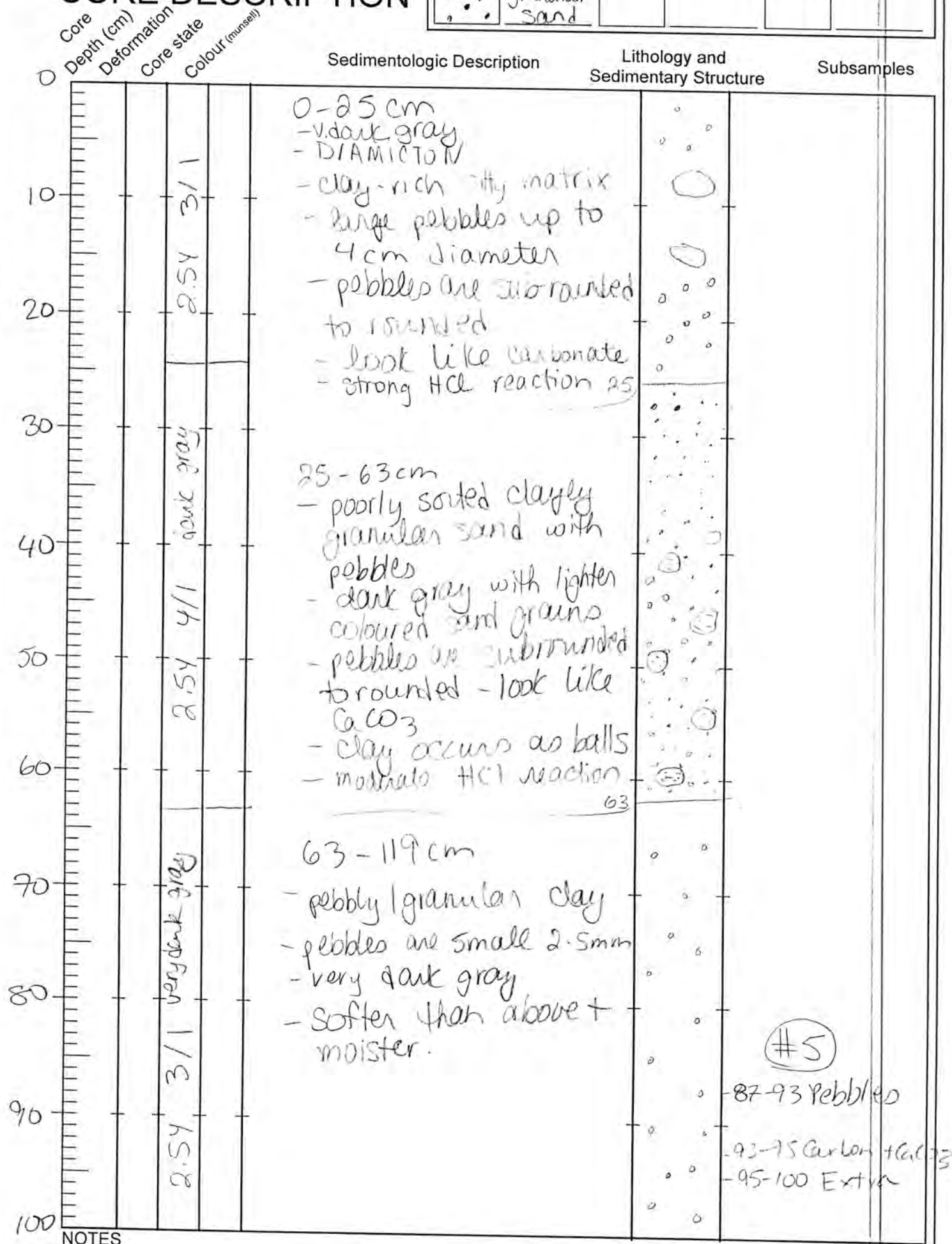
NOTES

GEOLOGICAL SURVEY OF CANADA

14
7.62-9.14m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 13, 2011	CORE INTERVAL 25 - 30 0 - 119	ft m
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 3B	
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND	
DESCRIBED BY BEM	PAGE OF 1/2	 pebbles	 clay balls
		 clayey silt	
		 granular sand	

CORE DESCRIPTION



NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 13, 2011		CORE INTERVAL 25 - 30 0 - 119		ft m
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba			CORE BOX NUMBER Run 3B	
EASTING NORTHING		478604 5429101		SYMBOL LEGEND		
DESCRIBED BY BEM		PAGE 2 OF 2				

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100						
110						
120					119 END	
130						
140						
150						
160						
170						
180						
190						
200						

NOTES

7.62-9.14m

25 - 30	ft
0 - 119	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

#5

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 13, 2011		CORE INTERVAL 25 - 30 ft 0 - 105 m	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 3C	
EASTING NORTHING 478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE OF 1			
		<input type="checkbox"/> clay	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/> pebbles	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/> silty / sandy stringers	<input type="checkbox"/>	<input type="checkbox"/>	

CORE DESCRIPTION

Sedimentologic Description

Lithology and Sedimentary Structure

Subsamples

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0 - 105 cm		
10				- very dry + stiff		
20				- clay with sparse pebbles.		
30				- some discontinuous silty / sandy stringers		
40				- moderate to strong HCl reaction		
50						
60						
70						
80						
90						
100						
105						

NOTES

105

105 end

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 13, 2011	CORE INTERVAL 30 - 35 ft 0 - 150 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER RUN 4A
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <input type="checkbox"/> clay matrix <input checked="" type="checkbox"/> Pebbles <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
DESCRIBED BY BEM	PAGE OF 1 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-150cm		
10				- very dark grayish brown		
20				- silty clay matrix with pebbles		
30				- DIAMICTON		
40				- pebbles range from 3mm to 6cm+		
50				- most pebbles look like CaCO_3 origin - looks like dolomite		#6
60				- moderate to weak HCl reaction		32-33 extra
70				- pebbles are sub-rounded to sub-angular		38-40 carbon + CaCO_3
80				- sediment is ^{alot} less stiff and dry than previous run		40-47 pebbles.
90				- some shale clasts (?)		
100						70-75 Specific Gravity

NOTES

GEOLOGICAL SURVEY OF CANADA

9.14-10.67m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 13, 2011	CORE INTERVAL 30 - 35 ft 0 - 150 cm									
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER									
EASTING NORTHING	478604 5429101	SYMBOL LEGEND <table><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>									
DESCRIBED BY BEM	PAGE 2 OF 2										

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100						
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

150
END

NOTES

9.14 - 10.67m

9.14 - 10.67m

9.14 - 10.67m

9.14 - 10.67m

9.14 - 10.67m

GEOLOGICAL SURVEY OF CANADA

10.67-12.19m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 13, 2011		CORE INTERVAL 35 - 40 ft 0 - 150 m	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 4/B	
EASTING 478604		NORTHING 5429101		SYMBOL LEGEND	
DESCRIBED BY BEM		PAGE OF 1 2		<input type="checkbox"/> clay <input type="checkbox"/> pebbles <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-150 cm		
10				- very dark gray		
				DIAMICTON		
20				- matrix is silty clay with pebbles throughout		
				- pebbles typically 3-15mm and are angular to sub-angular		
30				- matrix has strong HCl reaction		
				- core is very stiff and dry.		
40						
50						
60						
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

10.67 - 12.19m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 13, 2011	CORE INTERVAL 35 - 40 ft 0 - 150 m									
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 4B									
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <table border="1"> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table>									
DESCRIBED BY BEM	PAGE 2 OF 2										

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above but drier.		-100 - 105 pebbles
110					-105 - 107 carbon + CaCO ₃	
120					-107 - 112 extra	
130					(#7)	
140						
150					END	
160						
170						
180						
190						
200						

NOTES

10.67-12.19m

35	-	40	ft
0	-	150	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

10.67-12.19m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 13, 2011	CORE INTERVAL	35 - 40 0 - 45	ft m
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 4C	
EASTING	478604	SYMBOL LEGEND				
NORTHING	5429101					
DESCRIBED BY	BEM	PAGE 1 OF 1	<div>clay matrix</div>	<div>pebbles</div>		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-37cm		
10				- core is very hard + dry		
20				- strong HCl reaction		
30				- silty clay matrix with sparse pebbles		
40				DIA MICTON		
50				- pebbles are angular to sub-angular		
60				- Dolomitic + granitic pebbles		
70					37	
80					granitic rock	
90					45	
100				37-45cm		
				- Granitic rock fragment		

no samples

NOTES

12.19 - 15.24m

$$\begin{array}{r} 46 - 50 \\ - \end{array}$$

Core
Depth (cm)
Deformation
Core state
Colour (munsell)

10
RECOVER

NOTES

GEOLOGICAL SURVEY OF CANADA

15.24 - 18.29 m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 13, 2011	CORE INTERVAL 50 - 60 ft 0 - 108 m
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 6
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <div> <input type="checkbox"/> silty/sandy clay <input type="checkbox"/> <input type="checkbox"/> </div> <div> <input type="checkbox"/> pebbles <input type="checkbox"/> <input type="checkbox"/> </div> <div> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>
DESCRIBED BY BEM	PAGE OF 1 / 1	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-108 cm		
10				- very wet + cohesive		
20				silty/sandy clay with pebbles throughout		
30				- some of run lost - recovered solids look like a slurry and questionable		
40				- pebbles look like dolomite and are sub-rounded to sub-angular		
50				- low HCl reaction to no		
60						(#8)
70						60-68 extra
80						68-70cm carbon + CaCO ₃
90						72-77cm pebbles
100						
108						

NOTES

15,24 - 18,29m

50	- 60	ft
0	- 108	cm

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#8

NOTES

GEOLOGICAL SURVEY OF CANADA

18.29-19.81m

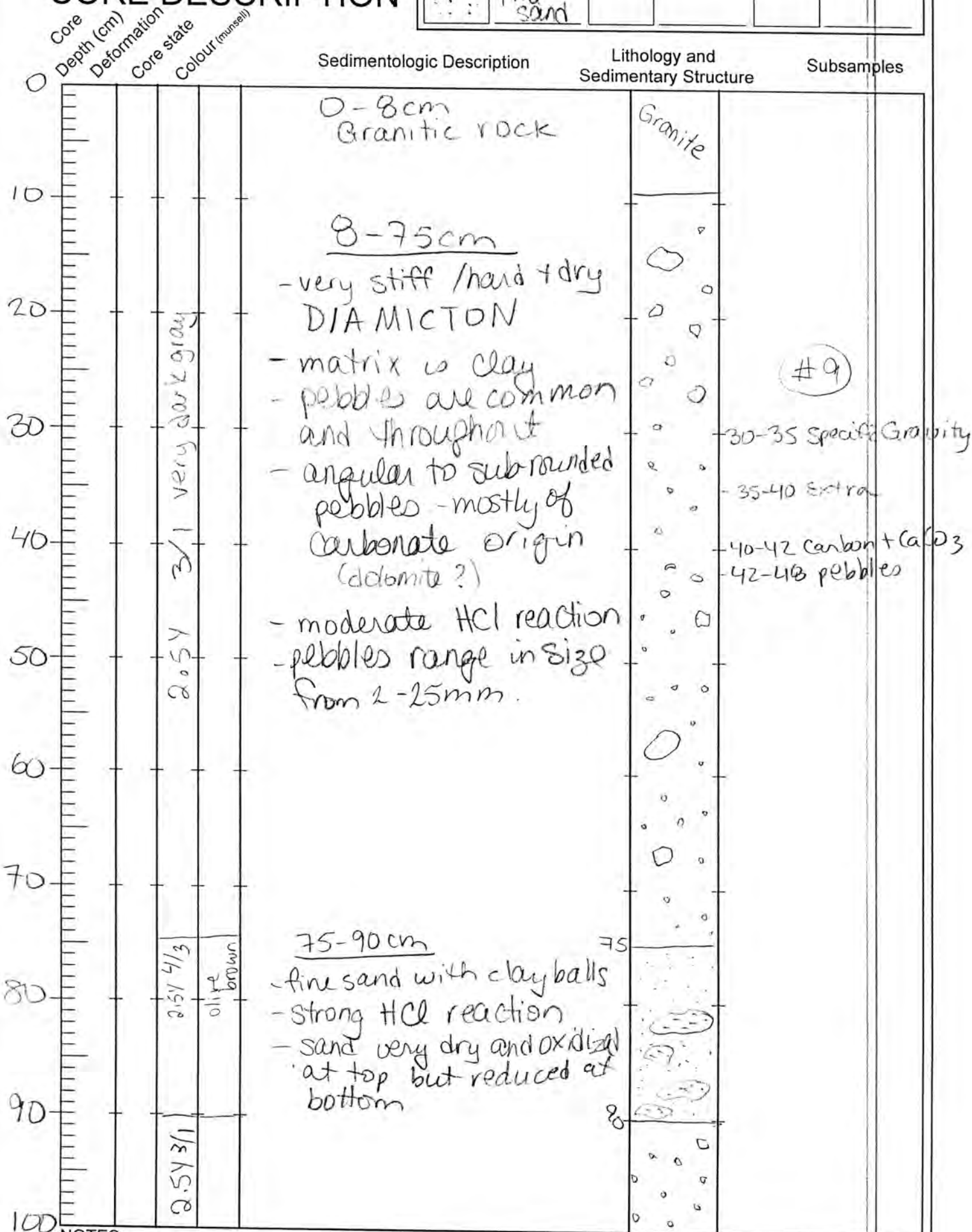
BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 13, 2011		CORE INTERVAL 60 - 65 ft 0 - 140 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 7A	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<div> <input type="checkbox"/> clay matrix <input type="checkbox"/> clay balls </div>			
DESCRIBED BY BEM		<div> <input type="checkbox"/> pebbles <input type="checkbox"/> </div>			
PAGE OF 1/2		<div> <input type="checkbox"/> fine sand <input type="checkbox"/> </div>			

CORE DESCRIPTION

Sedimentologic Description

Lithology and Sedimentary Structure

Subsamples



NOTES

GEOLOGICAL SURVEY OF CANADA

18.29-19.81m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 13, 2011	CORE INTERVAL 60 - 65 ft 0 - 140 cm
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CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 7A
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EASTING 478604	SYMBOL LEGEND		
NORTHING 5429101	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DESCRIBED BY BEM	PAGE OF 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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CORE DESCRIPTION

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				<u>90-140cm</u>		
110				- Similar diamicton as above		
120				- sandy matrix with pebbles - sub rounded to sub-angular		
130				- up to 10 mm across		
140				- look like Carbonate clasts		
				- weak Hcl reaction	140 END	
150						
160						
170						
180						
190						
200						

NOTES

18.29-19.81 m

60	-	65	ft
0	-	140	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID **GSC-BH-SW-07** CALENDAR DATE **June 14, 2011** CORE INTERVAL **65-70** ft **19.81m-21.34m**
0-120 cm

CORE BARREL TYPE **Sonic** GEOGRAPHIC LOCATION **Cartwright, Manitoba** CORE BOX NUMBER **run 7B**

EASTING **478604**
 NORTHING **5429101**

DESCRIBED BY **BEM** PAGE **1** OF **2**

SYMBOL LEGEND

<input type="checkbox"/>	Pebbles	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	clay-rich matrix	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core
 Depth (cm)
 Deformation
 Core state
 Colour (munsell)

Sedimentologic Description

Lithology and
 Sedimentary Structure

Subsamples

0-120cm

- Very dark gray clay-rich matrix with lots of pebbles + granules
 - Pebbles are angular to sub-rounded
 - Some are Carbonate others look like shield-origin
 - Vary in size from 3mm to 3cm across
 - Poorly sorted
 - Strong HCl reaction throughout core
 - very stiff, hard + dry.
- DIAMICTON

Very Dark Gray

3/1

2.5

(#10)

-76-82 pebbles

-82-84 Carbonate + calcO₃

-86-90 Extra

NOTES

GEOLOGICAL SURVEY OF CANADA

19.81 - 21.34m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 14, 2011	CORE INTERVAL 65 - 70 ft 0 - 120 cm
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CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 7B
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EASTING 478604	NORTHING 5429101
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DESCRIBED BY BEM	PAGE 2 OF 2
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SYMBOL LEGEND			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)
Deformation
Core state
Colour (munsell)

Sedimentologic Description

Lithology and Sedimentary Structure

Subsamples

100					Same as above			
110								
120								
130								
140								
150								
160								
170								
180								
190								
200								

END

NOTES

14.81-21.34m

65	-	70	ft
0	-	120	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

21.34 - 22.86 m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 14, 2011	CORE INTERVAL 70 - 75 ft 0 - 148 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 8A
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <input type="checkbox"/> granular clay-rich matrix <input type="checkbox"/> Pebbles <input type="checkbox"/> <input type="checkbox"/>
DESCRIBED BY BEM	PAGE OF 1 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-148cm		
10				- Very stiff / hard + dry		
20				- very dark gray		
30				- clay-rich matrix with pebbles + granules throughout		
40				- DIAMICTON		
50				- Pebbles are mostly subangular, of carbonate origin and range in size from a few mm to 2 cm		
60				- granules are angular to subangular and of similar origin to pebbles		
70				- Strong HCl reaction		
80						
90						
100						

#11

- 87-93cm pebbles

- 93-95cm carbon + calc3

- 95-100cm extra

NOTES

GEOLOGICAL SURVEY OF CANADA

21.34-22.86m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 14, 2011	CORE INTERVAL	70 - 75 ft 0 - 148 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 8A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	2 2		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200					148 END	

NOTES

21.34-22.56m

70	-	75	ft
0	-	148	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

22.86-24.38m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 14, 2011	CORE INTERVAL 75 - 80 ft 0 - 152 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 88
EASTING NORTHING 478604 5429101	SYMBOL LEGEND	
DESCRIBED BY BEM	PAGE 1 OF 2	<div><div><div></div><div>clay-rich matrix</div></div><div><div></div><div>pebbles</div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div></div>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152 cm		
10				- Very dark gray		
				DIAMICTON		
20				- very hard + dry		
				- clay-rich matrix with granules + pebbles throughout		
30				- Pebbles are very large btw 54-92cm (up to 7cm across)		
40				- Pebbles look like carbonate but large on is Diorite (shield)		#12
				- Pebbles are angular to sub-rounded.		38-43 extra
50				- Moderate to strong HCl reaction		43-45 carbon + $CaCO_3$
				- granules appear of same lithology as pebbles and may be partially shattered pebbles		45-50 pebbles
60						
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 14, 2011		CORE INTERVAL 75 - 80 ft 0 - 152 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 8B	
EASTING NORTHING		478604 5429101		SYMBOL LEGEND	
DESCRIBED BY BEM		PAGE 2 OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples	
100				same as above			
110							
120							
130							
140							
150							
152						END	
160							
170							
180							
190							
200							

NOTES

22.86 - 24.38 m

75 - 80	ft
0 - 152	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

GEOLOGICAL SURVEY OF CANADA

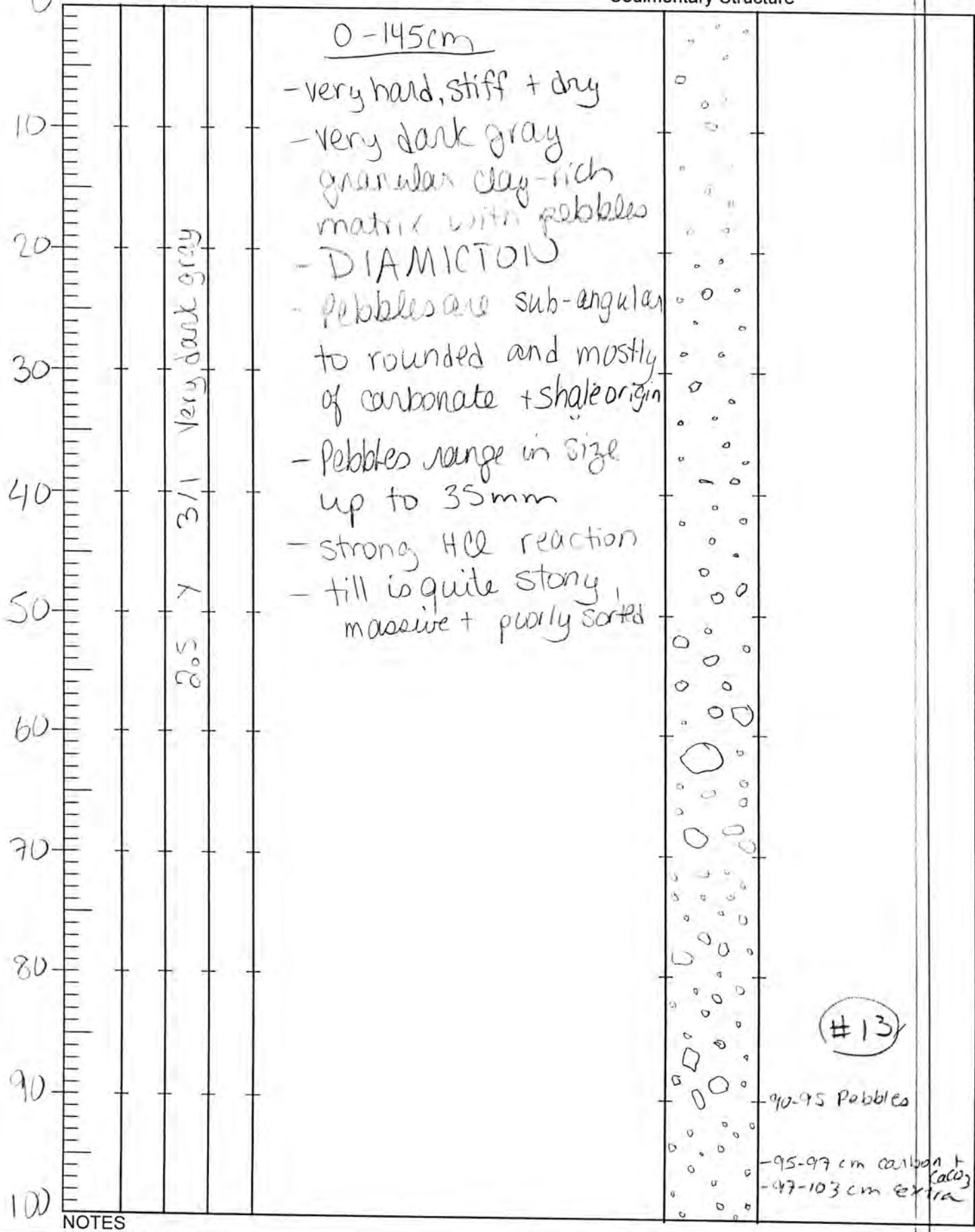
24.35 - 25.91m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 14, 2011	CORE INTERVAL	80 - 85 ft 0 - 145 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 9A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	1/2	<div><div></div>granular clay-rich matrix</div> <div><div></div></div> <div><div></div></div> <div><div></div></div>	

CORE DESCRIPTION

Core Depth (cm)
Deformation
Core state
Colour (munsell)

Sedimentologic Description Lithology and Sedimentary Structure Subsamples



NOTES

GEOLOGICAL SURVEY OF CANADA

24.38-25.91m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 14, 2011		CORE INTERVAL 80 - 85 ft 0 - 145 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 9A	
EASTING NORTHING		478604 5429101		SYMBOL LEGEND	
DESCRIBED BY BEM		PAGE OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				same as above.		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

145 END

NOTES

$$24.38 - 25.91$$

80 - 85 ft
0 - 145 cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 14, 2011		CORE INTERVAL 85 - 90 ft 0 - 146 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER run 9B	
EASTING NORTHING 478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE 1 OF 2		<input type="checkbox"/> clay matrix <input type="checkbox"/> pebbles <input type="checkbox"/> granules	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0 - 84 cm		
10				- very dark gray		
				DIAMICTON		
20				- matrix is granular		
				clay-rich with pebbles		
30				- pebbles are subangular		
				and up to 3cm across		
40				- poorly sorted - massive		
				- very stiff + dry		
50				- strong HCl reaction		
				- clasts are carbonate		
60				+ shale		
70						
80						
84				84 - 146 cm		
90				- major change in sediment		
				- soft + sticky mud with		
100				sparse granules		
				- very dark gray		

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 14, 2011		CORE INTERVAL 85 - 90 ft 0 - 146 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 9B	
EASTING NORTHING		478604 5429101		SYMBOL LEGEND	
DESCRIBED BY BEM		PAGE 2 OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				- angular granules are up to 3 mm and look like chips of carbonate		(#14)
110				- rare small pebbles (<1cm) too		110-115 pebbles
120				- massive + poorly sorted		115-117 Carbonate + calcO3
130				- Strong HCl reaction		117-123 extra
140				- matrix is clay-rich		
150				- DIAMICTON		
160						
170						
180						
190						
200						

NOTES

25.91 - 27.43m

85	-	90	ft
0	-	146	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

25.91-27.93m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 14, 2011	CORE INTERVAL 85 - 90 0 - 122	ft cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 4C	
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND	
DESCRIBED BY BEM	PAGE OF 1/2	<input type="checkbox"/> clay-rich matrix	<input type="checkbox"/>
		<input type="checkbox"/> pebbles	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Sedimentologic Description

Lithology and Sedimentary Structure

Subsamples


Core Depth (cm)	Deformation	Core State	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0-122 cm				<ul style="list-style-type: none"> - very dark gray - DIA MICTON - very stiff + dry - clay rich matrix with abundant granules + pebbles - Pebbles are sub-rounded to sub-angular - clasts are of carbonate + shale origin - moderate HCl reaction 		NO SAMPLES
10						
20						
30						
40						
50						
60						
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 14, 2011		CORE INTERVAL 85 - 90 0 - 122		ft cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba			CORE BOX NUMBER Run 9C		
EASTING NORTHING		478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE OF 2 2					

CORE DESCRIPTION

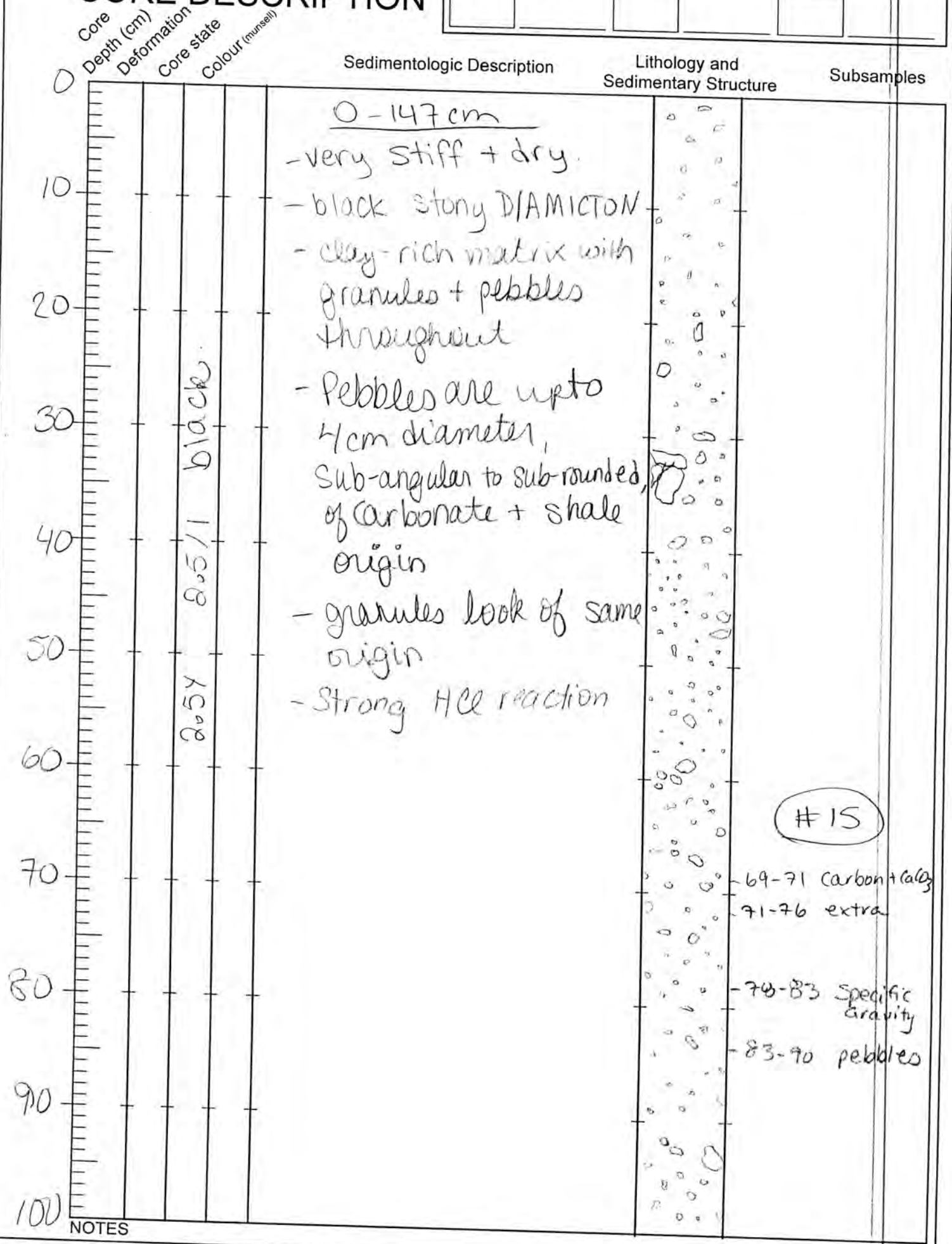
Core Depth (cm) Deformation Core state Colour (munsell)				Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		No SAMPLES
110						
120				122 end		
130						
140						
150						
160						
170						
180						
190						
200						

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 14, 2011		CORE INTERVAL 90 - 95 ft 0 - 147 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 10A	
EASTING NORTHING 478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE 1 OF 2			
		<div><div><div></div><div>clay rich matrix</div></div><div><div></div><div>pebbles</div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div></div>			

CORE DESCRIPTION



GEOLOGICAL SURVEY OF CANADA

27.43-28.96m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 14 , 2011	CORE INTERVAL	90 - 95 ft 0 - 147 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE	2		
		OF	2		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						
					147	END
NOTES						

27.43-28.96m

90	-	95	ft
0	-	147	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

28.96-30.48 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 14, 2011	CORE INTERVAL	95 - 100 ft 0 - 152 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 10 B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE 1 OF 2	<input type="checkbox"/> granular clay-rich matrix	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/> pebbles	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152 cm		
10				- Very dark gray		
				- very stiff and dry		
20				- Stony diamicton		
				- clay-rich matrix with granules + pebbles		
30				- Pebbles are easily broken in places		
40				- Carbonate + shale clast lithologies		
50				- clasts are subangular		
				- Strong HCl reaction		
60						
70						
						# 16
80						70-75 extra
						75-80 pebbles
90						80-82 Carbon + calc
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

28.96 - 30.48m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 14, 2011	CORE INTERVAL 95 - 100 ft 0 - 152 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 10B
EASTING 478604	SYMBOL LEGEND	
NORTHING 5429101		
DESCRIBED BY BEM	PAGE 2 OF 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

152
END

NOTES

28.96 - 30.48 m

95	-100	ft
	-152	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 14, 2011		CORE INTERVAL 95 - 100 ft 0 - 29 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER run 10c	
EASTING NORTHING 478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE 1 OF 1			
		<div><div><div></div><div>clay-rich matrix</div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div></div>			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-29cm		
10			very dark gray	- very stiff + dry		
			3/1	- very dark gray, stony		
				DIAMICTON		
20			8.5Y	- clay-rich matrix w/ pebbles + granules		
				- pebbles are sub-angular to sub rounded.		
30				29		
				- HCl reaction strong		
40				- same as above		
50						
60						
70						
80						
90						
100						

NOTES

30.48-32.00m

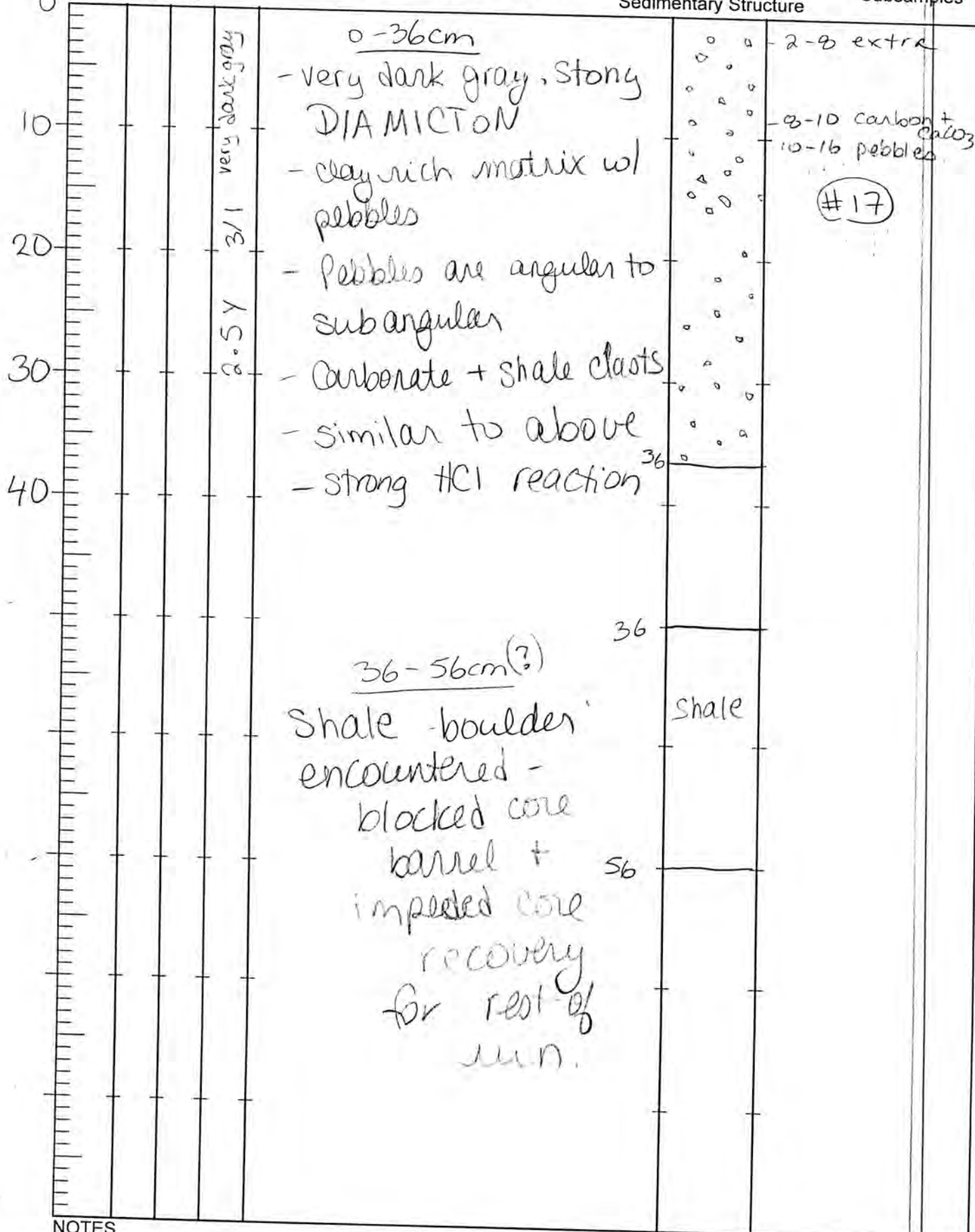
CORE DESCRIPTION

Core	Depth (cm)	Deformation	Core state	Colour (munsell)
1	0-10			
2	10-20			
3	20-30			
4	30-40			
5	40-50			
6	50-60			
7	60-70			
8	70-80			
9	80-90			
10	90-100			

Sedimentologic Description

Lithology and Sedimentary Structure

Subsamples



NOTES

30.48-32.00m

PAGE 1
OF 1

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

32.00-33.53m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 14, 2011	CORE INTERVAL 105 - 110 0 - 126	ft m
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 11B	
EASTING NORTHING 478604 5429101	SYMBOL LEGEND		
DESCRIBED BY BEM	PAGE OF 1 2	<input type="checkbox"/> clay-rich matrix	<input type="checkbox"/>
		<input type="checkbox"/> pebbles	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-126cm.		
10				- very stiff, hard + dry		
				- very dark gray, Stony		
				DIAMICTON		
20				- granular, clay-rich matrix with pebbles		
30				- pebbles generally < 1cm across		
40				- clasts of carbonate + shale origin		#18
				- clasts are sub-angular to sub-rounded		40-45 pebbles
50				- Strong HCl reaction throughout core.		45-47 carbon + CaCO ₃
60						51-56cm extra
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

32.00-33.53 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 14, 2011	CORE INTERVAL	105-110 0-126	ft cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 11B	
EASTING	478604	SYMBOL LEGEND				
NORTHING	5429101					
DESCRIBED BY	BEM					PAGE 2 OF 2

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

126
END

NOTES

32.00 - 33.53m

PAGE 1
OF 1

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 16, 2011	CORE INTERVAL 110 - 115 0 - 151	33.53-35.05 ft cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER run 12A	
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND	
DESCRIBED BY BEM	PAGE 1 OF 2	<input type="checkbox"/> clay-rich matrix	<input type="checkbox"/>
		<input checked="" type="checkbox"/> Pebbles	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				<u>0 - 151</u>		
10				- very stiff + dry		
20				- very dark gray, stony		
30				DIAMICTON		
40				- clay-rich matrix with lots of pebbles (some crushed) + granules		
50				- pebbles are subangular to sub rounded and of carbonate + shale origin		
60				- Strong HCl reaction		
70				- massive + poorly sorted		
80				- pebbles up to 25mm across		
90						
100						

NOTES

33.53-35.05h

CORE DESCRIPTION						

Core
Depth (cm)
Deformation
Core state
Colour (munsell)

[illegible]

33.53-35.05m

110 - 115 ft
0 - 15 cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

35.05-36.58m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 16, 2011		CORE INTERVAL 115 - 120 ft 0 - 151 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 12B	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<div> <div></div> <div>clay-rich matrix</div> </div> <div> <div></div> <div>Pebbles</div> </div> <div> <div></div> <div>pitted sample</div> </div>			
DESCRIBED BY BEM		PAGE 1 OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				<u>0-151cm</u>		
10				- very dry + hard		
20				- very dark grayish brown stony DIAMICTON		
30				- clay-rich matrix with lots of pebbles + granules		
40				- pebbles are angular to sub-rounded		
50				- clasts of carbonate & shale origin		
60				- strong HCl reaction		
70				- pebbles up to 40 mm		#20
80				- massive + poorly sorted		52-58 extra
90				@52cm large carbonate pebble (15x6 x 1.5cm) very pitted + angular esp. compared to all the other marked pebbles in run.		58-60 carbon + calc 3
100						60-63 pebbles

NOTES

GEOLOGICAL SURVEY OF CANADA

35.05-36.58m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 16, 2011	CORE INTERVAL	115 - 120 ft 0 - 151 cm
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CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 12B
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EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				

DESCRIBED BY	BEM	PAGE OF	2 / 2				
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CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

151 END

NOTES

35.05-36.58m

115 - 120	ft
0 - 151	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

#20

NOTES

GEOLOGICAL SURVEY OF CANADA

35.05 - 36.58 m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 16, 2011		CORE INTERVAL 115 - 120 ft 0 - 25 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 12C	
EASTING NORTHING 478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE 1 OF 1			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				Same as run 12B	0	
10					10	
20					20	
30					30	
40					40	
50					50	
60					60	
70					70	
80					80	
90					90	
100					25 END	

NOTES

GEOLOGICAL SURVEY OF CANADA

36.58 - 38.10m

BOREHOLE ID **GSC-BH-SW-07** CALENDAR DATE **June 16, 2011** CORE INTERVAL **120 - 125 ft**
0 - 152 cm

CORE BARREL TYPE **Sonic** GEOGRAPHIC LOCATION **Cartwright, Manitoba** CORE BOX NUMBER **Run 13A**

EASTING **478604**
 NORTHING **5429101**

DESCRIBED BY **BEM** PAGE **1**
 OF **2**

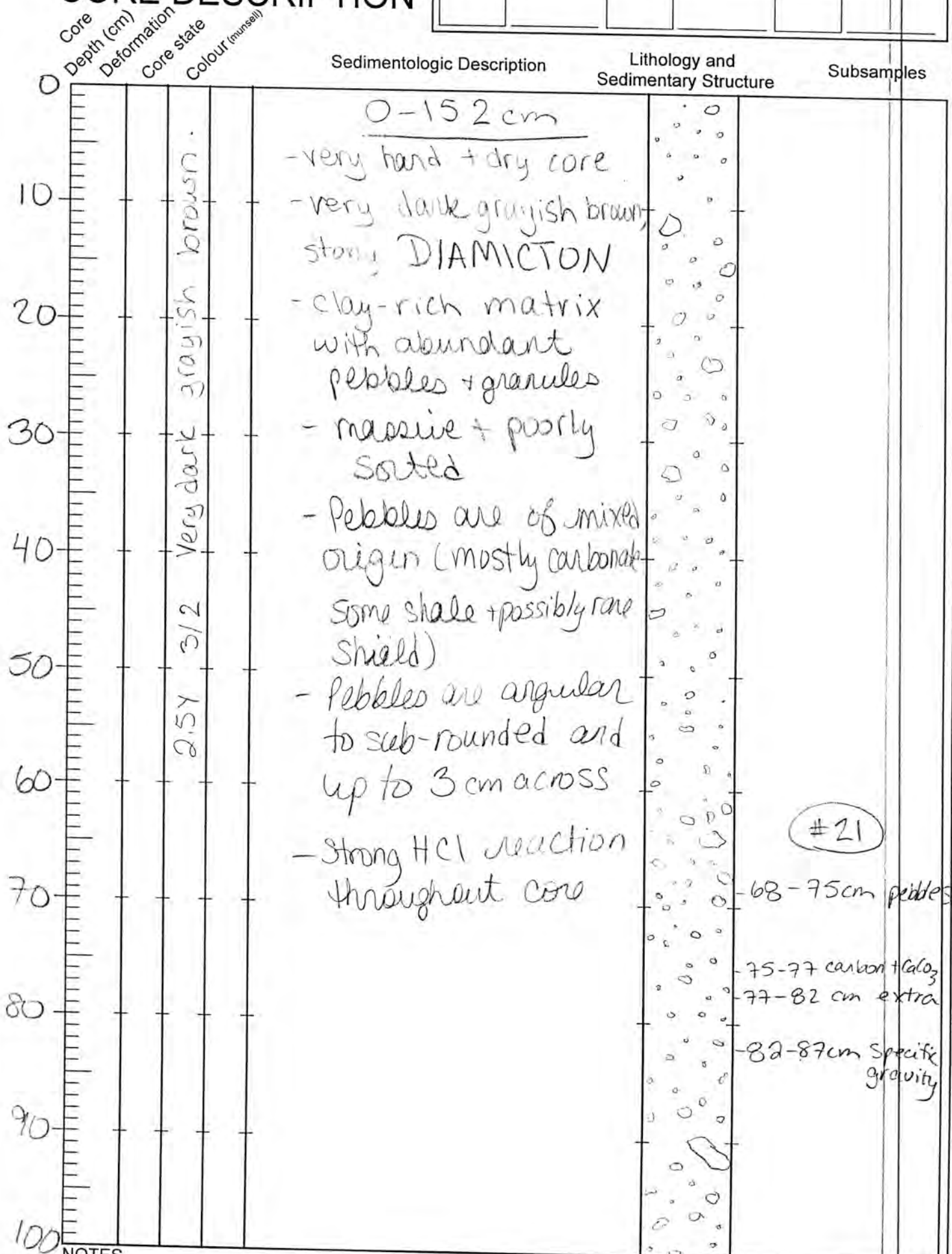
SYMBOL LEGEND			
	Clay-rich matrix		
	Pebbles		

CORE DESCRIPTION

Sedimentologic Description

Lithology and Sedimentary Structure

Subsamples



NOTES

GEOLOGICAL SURVEY OF CANADA

36-58-38-10W

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 16, 2011	CORE INTERVAL 120 - 125 ft 0 - 152 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 13A
EASTING 478604	SYMBOL LEGEND	
NORTHING 5429101		
DESCRIBED BY BEM	PAGE OF 2 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200					152 END	

NOTES

36.58 - 38.164

PAGE	1
OF	1

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

38.10 - 39.62m

BOREHOLE ID **GSC-BH-SW-07** CALENDAR DATE **June 16, 2011** CORE INTERVAL **125 - 130** ft **0 - 152** cm

CORE BARREL TYPE **Sonic** GEOGRAPHIC LOCATION **Cartwright, Manitoba** CORE BOX NUMBER **Run 3B**

EASTING **478604** NORTHING **5429101**

DESCRIBED BY **BEM** PAGE OF **1 2**

SYMBOL LEGEND

<input type="checkbox"/>	clay-rich matrix	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	pebbles	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152cm		
10				- very hard + dry		
20				- very dark grayish brown		
30				DIA MICTON		
40				- matrix is clay-rich		
50				- Pebbles are common throughout		
60				- range from 5mm to 3cm across		
70				- clasts predominantly of carbonate origin but also shale		
80				- clasts are angular to sub-rounded		
90				- largest pebbles are v. pitted		
100				- Strong HCl reaction throughout core		

#22

49-54 extra
54-56 carbonat calc
56-62 pebbles

NOTES

GEOLOGICAL SURVEY OF CANADA

38.10 - 39.62 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 16, 2011	CORE INTERVAL	125 - 130 ft 0 - 152 m
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 13B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE OF	22		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

152
END

NOTES

38.10 - 39.62m

125 - 130 ft
0 - 152 cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 16, 2011		CORE INTERVAL 125 - 130 ft 0 - 28 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 13C	
EASTING NORTHING 478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE 1 OF 1			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				Same as run 13B		
10						
20						
30						
40						
50						
60						
70						
80						
90						
100						

28
END

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 16, 2011		CORE INTERVAL 130 - 135 ft 0 - 151 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 14A	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<div style="display: flex; justify-content: space-around;"> <div><input type="checkbox"/> clay-rich matrix</div> <div><input type="checkbox"/></div> </div>			
DESCRIBED BY BEM		<div style="display: flex; justify-content: space-around;"> <div><input checked="" type="checkbox"/> Pebbles</div> <div><input type="checkbox"/></div> </div>			
PAGE OF 1					
OF 2					

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-151 cm		
10				- very hard + dry core		
20				- very dark grayish brown stony DIAMICTON		
30				- clay-rich matrix with granules and pebbles		
40				- pebbles range from a few mm to 3 cm across		
50				- clasts are mostly carbonate with some shale, possibly (larger)		
60				- clasts are sub-angular to sub rounded (smaller)		
70				- massive + poorly sorted		
80				- strong HCl reaction throughout core		
90						
100						

NOTES

#23

75-80 extra

80-82 Carbon + CaCO₃
82-90 pebbles

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID **GSC-BH-SW-07** CALENDAR DATE **June 16, 2011** CORE INTERVAL **130 - 135** ft **0 - 151** cm 39.62 - 41.15 m

CORE BARREL TYPE **Sonic** GEOGRAPHIC LOCATION **Cartwright, Manitoba** CORE BOX NUMBER **Run 14A**

EASTING **478604**
NORTHING **5429101**

DESCRIBED BY **BEM** PAGE **2** OF **2**

SYMBOL LEGEND			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

151
END

NOTES

39.62 - 41.15 m

39.62 - 41.15 m

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

41.15 - 42.67 m

CORE DESCRIPTION



GEOLOGICAL SURVEY OF CANADA

41.5 - 42.67 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 16, 2011	CORE INTERVAL	135 - 140 ft 0 - 152 cm
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CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 14B
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EASTING	478604
NORTHING	5429101

SYMBOL LEGEND

DESCRIBED BY	BEM	PAGE OF	2 / 2
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above.		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200					152 END	

NOTES

41.15 - 42.67 m

	135	-	140	ft
L	0	-	152	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

41.15 - 42.67 m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 16, 2011	CORE INTERVAL 135 - 140 ft 0 - 21 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 14C
EASTING NORTHING 478604 5429101	SYMBOL LEGEND	
DESCRIBED BY BEM	PAGE OF 1 / 1	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				Same as run 14B		
10						
20					al	
30					END	
40						
50						
60						
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

42.62 - 44.20 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 16, 2011	CORE INTERVAL	140 - 145 0 - 150	ft cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 15A	
EASTING	478604	SYMBOL LEGEND				
NORTHING	5429101	<input type="checkbox"/>	clay-rich matrix	<input type="checkbox"/>	<input type="checkbox"/>	
DESCRIBED BY	BEM	PAGE OF	1 2	<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-150		
10				- Core is very hard + dry		
20				- very dark gray, stony		
30				DIAMICTON		
40				- matrix is clay-rich		
50				- abundant pebbles and granules		
60				- poorly sorted & massive		
70				- pebbles are angular to sub-angular		
80				- clasts are primarily carbonate with some shale		
90				- clast range from 5-30 mm across		
100				- strong HCl reaction throughout core		

#25

60-66 extra

66-68 carbon + calcs

68-75 cm pebbles

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 16, 2011	CORE INTERVAL	140 - 145 ft 0 - 150 cm
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CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 15A
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EASTING	478604
NORTHING	5429101

DESCRIBED BY	BEM	PAGE	2
		OF	2

SYMBOL LEGEND			
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

150 END

NOTES

$$42.67 - 44.20m$$

140 - 145	ft
0 - 150	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

4420-45.72m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 16, 2011		CORE INTERVAL 145 - 150 ft 0 - 145 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 5B	
EASTING NORTHING 478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE 1 OF 2		<input type="checkbox"/> clay rich matrix	<input type="checkbox"/>
		<input checked="" type="checkbox"/> pebbles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-145		
10				- core is very dry + hard		
20				- very dark gray, stony DIAMICTON		
30				- clay-rich matrix with abundant pebbles.		
40				- clasts are shale + carbonate		
50				- pebbles are sub-angular to angular and range from <1cm to 4cm across		
60				- massive + poorly sorted		
70				- strong HCl reaction throughout core		
80						
90						
100						

58-68 cm pebbles
68-70 carbon + CaCO₃
70-78 extra

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID **GSC-BH-SW-07** CALENDAR DATE **June 16, 2011** CORE INTERVAL **145 - 150** ft **0 - 145** cm

CORE BARREL TYPE **Sonic** GEOGRAPHIC LOCATION **Cartwright, Manitoba** CORE BOX NUMBER **Run 15B**

EASTING **478604**
NORTHING **5429101**

DESCRIBED BY **BEM** PAGE **2** OF **2**

SYMBOL LEGEND

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				same as above		
110						
120						
130						
140						
145						
150						
160						
170						
180						
190						
200						

145
END

NOTES

44.20-45.72m

145	- 150	ft
-	145	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 16, 2011		CORE INTERVAL 145 - 150 ft 0 - 41 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 15C + D	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101					
DESCRIBED BY BEM		PAGE OF 1			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				Same as run 15B		
10						
20						
30						
40						
41						
49						
50						
60						
70						
80						
90						
100						

Shoe sample (D)

END

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 16, 2011	CORE INTERVAL	150 - 160 ft 0 - 45 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 16
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	1		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-43cm		
10				- very dark grayish brown strong DIAMICTON		- 6-12 Specific Gravity
20				- clay-rich matrix with pebbles		- 12-17 extra
30				- poorly sort + massive		
40				- pebbles are subangular of carbonate origin		- 24-26 Carbon + Calo,
50				up to 1.5cm across		- 26-32 pebbles
60				- strong HCl reaction		
70				- less pebbles than runs		
80						
90						
100						

NOTES

$$45.72 - 48.77m$$

150 - 160	ft
0 -	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

48.77 - 50.29m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 16, 2011	CORE INTERVAL 160 - 165 ft 0 - 151 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run AA
EASTING NORTHING 478604 5429101	SYMBOL LEGEND	
DESCRIBED BY BEM	PAGE 1 OF 2	<input type="checkbox"/> clay-rich matrix <input type="checkbox"/> pebbles <input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-151 cm		
10				- core is not as dry as previous but still quite hard		
20				- very dense grayish brown stony DIA MICTON		
30				- matrix is clay rich with lots of small (<1cm) to medium sized pebbles (up to 45mm) + sand		
40				- massive + poorly sort		
50				- clasts are subangular to subrounded and predominantly of carbonate origin		
60				- strong HCl reaction throughout core		
70						
80						
90						
100						

#28

- 77-84 extra

- 84-86 con bot + calcos

- 86-92 pebbles

NOTES

GEOLOGICAL SURVEY OF CANADA

48.77 - 50.29 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 16, 2011	CORE INTERVAL	160 - 165	ft
					0 - 151	cm

CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	RUN 17A
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EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DESCRIBED BY	BEM	PAGE 2 OF 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

151 END

NOTES

48.77 - 50.29 m

PAGE 1
OF 1

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

50.29 - 51.82 m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 16, 2011	CORE INTERVAL 165 - 170 ft 0 - 152 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 17B
EASTING NORTHING	478604 5429101	SYMBOL LEGEND <input type="checkbox"/> clay rich matrix <input type="checkbox"/> pebbles <input type="checkbox"/>
DESCRIBED BY BEM	PAGE OF 1/2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152 cm		
10				- Core is very dry + hard		
20				- when scraped has a waxy appearance.		
30				- very dark gray, stony diamictos		
40				- matrix is clay-rich		
50				- poorly sorted + massive		
60				- abundant angular to sub-angular pebbles throughout		
70				- clasts are mostly carbonate in origin (+ some shale) and btw 1-3.5cm across		
80				- large stone @ 85-88cm		
90				- strong HCl reaction throughout core		
100						

#29

90-96 extra

96-98 carbon + calcs

98-106 pebbles

NOTES

GEOLOGICAL SURVEY OF CANADA

50.29 - 51.82 m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 16, 2011	CORE INTERVAL 165 170 0 - 152 ft
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 17B
EASTING NORTHING 478604 5429101	SYMBOL LEGEND	
DESCRIBED BY BEM	PAGE OF 2 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

152
END

NOTES

50.29-51.82m

SEDIMENT CORE SUBSAMPLE INFORMATION

NOTES

NOTES

GEOLOGICAL SURVEY OF CANADA

50,29-51,82 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 16, 2011	CORE INTERVAL	165-170	ft
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Rm 170	m
EASTING	478604	SYMBOL LEGEND				
NORTHING	5429101	<div><div></div>clayrich matrix</div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	
DESCRIBED BY	BEM	PAGE OF	11	<div><div></div>pebbles</div>	<div><div></div></div>	
				<div><div></div></div>	<div><div></div></div>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				- very dark gray stony Diamicton	○ ○	
10				- Strong HCl reaction	○ ○	
20				- clayrich matrix with some pebbles	○ ○	
30				- pebbles are angular, carbonate + up to 2cm across	○ ○	
40				- massive + poorly sorted	○ ○	
50					36	
60					END	
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

51.82 - 53.34 m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 17, 2011		CORE INTERVAL 170 - 175 ft 0 - 15 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 81	
EASTING NORTHING 478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE 1 OF 2			
		<div><div></div>clay-rich matrix</div> <div><div></div>Pebbles</div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-151 cm		
10				- core is very hard + DRY		
20				- Very dark grayish brown strong DIAMICTON		
30				- matrix is clay rich.		
40				- Pebbles are abundant, range from ~5mm (most common) up to 15mm across		
50				- Pebbles are of carbonate + shale origin and are angular to subang.		
60				- Unit is massive + poorly sorted		
70				- Strong HCl reaction throughout core		
80						
90						
100						

#30

90-96 Pebbles
96-98 Carbonate
95-105 extra

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 17, 2011	CORE INTERVAL	170 - 175 ft 0 - 151 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 8A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE OF	22		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						
NOTES					151 END	

51.82 - 53.34 m

SEDIMENT CORE SUBSAMPLE INFORMATION

NOTES

GEOLOGICAL SURVEY OF CANADA

53.34 - 54.86m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 17, 2011	CORE INTERVAL 175 - 180 ft 0 - 150 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 186
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> clay-rich matrix</div> <div style="width: 50%;"><input type="checkbox"/></div> <div style="width: 50%;"><input type="checkbox"/></div> <div style="width: 50%;"><input type="checkbox"/></div> <div style="width: 50%;"><input type="checkbox"/></div> <div style="width: 50%;"><input type="checkbox"/></div> </div>
DESCRIBED BY BEM	PAGE OF 1 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-150		
10				- core is very hard + very dry especially btw 86-120cm		
20				- Very dark grayish brown stony DIAMICTON		
30				- Pebbles are mostly Carbonate with some shale		
40				- clasts are angular to subangular and some are quite large (3cm+ across) but most ~1cm		
50				- unit is massive + poorly sorted		
60				- strong HCl reaction throughout core		
70				- large clast btw 97-103cm depth		
80						
90						
100						

NOTES


- clast

GEOLOGICAL SURVEY OF CANADA

53.34 - 54.86 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 17, 2011	CORE INTERVAL	175 - 180 ft 0 - 150 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run BB
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE 2 OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples	
100				Same as above	 - clast		
110							
120							
130							
140							
150						150 END	
160							
170							
180							
190							
200							

NOTES

53.34 - 54.86m

53.34 - 54.86m

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

53.34 - 54.86m

CORE DESCRIPTION

Subsamples

NOTES

GEOLOGICAL SURVEY OF CANADA

54.86 - 56.39 m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 17, 2011		CORE INTERVAL 180 - 185 ft 0 - 150 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 9A	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<input type="checkbox"/> clay-rich matrix <input type="checkbox"/> <input type="checkbox"/>			
DESCRIBED BY BEM		<input type="checkbox"/> pebbles <input type="checkbox"/> <input type="checkbox"/>			
PAGE 1 OF 2		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-150cm		
10				- core is very hard + dry		
20				- very dark gray, stony		
30				DIAMICTON		
40				- clay-rich matrix with lots of pebbles throughout core		
50				- Pebbles are primarily Carbonate with shale and occasional shale(?)		
60				- clasts are angular to sub-angular and 5-20 mm across.		
70				- unit is massive and poorly-sorted		
80				- Strong HCl reaction throughout core		
90						
100						

#32

60-66 Specific Gravity

66-72 extra

72-74 carbon + CaCO₃

74-80 pebbles

NOTES

GEOLOGICAL SURVEY OF CANADA

54.86-56.39 m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 17, 2011		CORE INTERVAL 180 - 185 ft 0 - 150 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 19A	
EASTING NORTHING		478604 5429101		SYMBOL LEGEND	
DESCRIBED BY BEM		PAGE 2 OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

150
END

NOTES

54.86 - 56.39 m

180 - 185 ft
0 - 150 cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

56.39 - 57.91 m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 17, 2011		CORE INTERVAL 185 - 190 ft 0 - 152 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 19B	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<input type="checkbox"/> clay-rich matrix <input type="checkbox"/> <input type="checkbox"/>			
DESCRIBED BY BEM		PAGE 1 OF 2		<input type="checkbox"/> pebbles <input type="checkbox"/> <input type="checkbox"/>	
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152 cm		
10				- core is very hard + dry		
20				- Very dark grayish brown stony DIAMICTON		
30				- clay-rich matrix with pebbles throughout		
40				- pebbles are abundant, angular to sub-angular, 3-25mm across		
50				- Clasts are primarily of carbonate origin with some chert.		
60				- massive + poorly sorted		
70				- Strong HCl reaction throughout core		
80				* 43-45cm large broken carbonate clast with subangular edges but sharp broken edges rectangular in shape with striations surrounded by matrix on all sides, above + below		
90						
100						

#33

44-50 extra

50-52 carbon + calc
52-60 pebbles

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 17, 2011	CORE INTERVAL	185 - 190 ft 0 - 152 m
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 19B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	22		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

152 END

NOTES

56.39 - 57.91 m

CORE	185 - 190	ft
INTERVAL	0 - 152	cm

SEDIMENT CORE SUBSAMPLE INFORMATION


[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 17, 2011	CORE INTERVAL 185 - 190 ft 0 - 38 cm									
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 19C									
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <table border="1"> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table>									
DESCRIBED BY BEM	PAGE 1 OF 1										

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				Same as Run 19B		no samples
10						
20						
30						
40		2.5Y 3/1			38 END	
50						
60						
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

57.91 - 59.44m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 17, 2011		CORE INTERVAL 190 - 195 ft 0 - 151 m	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 20A	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101					
DESCRIBED BY BEM		PAGE OF 1 2		<div><div><input type="checkbox"/> clay-rich matrix</div><div><input type="checkbox"/> pebbles</div><div><input type="checkbox"/> oxidized clasts</div></div>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				<u>0-151cm</u>		
10				- core is hard + dry		
20				- Very dark gray, stony		
30				DIAMICTON		
40				- Strong HCl reaction throughout core		
50				- clay-rich matrix with carbonate and shale pebbles		#34
60				- Pebbles 5-30mm across and are angular to subangular		- 35-41 extra
70				- till is massive + poorly sorted		- 41-43 carbon + CaCO ₃
80				- lots of orangy, highly oxidized, crumbly clasts. (shale?)		- 51-60 pebbles
90						
100						


NOTES

GEOLOGICAL SURVEY OF CANADA

57.91 - 59.44 m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 17, 2011	CORE INTERVAL 190 - 195 ft 0 - 151 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 20A
EASTING 478604	SYMBOL LEGEND	
NORTHING 5429101	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> </div>	
DESCRIBED BY BEM	PAGE OF 2 2	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> </div>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200					151 END	

NOTES

57.91 - 59.44m

57.91 - 59.44m

57.91 - 59.44m

57.91 - 59.44m

57.91 - 59.44m

GEOLOGICAL SURVEY OF CANADA

59.44 - 60.96m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 17, 2011	CORE INTERVAL 195 - 200 ft 0 - 151 cm												
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 208												
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <table><tr><td><input type="checkbox"/></td><td>clay-rich matrix</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input checked="" type="checkbox"/></td><td>pebbles</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr></table>	<input type="checkbox"/>	clay-rich matrix	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	pebbles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	clay-rich matrix		<input type="checkbox"/>	<input type="checkbox"/>										
<input checked="" type="checkbox"/>	pebbles	<input type="checkbox"/>	<input type="checkbox"/>											
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>											
DESCRIBED BY BEM	PAGE OF 1 / 2													

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				<u>0-151cm</u>		
10				- core is hard + dry.		
				- very dark gray, stony		
				DIAMICTON		
20				- clay-rich matrix with lots of pebbles		
				- clasts range from 5 - 20mm across and are angular to subangular		
30				- clasts are predominantly carbonate with some shale		
40				- massive + poorly sorted		
50				- strong HCl reaction throughout core		
60						
70						
80						
90						
100						

NOTES

35


90-97 extra

97-100 carbonat
CaCO₃

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 17, 2011		CORE INTERVAL 195 - 200 ft 0 - 151 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 20B	
EASTING NORTHING		478604 5429101		SYMBOL LEGEND	
DESCRIBED BY BEM		PAGE OF 2 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				same as above		100-108 pebbles #35
110						
120						
130						
140						
150						
160						
170						
180						
190						
200					151 END	

NOTES

59.44-60.46m

PAGE 1
OF 1

SEDIMENT CORE SUBSAMPLE INFORMATION


[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 17, 2011	CORE INTERVAL	195-200 ft 0-330 m
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	run 20C
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE OF	11		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				Same as run 20B		no samples
10						
20						
30						
40						
50						
60						
70						
80						
90						
100					33 END	

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID
GSC-BH-SW-07

CALENDAR DATE
June 17, 2011

CORE INTERVAL
200 - 205 ft
0 - 151 m

CORE BARREL TYPE
Sonic

GEOGRAPHIC LOCATION
Cartwright, Manitoba

CORE BOX NUMBER
Run 21A

EASTING
NORTHING

478604
5429101

SYMBOL LEGEND

clay-rich matrix

DESCRIBED BY
BEM

PAGE OF
1/2

pebbles

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0 - 151 cm		
10				- core is stiff + somewhat dry		
20				- very dark gray, stony DIAMICTON		
30				- clay-rich matrix with some pebbles		
40				- clasts are angular to subangular, 5-40mm across and predominantly of carbonate origin with some shale clasts		
50				- unit is massive and poorly sorted		
60				- strong HCl reaction to moderate		
70						
80						
90						#36 90-97 pebbles
100						97-99 carbon + calc 99-100 extra


NOTES

GEOLOGICAL SURVEY OF CANADA

60.96 - 62.48m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 17, 2011	CORE INTERVAL 200 - 205	ft 0 - 151
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 21A	
EASTING 478604	SYMBOL LEGEND		
NORTHING 5429101	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>
DESCRIBED BY BEM	PAGE 2	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>
	OF 2	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>
		<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>

CORE DESCRIPTION

	Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100					same as above		
110							
120							
130							
140							
150							
160							
170							
180							
190							
200						151 END	

NOTES

60.96 - 62.48m

200 - 205 ft
0 - 151 cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

62.48 - 64.01 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 17, 2011	CORE INTERVAL	205 - 210 ft 0 - 152 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 21B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE 1 OF 2	<div><div></div>clay rich matrix</div> <div><div></div></div> <div><div></div></div>	<div><div></div></div> <div><div></div></div> <div><div></div></div>	<div><div></div></div> <div><div></div></div> <div><div></div></div>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152cm		
10				- core is hard + dry		
				- Very dark gray, stony		
				Diamicton		
20				- clay-rich matrix with		
				sub-angular to		
				sub-rounded pebbles		
30				- pebbles are between		
				5-15 mm across		
				generally but up to		
40				30 mm		
				- clasts are mostly of		
				carbonate origin with		
50				some shale + very		
				oxidized, crumbly		
				pebbles (shales? siderite?)		
60				- massive + poorly sorted		
				HCl reaction		
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

62.48-64.01m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 17, 2011	CORE INTERVAL	205-210 ft 0-152cm
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CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 21B
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EASTING	478604
NORTHING	5429101

SYMBOL LEGEND

DESCRIBED BY	BEM	PAGE OF	2/2
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)
Deformation
Core state
Colour (munsell)

Sedimentologic Description

Lithology and Sedimentary Structure

Subsamples

100							
110							
120				same as above			
130							
140							
150							
152						END	
160							
170							
180							
190							
200							

NOTES

62.48-64.61m

205-210	ft
0-152	cm

SEDIMENT CORE SUBSAMPLE INFORMATION


[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 17, 2011	CORE INTERVAL 205 - 210 ft 241 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 21C
EASTING 478604	SYMBOL LEGEND	
NORTHING 5429101		
DESCRIBED BY BEM	PAGE 1	OF 1

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				same as Run 21B.		no samples
10						
20						
30						
40						
50						
60						
70						
80						
90						
100					41 END	

NOTES

GEOLOGICAL SURVEY OF CANADA

64.01 - 65.532

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 17, 2011		CORE INTERVAL 210 - 215 ft 0 - 52 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 22A	
EASTING NORTHING 478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE 1 OF 2			
		<input type="checkbox"/> clay rich matrix <input type="checkbox"/> pebbles <input type="checkbox"/>			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152 cm		
10				- core is hard + dry		
20				- Very dark grayish brown stony DIAMICTON		
30				- clay-rich matrix with pebbles		
40				- pebbles are angular to subangular		
50				- clasts are predominantly carbonate + shale		
60				- clasts are 5-25 mm across		
70				- massive + poorly sorted		
80				- strong HCl reaction throughout core		
90						
100						

#38

30-36 Specific Gravity

36-42 Extra

42-44 Carbon + Calc


44-50 Pebbles

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 17, 2011	CORE INTERVAL	210 - 215 ft 0 - 152 m
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 22A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE	2		
		OF	2		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200					152 END	

NOTES

64.61 - 65.53 m - ~~67.22~~ 68 m

PAGE 1
OF 1

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

65.53 - 67.06 m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 17, 2011	CORE 215 - 220 ft INTERVAL 0 - 152 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 22B
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <input type="checkbox"/> clay rich matrix <input checked="" type="checkbox"/> pebbles
DESCRIBED BY BEM	PAGE 1 OF 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152 cm		
10				- core is hard + dry		
20				- Very dark grayish brown stony diamicton.		
30				- clay-rich matrix with abundant pebbles		
40				- Clasts are predominantly carbonate + shale		
50				- Clasts are sub-angular to sub-rounded and 5-30mm across.		
60				- massive + poorly sorted.		
70				- strong HCl reaction throughout core		
80						
90						
100						

#39

-47-53cm extra

-53-55 carbon + CaCO₃
-55-61 pebbles

NOTES

GEOLOGICAL SURVEY OF CANADA

65.53-67.06m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 17, 2011	CORE INTERVAL	215 - 220 ft 0 - 152 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 72B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE 2			
		OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above.	2.0.0.	
110						
120						
130						
140						
150						
152						END
160						
170						
180						
190						
200						

NOTES

65.53 - 67.06 m

PAGE	1
OF	1

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID
GSC-BH-SW-07

CALENDAR DATE
June 20, 2011

CORE INTERVAL
215 - 220 ft
0 - 36 cm

CORE BARREL TYPE
Sonic

GEOGRAPHIC LOCATION
Cartwright, Manitoba

CORE BOX NUMBER
Run 22C

EASTING
478604

NORTHING
5429101

SYMBOL LEGEND

DESCRIBED BY
BEM

PAGE 1 OF 1

clay rich matrix

oo

pebbles

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				SAME AS RUN 22B	0	
10					oo	
20					oo	
30					oo	
40					oo	
50					oo	
60					oo	
70					oo	
80					oo	
90					oo	
100					36 END	NO SAMPLES

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID

GSC-BH-SW-07

CALENDAR DATE

June 20, 2011

CORE INTERVAL

220 - 225 ft
0 - 150 cm

CORE BARREL TYPE

Sonic

GEOGRAPHIC LOCATION

Cartwright, Manitoba

CORE BOX NUMBER

Run 23A

EASTING NORTHING

478604
5429101

SYMBOL LEGEND

clay-rich matrix

pebbles

DESCRIBED BY

BEM

PAGE 1 OF 2

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-150cm		
10				- core is hard + dry		
20				- Very dark gray, stony		
30				DIAMICTON		
40				- clay-rich matrix with some sub-angular to angular pebbles		
50				- Clasts are primarily carbonate in origin and up to 3cm across		
60				- massive + poorly sorted		
70				- Strong HCl reaction throughout core		
80						
90						
100						


NOTES

GEOLOGICAL SURVEY OF CANADA

67.06 - 68.58m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	220 - 225 ft 0 - 150 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 23A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE 2 OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

150 END

NOTES

67.06 - 68.58m

220 - 225 ft
0 - 150 cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

68.58 - 70.16 m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 20, 2011	CORE INTERVAL 225 - 230 ft 0 - 152 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 23B
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> clay-rich matrix</div> <div style="width: 50%;"><input type="checkbox"/></div> <div style="width: 50%;"><input type="checkbox"/></div> <div style="width: 50%;"><input type="checkbox"/></div> <div style="width: 50%;"><input type="checkbox"/></div> <div style="width: 50%;"><input type="checkbox"/></div> </div>
DESCRIBED BY BEM	PAGE OF 1 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0 - 152 cm		
10				- core is dry + hard		
20				- Very dark gray, stony		
30				DIA MICTON		
40				- clay-rich matrix with angular to sub-angular pebbles + v/sand		
50				- clasts are of carbonate + shale origin and up to 25mm across		
60				- massive + poorly sorted		
70				- strong HCl reaction throughout core		
80				- some of the clasts are very brittle + crumble when scraped		
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	225 - 236 ft 0 - 152 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 23B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE	2		
		OF	2		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

NOTES

$$68.58 - 70.10 \text{ m}$$

PAGE 1
OF 1

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

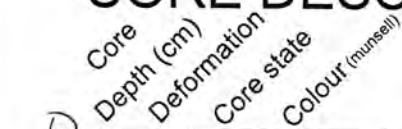
65.53 - 67.06 m

225 - 230	ft
-----------	----

SYMBOL LEGEND

Sedimentologic Description

Subsamples



Same as
run 23B

NO	SAMPLES
1	100
2	100
3	100
4	100
5	100
6	100
7	100
8	100
9	100
10	100
11	100
12	100
13	100
14	100
15	100
16	100
17	100
18	100
19	100
20	100
21	100
22	100
23	100
24	100
25	100
26	100
27	100
28	100
29	100
30	100
31	100
32	100
33	100
34	100
35	100
36	100
37	100
38	100
39	100
40	100
41	100
42	100
43	100
44	100
45	100
46	100
47	100
48	100
49	100
50	100
51	100
52	100
53	100
54	100
55	100
56	100
57	100
58	100
59	100
60	100
61	100
62	100
63	100
64	100
65	100
66	100
67	100
68	100
69	100
70	100
71	100
72	100
73	100
74	100
75	100
76	100
77	100
78	100
79	100
80	100
81	100
82	100
83	100
84	100
85	100
86	100
87	100
88	100
89	100
90	100
91	100
92	100
93	100
94	100
95	100
96	100
97	100
98	100
99	100
100	100

47 - END

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	230 - 235 ft 0 - 151 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 24A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	1 2	<input type="checkbox"/> clay-rich matrix	<input type="checkbox"/>
				<input type="checkbox"/> pebbles	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-151 cm		
10				- core is very dry + hard		
20				- very dark gray, stony		
30				DIAMICTON		
40				- clay-rich matrix with abundant pebbles		
50				- clasts are predominantly carbonate + shale		
60				- clasts are up to 25 mm across, angular to sub-angular		
70				- massive + poorly sorted		
80				- strong HCl reaction throughout run		
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	70.10 - 77.63 m 230 - 235 ft 0-15 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	R4024A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE	2		
		OF	2		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						
NOTES						

70.10 - 71.63 m

230 - 235 ft
AL 0 - 151 cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 20, 2011	CORE INTERVAL 235 - 240 ft 0 - 152 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 24B
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <input type="checkbox"/> clay-rich matrix <input type="checkbox"/> pebbles <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
DESCRIBED BY BEM	PAGE OF 1 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0 - 152 cm		
10				- core is very hard + dry		
20				- Very dark grayish brown stony		
30				DIAMICTON		
40				- massive + poorly sorted		
50				- clay-rich matrix with abundant pebbles		
60				- clasts are mostly carbonate or shale		
70				- clasts are angular to sub-angular and up to 2cm across		
80				- HCl reaction		
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	235 - 240 ft 0 - 152 m
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 24B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	22		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

152 END

NOTES

71.63 - 73.15 m

235 - 240 ft
VAL 0 - 152 cm

SEDIMENT CORE SUBSAMPLE INFORMATION

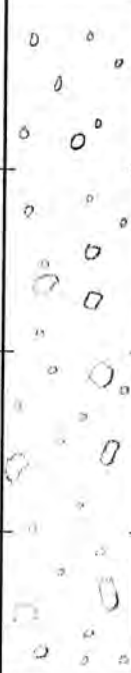
[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	235 - 240 ft 0 - 38 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 24C
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE 1 OF 1			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				Same as run 24B		NO SAMPLES
10						
20						
30						
40					38	
50					END	
60						
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

73.15 - 74.68m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 20, 2011		CORE INTERVAL 240 - 245 ft 0 - 152 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 25A	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<div> <input type="checkbox"/> clay-rich matrix </div> <div> <input type="checkbox"/> </div> <div> <input type="checkbox"/> </div>			
DESCRIBED BY BEM		PAGE 1 OF 2		<div> <input type="checkbox"/> pebbles </div> <div> <input type="checkbox"/> </div> <div> <input type="checkbox"/> </div>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152cm		
10				- Core is very hard + dry		
				- Very dark grayish brown		
20				DIAMICTON		
				- clay-rich matrix with abundant pebbles		
30				- clasts are angular to sub-angular		
40				- Clasts are pre dominantly carbonate with some shale. and can be up to 4cm across		
50				- massive + poorly sorted		
60				- Strong HCl reaction throughout core		
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	73.15 - 74.68m 240 - 245 ft 0 - 152 m
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 25A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE 2			
		OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						
				152	END	

NOTES

73.15 - 74.68m

240	-	245	ft
0	-	152	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

74.68-76.20m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 20, 2011	CORE INTERVAL 245 - 250 ft 0 - 151 < m
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 25B
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <input type="checkbox"/> clay-rich matrix <input type="checkbox"/> pebbles <input type="checkbox"/>
DESCRIBED BY BEM	PAGE OF 1 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-151 cm		
10				- core is very hard + dry		
20				- Very dark gray stony		
30				DIAMICTON		
40				- clay-rich matrix with pebbles		
50				- Pebbles are primarily carbonate and shale with rare red chert(?)		
60				- Clasts are angular to sub-angular and up to 2.5cm across		
70				- massive + poorly sorted		
80				- Strong HCl reaction throughout core		
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 20, 2011		CORE INTERVAL 245 - 250 ft 0 - 151 m	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 25B	
EASTING NORTHING		478604 5429101		SYMBOL LEGEND	
DESCRIBED BY BEM		PAGE 2 OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core State	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

151
END

NOTES

74.68 - 76.20 m

$$\begin{array}{r} 245 - 250 \\ 0 - 15 \end{array}$$

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 21, 2011	CORE INTERVAL 74.68 - 76.20 m 245 - 250 ft 0 - 42 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 25c
EASTING NORTHING 478604 5429101	SYMBOL LEGEND	
DESCRIBED BY BEM	PAGE 1 OF 1	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				same as Run 25B		
10						
20						
30						
40						
50						
60						
70						
80						
90						
100						

42
END

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 20, 2011		CORE INTERVAL 250 - 255 ft 0 - 152 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Kun 26A	
EASTING NORTHING 478604 5429101		SYMBOL LEGEND			
DESCRIBED BY BEM		PAGE 1 OF 2		<input type="checkbox"/> clayrich matrix	<input type="checkbox"/>
		<input type="checkbox"/> pebbles	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0 - 152 cm		
10				- core is very hard + dry		
20				- Very dark grayish brown stony DIAMICTON		
30				- clay-rich matrix with pebbles + granules		
40				- massive + poorly sorted		
50				- clasts are primarily carbonate + shale.		
60				- Pebbles are angular to sub-angular and up to 45mm across.		
70				- Strong HCl reaction throughout core.		
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

76.20-77.72m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June <u>20</u> , 2011		CORE INTERVAL 250 - 255 ft 0 - 152 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 26A	
EASTING NORTHING		478604 5429101		SYMBOL LEGEND	
DESCRIBED BY BEM		PAGE OF 2 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200					152 END	

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	250 - 255 ft 0 - 152 cm
SAMPLE TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 26A
EASTING	478604	SAMPLED BY	BEM	PAGE	1
NORTHING	5429101			OF	1
SAMPLED FOR					

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

77.72-79.25m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 20, 2011		CORE INTERVAL 255 - 260 ft 0 - 152 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Rundbb	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<div> <input type="checkbox"/> clay-rich matrix </div> <div> <input type="checkbox"/> </div>			
DESCRIBED BY BEM		PAGE OF 1 2		<div> <input type="checkbox"/> pebbles </div> <div> <input type="checkbox"/> </div>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152 cm		
10				- core is very hard + dry		
20				- Very dark grayish brown stony DIAMICTON		
30				- clay-rich matrix with lots of pebbles		
40				- clasts are sub-angular and up to 6cm across		
50				- clasts are primarily carbonate + shale		
60				- massive + poorly sorted		
70				- very strong HCl reaction through out core.		
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20 , 2011	CORE INTERVAL	77.72 - 79.25m 255 - 260 ft G 152C m
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 26B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE	2		
		OF	2		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above.		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						
				152	END	

NOTES

77.72-79.25m

255	-	260	ft
0	-	152	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

77.72-79.25m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 21, 2011	CORE INTERVAL	255 - 260 ft 0 - 30 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 26C
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	1 / 1	<div><div></div>clay-rich matrix</div> <div><div></div></div> <div><div></div></div> <div><div></div></div>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				Same as Run 26B		
10						
20						
30						
40						
50						
60						
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

79.25 - 80.77m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 20, 2011	CORE INTERVAL 260 - 265 ft 0 - 152 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 27A
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <input type="checkbox"/> clay-rich matrix <input type="checkbox"/> pebbles <input type="checkbox"/>
DESCRIBED BY BEM	PAGE 1 OF 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0 - 152 cm		
10				- core is very dry + hard		
20				- Very dark grayish brown stony DIAMICTON		
30				- clay-rich matrix with angular to sub-angular pebbles		
40				- clasts are mostly carbonate with some shale		
50				- range in size from 2mm to 2cm		
60				- massive + poorly sorted		
70				- strong HCl reaction throughout core		
80						
90						
100						

2.5Y 3/2 very dark grayish brown

#48

58-64 cm extra

64-67 carbon + clay

67-74 pebbles

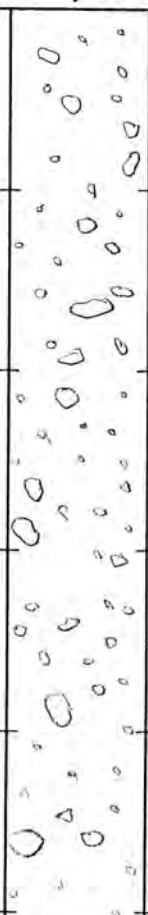
NOTES

GEOLOGICAL SURVEY OF CANADA

79.25 - 80.77m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	260 - 265 ft 0 - 152 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 27A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE OF	22		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

152 cm

NOTES

79,25 - 80,77m

60	-	265	ft
0	-	152	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

80.77 - 82.80 m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 20, 2011		CORE INTERVAL 265 - 270 ft 0 - 152 m	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 278	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<div> <div><input type="checkbox"/></div> clay-rich matrix </div> <div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> </div>			
DESCRIBED BY BEM		PAGE 1 OF 2		<div> <div><input type="checkbox"/></div> pebbles </div> <div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> </div>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-152 cm		
10				- core is hard + dry		
20				- Very dark grayish brown stony DIAMICTON		
30				- clay-rich matrix with large pebbles (upto 7 cm across)		
40				- massive + poorly sorted		
50				- clasts are primarily carbonate with some shale		#49
60				- clasts are mostly angular to subangular with the odd sub-rounded pebble.		51-57 extra
70						57-59 Carbon + CaO ₃
80						68-75 pebbles
90				- strong HCl reaction throughout core		
100				- some carbonate clasts break easily and appear as a crumbly mass within matrix		

NOTES

GEOLOGICAL SURVEY OF CANADA

80.77 - 82.30m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	265 - 270 ft 0 - 152 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 27B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE OF	3 2		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above.		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

152 END

NOTES

80.77-82.80m

265	-	270	ft
0	-	152	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]


NOTES

GEOLOGICAL SURVEY OF CANADA

80.77 - 82.30m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 21, 2011	CORE INTERVAL 265-270 ft 0-25 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 27c
EASTING 478604	SYMBOL LEGEND	
NORTHING 5429101	<div> <input type="checkbox"/> clay-rich matrix </div> <div> <input type="checkbox"/> </div> <div> <input type="checkbox"/> </div>	
DESCRIBED BY BEM	PAGE OF 1 1	<div> <input type="checkbox"/> pebbles </div> <div> <input type="checkbox"/> </div> <div> <input type="checkbox"/> </div>

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				same as Run 27B		
10						
20						
25					END	
30						
40						
50						
60						
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

82.30 - 83.82m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 20, 2011		CORE INTERVAL 270-275 ft 0-151 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 284	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<div> <input type="checkbox"/> clay-rich matrix </div> <div> <input type="checkbox"/> </div> <div> <input type="checkbox"/> </div> <div> <input type="checkbox"/> </div>			
DESCRIBED BY BEM		PAGE 1 OF 2		<div> <input type="checkbox"/> pebbles </div> <div> <input type="checkbox"/> </div> <div> <input type="checkbox"/> </div> <div> <input type="checkbox"/> </div>	

CORE DESCRIPTION


Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-151 cm		
10				- core is very hard + dry		
20				- Very dark grayish brown, strong DIAMICTON		#50
30				- massive + poorly sorted		- 24-30 Specific Gravity
40				- clay-rich matrix with pebbles		- 30-32 Carbon + Calc ₃
50				- Pebbles are mostly angular to sub-angular		- 32-39 pebbles
60				- clasts are primarily Carbonate + shale and can be up to 3cm across		- 47-53 extra
70				- strong HCl reaction throughout core		
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 20, 2011	CORE INTERVAL	270 - 275 ft 0 - 151 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 28A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE 2 OF 2			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above but core gets progressively drier.		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

NOTES

82.30-83.82m

PAGE 1
OF 1

SEDIMENT CORE SUBSAMPLE INFORMATION

#50

NOTES

GEOLOGICAL SURVEY OF CANADA

83.82-85.34m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 21, 2011	CORE NUMBER 275 - 280 ft
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER run 28B
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <div></div> <div></div> <div></div> </div> <div style="width: 50%;"> <div></div> <div></div> <div></div> </div> </div>
DESCRIBED BY BEM	PAGE 1 OF 1	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0						
10			8.5Y 3/2	<u>0-11cm</u> - very hard + dry - very dark grayish brown, stony DIAMICTON - clay-rich matrix with angular pebbles upto 3cm across - clasts are shale + carbonate - massive + poorly sorted - strong HCl reaction		#51
20			8.5Y 6/1 gray			
30						
40				<u>11-42cm</u> - strong HCl reaction - very dry carbonate silt/vfsand with clay - completely unconsolidated - contains clay balls near top to ~20cm - upper contact is sharp but irregular - large, angular, broken pieces of granodiorite in lower half of core - no visible structure (massive) + poorly sorted		20-24 extra 24-26 carbonate 26-28 carbon 34-42 pebbles
50						
60						
70						
80						
90						
100						

NOTES

83.82 - 85.34m

275-280

PAGE	1
OF	1

#51

NOTES

GEOLOGICAL SURVEY OF CANADA

85.34 - 86.87 m

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 21, 2011	CORE INTERVAL	280 - 285 ft 0 - 147 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 29A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	1 2	<div> <div>□</div> <div>poorly sorted sand</div> </div> <div> <div>□</div> <div>clay-rich matrix</div> </div> <div> <div>☹</div> <div>clay-rich blobs</div> </div> <div> <div>↗</div> <div>fining upward</div> </div> <div> <div>○</div> <div>pebbles</div> </div>	

CORE DESCRIPTION


Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0-14cm			2.5Y 3/3 Dark Olive Brown	<ul style="list-style-type: none"> - a mix of poorly sorted v.f.-coarse sand and clay-rich blobs containing pebbles + granules - a bit chaotic - could be slough at bottom of hole(?) - strong HCl reaction 		
14-63cm			2.5Y 3/2 Very Dark Grayish brown	<ul style="list-style-type: none"> - Very dark grayish brown, stony DIAMICTON - clay-rich matrix with small pebbles / granules - clasts are primarily carbonate with some shale - massive + poorly sorted - clasts are < 1cm across - strong HCl reaction - upper contact is sharp but highly irregular - Basal contact is somewhat inferred and has a large carbonate clast - fining upward unit - clasts are angular 		
63-147cm			2.5Y 4/2 Unconsolidated, silty sand	<ul style="list-style-type: none"> - poorly sorted + massive unit - fines upward from 172cm to 63cm - Pebble lag btw 63-72cm(?) - Unconsolidated gravel with v.c. sand, silt and clay - clast supported - clasts are angular to subangular, consist primarily of carbonate + shale - Strong HCl reaction on matrix and clasts - clasts are 2-10 mm in diameter 		<p>#52</p> <p>88-90 carbon + carbonate</p> <p>90-95 pebble</p> <p>95-100 extra</p>

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 21, 2011	CORE INTERVAL	280 - 285 ft 0 - 147 m
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 29A
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM				
		PAGE	2		
		OF	2		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				See above		
110						
120				122 - 147		
130				- finer than above and more matrix-supported		
140						
150					147	
160					END	
170						
180						
190						
200						

NOTES

85.34	-	86.87	m
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280 - 285	ft
0 - 147	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID
GSC-BH-SW-07

CALENDAR DATE
June 21, 2011

CORE INTERVAL
285 - 290 ft
0 - 149 cm

CORE BARREL TYPE
Sonic

GEOGRAPHIC LOCATION
Cartwright, Manitoba

CORE BOX NUMBER
Run 29 B

EASTING
478604

NORTHING
5429101

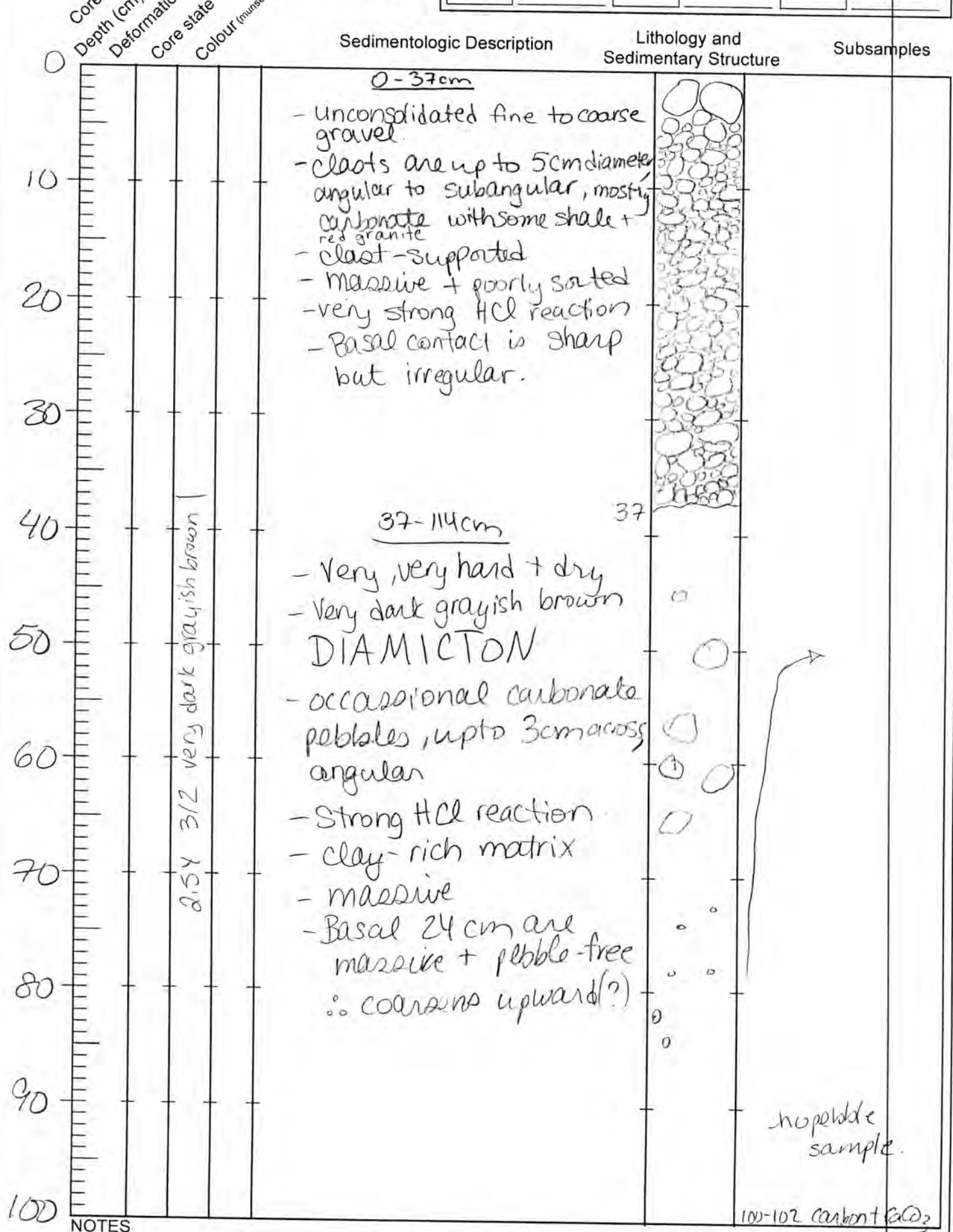
SYMBOL LEGEND

DESCRIBED BY
BEM

PAGE 1 OF 2

clay-rich matrix

CORE DESCRIPTION



GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 21, 2011	CORE INTERVAL	285 - 290 ft 0 - 149 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 29B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	2 2		

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100						
110				114-147 cm		
120				- Top contact is irregular and hard to see		
130				- massive, poorly sorted, unconsolidated gravel with sand, silt + clay		
140				- matrix supported		
150				- strong HCl reaction		
160				- clasts are sub-angular to sub rounded		
170				and range from 2mm to 5cm in diameter		
180				- clasts are primarily carbonate		
190						
200						

NOTES

86.87-88	39	m
285-290	ft	

86.87-88	39	m
285-290	ft	

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

88.31 - 89.92m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 21, 2011		CORE INTERVAL 290 - 295 ft 0 - 148 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 3bA	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<div> <div>...</div> sand </div> <div> <div>☹</div> clay balls </div> <div> <div>○</div> pebbles </div>			
DESCRIBED BY BEM		PAGE 1 OF 1			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				<u>0 - 35 cm</u> - Very wet core - Unconsolidated, massive, poorly sorted F-c sand with large pebbles (up to 7cm) and clay balls - clasts are angular + mostly carbonate with some shale - sands have silty/clayey component - large carbonate clast has a crumbly white dissolution zone around it - Strong HCl reaction - Basal contact is gradational and approximate		
10						
20						
30						
40						
50						
60				<u>35 - 148 cm</u> - massive, poorly sorted, unconsolidated fine to coarse sand with some gravel. - clasts are angular to subangular + mostly carbonate + shale. - contains fines mixed in with sands - matrix has a strong HCl reaction.		
70						
80						
90						
100						

NOTES

#54

- 75-80 extra

- 80-85 pebbles

- 85-87 carbon + CaCO₃

GEOLOGICAL SURVEY OF CANADA

88.39 - 89.72m

BOREHOLE ID **GSC-BH-SW-07** CALENDAR DATE **June 21, 2011** CORE INTERVAL **290-295 ft**
0-148 cm

CORE BARREL TYPE **Sonic** GEOGRAPHIC LOCATION **Cartwright, Manitoba** CORE BOX NUMBER **Run 3bA**

EASTING **478604**
 NORTHING **5429101**

SYMBOL LEGEND

DESCRIBED BY **BEM** PAGE **2**
 OF **2**

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100						
110				Same as above		
120						
130						
140						
150					148 END	
160						
170						
180						
190						
200						

NOTES

88.39	-89.72	✓
290	295	#

290 - 295	ft
0 - 148	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

89.92 - 91.44 m

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 21, 2011		CORE INTERVAL 295 - 300 ft 0 - 66 cm													
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 30B													
EASTING 478604		SYMBOL LEGEND															
NORTHING 5429101		<table border="1"> <tr> <td></td> <td>Sand</td> <td></td> <td></td> </tr> <tr> <td></td> <td>pebbles</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>					Sand				pebbles						
	Sand																
	pebbles																
DESCRIBED BY BEM		PAGE 1 OF 1															

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				<u>0-66 cm</u>		
10				- massive, poorly sorted f-vc sand with some pebbles.		
20				- clasts are angular and mainly carbonate with some shale + silt.		(455)
30				- Pebbles can be up to 5cm diameter		28-35 extra
40				- some silt + clay fines in sands		33-35 carbon + calcs 35-42 pebbles
50				- matrix reacts strongly to HCl.		
60						
70						
80						
90						
100						

NOTES

89.92 - 91.44 m

PAGE 1
OF 1

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

91.44 - 92.96m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 21, 2011	CORE INTERVAL 300 - 305	ft m
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 31A	
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND	
DESCRIBED BY BEM	PAGE 1 OF 2	sand	pebbles

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				<u>0-84cm</u>		
10				- clayey v-m sand with angular pebbles		
20				- massive + poorly sorted		
30				- pebbles are angular and up to 15mm across		
40				- pebbles are mainly carbonate with some shale + minor silt		
50				- Very strong HCl reaction throughout unit		(#56)
60				- subtle fining upward sequence (?)		- 47-54cm pebbles
70						- 54-60 Carbonate
80						- 61-66 extra
90						- 61-66 specific gravity
100						
				gradational contact 84		
				<u>84-142cm</u>		
				- fining upward gravel sequence		(#57)
				- Pebbles are subangular to sub-rounded		- 98-100 Carbonate

NOTES

GEOLOGICAL SURVEY OF CANADA

91.44 - 92.96m
300 - 305 ft
0 - 142 cm

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 21, 2011		CORE INTERVAL 300 - 305 ft 0 - 142 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 31A	
EASTING 478604		NORTHING 5429101		SYMBOL LEGEND	
DESCRIBED BY BEM		PAGE OF 2		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				<ul style="list-style-type: none"> - Sandy clayey matrix btw pebbles / in pore space - unit is clast supported - pebbles are primarily carbonate with some shale + minor silt - matrix reacts strongly to HCl - sediments are weakly cemented 		100-105 pebbles
110						105-110 extra
120						
130						
140						
150						
160						
170						
180						
190						
200						

NOTES

91.44 - 92.96 m

PAGE	1
OF	1

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

92.96-94.49

BOREHOLE ID	GSC-BH-SW-07	CALENDAR DATE	June 21, 2011	CORE INTERVAL	305 - 310 ft 0 - 65 cm
CORE BARREL TYPE	Sonic	GEOGRAPHIC LOCATION	Cartwright, Manitoba	CORE BOX NUMBER	Run 31B
EASTING	478604	SYMBOL LEGEND			
NORTHING	5429101				
DESCRIBED BY	BEM	PAGE OF	1 1	<div><div></div>clay-rich matrix</div> <div><div></div></div> <div><div></div>pebbles</div> <div><div></div></div> <div><div></div></div> <div><div></div></div>	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				0-11 - Gravel like bottom of Run 31A		
10					11	
20				11-65cm - very dark grayish brown stony DIAMICTON		
30				- matrix is sandy clay with pebbles up to 3 cm across		#58
40				- carbonate + shale pebbles are sub-rounded		40-45 extra
50				- matrix has a strong HCl reaction		45-50 pebbles
60				- massive + poorly sorted		50-52 Carbon + CaCO3
70				- pebbles are scarce	65	
80					END	
90						
100						

NOTES

92,96-94.49 ~~91.44~~ - 95

ft
cm

1

1

NOTES

GEOLOGICAL SURVEY OF CANADA

94.49-96.01m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 21 , 2011	CORE INTERVAL 310 - 315 ft 0 - 145 cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 32A
EASTING 478604	NORTHING 5429101	SYMBOL LEGEND <div style="display: flex; flex-wrap: wrap;"> <div style="margin-right: 10px;"> sand</div> <div style="margin-right: 10px;"> pebbles</div> <div style="margin-right: 10px;"> clay ball</div> <div style="margin-right: 10px;"> clay-rich matrix</div> </div>
DESCRIBED BY BEM	PAGE OF 1 / 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				<u>0-28 cm</u> - very fine to medium qtz sand with clay balls. - massive + poorly sorted - matrix reacts to HCl strongly - Sand is quite dry.		
10						
20						
30						
40				<u>28-145 cm</u> - Very dark grayish brown stony DIAMICTON - Clay-rich matrix with some pebbles - pebbles are sub-angular and up to 15cm across - clasts are shale + carbonate - massive + poorly sorted - Strong HCl reaction throughout unit		#59 58-65 pebbles 65-67 Carbon + Calc 67-72 extra
50						
60						
70						
80						
90						
100						

NOTES

GEOLOGICAL SURVEY OF CANADA

94.49-96.01 m

BOREHOLE ID GSC-BH-SW-07	CALENDAR DATE June 21, 2011	CORE INTERVAL 310 - 315 0- ft cm
CORE BARREL TYPE Sonic	GEOGRAPHIC LOCATION Cartwright, Manitoba	CORE BOX NUMBER Run 3 2A
EASTING NORTHING 478604 5429101	SYMBOL LEGEND	
DESCRIBED BY BEM	PAGE 2 OF 2	

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
100				Same as above		
110						
120						
130						
140						
150						
160						
170						
180						
190						
200						

145
END

NOTES

94.49-96.01m

310	- 315	ft
0	- 145	cm

SEDIMENT CORE SUBSAMPLE INFORMATION

[illegible]

NOTES

GEOLOGICAL SURVEY OF CANADA

96.01-9754

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 21, 2011		CORE INTERVAL 315 - 320 ft 0 - 151 cm	
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 32B	
EASTING 478604		SYMBOL LEGEND			
NORTHING 5429101		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
DESCRIBED BY BEM		PAGE OF 1 2			
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				<u>0-151cm</u>		
10				- core is <u>very</u> dry + hard.		
20				- Gray stony DIA MICTON		
30				- clay- rich matrix with pebbles throughout (can be up to 7cm across)		
40				- Clasts are angular to sub-angular and mostly carbonate		
50				- core is so dry it is practically cement		
60				- massive + poorly sorted		Core too hard to sample
70				- Strong HCl reaction throughout core		no samples
80						
90						
100						

NOTES

96.01-97.54m

CORE DESCRIPTION

Core	Depth (cm)	Deformation	Core state	Colour (munsell)
1	0-10			
2	10-20			
3	20-30			
4	30-40			
5	40-50			
6	50-60			
7	60-70			
8	70-80			
9	80-90			
10	90-100			

Lithology and Sedimentary Structure

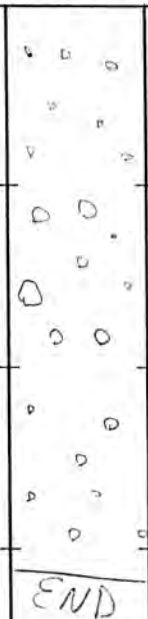
Subsamples



GEOLOGICAL SURVEY OF CANADA

BOREHOLE ID GSC-BH-SW-07		CALENDAR DATE June 21, 2011		CORE INTERVAL 315 - 320 0 - 32		ft m
CORE BARREL TYPE Sonic		GEOGRAPHIC LOCATION Cartwright, Manitoba		CORE BOX NUMBER Run 31C		
EASTING NORTHING		478604 5429101		SYMBOL LEGEND		
DESCRIBED BY BEM		PAGE OF 1 1				

CORE DESCRIPTION

Core Depth (cm)	Deformation	Core state	Colour (munsell)	Sedimentologic Description	Lithology and Sedimentary Structure	Subsamples
0				Same as Run 32 B but not as dried out		NO SAMPLES
10						
20						
30						
40						
50						
60						
70						
80						
90						
100						

NOTES