

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
	0'	5'	5'
	5'	11'	6'
	11'	20'	9'
	20'	21'	1'
	21'	22.5'	(S)
	22.5'	23.5'	1'
	23.5'	25'	1½'
	25'	26'	1'
	24'		
	26'	27'	1'
	27'	28.5'	
	28.5'	43'	
	43'	44.5'	1½"
	44.5'	46'	

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
Till.
Loess - yell-br. very slightly oxidized at upper surface.
Loess - yell-br. to buffed, oxidiz
Till - yell-br. sandy, silty
(S) POON
Till - gr-gray sandy silty Till.
(S) POON
Till - green-gray - sandy silty Till
Boulder
Till - yell-br. (slight) Gr-gray
Sandy silty Till
(S) POON L.S. Boulder in Bottom of Spoon.
Till - yell-br. sandy silt (calc.)
(S) POON
Till yell-br to Bl-gr sandy silty calcar Till

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
	46'	47½'	
	47½'	51'	
	51	52	
	52	53	
	53'	54.5'	
	54'	± 81'	
	81'	82.5'	
June 18			
	82'	92'	10'
	92'	102'	10'

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
<u>Spoon</u>
Till - yell-Br to Bl-gr. sandy silty ^{cal. t.}
Till - yell-Br. sandy silty <u>Till</u>
Till Bl-gr. sandy silty
<u>Spoon</u>
Till Bl gr., calc. silty sandy to gravelly.
<u>Spoon</u>
Rem out to 6"
<u>Till</u> - Bl-gray, calc. silty sandy to grav. Some yell-Br. continuation from above pass.
<u>Till</u> - Same less, gravelly → less continuation

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
	102'	110'	8'
	110'	118'	8'
		117'	Hit
		118'	
		121'	
	118'	130'	12'
	130'	140'	10'
	140'	150'	10'
	150'	160'	10'
	160'	168'	10'
30 min	168'	172'	4'
	Set	6" casing	

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
Till - Bl-gr, calc., silty - sandy to gravelly, yell-br contains
Till - same Picking up wood a Boulder.
Boulder
Boulder (gran.?)
Till - Bl-gr, calc., woody, silty - sandy to gravelly Till.
Till - same
Till - same
Till - "
Till - same
Bed-rock - light tan - buffed, argill., fossiliferous L.S. [~ Brach]
Length of casing to ground level = 171.7'

SAMPLE NO.	DEPTH 6" Drill Bit		THICKNESS
	From	To	
June 20	172'	175'	3'
June 21			
175' to 184.8'	175'	179.9'	
Time 11:15 TO 12:15			
9.8'	179.9'	180'	
Core	180'	182'	
	182'	182.3'	
	182.3	183.6	
	183.6'	183.8'	

DESCRIPTION OF BEDS	
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.	
Bedrock - Light tan buffed, argill, fossil, calcite cry, bearing L.S.	
Began Coring At 175'	
Devonian	
- Light tan, fossiliferous, limestone with some calcite stringers (→) Brachs.	
- Dark tan argillaceous limestone	
- Light tan, fossiliferous, calcite replacement L.S.	
- Dark tan, argillaceous, calcite bearing L.S.	
- Light tan, fossil, calcite bearing L.S.	
- Dark tan, argillaceous, calcite bearing L.S.	

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
	183.8'	184.8'	
Drilling Time 1:20 to 2:10	184.8'	186.7'	
	186.7'	190'	
6.8'	190'	191.7'	
Core 2 184.9' to 191.7'			

DESCRIPTION OF BEDS	
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.	
- light tan, fossil, calcite bearing L.S.	
- Light tan to gray, fossil, calcite bearing L.S.	
- Light tan, highly fossil (crinoids) argill calcite bearing L.S. 186.7' to 188' shows oxidation	
- light gray, fossil, (crin.) calcite bearing L.S.	

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
Drilling 2:20 to 3:20	191.7'	198.5'	6.8'
191.7' to 202.1'	198.5		
Total Core #3 10.4'	198.5	202.1'	
Drill 4:05 to 4:55	202.1'	206.6'	
202.1' to 211.9'	206.6'	211.9	
9.8'			
June 21			

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
- Light gray, fossil, argill., calcite bearing L.S. [cryst.] [Fracturing planes showing cleav.]
- Light gray, brecciated, argill., calcite bearing L.S. fossil, [cryst.] [Fractures Shows Cleavage Planes]

same as above but also massive L.S.

- med to dark gray, highly breccia., with massive zones, sandy, few fossils, argill L.S.

June 24

SAMPLE NO.	DEPTH		THICKNESS	DESCRIPTION OF BEDS
	From	To		KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
Drilling time 11:20 to 12:30 Total 10.2 Box #5	211.9'	222.1	10.2	- medium gray + tan brecciated, argillaceous L.S., [highly Brecciated] Waps. Pavenport
1:30 to 2:20 Total 10' Box #6	222.1	232.1	10'	① * 222.1' to 225' med. gray to tan brecciated, argillaceous L.S. ② 225' to 230.2' med. gray and tan [slightly brecciated at 225' & 226'] argillaceous dolomitic, L.S. containing calcite cry. * At 229.5' there is .1' of a shaly zone * At 228.3' there is a color change from Tan to med. gray ③ 230.2 to 232.1 - med. gray, argill., fossil. (~) L.S.

SAMPLE NO.	DEPTH		THICKNESS	DESCRIPTION OF BEDS
	From	To		KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
				<p>⊕ At. 254.5' - 254.9' large chert nodds.</p> <p>254.9' to 260.5' - med. gray sandy, cherty porous calcite stringers, dolomitic limestone.</p> <p>260.5' to 262.3' - gray sandy, dolomitic L.S.</p>
Drilling 9:50 to 11:15 Total 9.7'	262.3'	272'	9.7'	<p>med. gray sandy, shaly, cherty calcitic, pyritic, bearing shaly dolomitic limestone</p> <p>- med. gray ^{to olive gray.}, cherty, calcitic crystalline, pyrite crystalline bearing sandy, shaly dolomitic limestone</p>
Box 10				
11:20 to 12:30 Box 11	272'	282.0'	10'	<p>⊕ 272' to 275' same as above</p> <p>The last .3' grades into a dark shaly limestone</p>
				<p>Kenwood 275' DTIS</p>

SAMPLE NO.	DEPTH		THICKNESS	DESCRIPTION OF BEDS
	From	To		KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	275'			275' to 276.6' - light tan fine grained calcite cry bearing limestone. (Load structure)
				276.6' to 277.5' Same as above with Calcite cry. the size of the core.
				277.5' to 280' - Light tan fine grained, calcite cry [conformities with structure like load structure] limestone. [micrite]
				280.1 to 282.0' - Same as above except all broken up.
12:45 to 1:35	282.0'	292.0'	10'	282' to 285' - Light tan fine grained [micrite] calcite stringers conformities [load structures] limestone
10'				
Box 12				

SAMPLE NO.	DEPTH		THICKNESS	DESCRIPTION OF BEDS
	From	To		KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	285'	286'	1'	⊙ 285' to 286' Brown to tan porous calcite stringers to crystals [large med. grained Dolomite L.S.]
				⊙ 286' to 287' - light tan, fine grained (micrite), calcite stringers L. Stone.
				⊙ 287' to 288.3 Tan fine grained dolomite L.S. with large calcite cry at 287.7'
				288.3 to 289.2' Br, porous med grained, calcite dolomite L.S.
				289.2' to 292' - Same
				as 282' to 285'
1:55 to 2:35 <u>10.1'</u>	292'	302.1'	10.1'	292' to 295.5' Light gray to tan, fine grained, calcite stringers, conformities [Load structures, limestone]

Box 13

FOR FIGURING, CASING TALLY, ETC.

295.5 to 296.4

? $\xrightarrow{\text{Otis}}$
coggon \rightarrow

296.4

to

302.1

3:15

to

3:40

302.1' to

311.9'

Total

~~9.8~~ 9.8'

Box 14

? \rightarrow

FOR FIGURING, CASING TALLY, ETC.

* light tan to gray, fine grained
calcite cry, dolomite (oxidation) ?

* Brown to tan, ~~course~~ coarse
grained, Porous to Varves,
calcite crystals, sandy, Pyrite
bearing
Dolomitic Limestone.
(Calena) \rightarrow

302.1' to 310.5'

same as above
Porous.

310.5' to 311.3'

Light gray, med grained
calcite cry, Pyrite bearing
Black banding (?) limestone

311.3' to 311.9'

Light tan, dark banding
calcite plugs & Pyrite
bearing dolomite.

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
2:15 to 2:45 Box 18	341.9'	352'	10.1'
2:50 3:25 Box 19	352'	362'	10'
3:40 to 4:10 Box 20	362	372.1'	10.1'

cut box end
371.7'

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
Light gray, med. ^{to fine} grained argillaceous, dolomite (fossils)? quartz cry (few)
light gray, med to fine grained, ^{slight porous} argillaceous fossiliferous calcite and quartz bearing dolomite
362 to 368.6' - Blue-gray med grained, slight porous argill, (fossils few), calcite and qtz bearing dolo.
368.6' to 369.2' concave filling (qtz, calc, shale)
369.2 to 372.1' Same as above grades into tan or gray tan

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
9:55 to 10:40	372.1'	382.2'	10.1'
10:11			
Box 21			
time 10:50 to 11:20	382.2'	392.1'	9.9'
Total 9.9'			
Box 22			

DESCRIPTION OF BEDS

KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.

Light gray, ^{to Bl gray} med grained, slight porous, argill, fossiliferous, calcite and chert ~~etc~~ Pyrite bearing dolomite.

⊗ ≈.1 zone of Chert at 375'

⊗ green-gray bands of shale

⊗ 381.5' to 382.2' - porous - varveous

Same

Light gray to bluish gray, med grained, slight porosity with some varveousness, argill (Bl-gr) fossil (few) calcite - chert - Pyrite bearing dolomite.

⊗ entire core shows fracturing + cavity fill by shales. (Bl-green)

SAMPLE NO.	DEPTH		THICKNESS	DESCRIPTION OF BEDS KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	From	To		
11:30 to 11:55	392.1'	402.1	10'	Light tanish gray, med grained slightly porous & various, argill. fossils, calcite, chert + Pyrite bearing Dolomite (392.1' to 392.6')
10'				
Box 23				397.6' to 401.2' - tanish med (Brocken to dark gray, med to coarse (sandy) grained, small amounts of calcite with large amounts of chert + Pyrite bearing Dolomite
				401.2 to 402.1' - tan, med grained, argill, calcite, cherty Pyrite bearing Dolomite
				402.1 to 404' - grayish tan med grained, argill, fossiliferous (2), calcite, pyrite, bearing with interbedded cherty zones within the dolomite
12:10 to 12:45	402.1	411.9'	9.8	
9.8'				
24				

Contact?

→
Kan Kakeo

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
	404'	404.1	.1'
	404.1	411.9'	
1:05 to 1:45	411.9'	421.8'	9.8'
25			
1:55 to 3:20	421.8	432'	10.2'
Bot 26			

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.

Calcite

Same as before (402.1 to 404)

all - grayish tan, med grained argill (Bl-n. shale) fass., calcite & ~~pyrite~~ pyrite bearing with interbedded chert, Dolomite

Light tanish gray, med to fine grained, argillaceous, fass. calcite, and quartz bearing Dolomite. § 421.8' to 426.3'

* 426.3' * 432' (Orange spots)

Thinish gray, med, grained Porous, argillaceous (bl-gr) fossiliferous (coral) calcite bearing Dolomite

Orange - starts 429.8' Oxidiz.

Chem. stain

FOR FIGURING, CASING TALLY, ETC.

3.15
to

432'

4 ~~1.8~~ 9.8'

85X
27

FOR FIGURING, CASING TALLY, ETC.

Med. Gray, med to coarse
grained (sandy) Porous
friable, argill.
Dolomite (Class. Silurian)

July 1

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
2:30 to 3:20	441.8'	446.8'	5'
5'			
Box #28			
3:30 to 4:30	446.8	451.8'	
5'	4.8' of core recovered out of 5'		
Box 28			
4:40 to 5:20	451.8'	461.8'	10'
10'			
Box 29			

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.

med to dark gray ^{med to coarse grained} porous, ^{voids} argill, fossil, calcite cry bearing dolomite

med gray, coarse grained argill (some green-^{zr}) ^{Bedding planes} Highly porous, voids, fossil calcite cry bearing dolomite

Same as above [EXCEPT]

At: 457.1' to 459.2 - Reddish orange stain

Last calcite gained chert.

50. med gray, med to coarse grained, ~~argill~~, bedding planes highly porous, voids fossil chert bearing dolomite

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
5:40 TO 6:10 <u>Box 30</u>	461.8'	471.6'	9.8'
	At: (471) - sol. cavity or fracture taking lots of H ₂ O [Loss of core Recovered, 9.6' out of 9.8' (471.6)		
	<u>July 9</u>		

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
med gray, coarse grained Porous, fossil, cherty fractured (chert nod.) Dolomite
* Got hung up at \approx 300'
Started coring at 474.5'

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
10:00 TO 10:40	474.5'	484.1'	9.6'
Box 31	Recovered 9.1' out of 9.6'		
Loss of Circulation	Contact = No chert		479.7'
	(B mark)		

DESCRIPTION OF BEDS

KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.

⊗ med. gray - med grained porous, fossiliferous, chert nod., fractured, dolomite

From 474.5' to 479.7' - grade to more porous & darker gray with ~~no~~ chert 1.8' (almost none)
Foss. - ~, Crinoids

⊗ - 479.7' - 483.2' - Light gray, fine grained, slight porous, fossiliferous (~ + Crin) green shale interbedded, Pyrite bearing dolomite.

483.2' - 484.1' - same but darker gray & more fractured

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
10:55 to 11:25 Box 32	484.1	491.9	7.8'
		Recovered 7.8' out of 8.2'	
		At: <u>492.3'</u>	
<hr/>			
12:50 to 1:30 Box 33	492.3'	502.3'	10"

DESCRIPTION OF BEDS	
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.	
484.1 to 491.9 492.3'	
Med gray, fine to med. grained, slightly argill, foss (✓, cryn., worm burrows) green shale inter bedded Pyrite bearing, dolomite	
<hr/>	
492.3' - ^{496'} med. gray to tanish fine to med grained, med porosity, greenish gray shale zones, foss, Pyrite bearing, Dolo	
496 - 498.6' ^{502.3'} - grayish tan med grained, porous green ^{gray} shale, argill, calcite Pyrite bearing, foss, Dolomite	

FOR FIGURING, CASING TALLY, ETC.

4'55
to

532.4'

542.5'

520

10.1' total.

BOX

36

37

5'45

TO

542.5' - 552.5'

6'15
BOX

37

9.7' Recovered
out of 10'

36

FOR FIGURING, CASING TALLY, ETC.

tanish gray, med to coarse
grained, sandy, fossil
(coral, brach, cryn), Porous
Pyrite bearing, sol. cavity
filled with Qtz, cry, cherty
nodules bearing Polonite,
with a gr-gray bedded shale.

542.5 to 544.9' Same
with calcite in sol cavities

544.9' to 552.5' - grayish
tan, coarse grained, sandy
foss., Porous & Fractured,
Pyrite bearing, sol. cavity
filled with Qtz, Dolo-
with gray shale interbedded.

No chert!

Calcite

548.7 to 549.7 Almost a
Limestone!

FOR FIGURING, CASING TALLY, ETC.

6:30 To 552.5' - 558.9'

6.1' Recovered
out of 6.4'

Box
39

FOR FIGURING, CASING TALLY, ETC.

At 552.5 - 552.6' chert
rod.

Same as before
with gtz replace.

July 10

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
10:00 to 10:30	558.9'	559.4'	.5'
Box 39	559.4'	561.5	
<u>July 11</u>			
* 12:50 to 1:25	At ≈ 564	hit a	
Box 39 + 40	561.5	571.6	10.1'
~~~~~			
2:10 to 3:00	571.6	581.9	10.3'
Box 40 + 41	Kanke Edgwood. →		
	} Contact		

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
Same, becomes more sandy
Same - Recovered .6' out of 2.1"
cross. + Pipe drops, .2 ± .3"
Grayish tan, med grained, moderately porous, <del>well</del> fossiliferous, interbedded green-gray shale, highly pyritic, large chert nod. bearing Dolomite.
571.6 - 572.6' - Same
572.6 - 576.6' - tanish gray med to coarse grained, Porous, with solen. cavities, fossiliferous, interbedded shale (gray) few chert nodules.

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
	Edgewood		
	Mag.		
	581.9	589.8	7.9

CONTACT ← Edgewood  
Mag.

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
Pyrite bearing dolomite
576.6' - 581.9' - Green gray, fine to med. grained non-porous, bedded, shaly, sandy, shaly, dolomitic siltstone, pyrite bearing, siltstone
Same!
<del>Total</del> hole 590'

