

MEASURED SECTION NO. Clay 1133  
 LOCALITY #20309  
 SETTING \_\_\_\_\_

DATE 5/10/91  
 STRATIGRAPHIC UNIT Big Tujun  
 MEASURED BY AN & RM

	SEDIMENTARY TEXTURES & STRUCTURES			INTERVAL	ROCK TYPE, CONTACTS & ACCESSORIES	SUP TEXTURAL	MAT SUB	MATURE IM	DESCRIPTIONS
	GRAV	SAND	SILT CLAY						
	64 4	VCCM FVF							
2075									
2080									lt-tan, dolomite w/ f.-v. fine qtz sand: mottled - (burrowing?)
2085									pinkish grey, quartz-sand wackestone interbedded w/ white, poorly sorted, med-fine qtz ss in thin (< 1cm), irregular layers: dk green, silty, crumpled laminae both horizontal and at low-angle (< 10°) throughout: crumpled laminae may be algal
2090									dk. gry green, mudstone w/ isolated, coarse qtz sand & 70-80% qtz silt: upper contact sharp/lower contact gradational
2095									lt-tan sandy dolomite w/ algal laminae & stromatolites - appear to be algal mats - curled edges have qtz sand infiltrated into interspace: w/ medium-coarse qtz sand & isolated, rounded qtz granules at bottom - sharp lower contact
2100									purple & white, medium-very coarse qtz ss w/ white qtz granules; poorly sorted & moderately well rounded: low angle (10°) planar xbeds: possible, large (1cm diameter) nearly horizontal, tubular burrows marked by hematitic stain: calcite cement decreases down hole
2105									interbedded purple & white, medium-very coarse, poorly sorted qtz ss & purple/gry-fuf. qtz ss - scour-based, fining upward cycles w/ well-developed trough xbeds, planar xbeds, ripple scale xbeds & horizontal layers <u>2087</u> <u>green shale</u> layer: calcite cement in coarse material
2110									gry, v.f. fine grained qtz sandstone w/ isolated, granule layers & single, white qtz pebbles: faint horizontal laminae & ripple xbeds occasionally, brecciated by bioturbation: clay & organic drapes discontinuous: laminae become rarer & wispier down hole - possibly horizontal burrows w/ rims of black (organic) material

- mm - algal laminae
- SS - stromatolite
- - - - - mudstone
- (C) - calcite cement
- ~ ~ ~ ripple scale xbeds
- \* - organic debris
- (P) - pink
- W - trough xbeds
- /// - planar xbeds
- m - scour surface

88 2/2

MEASURED SECTION NO. Clay 1133  
 LOCALITY # 20369  
 SETTING \_\_\_\_\_

DATE 5/10/91  
 STRATIGRAPHIC UNIT Big Injun  
 MEASURED BY AV & RM

Interval	SEDIMENTARY TEXTURES & STRUCTURES			INTERVAL	ROCK TYPE, CONTACTS & ACCESSORIES	TEXTURAL MATURITY		DESCRIPTIONS
	GRAV	SAND	SILT-CLAY			SUP	SUB	
2110	64.4	VCCM FVF	SILT-CLAY					at 2110' - Possible burrows w/ organic coatings Overall the ss is a grey almost very fine-grained ss-very dirty-abundant auth. clay? coating grains w/ one layer thick clay drapes (see piece 2114' 4") for clay drape on bottom of piece - these layers cause horizontal fractures which may be due to unloading and is speckled w/ fine-grained (1mm) speckles of red w/ black (very) calcite cement
2115								at 2114' 5" - pyrite (5mm x 1cm) note 3% fine grain (1mm) speckles of red (siderite spots) at 2115' - a 3 inch thick zone of siderite (2-3mm diameter - see) at 2111' 6" - wisps of concave downward layers
2120								Missing 2118' 2" to 2119' a fine ss w/ one layer thick horizontal fractures following clay layers at 2119' 6" end of core
2140								Missing Core
2145								Note: the saw is leaving lots of saw blade marks on the core w/ lots of burnt oil on the thin slabs making determining of sedimentary structures difficult at 2145' start of core The ss is between fine and very fine ss. It is extremely dirty and rich in clay - making the ss appear very dirty - grey in color at 2146' 4" - note the very thin - one grain layer thick of horizontal fractures (unloading of core or true fractures?) at 2150' 2" - black round intraclasts of (shale?) w/ horizontal lamination end of core at 2151' 4" at 2147' - very faint bioturbation at 2145' 11" - one burrow? 1" X 3/16 or 2cm X 6mm horizontal laminations at 2145' 10" - ripples w/ crest - 1cm between crests
2155								note: grain size difference between ripples .5 mm high at 2145' 3" - bioturbation cutting horizontal lamination which is finer grained (2-1cm thick) note 2" thick zone of speckled red sec-oxidized pyrite - too fine grain to see

very weak calcite cement

1mm size white mica present

- ~ ~ ~ - ripple scale cross-bedding
- ~ ~ ~ - ripples
- - intraclasts of shale (?)
- == - horizontal lamination
- ⚡ - burrow
- /// - cross-bedding
- ⊗ - pyrite ⊕ - siderite