



ANHYDRITE 2444 (-730)
 BANHY 2465 (-709)

LS: lt brown; vf-xtal; dense; sli. granular in part; poor apparent porosity; dull fluor; N.S.

LS: lt brown to grayish brown; vf-xtal; dense; poor apparent porosity; dull fluor; N.S.

LS: lt brown matrix w/md gray, irregular grains; vf-xtal; dense; poor apparent porosity; almost no fluor; N.S.

LS: lt brown; vf-xtal; finely granular; chalky in part; poor apparent porosity; v-dull fluor; N.S.

LS: as above.

SiltSt: green; calcareous; trc v-fine sand & greenish lime;

LS: lt brown; vf-xtal; sli. chalk; rough; poor apparent porosity; v-dull fluor; N.S.

LS: as above.

Shale: green, gray in part;

LS: lt brown to grayish-brn; vf-xtal; chalky in part; poor apparent porosity; N.S.

LS: lt brown; vf-xtal; sli. granular; poor apparent porosity; few scattered fluor. grains; N.S.

LS: lt brown; mf-xtal; dense; v-sli. chalky; tight vugular porosity w/spotted dry stain, v-weak fluor; no visible oil, 1 chip 3820.

Note: 3830 sample was missed, trc dry stain as above persists in 3840 & 3850.

Shale: gray, mottled brown; calcareous; peletal; pyritic; fos; 3850.

LS: lt-md brown; vf-xtal; sli. fos; mostly dense; trc w/black specks which crush sil show dk brn oil; only dull fluor; <1% 3860 & 3870.

LS: w/trc shows as above.

LS: lt brown; vf-xtal; v-rough texture; trc moldic porosity w/sil. show dk brn oil; only weak fluor; <1% 3880.

LS: lt brown; vf-xtal; very finely granular; trc pin-point vug porosity w/dk brown wet stain & SSO; 3900.

Shale: dk gray - black; lignitic ip; trace 3900.

SiltSt: lt-green; calcareous; 3920, 3930.

LS: lt-md brown; vf-xtal; dense; poor apparent porosity; N.S.

LS: lt brown; vf-xtal; coarsely oolitic; sli. fos-frag; fair int-ool por, scattered vug; black stain; crush dk brn oil; weak fluor; 2-5% 3940, 3950.

Shale: green, gray; silty in part;

LS: lt brown, grayish-brn; vf-xtal; finely gran; fos. in part; poor apparent porosity; N.S.

Shale: green; silty;

LS: lt brown; vf-xtal; fine granular; trc spotted black stain which may be float;

LS: lt brown; vf-xtal; v-fine granular; sli. oolitic & fos-frag; trc black stain as above is probably float;

LS: lt brown to grayish-brn, some sli. greenish; shaley; fos; poor apparent porosity; still trc black stains as above;

HEEBNER 4007 (-833)
 Shale: black; lignitic; <1% 4020.
 LS: lt brown; vf-xtal; dense; indistinct; N.S.

Shale: lt green; silty; marly in part;

LS: off-white to lt brown; mic-vf xtal; includes white, opa. chert; even yel. mineral fluor; fair vug porosity w/dk brown wet, spotted stain; crush SSO; 1-2% 4050 stop & 30 min.

LS: as above w/diminished fluorescence; trc shows floating thru 4080 sample.

LANSING 4056 (-882)
 LS: off-white to v-lt brown; mic-vf xtal; no grains; chalky in part; trc chert; no visible porosity; N.S.

LS: as above; w/minor green to gray shales;

LS: lt-md brown; vf-xtal; fos; sli. granular; poor apparent porosity; N.S.

LS: as above.

LS: lt brown; vf-xtal; few chips fair vug por., w/ black spotted stain & SSO; almost no fluor; 1-2% 4110, decr 4120.

LS: lt brown to lt gray; mic-vf xtal; dense; almost no grain; minor chalk; no visible porosity; N.S.

LS: lt brown; vf-xtal; dense; no visible porosity; 1 rounded chip, spotted stain is probably float; 4140.

LS: lt brown to grayish brn; vf-xtal; dense; no visible porosity; N.S.; w/minor green/ gray sh; 4150.

LS: lt brown to gray; vf-xtal; much fos-frag; trc oolitic; tight int frag porosity; only dull fluor; scattered pin-point wet stain; crush few micro-drops oil; 4170, 4180.

LS: white to lt brown; mic-vf xtal; trc oolitic; much soft chalk; 30m sample washes white; poor apparent porosity; N.S.

LS: most lt brown, some gray; mic-vf xtal; no grain; smooth; dense, platy; no visible por; N.S.

LS: lt brown; mic-vf xtal; no grains; dense; sli. chalky in part; no visible porosity; N.S.

LS: lt brown to gray; mic-vf xtal; finely granular in part; dense to chalky; trc opa. chert; no visible porosity; N.S.

LS: as above but more chalky; N.S.

LS: lt brown to mottled gray in part; mic-vf xtal; dense; chalky in part; no visible porosity; N.S.

LS: dk gray; vf-xtal; cherty; dense; N.S.

MUNICE CREEK SH 4238 (-1064)
 Shale: gray to black & lignitic in part; 4220.
 LS: md-dk grayish brown; vf-xtal; fos-frag ip; dense; trc coarse sulfide; trc chert; N.S.

LS: gray; f-m xtal; dolomitic ip; re-xtalized, looks broken-up; spotted dk brn stain, crush SSO, even dk brn dry stain, weak fluor; weak odor at best; only 1-2% 20 & 40 min samples.

LS: lt brown; vf-xtal, trc coarse spar; dense to chalky in part; poor apparent porosity; dull mineral fluor; N.S.

Shale: black; lignitic in part; few chips 4290.

LS: lt gray; mic-vf xtal; dense, platy; N.S.

LS: lt-md brown; vf-xtal; trc tight vug porosity w/ sil. stain; no visible oil; 1-2% spotted dry stain 4300.

LS: lt brown; vf-xtal; fos-frag in part; poor porosity; N.S.

Shale: green, marly, 4328 stop.

LS: lt-dk brown; vf-xtal; looks shaley; poor apparent porosity; N.S. 4328-20m.

LS: lt gray; vf-xtal; coarsely oomoldic; 1/3 oom por. w/spotted dk brn stain & SSO; 4328-40m.

STARK SH 4337 (-1163)
 Shale: black; lignitic; few chips 4350.
 LS: md-brown; vf-xtal; fair-good vug por; hvy black stain & SO; trc 4350, 2-5% 4355.
 Shale: green; calcareous;
 LS: grayish-brn; vf-xtal; good vug por. w/hvy black stain & S.O., dull fluor; 25% 40 & 60 min.

LS: lt brown to grayish-brn; vf-xtal; few chips w/vug por. & spotted dk stain, looks like float from "K", 4400, 4490.

LS: lt brown to grayish-brn; mic-vf xtal; chalky in part; poor porosity; N.S.

HUSHPUCKNEY 4391 (-1217)
 Shale: black; lignitic; few chips 4400, inc 4410.
 LS: md-dk grayish-brn; vf-xtal; dense; peletal in part; sil. fos; trc green sh contact; no visible porosity; N.S., 4410.

LS: lt brown; vf-xtal; dense to chalky in pt; trc shallow vug por; spotted stain; no visible oil; dull fluor; 4418- 20 min.

LS: lt grayish-brn; vf-xtal; sli. chalky in part; trc peletal; trc fos; poor apparent porosity; N.S.

LS: lt-md grayish-brn; vf-xtal; fos in part; sli. chalky; trc peletal; trc opa. chert; poor apparent porosity; N.S.

LS: lt-md grayish-brn; vf-xtal; sli. ool. & fos-frag. in part; trc crinoidal; mostly dense; N.S.

LS: md-dk brown; vf-xtal; sli. fos; shaley residue after acid digestion; no visible porosity; N.S.

SiltSt: green; calcareous; marly; starts 4480, inc 4490.

LS: lt-md brown; vf-xtal; md-crs granular; sli. fos; sli. drusy vugular porosity; spotted stain & SSO; dull fluor; 25-50% dry stains 4500, decr 4510.

MARMATON 4496 (-1322)
 LS: lt brown; vf-xtal; md grain supported colite; fos-frag in part; tight int ool & poor-fair vug por; dull fluor; crush SSO; 4514 & CFS.
 LS: as above but marly & chalky w/decr shows 4514-30 min sample washes white.
 LS: grayish-brn; vf-xtal; dense to chalky in part; peletal in part; poor apparent porosity; N.S.

LS: lt brown; vf-xtal; md-grain suprd colite; tight int ool & fair vug porosity; lt brn wet stain; VSSO at best; 1-2% dry stain 4540 & 30m.
 Shale: green, marly; washes 30 min greenish;
 LS: gray; mic-vf xtal; trc pin-pt porosity w/sil. stain; no visible oil;
 LS: dk brn to grayish-brn; vf-xtal; dense, platy; no visible porosity; N.S.

PAWNEE 4566 (-1392)
 Shale: black; carbon; 4560-30 min.

LS: lt gray calc; 4566; poor apparent porosity; N.S.

LS: lt grayish brown; vf-xtal w/trc md-xtal clusters; poor apparent porosity; N.S.

Shale: dk gray, black;
 Shale: gray, green;
 LS: lt gray, scattered dk gray grains; vf-xtal; poor apparent porosity; N.S.

Shale: black; lignitic; 4630.
FT. SCOTT 4617 (-1443)
 LS: lt grayish brown; vf-xtal; dense; cherty; no visible porosity; N.S.

LS: as above w/some green shales; N.S.

LS: md-dk grayish brown; vf-xtal; dense; poor porosity; N.S.

CHER SH 4647 (-1473)
 Shale: black; lignitic;
 LS: lt brown; mic-vf xtal; soft chalk in part; poor apparent porosity; N.S.

LS: lt brown; vf-xtal; sli. granular; trc oolitic and/or peletal; poor apparent porosity; N.S.

LS: lt-md gray & brn; vf-xtal; silty in part; trc shells; poor porosity; N.S.; w/much gray, green shale.

LS & Shale as above.

LS: lt grayish-brown; vf-xtal; fos-frag in part; sli. chalky; platy; no visible porosity; N.S.

LS: lt-md brown; vf-xtal; sub-vit; sli. granular; trc smokey chert; dense; N.S.

LS: grays; mic-vf xtal; poor apparent porosity; N.S., much green, gray shales 4736-stop.

LS: lt grayish-brn; vf-xtal; dense, platy; N.S.; w/ much gray, green and minor maroon, sli. pyritic shale.

LS: lt-dk grayish brown; vf-xtal; dense; N.S.; w/shales as above.

LS:Shale: as above.

MORROW 4784 (-1610)
 Shale: green, gray; w/various lime; N.S.

Shales: as above w/traces very fine, well cemented, white sandstone; N.S.

Shale: gray, green w/minor maroon; much slough, poor samples.

SandSt: mostly white, some greenish; sli. acid reaction indicates some calcite cement but is well cemented probably with silica; cuttings are blocky to shaley; very fine to fine rounded quartz grain; No Shows; found at 4870 & 4880 samples.

SandSt: as above.

MISSISSIPPI 4873 (-1699)
 LS: lt brown; mic-vf xtal; dense, blocky; no visible porosity; N.S., only few chips 4890.

LS: lt brown; mic-vf xtal; dense; no visible porosity; N.S., only 3 chips 4910.

LS: white; vf-xtal; sandy; poor porosity; N.S.; <1% 4940, 4950.

ROTARY TOTAL DEPTH 4950 (-1776)

