IGS #5 OBS-08-20 ABCD-1 Center Point bridge

Cored 63' — —

Box #	Interval	Box #	Interval
1	63–72.4	19	254.3–264
2	72.4–82	20	–273.3
3	82–91.8	21	–283
4	91.8–101.2	22	283–293.9 Gap
5	101.2–110.9	23	–303.6
6	110.9–119.3	24	–313
7	119.3–129.4	25	–322.6
8	129.4–139.2	26	–332
9	139.2–149	27	–341.5
10	149–158.4	28	–351.3
11	158.4–169.2	29	–360.9
12	169.2–196.8; cuttings,	30	–370.5
13	196.8–206.3 173–191	31	370.5–380.2
14	206.3–216	32	380.2–389.8
15	–225.6	33	389.8–399.6
16	–235.3	34	–409.2
17	–245	35	–418.9
18	–254.3	36	–428.4
	Pleist 0–39.3	37	428.4–433

Ls. breccia; frags. of dom. C.V. w/ minor Dav. in shale matrix; sty. sutures between brec. frags. 63–63.5

Ls., v. pale yel-brn to brn-gr.; f; few brachs, brn. crin. oss.; high-angle shear w/ slickenside at 40° L4. 63.5–65.6

Ls biostrome, brn-gr; 55° slick. as marked, bedding also at 55° 65.6–68.7

Ls. breccia; Tr. of Dav. lith in upper 2', with weak sty seams between a few brecc. frags; ~5% C.V., 50% Dav. 70.5–73.5

sdy clay matrix in lower 0.1 with prom. sty seams between frags.; 55° shear w/ slick. as marked; 68.7–73.6

Ls. megabreccia; olive gr. to brn gr. C.V. w/ banded yel-brn, dk brn gr. calc dol (S.G.?, not petrolif) set in C.V. 73.6–76

Ls, brn-gr; f; mod foss; few scatt Dav. brecc. frags in upper part, abund sty; bottom 1.6 strongly brecciated, w/ abund. Dav. frags 76.–79.3

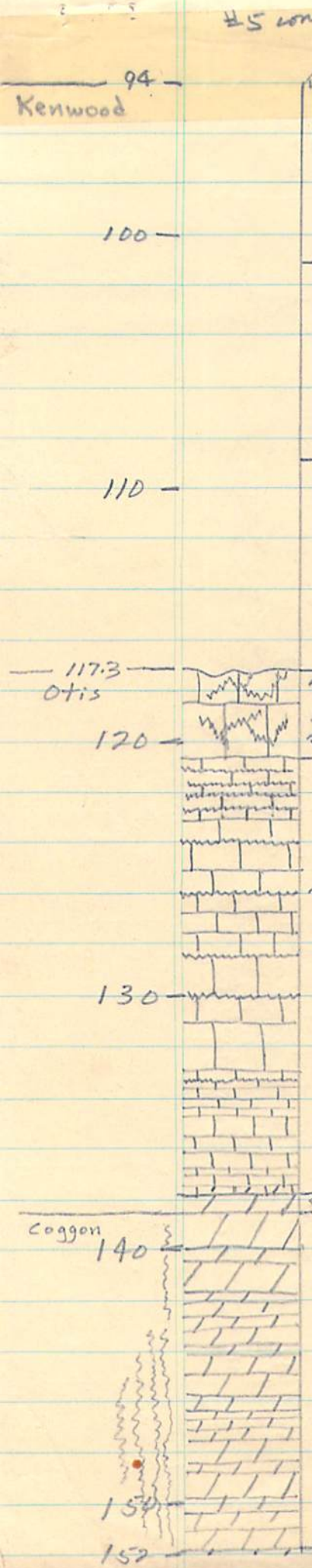
Ls; v. pale yel-brn, f; v. dolo., tr. of crin. oss., tr. emb. sd, v. faintly brecciated – tr of Dav. frags; wavy zones of S.G. lithology; strong petrolif odor 79.3–80.3

Dol., yel-gr, to v. pale yel-brn, med-f silt grade, v. petrolif.; v. weak banding; few scatt dusky yel-brn. carb. lam.; v. calc. 80.3–85.2

Ls, yel-gr. 5Y 7/1, L, v. stylolitic in upper ½, weakly brecc. in lower ½ 85.2–86.7

Ls., v. pale org., v. f, s/l. to mod. dolo; petrolif; Zone of stylolitic, unalt. yel-gr. Ls at 88.5, 90.3 to 92.8; lower 1' is pale yel-brn calc dol., s/l por, few emb frags; weak 45° banding; 45° contact by Kinderhook 86.7–94.0

#5 contd.



Ls. breccia of rounded S.G. frags in sdy. sh. matrix; 94.0 - 94.3

Ls, yel-gr (5Y 8/1), v.f., arg., sli. dolo, v. sdy (qtz & cht. grains; 94.3 - 94.6

Ls., pale yel-brn, contorted, foss. (all C.V. except for 1" block of sdy Ken. at base 94.6 - 95.5

Ls., v. pale yel-brn, f., weak sty. banding.; all S.G. except for squeezed in zone of sdy Ken in top 0.3'; 95.5 - 96.5

Ls. breccia, w/ blocks & wisps of S.G, sub-ang to ang. frags of Dav. & foss. C.V in sdy, arg. matrix; v. shaley & sdy matrix in lower 0.3'; mixed mega. & micro-brec. 96.5 - 98.2

Sh., olive gr, mixed, banded & swirled w/ intraclasts of yel-gr., f, arg., calc. dol (~45° angle); sdy zone near middle; dom. uniform olive gr sh in lower 0.7'; 98.2 - 99.8

Ls., pale yel-brn. & olive gr, matt, foss., all C.V.; 45° slick at base 99.8 - 101.2

Macro brecc. of Dav., C. & S.G. in shaly, variably sdy matrix. 101.2 - 102.5

Ls. as in 99.8 - 101.2, w/ 55° slick at base. 102.5 - 104.4

Mega & micro brecc., mixed, w/ frags of Dav., C.V. & S.G.; bottom 1.4' is solid block of pale yel-brn. petrolif dol. w/ much calcite in opt. cont. & prob. is S.G. (bedding is at ~60° w/ slick. at base 104.4 - 108.9'

Sh., lt gr. & v. lt. olive gr, matt; rounded clasts in upper 1'; dom. med. lt gr. sh below 112'; sdy 115 - 115.5'; → arg., sdy, calc dol 116.7 - 117.2; bottom 0.1' is v. sdy sh 108.9 - 117.3

Ls, pale yel-brn w/ yel-gr. matt zones, L - v.f.; dessic. fracs & irreg voids filled w/ sparry calcite; dissolution voids filled w/ Ken non-sdy sh; scatt. Emanuella w/ good geopet, occas. gast.; few oct.; irreg sty.; pelletal zones in lower 1' 117.3 - 120.6

Ls, v. pale yel-brn, SL - v.f, dom. pelsparite; closely-spaced hor. sty in upper 2.5'; occas. sty in middle portion; Abund dk yel-brn carbona. partings 133.3 - 136.6; lower 0.5' s/i. dolo. 120.6 - 137.8

Dol., dk. yel-brn, med. calc.; transition zone; carbona. parting at base 137.8 - 138.5

Dol, v. pale yel-brn, med, sacc.; s/i. por in upper 4', v. por. & sm vugs 144 - 151.6; few splotches of calcite; abund. Emanuella molds 138.5 - 151.9

vert. frac. 145.6 - 150.4

Mod. Petrolif odor throughout

#5 contd

Dol., pale yel-brn, v.f.-s.l.; carbona. lam in upper 1/3; 151.9-152.5

152 — Bertram

152.5 ← vert. ice xtal pattern @ 152.9

Dol., yel-gr to lt. gr., f-med., scatt. emb. sd.; mottl. w/ yel-gr. v. arg. dol.; 0.02 band of med. gr. sh. at top; 152.5-156.5

Dol., olive gr., crse, v. sdy, mixed & mott w/ med. gr. sdy clay; more clayey in top 0.3' & bottom 0.2'; irreg. sty.; 156.5-158.6

160 —

Dol., yel-gr, f., few scatt. sd. grains, traces of mixed lt. grn. clay; 0.1' of v. sdy clay 163.0 to 163.1'; 158.6-163.5

Grn-gr. v. sdy sh. mixed w/ Sil. cht rubble (silicified Pentam, Favosites; 163.5-~171

Sil.

cht nod. w/ unalt. dol. contact at 169 (no solution, no abrasion)

170 —

Dol., yel-gr (5Y 7.5/1), f, v. sli. por, scatt. wh cht nodules

S:1

Core Gap (drill cuttings only) sh. from 163.5 to 171 started caving, reamed to 197 & set NX casing.

180 —

190 —

Dol., lt. gr & v. pale org., mott., f-v. f., mod. por. packed w/ v. sm. & lg. "telescoped" brachs, also v. abund sm. crin. columnal molds; also v. pale org below 197, w/ only scatt. brachs; cht is yel-gr, subtrip., irreg nodular 191-202.8

200 — ← high-angle frac.

Dol., med. blu-gr, v.f., sli. por; nod. cht (blu-gr w/ wh rims) 202.8-216

210 —

210 —

Dol., v. pale org., f, w/ v. abund wh to yel gr. S. & T nod cht (cht is at 0.1 to 0.3" intervals), dol. has only scatt., v. sli. por zones; massive dol w/ scatt. sty seams; breaks in core are at cht-dol contact except where very stony sty are present and except for the few planar bedding breaks shown in graphic column; lower 0.5' is med lt. gr dol w/ dissem. pyrite; 216-285.2

No water from this interval

220 —

230 —

240 —

250 —

260 —

268 —

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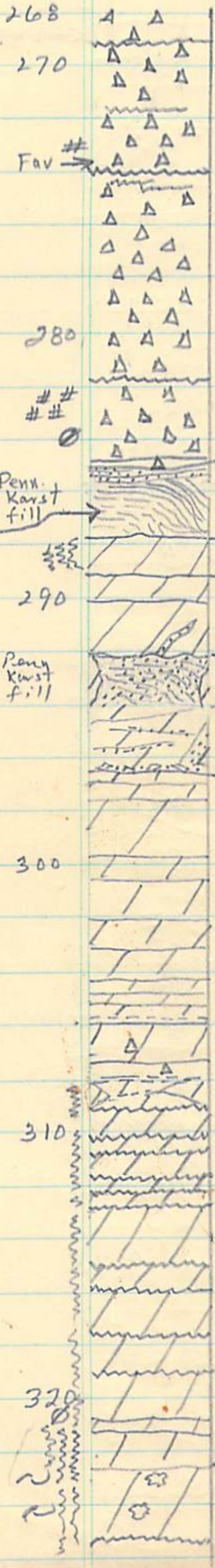


285.2

Sh, med. dk gr., sli. mica, intercalated w/ lt. gr. arg., mica, sls w/ carbonaceous flecks, grading to v. silty med. gr. sh. laminae sub-horizontal to v. high-angle
285.2 – 287.7

Dol., lt. blu-gr., med., v. por
287.7 – 289.2

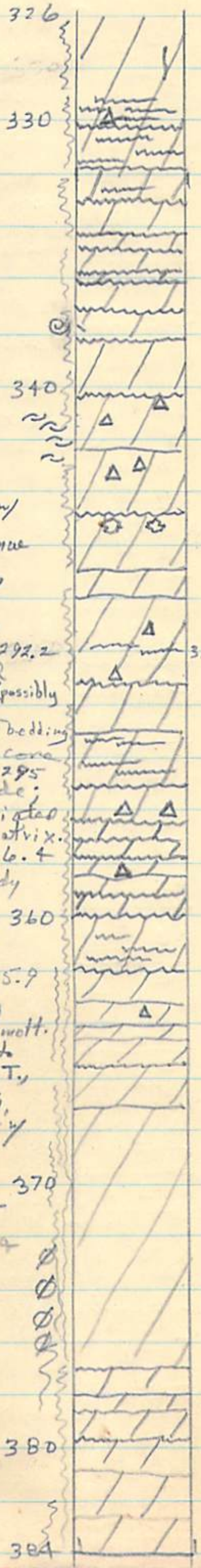
Dol., yel-gr., v. f., lower 0.4' w/ high-angle frac healed w/ Penn. 289.2 – 292.2

SS., v. f., clayey, silty; w/ wall block (shear zone?) of dol. (possibly a breccia block) 292.2 –

Dol., yel-gr., v. f.; mega brecc?; bedding at ~45°; Penn. partings bet. core segs; high-angle shear at 295 w/ Penn arg v. f. Ss on one side; basal 0.1' finely brecciated w/ Penn shaly Ss as matrix.
292.2 – 296.4

Dol., yel-gr., f., v. tight; edy med. gr. sh partings on bedding planes; lower 0.5' is lt. grn-gr sh w/ sdy zones
296.4 – 305.9

Dol., v. pale yel-brn to v. pale org, weakly mott. w/ med.-lt. gr., f-med, sli. to med. por.; scatt. wh, T., nod. cht as on graphic.; broken zones in upper 4' w/ lt. grn-gr + brn-gr sh; scatt. vugs; calcite-lined vugs @ 323.; incip. vert frac. 327 – 328.3
305.9 – 384



brachs w/ rext. calcite

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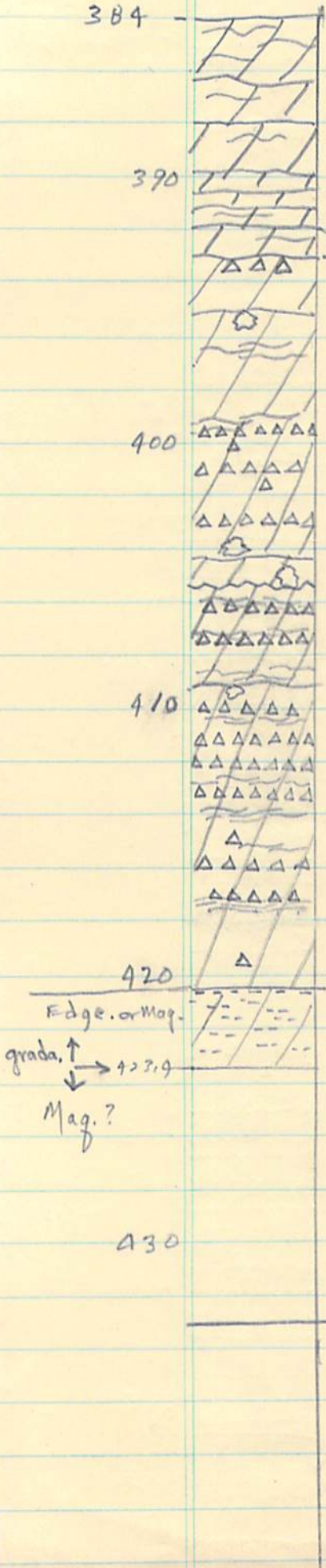

384 – Dol., yel-gr. to v. pale yel-brn, f-med, por zones; scatt. incipient grn-gr sh partings; few open vugs
384–393

Dol, v. pale yel-brn, m–f, v. por. zones; scatt. bedded cht (gr-wh, Tupper & lower rind, & internally); minor nod. cht.; zones of abund. wavy grn-gr. incip. sh partings
393–420.6

420.6 – 0.1' gr-grn sh → dol. gr-grn, v. arg. v. silty, weakly mott. w/ gr-grn clay.
Variable dol-sh – dol sequence, v. silty, blk phos grains

433 TD