

SOIL SURVEY

Bremer Co. (9)

Proj. N HSN 218-8(106) 2R 09

Road US 218

Party E Soucek
J Fudge
M Muxfeldt

Samples Released
3/19/07

~~HA~~
N HSN-218-8(106)-2R-09
potential borrow sites
pg 15-20 and 24-36

maxfeldt
Fudge
Soucek

9.26.6
Pt cloudy warm
temp 70°

17

Hole #	Sta	Dist	C S M	Soil Cond	Sample #
H.2381	Hole # 6			moist	Sample
BORROW # 1	N			moist	Sample
				moist	Sample
H.2382	Hole # 1			moist	Sample
BORROW # 5				moist	Sample
				moist	Sample
H.2383	Hole # 2			moist	Sample
BORROW # 5				moist	Sample
				moist	Sample
H.2384	Hole # 3			moist	H.2383.A
BORROW # 5				moist	H.2383.B
				moist	H.2383.C
H.2385	Hole # 4			moist	H.2382.A
BORROW # 5				moist	H.2382.B
				moist	H.2382.C

2.1	A	Black silty clay		
11.5	B	Brown clayey sand		
33.0	C	Brown coarse sand w/ boulders		
		H ₂ O		dry clay
20	A.	Black silty sand		
20.0	B.	Brown sand		
50.0	C.	Brown coarse sand		
15.0		H ₂ O		1 day
20	A	Black silty sand		
21.0	B	Brown sand		
50.0	C.	Brown coarse sand		
17.2		H ₂ O	sluff	1 day
4.0	A.	Black silty sand		
23.0	B	Brown sand		
50.0	C.	Brown coarse sand		
11.3		H ₂ O		1 day
4.5	A	Black silty clay		
24.0	B	Brown sand		
60.0	C.	Brown coarse sand		
17.9		H ₂ O		1 day

Hole #	Sta	F DIST	C S M	Soil Cond	Sample #
A2390	Hole #2			moist	A.2389.A
BORROW	#3			moist	A.2389.E
				-	-
A.2391	Hole #3			moist	Sample
BORROW	#3			moist	Sample
				moist	Sample
				-	-
A.2392	Hole #4			moist	A.2389.H
BORROW	#3			moist	A.2389.B
				moist	A.2389.C
A.2393	Hole #5			moist	Sample
BORROW	#3			moist	Sample
				moist	Sample

3.0	A.	DK Brown Sand			
22.0	B.	Brown Sand			
32.5	C.	L.S.			
16.4			H ₂ O	dry	1 day
3.3	A.	Dark Brown Sand			
26.0	B.	Brown Sand			
37.5	C.	Brown coarse Sand			
41.0	D.	B+U. L.S.			
14.6			H ₂ O	dry	1 day
Fudge			10.3.6		
Muxfeldt			Cloudy	Warm	Temp 80°
Source					
3.0	A.	DK Brown Sand			
24.5	B.	Brown Sand			
50.0	C.	Brown coarse Sand			
14.9			H ₂ O	dry	1 day
2.0	A.	DK Brown sand			
26.0	B.	Brown sand			
50.0	C.	Brown coarse sand			
15.3			H ₂ O	dry	1 day

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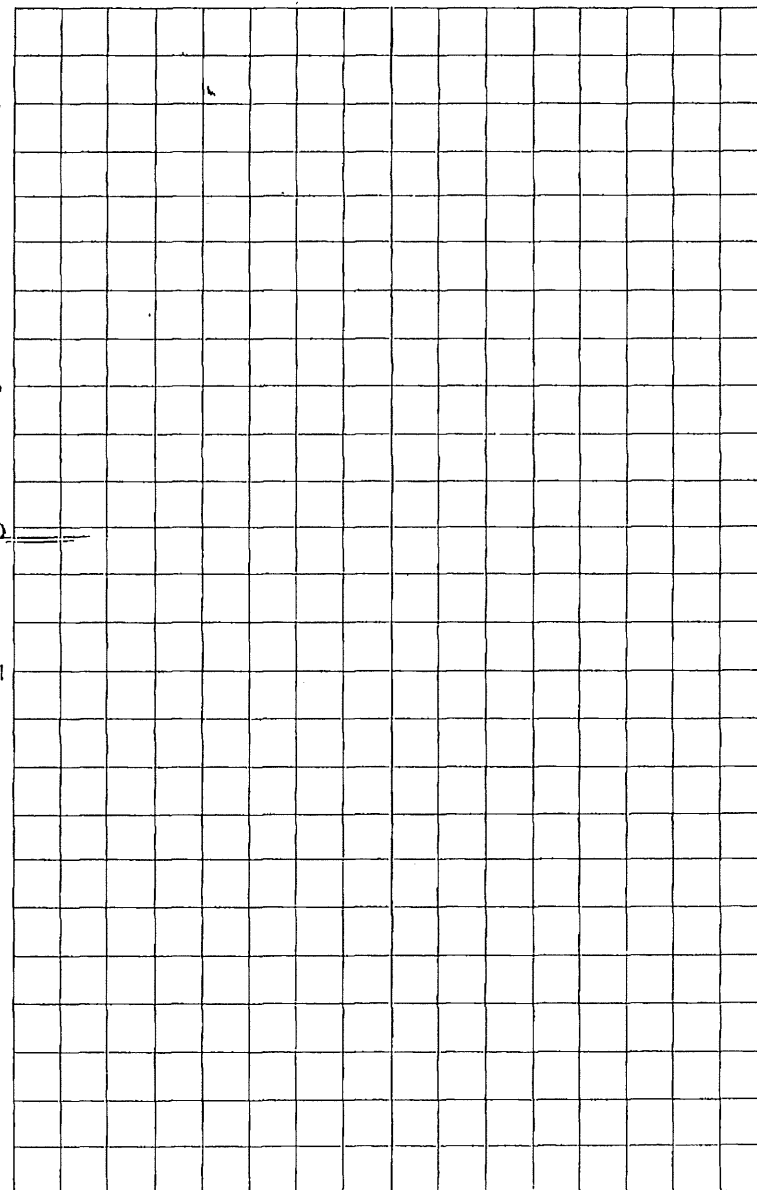
Soil Survey

Bremer Co (9)

Proj N H S N. 218.8 (106) 2R 09

U. S 218

Party E Soucek
J Fudge
M Muxfeldt



Hole #	Sta	DIST	C S M	Soil COND	Some #s
A2404	Hole # 1			moist	x Sample
BORROW # 6			6.0 6.5		x Sample
			17.5 18.0		x Sample
				-	-
A2405	Hole # 2			moist	Sample
BORROW # 6				moist	A2404.E
				moist	A2404.C
				moist	x Sample
				-	-
A2406	Hole # 3			moist	A2405.A
BORROW # 6			5.0 5.5		Sample
			15.5 16.0		Sample
				moist	Sample
A2407	Hole # 4			moist	A2408.A
BORROW # 6				moist	Sample
				moist	A2408.B
				moist	A2408.C

Muxfeld +
Fudge
Soucek

10.10.6
cloudy cool
temp 50s

24
25

2.5	A	DK Brown sandy silty clay		
9.5	B	Brown gl. cl w/ sand seams		
36.5	C	Grey gl. cl		
37.0	D	h.s.		
63		H2O		1 day
2.5	A	DK Brown sandy clay		
11.5	B	Brown gl. cl w/ occ sand seams		
33.0	C	Grey gl. clay		
44.5	D	Brown + grey gl. cl w/ h.s. pieces		
45.0	E	h.s.		
69		H2O		1 day
3.0	A	DK Brown sandy clay		
8.5	B	Brown gl. clay w/ occ sand seams		
27.5	C	Grey gl. cl.		
38.0	D	Brown + grey sandy clay w/ sand seams		
67		H2O		1 day
2.5	A	DK Brown sandy clay		
6.5	B	Brown clayey sand		
10.0	C	Brown gl. cl / clay		
33.0	D	Grey gl. cl / clay		
72		H2O		1 day

Hole #	Sta	Dist	C S M	Soil Cond	Sample
A2408	Hole #5				Sample
BORROW	#6				Sample
			170-175		Sample
A2409	Hole #6			moist	A2408.A
BORROW	#6			moist	Sample
				moist	A2408.B
				moist	A2408.C
A2410	Hole #7			moist	A2411.A
BORROW	#6			moist	A2411.B
				moist	Sample
				moist	A2411.C
A2411	Hole #8			moist	Sample
BORROW	#6			moist	Sample
				moist	Sample

3.5	H.	DK Brown. Sandy clay			
17.0	B.	Brown gl. cl. w/ sand seams			
43.0	C.	Grey gl. cl. w/ sand seams			
7.6		H ₂ O			1 day
2.5	A.	DK Brown. Sandy clay			
7.0	B.	Brown Sandy clay			
16.0	C.	Brown gl. clay w/ sand seams			
43.0	D.	Grey gl. clay w/ sand seams			
11.3		H ₂ O			1 day
2.8	A.	DK Brown. Sandy clay			
9.5	B.	Brown sandy clay			
24.5	C.	Grey gl. clay w/ sand seams			
35.0	D.	Brown clayey sand w/ loc silt seam			
6.9		H ₂ O dry			1 day
3.3	A.	DK Brown. Sandy clay			
16.0	B.	Brown sandy clay w/ loc. boulder			
30.0	C.	Brown clayey sand w/ loc silt seam			
7.0		H ₂ O Dry			1 day

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30	A.	DK Brown sand		
12.5	B.	Brown clayey sand		
28.5	C.	Grey gl. cl. w/ sand seams		
30.0	D.	L.S.		
12.7			H ₂ O	dry 1hr
Muxfeldt			2 27.2	
Rudge			Cloudy Cool	temp. 20°
Soucek				
30	A.	Black silty sand		
10.0	B.	Brown sand		
25.0	C.	Brown coarse sand		
40.0	D.	G. Br. sand		
45.0	E.	G. Br. sandy silty clay		
15.1			H ₂ O	Plugged 1 day
1.5	A.	Black silty sand		
19.0	B.	Brown coarse sand		
34.5	C.	G. Br. sand		
45.0	D.	G. Br. sandy silty clay		
15.6			H ₂ O	Dry 1 day

project NH SX-218-7-(207) 3H-07

BLACKHAWK County

DATE Started - 7-16-12

DATE Finished - 8-2-12

Borrow's 6-A + 6-B

R. Trout

M. Berg

Sending
number

S+A

G
DISTCores
moistures
shelbysoil
moisturesame
AsR. Irvadt
M. Berg7-24-12
Temp 98°

6

R1752 hole #1

Borrow 6-A

Dry SAMPLE
moist SAMPLE
wet

1.5 A BIK Sandy silty clay Loam Topsoil
 24.0 B Br SAND Med. w/occ. GL. clay Seams
 26.0 C Bldr's
 7.0 plugged H₂O 24 hrs

R1753 hole #2

Borrow 6-A

Dry SAMPLE
moist SAMPLE

1.5 A BIK Sandy silty clay Loam Topsoil
 38.0 B Br Sand med. w/occ. GL. clay seams
 22.6 plugged H₂O 24 hrs

R. Irvadt
M. Berg7-25-12
Temp 101°

R1754 hole #3

Borrow 6-A

Dry R1752-A
moist SAMPLE
wet SAMPLE

0.7 A BIK SANDY silty clay Loam Topsoil
 31.0 B Br SAND med.
 33.0 C Gr. GL. CLAY
 11.9 plugged H₂O 24 hrs

R1755 hole #4

Borrow #6-A

Dry SAMPLE
moist SAMPLE

0.7 A BIK SANDY silty clay LOAM Topsoil
 33.0 B Br SAND med. w/occ GL clay Seams
 13.0 plugged H₂O 24 hrs

ending number	STA	Q DIST	cores moisture shelby	Soil moisture	SAME AS
R1758	hole #1			dry	SAMPLE
Borrow 6-B				moist	SAMPLE
R1759	hole #2			dry	R1758-A
Borrow 6-B				moist	SAMPLE
R1760	hole #3			dry	SAMPLE
Borrow 6-B				dry	SAMPLE
				moist	R1759-B
R1761	hole #4			dry	R1760-A
Borrow 6-B				dry	R1760-B
				Wet	SAMPLE
R1762	hole #5			dry	R1763-A
Borrow 6-B				dry	R1764-B
				Wet	R1761-C

K. Irouart
M. Berg

t- 51-12 8
Temp 98°

2.0 A	BLK	SANDY silty clay Loam Topsoil
28.0 B	Br to Gr	SAND w/occ GL clay seams & BLDR.
12.4	wet	H ₂ O 24 hrs
0.5 A	BLK	Sandy silty clay Loam Topsoil
33.0 B	Br to Gr	SAND med.
15.5	plugged	H ₂ O 24 hrs.
0.5 A	BLK	Sandy silty clay Loam Topsoil
3.0 B	Br	Sandy silty clay
33.0 C	Br to Gr	sand med.
19.0	plugged	H ₂ O 24 hrs
0.5 A	BLK	Sandy silty clay Loam Topsoil
3.0 B	Br	Sandy silty clay
33.0 C	Br to Gr	sand med. w/occ GL clay seams
19.1	Plugged	H ₂ O 24 hrs
0.5 A	BLK	SANDY silty clay Loam Topsoil
3.0 B	Br	sandy silty clay
33.0 C	Br to Gr	SAND med. w/occ GL Clay seams
17.0	plugged	H ₂ O 24 hrs

Sending Number	STA	Q dist	Cores moisture shelby	Soil moisture	SAME As
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R1763	hole #6			dry	Sample
Borrow 6-B				wet	Sample

2.0	A	BIK	sandy silty clay	Loam	Topsail
28.0	B	Br	Sand med. w/dec	GL clay	*Gravel seams
12.4		plugged	H2O	24	hr