

29 24.5

Top H

silty gr. grn. silt. alt. (CO₂ w/ Tan and brn. mat. silty channels and fissures with fine brn. mixed with gr. silt and shale. 1 sp. white mat. in v. w.

(impregnated
w/ epoxy)

2926

petrified CO₂ w/ abund. mm sized wavy folia w/ open; oc. fractures filled w/ qtz silt (grn) + spar. brn. alteration at surface.

2928

shale, silty lamination, w/ wavy. w. cm amplitude w/ "clasts" CO₂, thin interstratified shale wavy through CO₂ mm to cm scale features fissures w/ spar and silt fill. "geopetal".

2932

Tan-gr CO₂ w/ wavy. fenestral-like wavy filled with grn. soft shale, no fossils, dense mud.

2934

silt. wavy mm size, wavy. w/ shale and spar fill, silt. crinoids, molds (molds), structures, sect. shale lam and thin wavy silt.

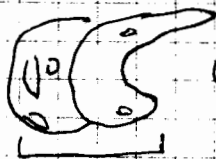
2936

↑ grn. silty shale deepened, ↑ fossils incl. crinoid rings (grans), crinoids. brown mud w/ clean cm. mother of CO₂ in shale CO₂.

36.5

base silty sh. with abund. mm sized dk brown clasts of CO₂ sect. through silty lam. sh., abund. contact w/ mud. clean tan - ls. brn. silt. - crinoids, phyllonit algae, ef. top 3 cm. with wavy wavy filled with qtz silt.

39.



(ef) abundant.

2mm

42

Tan to buff silt. wavy. to mud w/ fossils, forams etc. mud calc. w/ silt. matrix, patches of brn. microgranular silt. other w/ sm. fractures and wavy silt. microcrystalline, sm. fenestral folia in cm thick zone.

43

thick brn. coarse grain granitic - granitic w/ lt. grn. silt (wavy) mixed and layered, cm rhythmic bedded. ^{to dk. grn. shaley layers} _{crin. to 5 mm}

2946 as above diversity of fossils, fossil. show cleavage, cf. as fine comminuted debris and attached w/ *Valgac* (?) = *Osgia*
C. sp. cement.

47 fine grain size, more comminuted pieces, less clayey. *Osgia* com.
big patches replaced by ls. gr. L. XH. Chlo, with remnants of dissolved frags. (Chlo. frags) NO Ø or H

48



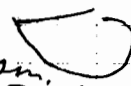
50 ↑ dk. gr. shale, → & washed. w/ scat. clinoid, or *Osgia*, ^{com} layers of more pure *Pr.* CO₂ with wavy layers (wavy sh.) fine comminuted frags. scat. through matrix. Silic. lenses in CO₂ - sp. to dk. gr. w/ fossils preserved.

54 bland. dk. gr. - grn. shale w/ moderate clinoid ooids (pseudom); or *Osgia* to sev. Ø cm., scat. sp. (fr.), ~~attached~~ thin shelled brach. common to sev. cm.

scat. pyrite silicates

(box of CO₂)

55.5 scat. comminuted fossil shells, or *Osgia* parts, silic. scat. rock (iron ore) - sponge specul. *Pr.* to grey (dark) color.

58 dk. brn. gr. washed. w/ artie. brach. abund. - putate w/ spines scat. through matrix, sm. thick sm. thin walled , well preserved *Osgia* in some, *Osgia* attached to grains, scat. sp. in matrix and attached to grains, scat. sp. replaced *Osgia* frags - *Osgia* scattered, scat. pyrite replacement of grains (in *Osgia*), and matrix shaly zone (in thick) w/ bland. clinoid.

to 62 silty, *Osgia* comm., *Osgia*, pyrite replacement common

2965

sp. brn. burrowed wackst., ^{and attached} of (fine), ~~to~~ ^{to} ~~moderately~~ ^{moderately} ~~pelletoid~~ ^{pelletoid} ~~around~~ ^{around} (2 mm) ~~spherical~~ ^{spherical}, sm. ~~dark~~ ^{dark} ~~water~~ ^{water}, ~~or~~ ^{or} ~~brzyan~~ ^{brzyan}, ~~or~~ ^{or} ~~fusulid~~ ^{fusulid}, ~~unusual~~ ^{unusual}, ~~sm. size~~ ^{sm. size} (burrows - ~~are~~ ^{are} ~~partially~~ ^{partially} ~~open~~ ^{open} ~~up~~ ^{up} ~~of~~ ^{of} ~~medium~~ ^{medium} ~~pellets~~ ^{pellets})

cut by solution pipes filled with green shale and rimmed with brn. ~~microfossil~~ ^{microfossil} ~~solids~~ ^{solids} and possibly ~~chromite~~ ^{chromite} ~~patches~~ ^{patches} of ~~green~~ ^{green} ~~chromite~~ ^{chromite}

↑ fossil or go lower, ~~brzyan~~ ^{brzyan}, ~~fusulids~~ ^{fusulids}, ~~brzyan~~ ^{brzyan}

Burrows mainly pellets (and ovoid) w/ ~~sp. cement~~ ^{sp. cement}



Mineralization along wall of ~~fracture~~ ^{fracture}, mainly ~~green~~ ^{green} ~~replacement~~ ^{replacement}

66 Ab. w/ burrowing in pellet wackstone

solen. cavity filled with $\frac{1}{8}$ - $\frac{3}{16}$ mm ~~qtz. ss.~~ ^{qtz. ss.}, rimmed by ~~buff~~ ^{buff} ~~inter~~ ^{inter} ~~cheese~~ ^{cheese} structures ~~microfossil~~ ^{microfossil} ~~CO₂~~ ^{CO₂}

lower pellet w/ fossil. ~~scat.~~ ^{scat.} ~~ab. qtz.~~ ^{ab. qtz.} ~~int.~~ ^{int.} ~~lensing~~ ^{lensing} (alteration)

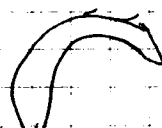
70 pellet wackst., ~~brzy. ab.~~ ^{brzy. ab.} w/ ~~gr. stn.~~ ^{gr. stn.} ~~moderately~~ ^{moderately} ~~fracture~~ ^{fracture} ~~con~~ ^{con} ~~size~~ ^{size} ~~filled~~ ^{filled} ~~with~~ ^{with} ~~gr. shale~~ ^{gr. shale}, ~~sm. part~~ ^{sm. part} ~~with~~ ^{with} ~~c. calc. spar.~~ ^{c. calc. spar.} ~~last~~ ^{last} ~~CO₂~~ ^{CO₂} ~~in~~ ⁱⁿ ~~sm. layer~~ ^{sm. layer} ~~fractures~~ ^{fractures}.

Burrows, ~~moderately~~ ^{moderately} w/ ~~sm.~~ ^{sm.} ~~alteration~~ ^{alteration} ~~following~~ ^{following} ~~them~~ ^{them}.

72 ↑ fossil density, ↓ pellets, but broken fossils ~ 1 mm and less ~~w/~~ ^{w/} ~~shale~~ ^{shale} ~~solen.~~ ^{solen.} ~~features~~ ^{features}

75 soln. features: ~~moderately~~ ^{moderately} ~~or~~ ^{or} ~~mm~~ ^{mm} ~~sized~~ ^{sized} ~~vugs~~ ^{vugs} ~~with~~ ^{with} ~~gr. shale~~ ^{gr. shale} ~~fill.~~ ^{fill.} ~~w/~~ ^{w/} ~~green~~ ^{green} ~~shale~~ ^{shale} ~~lam.~~ ^{lam.} ~~for~~ ^{for} ~~communities~~ ^{communities} ~~fossil~~ ^{fossil} ~~frag.~~ ^{frag.}, ~~scat.~~ ^{scat.} ~~EF~~ ^{EF} (free)

76 microphyllite shale lam. ~~abund.~~ ^{abund.} ~~in~~ ⁱⁿ ~~dense~~ ^{dense} ~~lime~~ ^{lime} ~~mud~~ ^{mud} (tan) ~~with~~ ^{with} ~~spars~~ ^{spars} ~~fossil~~ ^{fossil} ~~frag.~~ ^{frag.}

2979 sect. brk artu con size  some lower w/ spine
 spar blebs m m size fairly size.  muted(?)
 fairly clear tan mud., sect. sp. att. molting - no apparent
 textural differences

79-82 spar blebs, elongate, sm. wavy (con size), $\rightarrow$ phylloid algae;
 sect. EF, free and att., comminuted fossil frags in
 mudst. alternate or zone with phylloid algae
 sect. vertical oil str. fractures

83 brn. wackst., no algae, & EF, & lg. brk - am silic
 & mudst., & fault.
 sect. spar blebs (m m size) plate-like molting 
 sect. red flake (organic) not curved
 sect. quartz (w/ sp) sm. grain replacement
 still mostly comminuted fossil debris

85 brn. - dk brn. wackst. MA
 sect. spar blebs - molting w/ attached encrusting forams
 red flake, sect. quartz
 stand. silt sized fossil debris as matrix
 sec. wht. chert replacement

86 dark more conc. and brk, pyritized dk sp. brk. chert band.
 free and attached encrusting forams
 up to 20 mm EF



86.5 dk. sp. shale with rounded ovoid clasts of mixed lime mudst.
 with composite fabric - calcite-like, shale matrix w/
 dispersed mix of sp. and type of clasts. m m to cm size
 below which is dolomitized mat. void and pellets, grey color
 int. (alt.), shale filler fissure

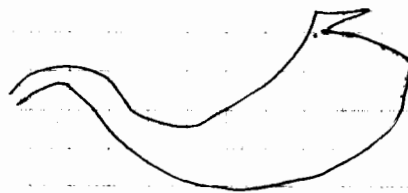
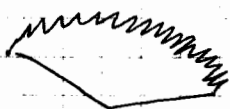
88 oolite 0.2 - .3 mm; vertical pass w/ oil str. and w/ mudst.
 of voids alongside, vertically oriented grey patches w/ some cavities
 and c. dolomite fill
 20-30% voids through out of rock dolomitized (c. dol.)

89 more dolo. ooids, scat. chert replace crinoid,
patchy gr. of l. dolo filled w/sgt amid gray shale
30-40% patches of brown micaceous spar (inter grain)

92 1 coated fossil frags, & ooid grain size, muddy matrix, scat dk gray
stylotitic shale lam., silty crinoid

96 (btm. of core)

productid spines, crinoids, bryozoan - ramae; belemnite
fragments
wavy shale lam (silty also)



sev. cm.
(on core face)

2913.5 (base G (C₂)) v/dk gr-ben lime mud., w/ argil., scat. sf (free and attached) scat. erinoid and brachiopod frags (mar. size) dk. gr. rounded, ovoid molluscs in matrix w/ dispersed fm. pyrite - barite (?), occ. pyrite clusters
 dk brown spec - calcite (?) or phosphate

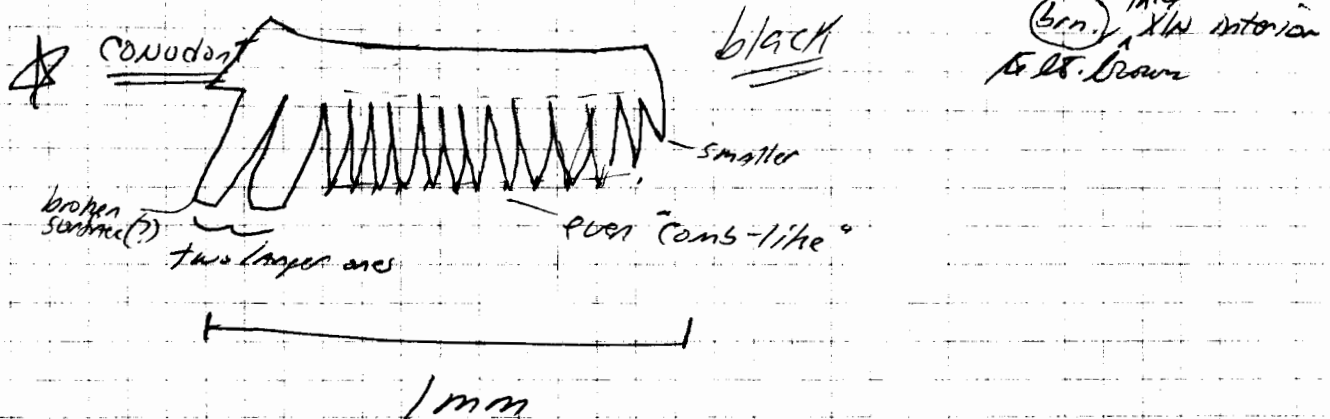
2915.5 (G') Top few cm. to fossil rock - packed brachiopods, molluscs, erinoid (part siliceous black-white), scat. encrusting forams, byzantine fragments - all generally dk. brown color, matrix silty dk. gr. w/ dispersed pyrite, occ. fossilized.

Lower section less fossils, lighter lime mud (brown-gr.) scat. fine encrusting forams, etc., also brach., erin., byzantine, some molluscs frags, an encrusting scat. pyrite.

2775 dolomitized ^{thin} tan to buff wackst., byzantine, molluscs
 vertical elong. wags filled w/ calc. spar, on top brown filled with oolite
 matrix mud granular ^{fine} w/ palety (20%) in strand.

2781 oolite, 50% molluscs, gr. mat. lt brown
 Top 2 cm of core contains 3 mm thick layer silty oolite (white) in brown cement, tightly packed, next cm. tightly packed light cemented with lath-like of compressed oolite

2806.5 fissile, firm black shale, relatively unfossiliferous, fresh break along bedding is "pock-marked" with 9 mm rounded "phosphate concretions" (?)



2808 dk. gr. shale, brach. debris, cm (4) size brach. valve

