

NAME North Marion Quarry STRUCTURAL SETTING _____

LOCATION T19S, R4E, Sec. 28, SENW DESCRIBED BY: Tim Carr

BOX NUMBER	SEDIMENTARY TEXTURE & STRUCTURES					BURROWING INTERVAL (FT.)	BASIC ROCK TYPE	Paleosol	Caliche	Evaporites	Chert Nodules	Carbonate nodules	RIPPLES	HORIZONTAL LAMINAE	LOW-ANGLE X-BEDS	HI-ANGLE X-BEDS	Vugs	DATE <u>8/19-20/97</u>
	CARBONATES																	UNIT <u>Chase Group</u>
	GN	PK	WKE	MUDST	EVAP													PAGE <u>1</u> OF <u>11</u> PAGES
CLASTICS					AVERAGE GRAIN SIZE												COMMENTS	
M	F	VF	SILT															
	U, L	U, L	U, L	U, L														
1						4												Spud just west of power line along south side of road
						8												3' of overburden
						12												2.5' of weathered Odell shale - (Not recovered from starter barrel)
						16												Red-Brown shale
						20												Green-gray shale
						24												Red-brown to dark gray mottled shale
2						28												red-brown gray red-brown gray
3						32												11. tan shale increasing in carbonate content downward
						36												vuggy carbonate (dropped on ground to 28')
						40												vugs 1/2" to 1.5" lined with yellow tan
						44												dk. gray. ms grading upward to tan
						48												Fractured

↑ Winfield LS
 Luta LS. Mbr.
 Winfield LS
 Cresswell LS Mbr.

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	CARBONATES																			8/19-20/97
	GN	PK	WKE	MUDST	EVAP															UNIT
	CLASTICS																			Chase Group
M	F	VF	SILT	AVERAGE GRAIN SIZE															PAGE	
U	L	U	L	U	L														2	
																			OF	
																			11	
																			PAGES	
																			COMMENTS	
3							36												1/2" vugs	
4							40													
4							44												1.5" nodule dark gray center + lt. tan rim	
5							48												Fractures	
5							52												gimestone	
6							56												Yellow tan sandstone	
							60												cemented	
							64													

Winfield Ls

Cresswell Mbr
Grant Shale Mbr
Grant Shale Stoval Mbr

3
4
4
5
5
6

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	CARBONATES																UNIT <u>Chase Group</u>
	GN	PK	WKE	MUDST	EVAP												PAGE <u>3</u> OF <u>11</u> PAGES
	CLASTICS																COMMENTS
M	F	VF	SILT	AVERAGE GRAIN SIZE													
U, L	U, L	U, L	U, L														
6																	mottled yellow - gry
7																	dark gry.
8																	yellow gry.
																	Apple green shale
																	Apple green shale
																	Apple green shale
																	Apple green shale
																	anyrite bed
9																	Collaps Breccia
10																	

Stoval Mbr
Doyle Shale

Gage Shale
MOR

Doyle Shale

mottled yellow - gry
dark gry.
yellow gry.

Apple green shale

Apple green shale

Apple green shale

Apple green shale

anyrite bed

Collaps Breccia

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	CARBONATES																		UNIT <u>Chase Group</u>
	GN	PK	WKE	MUDST	EVAP														PAGE <u>4</u> OF <u>11</u> PAGES
CLASTICS					AVERAGE GRAIN SIZE														COMMENTS
M	F	VF	SILT																
U, L	U, L	U, L	U, L																
							100												No recovery
							104												mudstone granstone
							108												vegs 1"
							112												lt. gray w/blk lamination
							116												gnst - ms interbeds
							120												
							124												
							128												green shale

Doyle Shale

Tawanda

Tawanda
Holmesville shale

10
11

11
12

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	CARBONATES																UNIT <u>Chase Group</u>
	GN	PK	WKE	MUDST	EVAP												PAGE <u>5</u> OF <u>11</u> PAGES
	CLASTICS																COMMENTS
M	F	VF	SILT	AVERAGE GRAIN SIZE													
U, L	U, L	U, L	U, L														
12																	
13					Fort Riley Mbr		132										laminite carbonate ms
13							136										gn - dk grey
14							140										gn.
14							144										
15					Fort Riley Main Lst		148										gn.
15							152										scattered anhydrite nodules
15							156										gnst.
16							160										

Berneston Limestone

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	CARBONATES															COMMENTS
	GN	PK	YKE	MUDST	EVAP											
CLASTICS					AVERAGE GRAIN SIZE	Paleosol	Caliche	Evaporites	Chert Nodules	RIPPLES	HORIZONTAL LAMINAE	LOW-ANGLE X-BEDS	HI-ANGLE X-BEDS	COMMENTS		
M	F	VF	SILT													
U, L	U, L	U, L	U, L													
19 20						196										lots of whole fossils
						200										gnst
						204										lots of evaporites
						208										
						212										
21 22						216										no - west
						220										
22 23						224										

Barneston Limestone

Mat Field Shale
 Florence
 Blue Springs
 MBF

24

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	CARBONATES																UNIT <u>Chase Group</u>	
	GN	PK	WKE	MUDST	EVAP												PAGE <u>8</u> OF <u>11</u> PAGES	
	CLASTICS																COMMENTS	
M	F	VF	SILT	AVERAGE GRAIN SIZE														
U, L	U, L	U, L	U, L															
	↑																Green-gry	
							228										Green	
							232										red gry	
<u>23</u>							234										gry	
<u>24</u>							236										red	
							240										Kursted grst-wkst	
	↓						244										H. gry grst	
<u>24</u>	Matfield Shale						248											wkst
<u>25</u>							244											
							252										dk gry	
							256										shell lag	
<u>25</u>							252											
<u>26</u>							256											

Blue Springs
Kinney LS

Matfield Shale

23
24

24
25

25
26

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	CARBONATES																8/19-20/97	
	GN	PK	WKE	MUDST	EVAP												UNIT	
	CLASTICS																Chase Group	
M	F	VF	SILT	AVERAGE GRAIN SIZE												PAGE		
U, L	U, L	U, L	U, L													9 OF 11 PAGES		
COMMENTS																		
26	Matfield Shale						260											dry gy
27																		
27	Kinney ls						264											tidalites
28																		
28	Wymore Shale						268											green-gry lenses
28																		
28	Wymore Sh.						272											green
29																		
28	Shroyer ls mbr						276											redish
29																		
28	Wrexford limestone						280											green caliche rich
29																		
28							284											kurst w/shale fill
29																		
28							288											wkst-pkst w/grain rich layers
29																		
28							292											lt grey g-nst-pkst
29																		

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	CLASTICS																	COMMENTS
M	F	VF	SILT	AVERAGE GRAIN SIZE														
U, L	U, L	U, L	U, L															
29																		nodules
30																		lt. grn gry whst - phst. whole fossils
							292											crse - grnd. grnt.
							296											erosional contact.
30							300											v. lt. gry grnt. - phst.
31							304											buff grnt.
							308											v. lt. gry grnt
31							312											gypsum laths
32							316											caliche nodule at base evaporites
32							320											large gnd.
33																		

Haverhill mbr.
Thremble Ls mbr.
Wireford Limestone

3

