

- ① Ambassador - Stribling ✓
- ② Stephens - Heris ✓
- ③ Hajam
- ④ Pan Am A-1 Ozy ✓
- ⑤ Pan Am USA - C. S. Smith ✓

Book (4)

**Well samples
Keep**

Pope

① Continental - Sorrels - 28-8N-18W

#307 TD 6132 ⁵³⁰ 3 boxes

^{samples ordered} Good well - probably end in Morrow?
sdy col ls @ 5850 + (ling) ⁵⁵ @ TD

Pope

② Mobil - Davls 34-10N-19W

^{? samples} Ordered 4123 TD

Faulkner

③ * Humble - Bahner 12-8N-14W

#303 ^{samples} Ordered 4-3207 TD 2 boxes

Good well - TD C Hill??

Conway

④ Humble - Kaufman 12-7N-17W

? 6/3 ^{samples} Ordered TD in visit
5538 - dk-gy con ls
- Miss??

white

⑤ Aladdin - Crickett 2-7N-8W

? 3166 TD

conway

⑥ * Ark-Lia - Darling 3-7N-15W

#505 (2 boxes) ^{samples} Ordered 0-3923 TD Ends in med ss
Free drilling

Pope

⑦ * Sinclair ^{samples} Ordered Hogan 8-9N-18W

#475 (2 boxes) 30-2738 TD - C. Hill?

⑧ } Stephens - Hovis ^{Crowley Fan/Kmer} 30-8N-12W
done } # 266 4000TD

⑨ * Sunray ^{samples} ~~entire~~ - Wright white 16-8N-6W
#605 Goodwell 5762TD in Ord (P) 1/3
Samples 10' - 5762

⑩ Ambassador - Strubling white 14-6N-8W } Done
302 3 boxes 0-454TD

340 - 360 ~~ss, med/lt gy / rt-fgr;~~
Do not type ~~40% med dk gy, silty mic ss~~
(Samples unreliable)

5556 casing - Samples from 0-560 unreliable

560 - 700 sh, med dk-gy, silty, mic
(very poor samples)

700 - 780 silty, med-gy, mic, shaly
(very poor samples)

- Good samples begin

780 - 800 silty, med-gy to med dk gy
v mic, clayey, v sl limy

800 - 880 sh, med dk gy, v silty, mic

880 - 920 silty, med dk gy, mic, clayey

920 - 950 silty, med lt gy to med dk gy, mic
clayey, sl limy

950 - 960 silty, med lt gy, mic, sl limy,
v ss dy

960 - 972 ss, med dk gy, silty, clayey,
sl limy P-med gr; clay
matrix; interbedded w/ dk-gy
mic sh

972 + 1030 silty, med-gy, mic; v sl limy
in upper part; wh calcite veins @ 1020

- 1030 - 1085 Sls, med dk gy, mic, clayey, non-lim
 Pa 10857
 Pm 1085
- 1085 - 1150 Sh, med dk-gy, P-mic, silty
- 1150 - 1260 Sh, dk-gy, clayey; ~~st silty~~
 wh^{rein} gts; non-lim; trace
 siderite & pyrite
- 1260 - 1285 ss, med dk-gy, v lim, v f-gr
 crin
 (sample 1275-90 - gts & clay
 that looks like fault gouge --
 dk-gy sh-slickensided)
- 1285 - 1315 Sh, dk-gy, clayey; slickensided
 in upper part, non-lim
- 1315 - 1340 ss, med-gy, silty, v f-gr,
 (poor samples)
- 1340 - 1370 Sls, med dk-gy, mic, clayey
- 1370 - 1500 Sls, med-gy, mic, c-gr
- 1500 - 1580 Sh, dk-gy, mic, clayey to silty
- 1580 - 1590 Ls, med-gy, silty, v f-gr,
 fiss, porous
- 1590 - 1683 ss, dk to med-gy, mic silty, silty, v lim,
 v f-gr

- 1683 - 1750 Sh, med dk gy, mic, sl silty?
non-limy
- 1750 - 17~~55~~⁵⁵ ss, med lt gy, silty, v sl limy,
v f gr
- 1755 - 1785 - Sh as above
- 1785 - 1790 ss as above
- 1790 - 1903 ss, dk-gy, v f mic, clayey to silty;
~~sh as above~~ trace siderite
- 1903 - 1990 silty, med lt gy, mic, v f sdy
C-gr
- 1990 - 2115 silty, med-gy, mic, clayey
interbedded w/ dk-gy mic ss
- 2115 - 2160 Sh, med dk gy, mic, silty,
v sl limy
- 2160 - 2255 ss, med lt gy, silty, sl limy,
v f gr
- 2255 - 2315 silty, med-gy, mic, v sl limy, v f sdy
- 2315 - 2520 Sh, med dk-gy, mic, silty,
non-limy to v sl limy
- 2520 - 2530 ss lt gy, v sl limy, f-gr
- 2530 - 40 Sh, med dk gy, f-mic, clayey
- 2540 - 2549 ss, med lt gy, silty, sl limy
v f-gr

2547 - 2590 sh, med dk gy, v f mic, sl limy, clayey

2590 - 2595 ss, lt gy, sl limy, v f-gr

2595 - 2668 sh, dk-gy, mic, ^{clayey to} v sl silty

2668 - 2675 ss, med lt gy, sl silty, sl limy
v f-fgr

2675 - 2780 sh, dk-gy, v f mic, clayey,
non-limy

2780 - 2810 sh, dk-gy, v f mic, sl silty,
v sl limy

2810 - 2887 silty, med dk gy, ^{mic} clayey, sl limy,
interbedded w/ dk silty sh

2887 - 2937 ss, med lt gy to med gy, silty,
limy, v f-fgr; trace mdgrs

2937 - 2988 sh, dk-gy, silty, mic

2988 - 2993 ss, med-gy, silty, sl limy,
v f-fgr

2993 - 3183 sh, dk-gy, ^{mic} clayey to
sl silty; non-limy

3183 - 3198 ss, med-gy, mic, silty,
sl limy, v f^f-gr

3198 - 3285 sh, dk-gy, mic, clayey to
sl silty

3285 - 3305 ss, med lt gy, sl limy, vf-gr
trace med grs

3305 - 3570 sh, dk-ry, clayey, ^{to sl silty.} f-mic;
non-limy

~~3385 - 3570 ss, med lt gy, lollgy, sl limy
vf-gr~~

3570 - 3700 sh, dk-ry, silty, v sl limy
Thin beds lt gy vf-gr ss
@ 3645, 3668, 3683-86

3700 - 3890 sh, dk-ry, clayey to sl silty

3890 - 3988 sh, dk-ry clayey to sl silty,
splintery fracture in part
non-limy

3988 - 4065 ss, med-ry, silty, sl limy,
vf-f gr; trace med grs;
clayey matrix; interbedded

PG ??
ch .1 with dk-ry silty sh

4065 - 4180 sh, dk-ry, silty

4180 - 4330 sh, dk-ry, clayey to
sl silty; splintery
fracture in part
(poor samples)

4330 - 4430 Sh, dk-gy silty, laminar
med lt gy arg silts.

4430 - 4510 Sh, dk-gy, clayey to
sl silty; iron lining

4510 TD striking

(Most samples of this well poor)

Stephens Prod Co

E-log 2305 - 4000

J. A. Horis No 1

Fauquier County, VA

30 - 8N - 12W

Samples + boxes

0 - 3990

Started w/ box #3 @ 2000

2000 - 2050 sh, dk-gy to blk, clayey,
non-limy; in part, granular,
but 90% smooth

2050 - 2100 sh, dk-gy to blk, clayey,
non-limy; dk-br siderite

2100 - 2110 ss, med-gy, v silty, ^{clayey} mic,
v fgr; v sl limy

2100 - 2115 sh, dk-gy to blk, clayey, ~~to~~
silty

2115 - 2130 slts, med dk-gy, v f mic,
clayey; interbedded w/
dk-gy sh

2130 - 2140 sh, dk-gy clayey to
~~sh~~ silty

2160 - 2190 Sh, dk-gy, clayey, non-limy

2190 - 2250 Sh, dk-gy, clayey to mic &
silty; vsl lim, a part

2250 - 2400 Sh, dk-gy to blk, clayey,
non-limy; trace siderite

2400 - 2450 sb, dk-gy, v f mic, clayey
to sl silty

2450 - 2480 Sh, dk-gy ^{to blk} clayey; trace
siderite

2480 - 2530 Sh, dk-gy to blk, clayey, s/
silty; ^{trace} s/ lim & v f
shy layers - sd in
clay matrix

2530 - 2602 Sh, dk-gy, clayey, v sl
limy; siderite
Ting pyritized garnetite 2580-90

2602 - 2604 slts, med-gy, clayey, s/
limy, v f sdy

2604 - 2620 Sh, blk, clayey

2620 - 2622 slts as above

2622 - 2630 Sh as above and ^{Abundant bentonite,} it
Y greenish-gy, soft, inclusions

2630 - 2683 sh, dk-gy to blk, clayey,
non-limy ^{much} (Bentonite)
slump to 2650 - 60 - 70 - 80

2683 - 2710 silts, med dk-gy, v silty,
slimy

2710 - 2730 silts, med-gy, mic, v silty,
v silimy

2730 - 2780 ss, med-gy, mic, v silty,
v f gr; v silimy

2780 - 2790 silts, med-gy, ~~mic~~,
clayey

2790 - 2845 silts, med-gy to med
dk gy, mic, v silty

~~2810 sh, dk-gy to br gy, silty~~

2845 - 2862 ss, med lt gy to med gy, silty,
v limy, ^{vf} f-gr scattered
med-c gss - foss frags

2862 - 2875 sh, dk-gy, clayey,
v silimy

²⁸⁸⁹
2875 - 2903 ~~ls~~ ss, med lt gy, v silty
v limy, foss, f-med

2889 - 2892 ^{DK-25}
sh break 2889 - 2892

2892 - 2903 ss, med-gy sl lining, silty,
vf-fgr

2903 - 2915 slts, med-gy, sl lining, v/sdg

2915 - 2925 ss, med lt gy, silty, mic
sl lining, vf-fgr

2925 - 2940 ss, med lt gy, mic, silty,
f-gr

2940 - 2955 slts, med-gy, mic, sl lining,
vf sdg

2955 - 3025 ss, ^{med lt gy to} med gy, mic, r silty,
sl lining, vfgr

3025 - 3100 slts, med-gy, mic, sl lining,
v/sdg
clayey, c-gr

3100 - 3328 slts, med-gy, mic, sl lining,
clayey to c-gr

3328 - 3340 sh, dk-gy clayey

3340 - 3380 slts, med-gy, mic, clayey,
v/sdg

3380 - 3413 sh, med dk gy, mic, r silty
non-lining

3413 - 3565 silt, med-gr, mic, v s/ling,
clayey to c-gr; beds
dk-gr mic sh

3565 - 3784 sh, med dk gr, mic, silty,
non-ling

3784 - 3830 ~~sh~~ ^{ss} silt, med-gr, mic, ling,
~~vs. sh, c-gr~~ vs. sh,
vf-fgr; trace med-grs;
interbeds of med dk gr, v s/dz ^{c-gr} silt
trace crin

3830 - 3863 sh, dk-gr to silt, clayey,
non-ling -- splintery to ^{rectangular} ~~angular~~
fracture

3863 - 3913 ss, med-gr, mic, vsilt, sl
ling, vf-fgr

3913 - 3926 sh as above

3926 - 3945 ss, med-gr, mic, vsilt,
sl/ling to ling, vf-fgr; trace
med-cgrs; silty layers + beds

3945 - 3963 silt, med dk gr, mic, sl/ling,
clayey to c-gr

3963 - 70 ss, med-gr, sl lim, vsilty
rf-fgr

3970 - 3980 sits as above

Last sample 3970-80 - Hovis

Sinclair O & G

April, 1964

Richard Hogan #1

8 - 9N - 18W

Pope County Ark 2736' TD

0-30 NS

30-40 ss, weather lt br, clayey, f to c
 gr; ~~gtz grains; maybe~~
 Qat in part? =

40-55 ss, lt gy, clayey, v f to f gr

55-90 silts, med dk-gy, mic, beds
 dk-gy silty sh in part;
 c-gr gtz silts in part

90-100 As above but ~~no~~ 50% dk-gy
 fissile sh

100-155 silts, med dk gy, mic, clayey,
 c-gr; interbeds dk-gy sh

155-160 ss, med lt gy, clayey, f. gr

160-180 slts, med gy, mic, v. sh, c-gr

180 - 200 sh above + dk-gy sh partings

200-225 slts, med dk gy, mic, clayey
shaly, c-gr

225-250 sh dk-gy, mic, silty;
interbedded w/ med dk gy mic,
clayey c-gr slts; trace siderite

250-280 slts, med dk gy, mic, clayey,
c-gr; interbedded w/ dk-gy
silty sh; trace siderite

280 - 300 sh, dk-gy, ^{mic,} v. silty

300 - 330 sh, dk-gy, clayey, fissile

330 - 340 slts, med dk gy, mic, v. clayey;
silt in clay matrix - "gramm" "

340-370 silts, med-gr, mic, c-gr;
(1 piece lt br rfsdy ^{mic} @ 340-50)

370-380 silts, med-gr to med dk gr, mic,
"clayey, shaly

380-400 sh, dk-gr, mic, v silty

400-420 silts, med lt gr, ~~v~~ mic, c-gr;
clayey in part

420-450 silts, med-gr, clayey, ^{mic} rfsdy;
thin beds ^{clear} of f-gr ss

450-480 silts, med-gr, clayey, mic + sdy;
interbedded with clayey, mic,
vt to f-gr ss

480-550 sh, dk-gr, clayey, fissile;
thin ^{lenses} layers of ^{dk-gr clayey} rfsdy silts;
pyrite

550-600 ~~sh~~ sh, dk-gr, silty;
^{med dk gr} layers of clayey silts

Y (570-600 1 piece lt yellowish-
flaky bentonite - m
apparent inclusions

600-610 sh, dk-gr, silty, interbedded
w/ med dk gr clayey c-gr silts

- 610 - 630 slts, med lt gy, mic ^{limy} c-gr
- 630 - 650 slts, med-gy, mic, clayey;
shaly in lower part
- 650 - 680 sh, med dk gy, ^{to dk gy} mic, silty;
non-limy; interbedded w/
med-gy c-gr slts
- 680 - 90 slts, med-gy, mic, c-gr, non-
limy
- 690 - 710 ss, med-gy, mic, v f gr
(700 - 710 - E-log only -
sample is cement + sh,)
E-log begins @ 703 - casing ends
- 710 - 770 sh, dk-gy
- 770 - 83 ss, med-gy, silty, v f gr
(Poor samples)
- 783 - 800 slts, med-gy, mic, c-gr
(Poor samples)
- 800 - 810 sh, dk-gy, clay
- 810 - 830 slts, med dk gy, mic, clayey
Med-gy bentonite - no inclusions
@ 810 - 20

830 - 842 sh, dk-qq, silty, siderite

842 - 870 slts ^{mic} med dk-qq, clayey,
~~fs sdg~~ ~~f gr~~; clay matrix;
dk-qq sh partings

870 - 900 sh, dk-qq, clay;
883-887 slts as above

900 - 935 slts, med-qq, c-gr; interbeds
dk-qq sh

935 - 948 sh, dk-qq, sl silty

948 - 960 slts, med dk qq, clayey

960 - 1000 sh, dk-qq, sl silty; pyrite

1000 - 1010 sh, dk-qq, clayey, non-lim;
fossil; slickensided??

1010 - 1030 ^(10-20' lag) slts, med dk qq, fs sdg,
S (sample 1030-40) clayey, c-gr; ^{much} siderite

1030 - 1080 sh, dk-qq, sl silty (fossil)
siderite (

- No lag here
(sample 1070-80 1 lb, benboite?)

- falls apart in acid & seems
to have dol xlls -- only 1
piece well developed)

1080-90 ss, med-gy, silty, sl/lamy,
vf gr

(1080-90) lt gr-gy

bentonite - 1 piece well
preserved -- many others may
be present as gr-gy
balls of clay)

1090-1105 ss, lt-gy, clean, vf gr;
v v sl lamy,

1105-1130 slts, med lt gy, mic, clayey,
vf sdy, c-gr

1130-1125 slts, med-gy, clayey, interbedded
w/ dk-gy sh - which
increases downward

1125-82 ss, med lt gy, sl silty,
poorly sorted f-vc grs;
scattered clear ptz grains

1182-1190 slts, med dk gy, clayey

1190-1200 ss as above

1200-1225 slts, med dk gy, mic, clayey

1225-1230 sh, dk-gy, silty

- 1230-1240 - ~~ss~~ silts, med ~~dk~~ gy, mic,
clayey
- 1240-1260 - ss, med-gy, silty, mic, vfg
- 1260-80 - silts, med dk gy, f-mic;
interbedded w/ dk-gy sh
- 1280-1335 Sh, dk-gy, sl silty; mostly
fissile clay shale
- 1335-1350 silts, med-gy, vfg sdy, c-gr;
beds ^{silty} vfg gr ss
- 1350-1370 silts, med-gy, clayey
- 1370-1425 sh, dk-gy, ~~sl silty~~, fissile
clayey
- 1425-1435 silts, med-gy, vfg sdy, c-gr
- 1435-1469 sh, dk-gy, sl silty
- 1469-1482 ss, med dk gy, thin, f-med gr;
1460-70
Good example trace c-grs; c-gr
- 1482-1520 silts, med-gy, vfg sdy, c-gr;
dk-gy sh partings
- 1520-1580 sh, dk-gy, silty; beds
med-gy silts
- 1580-1600 silts, med-gy, clayey, c-gr;
beds dk-gy sh

- 1600 - 1715 Sh, dk-gg, ^{f. mic, silty} fissile; An upper 70'
- 1640-50 - silt - - trace throughout
- 1715 - 1725 silt, med ^{lt v/sly} gg, c-gr
- 1725 - 1755 silt, med-gg, clayey, mic, c-gr - suberitic cement
- 1755 - 1842 Sh, dk-gg, ^{f. mic} silty
- Y.P.P. 1810 - 20 - questionable bentonite - med-gg - breaks up in acid & gives slow reaction - dol?
- 1842 - 1870 ss, lt-gg, med - c gr; drills fine trace grass in lower part
- Good spongy 1860 - 70 - much greenish-brownish gray bentonite; mica, dol, & other inclusions - probably in strata below ss.
- 1870 - 1920 Sh, dk-gg, fissile
- 1920 - 1948 Sh, dk-gg, silty
- 1948 - 2000 silt, med-gg, sl lim, f. mic, c-gr
- 2000 - 2020 silt, med dk gg, mic, clayey, v sl lim
- 2020 - 2065 ss above & ^{scattered} ~~med~~ f-med sd grs (cm) inv lim lenses

- 2065 - 2095 Sh, med dk gy, ^{sl lim} silty; pyrite;
crin
- 2095 - 2140 silty, med-gy, mic, clayey,
sl lim ^{siderite}; gastropod
- 2140 - 215~~0~~⁴⁸ Sh, dk-gy, silty
- 2148 - 2170 silty, med dk gy, mic, clayey
lenses med-gy ~~sl~~ lim, silty
f-med gr ss
- 2170 - 2186 ss, med-gy, X silty &
clayey, sl lim, f-c gr
- 2186 - 2203 Sh, dk-gy, silty
- 2203 - 2214 ss, med-gy, silty, lim, f-med gr,
trace c-grs (poor samples)
- 2214 - 2315 Sh, dk-gy, mic, ^{sl} silty;
trace siderite; sl trace pyrite
- 2315 - 2330 Ls, med-gy, sdy, foss, f-gran,
oolites w/ f sd nuclei; crin
& other foss frags; abundant
vf-f gr sd -- some layers
of sl sdy ls, others of
lim ss

2330 - 2381 Sh, med dk gy to br-gy;
sl silty, ^{fissile} sl sideritic

2381 - 2398 SS, med-gy, silty, limy,
f to med gr; crin, brach, ost
vf gress in lower part
(Pentons-like dilic dense
ch -- must be contamination)

2398 - 2432 Sh, ^{med} dk-gy, f-mie, sl
silty, sideritic, ~~pyrite~~

2432 - 2460 SS, lt-gy, limy, poorly sorted,
vf to med-gr, ^{tr crs} porous; br
siderite? spots & clayey streaks

2460 - 2485 SS, lt-gy, limy,
vf to f gr; scattered
med-gr; porous; crin

2485 - 2494 SS, med lt-gy, silty, sl
limy, f-med-gr - trace
c-grs; ~~scat~~ dk-gy
silty, clayey layers

2494-2510 Sh, dk-gy, fissile ~~to~~ silty
in upper part silty to bed
Trace slickensides

2510-2545 SS, med lt gy, ~~silty~~ ^{silty to limy} v f gr
well sorted
A clayey film partings; trace mica

2545-55 SS, med lt gy, limy, v f to f gr,
well sorted; dark clayey surfaces;
mica

2555-2395 SS, med-gy, v limy ^{mic}, v f to med gr;
crin, siderite, ^{dk} clay shale
partings. Some ss lenses
med dk gy, v clayey & limy -
foss frags; trace c sd

2595-2625 SS, med lt gy, limy, sl silty,
v f to c-gr, dk-gy
coating on some sd grs
trace mica

2625-2640 SS, med-gy ^{sl limy}, ^{mic}, v silty, v f-cgr

2640-2665 sh, med dk gy, fmic, silty;
layers med-gy c-gr slts;
pyrite

2665-2680 slts, med dk gy, clayey, mic,
c-gr; dk-gy sh partings

2680-2710 sh, dk-gy, fmic, silty;
parting of med-gy c-gr slts
pyrite

2710 ²⁷³⁶-TD. ss, med-gy, mottled, silty, limy,
rf to f-gr; ^{trace med grs} crin, trylone, siderite;
dk-gy shale parting

No ls in ^{to} hole

TD Hogan

Pan American Petroleum Corporation

U. S. A. Pan American #1

960' E of 660'S of C

15 - 12N - 22W

GL 1588.8

12

~~0~~ - ~~18~~ ss, weathered yellowish-brown,
well sorted, vf gr; angular,
becomes silty^{ss} in lower part

12

~~18~~ - 28 sh, med-gr, f-mic, silty;
upper part weathered to lt brgy

28 - 50 ss, med-gr, v silty & clayey, vf gr,
grades downward to lt gy vf - fgr
ss w/ sh partings

50 - 62 sh, med dk gr, mic, v silty

62 - 75 silts, med-gr, mic, clayey, c-gr,
vf sdy in lower part.

75 - 82 ss, lt gy to med-gr, vf to
f-gr; clayey partings; thin
layers are selenitic, and contain
chert & granules

- 82-115 silts, med-gr, clayey, rf sdy,
c-gr; sideritic; probably
alternating beds of gr ss, silts, & s4
- 115-125 ss, lt-gr, sl limy,
rf to c-gr
- 125-140 silts, med-gr, ^{f mic} clayey, rf sdy;
gradational w/ above; some is
dense gr silts -- rf f gr gr
- 140-147 ss, med-gr, silty, ^{silty} rf to
med-gr; poorly sorted; sideritic
- 147-158 silts, med-gr, f-mic, dense
• f-gr gr ~~interbedded w/ gr ss~~
- 158-190 ss, dk-gr, silty, f-mic
- 190-224 silts, med-gr, f-mic, dense
f-gr gr; interbedded w/ dk-gr
mic s4
- 224-37 ss, med lt-gr, sl limy, rf to
f-gr, & med-gr ^{silty} f to med-gr
ss - coated grains, sideritic
cement -- may be lower 5' of unit
below a shale parting.

- 237-247 - sh, dk-gy, silty
- 247-263 ss, lt to med-gy, silty
limy, sideritic, f to med gr;
glauconite; shale parting
② 257
- 263-320 silty, med-gy mic, clayey;
grades downward into dk-gy
fissile sh
- 320-333 ss, med-gy to reddish-br, limy,
silty, poorly sorted v f to
med-gr ss; scattered v c grs
siderite
- 333-432 sh, med dk gy, mic, silty to
fissile -- fissile clay
shale below 400'
- 432-447 ss, med lt gy, silty limy,
poorly sorted = f- to v c gr;
clear qtz granules.
- 447-454 sh, dk-gy, fissile, siderite
- 454-461 ss, med lt gy, sideritic,
silty limy, porous, f to v c
gr; qtz grains

461-516 SS, med^{it} gy, sl ling, silty
f med-gr - scattered c & v
grs + grs - in part pink

516-521 - sh, dk-gy, fissile

521-540 SS, med lt gy, clayey, silty,
poorly sorted w/ fine gr;
gtz grains in matrix of clay
& w/ f SS in part.

540-48 sh, med dk-gy, v fine, s/silty,
non-ling

548-552 SS as above

552-568 sh, med dk gy, f-fine, s/
silty, non-ling; siderite

568-573 ls, br-gy, v sh, silty,
foss; abundant f-med sd grs
--- ling ss in part; crin, gast;
much pyrite

573-78 sh as above

578-82 ss, dk-gy, v clayey, sideritic,
f-gr; sd in clay & siderite matrix

582-620 sh, med dk-gy, silty; interbedded
w/ med-gy c-gr, v s/ling s/lb

- 620 - 640 ss, med lt gy, ^{sl} silty, limy,
f to vc gr; qtz grains; crin
- 640 - 655 ss, med lt gy, sl silty, ^{sl} limy,
f to c-gr;
- 655 - 680 ss, med lt gy, sl silty, sl limy
f to vc grs; scattered grains; crin
- 680 - 713 ss, med lt gy, sl limy, med-c gr,
trace glauc, tr crin
- 713 - 730 sh, med dk gy, vf mic, v silty
- 730 - 749 sh, dk-gy, clayey, fissiles
non-limy
- 749 - ^{740-50 sample = out of place??}
silty, med lt gy to med-gy, sl limy,
mic, v f sdg, c-gr
- 749 - 779 ss, med lt gy, v limy, med-cgr;
coated sd grs in calcite matrix;
crin, ost, & other foss frags
trace glauc
- 779 - 795 sh, dk-gy, silty
- 795 - 800 silty, med-gy, sl limy,
v f sdg, c-gr

770-800 NS

- 800 - 820 Sh, med dk gy, f-mic,
v silty; interbedded w/
med dk gy, mic ^{trace siderite} c-grs/ls.
- 820 - 856 Sh, dk-gy, clayey, fissile,
non-lim
- 856 - 881 SS, med lt gy, limy, f-c gr,
crin,
- 881 - 895 Sh, dk-gy, fissile; beds ^{dk} _{med 199}
f-med gr crin ss w/ clay matrix
- 895 - 900 SS, med-gy, v silty, ~~limy~~,
rf to med gr; crin; siderite
- 900 - 920 SS, med lt gy, v limy, f-med gr,
abundant crin
- 920 - 930 SS, med lt gy ^{silty} _{limy}, rf to f gr,
crin
- 930 - 950 SS, med lt gy, v limy, f to med gr,
many crin; trace c grs
- 950 - 60 SS, med lt gy, v limy, med-c gr,
qtz grains; crin, brach, coral,
ost, bryo.
- 960 - 1010 SS, med lt gy, limy, med-c gr,
~~scatt c grs~~ crin; drills free

1010 - 1022 ss, med lt gy, sl limy
c-gr; gty grains; dullstree
pyrite

1022 - 1100 sh, med dk gy, v fine,
v silty; (siderite) interbedded
w med-gy mic c-gr slts
v

1100 - 1120 sh, dk-gy, v fine, fissile
v sl limy

1120 - 30 sh, dk-gy, v fine silty;
siderite, pyrite

1130 - 1170 slts, med-gy, mic, c-gr;
beds dk-gy mic sh

1170 - 1198 sh, dk-gy, v fine, v silty;
interbedded w/ med dk gy
c-gr gty slts, ^{tr} siderite

1198 - 1218 slts, med-dk gy, clayey,
limy, v c-gr; clay matrix
siderite, pyrite, beds of
clay w/ f sd, + crin

1218 - 1235 ss, med-gy, sl limy, v silty
w/ to f gr; crin, pyrite; becomes
finer grained + more silty downward
trace siderite; trace phosphate

1235 - 1242 sh, dk-gy, clayey, fissile;
interbedded w/ med-gy v f silty sl
limy c-gr slts; much pyrite;
trace phos; trace glauc?; gypsum

1242 - 1255 sh, very dark-gy, sooty, v silty
carbonaceous, fissile; much pyrite;
dk-gy phosphatic oolite-like
clusters of f-med sd size
in more limy part - gives
very strong phosphate yellow

Bitkin

1255 - 1265 ls, med lt gy to med-gy,
sl silty, f-grained;
abundant limy ^{med dk gy} (v f sd sized)
"pellets" or "oolites" scattered
in med lt gy + med-gy ls -
~~gives~~ firm very fine silt
residue; crin, brach-nymphs

1265 - 1300 slts, med-gg, limy, sdy, v-c-gr;
^{abundant} vf to f sdgrs; free dk-gg
large (to v-c sd) "oolites" --
calcite interior w/ clay ^{outer} shell;
much pyrite; crin -; no ples
dk-gg sh partings

1300 - 1321 Ls, med lt gg, silty, crinoid,
f-gran; crin, bryz, brachis

1321 - Casing

1321 - 1330 Ls, med-gg, crin, silty,
f-gran; interbedded w/ dk-
gg fissile sh

1330 - 40 Ls, med lt gg, silty, pelltal
f-gran; ting dark pellets
in lighter matrix; tr ool

- 1340 - 80 silts, med-gy, v limy, crgr,
pyrite, oSt
- 1350 - 70 Ls, med dk-gy, v silty,
f-gran; brach; heavy silt res
- 1370 - 80 Ls, med-gy, silty, crin,
f-gran
- 1390 - 1402 Ls, med dk gy, v silty
f-gran; brachs; silt res
- 1402 - 1412 silts, dk-gy, v limy, clayey
med-gr
- 1412 - 1427 Sh, dk-gy, ^{phosphatic} v limy, silty, pyrite
- 1427 - 1442 Ls, med-gy, v silty & clayey,
f-gran to vf xlln; crin
interbedded w/ dk-gy silty,
v limy sh; ls leaves silt
aggregate
- 1442 - 1475 sh, dk-gy, v limy, ^{± v phosphatic} silty,
granular; thin beds of
med dk gy v silty vf-xlln ls;
calcite xlls in silty aggregate
matrix; pyrite

- 1475 - 1482 Sh, dk-^{oolitic}gy silty, limy,
 phosphatic, interbedded w/ dk-^{oolitic}gy
 v silty, phosphatic, oolitic ls;
 dark ^{gy}, f- sd sized oolites in
 sh + ls are phosphatic
- 1482 - 1510 Sh, med dk gy, sl limy,
 fissile, ^{much} pyrite + siderite mixed
- 1510 - 1540 Sh dk-^{oolitic}gy, sl limy, ^{oolitic} fissile,
 pyrite, splintery fracture
- 1540 - 1588 Sh, dk-^{oolitic}gy to blk, ^{in upper part} sl limy
 fissile; limy pyritized ~~shales~~
 plant (?) fragments; much pyrite
- 1588 - 93 ss, med dk gy, limy, silty
 v f gr
- 1593 - 1615 Ls, H-^{oolitic}gy to med-^{oolitic}gy, v f sdy,
 sl dolitic ^(in upper part) f-gran; ^{brachi} erin brachy; limy
 oolitic pellets; pyrite
- 1615 - 1638 slts, med dk gy, v f mic, v limy,
 f-to-e-gr; pyrite; v sl phos
- 1638 - 1640 Sh, med-^{oolitic}gy, fissile, soft

1670 - 1680⁰ Ls, lt br gy, siliceous, f-grains
to silica res; 20% smoky
f-lbrgy ds transl ch

1650 - 1670 Ls as above + 50% ch

1670 - 1690 Ls, lt gy, ~~f~~ siliceous,
f-xlln; 10% milky ^{to med-gy} whplsch
bruch

1690 - 1700 Ls, med lt gy, siliceous,
f-grain to f-xlln
50% + silica res

1700 - 1712 Ls, med lt gy, sl siliceous,
f-xlln; trace dol rhombes

1712 - 1740 Ls, dull lt gy (cement color)
siliceous, f-grain; much
silica res; trace dk-
clayey pyritic partings

1740 - 1760 Ls, lt br gy, ^{sl} siliceous,
f-xlln; sl silt res

1760 - 1770 Ls, ^{finely} mottled lt gy + lt br gy,
siliceous, v f xlln to f-grain;
heavy silica ^{aggregate} res

1770 - 1810 ls, med lt gy, siliceous, f-gran;
much v limy med lt gy
to lt br gy ch

1810 - 1826 * ls, lt br gy, siliceous,
f-gran to f-xlla; much silt
res; ~~some~~ ^{20%} limy finely figured
chert to med-gy ds ch

1826 - 1840 ls, med lt gy to med-gy, v siliceous,
f-gran; 40% lt gy to med-gy
mottled limy to ds ch;
br-gy "figures" or silty spots
in sub translucent chert

1840 - 1850 - NS

1850 - 1870 Ch, lt gy, lt br gy, med-gy
transl, limy to ds; ^{30%} med-gy
siliceous silty f xlla ls;
leaves heavy ~~and~~ dk gy silica +
silt res;

1870 - 1910 ch, lt br gy to lt gy, transl
~~locally~~ banded, dense to silty
20% med-gy siliceous ^s silty
f-gran ls

1910 - 1938 - Ch, lt gy to lt br gy, sl liming
ds; 20% lt br gy siliceous
f-gran ls

1938 - 1941 Sh, greenish-yy liming,
v pyritic, ost, crin; interbedded
w/ med-yy v silty, ^{fiss} f-granls -
leaves much soft clayey siliceous aggregate
w/ fossil casts

1941 - 1947 Ls, med lt gy, sl silty
f-gran; crin, pyrite; leaves
~~shaly~~ silty res lin part;

BMS

1947 - 1949 Sh, med-yy, v liming, v ssdy; pyrite

Benters

1949 - 1977 Ch, med lt gy ~~fine~~ br gy,
dense; interbedded w/ br gy
silty, v dolic, f-xlla ls

1977 - 1979 ~~sh~~, silty, med dk gy, v liming,
dolic, siliceous

Hunter

1979 - 2055 Ls, med lt gy, v dolic, f-gran
to v f xlla; gts silt residue
aggregate + grains; v f-mica,
pyrite, brach, ost

2055-2074 Sol, med-gy, limy, f-gran to
vs xlls; ^{heav} silica silt res

2074-2130 Ls, med lt gy, dolie, vs gran
to f-xlls; ^{medium} ~~st~~ silica res
pyrite, ost

2130-2140 NS

2140-50 - vs/dolie & little res to table
2140-2160 Ls, med lt gy, vs/dolie,
f-gran; v little ^{to med} silica res
ost

St Clair

2160-2178 Ls, lt-gy to pink, dolie
f-banded xlls; ^{in upper part} trace vt-f sdx
pink crin xlls, ost; trace
silica res

Cason

2178-2181 silts, lt gr-gy, v limy, ^{dolie} phosphatic,
foss; dk-gy plus grains;
ost, crin, gast; pyrite, glauc
st mixed w/ ls below? - light calat
xlls attached to many pieces.

2181 - 2205 Ls, lt pinkish-~~gy~~ to lt. gy,
sl dolie, f to med x/l's;
crin, brach, pyrite
2190 - 2200 poor sample

~~2000 - 2110~~ Ls, as above and
med lt gy sl dol f-gran
ls w/ scattered f-med
rd & fr sd
plattin?

2215 - 2218 Ls, med lt gy, sl dolie,
ds to f-gran; scattered
vf to med ^{trags.} rd & fr sd; & Ls
lt gy, f-x/l's ~~vt sdy~~
dolie; brachs, crin; pyrite

plattin

2218 - 30 Ls, med-~~gy~~, sl dolie,
ds to f-gran; pyrite

2230 - 2240 Ls, med-~~gy~~, ds to f-gran;
interbedded w/ gr gy "silky" ^{inter}
fissile sl limy ^{of sdy} shale
pyrite

2240 - 2250 - poor sample
Probably staly ls

2250 - 2260 SS, med-gr, v dolic,
f to med gr; rd + fr; trace
med-gr ds dol; pyrite;
trace glauc

2260 - 2270 Dol, med-gr, ~~vsdy~~, f-gran
to f xlls; f to med rd +
fr sd in parts; silty ~~to in~~
part; pyrite

2270 - 2280 SS, med-lt gr, dolic, f+med gr
rd + fr

2280 - 2288 Sh, gr gr, sdy, pyritic,
sl dolic, fissile, "silky"
luster; v f to med sd

2288 - 2305 SS, lt br gr, v dolic f-cgr,
rd + fr; interbedded w/
lt br gr sd to v s/sdy

(Everton?) f-xlls dol

2305 - 2318 TD
Dol, lt br gr, vsdy to
sl sdy, v f xlls;
sd grs f-c rd + fr

(Lower 70 feet of samples fair to
poor and St. Peter - Everton not well
represented.)

Pan Am USAC

18-13N-18W

0-30 Ls, med-gy, silty, v f sdy, ool, f-gran,
crin, brachs, ost; res sdy silt &
clay w ools dissolved out; some
lt br gy ^{ool} non-sdy ls ~~with~~ to med ools

30-40 Ls, lt br gy, sl ool, f-gran,
crin, ost, spines; pyrite, scattered
o ools

40-60 Ls, lt br gy to med-gy, silty, sl ool f-gran
v foss - ost, crin, brach, spines
archiaceph ^{straight ceph}; res silt, clay, & r fgt grs
pyrite

50-60 - scattered sl cherts in some
places

60-80 Ls, lt br gy, ool, sl silty, f-gran
to v f x lln, ^{crin, spines} ool & foss frags in
f matrix - little res

80-90 Sh, dk-gy, v limy, v silty,
v f mic; non-phosphatic

90-100 Ls, md dk-gy, silty, s^{ool},
f-gran; spines, brachs; v f fine ools

100-120 Ls, md dk gy, v silty, ^{+clayey} f-gran;
many brachs; heavy clay & silt res

120-135 Sh, dk-gy, v limy, silty; interbedded
w dk gy v silty Ls; crin, brach

135-140 Ls, lt br gy, vool, f-gran, med
to c ools; trace ^{c silt sized} gtz res

140-160 Ls, lt br gy to md-gy, ^{ool} silty,
delic, f-gran; crin; ^{tiny} silty "pellets";
abundant del chunks in part; trace
gtz silt res

- (tr brgn)
- 160-180 Ls, med dk gy, silty, s/ool
f-gran, brach, crin, gast; tr
qtz silt res
- 180-203 Ls, med dk gy, v silty, s/dolic,
f-gran to vt xlls
- 203-230 Sh, gy-blk v limy, silty, hard -
"non-fissile"^{to fissile}; v sh. phos; tr pyrite
tr foss frags
- 230-248 Ls, med dk gy, ^{to dk gy} clayey, dense
to f-gran; brach & other frags
non-phos; trace pyrite; grades
into shale below
- 248-270 Sh, dk-gy, v limy, silty,
sub fissile; in part granular
& phosphatic; interbedded w
dk gy vt xlls silty ls
- 270-306 Sh, dk-gy to dk br gy, limy,
medium soft^{grassy}, silty, granular;
"granular" parts are v phosphatic
tr pyrite = foss frags in part?
Tr other ^{calcareous} foss frags

306 - 340 Sh, dk-gy, ~~sl~~ limy, v. mic,
silty; mostly fissile + some granular,
but still sl ^{in part} phos; pyrite; thin
pelecypod? & gast? shells

340 - 378 Sh, dk-gy to blk, fissile,
sl limy; pyrite; thin shells
& other organic fragments or
markings on layers; s/ phosphatic
in some of the harder ^{less fissile} layers

378 - 380 Sh, dk-gy, sl limy, v. silty, r
(silt in part) ^{Pyrite} in silt sized qtz

380 - 408 Ls, med lt gy to med-gy, silty,
ool, v. f sdy; brach, crin, & other
foss frags; ^{mult} v. f sd res; non-phos

408 - 411 Sh, dk-gy to blk, limy, phos

411 - 419 Ls, med-gy, v. f sdy, foss?

419 - 422 Sh, lt br gy, sl limy, non fissile

~~Boone~~
422 - 434 Ls, lt to med-gy, sl dolie, f-gran
to med xlln; 5% med-gy ds ch
v. f-silica res

434-450 Ls, lt-gy, ~~st dolie~~, siliceous,
f-xlls; silica agg res;
trace lt gy ch

450-470. Ls, lt-gy, cherty, ^{vsl dolie} f-and xlls;
10% lt-gy limy to ds ch, to crin

470-490 Ls, lt-gy ^{v siliceous (limy}
^{vsl dolie, v f to f xlls}
chert in part) res porous
silica to ch, brach;

490-510 Ls, lt-br gy, ^{f-gran to med-xlls} ~~f-xlls~~, trace
silica res; ^{brach silastic?} crin, ^{may be}
mostly foss frags; glau
^{which give mottled appearance}

510-540 Ls as above but sl more ^{siliceous} silty

540-560 Ls, lt-gy, siliceous, f-gran to
f-xlls; grades into lt-gy v limy ch,
but no ds ch

560-583 Ls, lt-gy, siliceous; cherty, f-gran
to f-xlls; 30% lt-gy limy ch;
trace v f del xlls

583-90 Ls, lt-gy, siliceous, v cherty
f-gran; 40% ds lt-gy ch

590 - 600 Ls, lt br gy, sl siliceous,
f-xlls; clastic? - crin, etc?

600 - 650 - NS

650 - 680 Ls, lt br gy, siliceous, v cherty,
v siliceous
f-gran to f-xlls; 40% lt-gy to
blue-gy ds ch; ls grades into ch

680 - 700 Ls, dull chalky wh (cement luster)
v siliceous, f-gran; clastic ross
fine frags in siliceous matrix; trace
wh ~~to blue gy~~ limy ch; glauz

700 - 710 As above v trace blue-gy ds
transl ch

710 - 720 Ls as above of 10% ltgydsch

720 - 730 Ls, dull lt gy, siliceous, f-gran;
40% limy, sl fractured ch, glauz

731 - 740 NS

740 - 750 - AS above - - poor samples

750 - 760 - ch, lt-gy, limy, granular
to dense

760 - 780 Ls, med lt gy, f-gran; Nores
interbedded w/ lt-gy to lt
bluish-gy ds to ling ch; trace
lt gr-gy ^{tomud-gy} ["] ling, silky, glauc sh (acting
@ 768-770?)

St. Joe

780 - 800 Ls, lt-gy to lt br gy (trace pink
crin) v crinoidal f-gran; in part
contains scattered to abundant f-tomud
rd & fr sd; dk-gy plus graining &
specks; pyrite; interbedded w/
med-gy, ling, crinoidal, sl sd,
pyritic, plus sh; contact between

sh & ls on several pieces,
^{very little} ~~no~~ mixed ing of these lithologies in samples --
probably no sample collected at the contact

800 - 820 Ls, med lt gy, dolic, f-gran;
soft nos of qtz ^{ost rather} foss frags;
Pyrite

820 - ¹¹⁰⁸ Ns L.T.D @