Book No. Ernest E. Glick
From USGS
To Denver, Colorado

Mead

1. USGS Test Hole - 26-12N-2W (No. 769) Jackson Co
2. Allison - Collison - 24-7N-6W (No. 46) White Co
3. LeGrande - Jacobs - SWSE 34-9N-1W (No. 6) Jackson Co
4. Barnett Co - 10-13N-6W (No 453) Independence
5. Craft-Hinkle - 23-11N-4W (No 40) Independence
6. Buffalo Oil - Terry Peel 26-6N-3W (No 33) Woodruff
7. Dee Linn #1 Cushman WW 14N-7W (No 955) Independence
8. Dee Linn #3 Cushman WW 14N-7W (No 1327) Independence
9. Wyoming O&G No 1 Reaper 14-10N-7W (No. 1749) White Co.
10. Dee Linn #2 Cushman WW 14N-7W (No 1326) Independence
11) Manning & Martin No1 Cartwright NESW 16-7N-8E Cuthbert

Book (3)

stenographers notebook

Gregg Ruled
6 In.x9 In.
100 Sheets
43-4204

A Mead Product
Hulman Bldg., Dayton, Ohio 45402

Arkansas Geological Commission No 769

USGS Test Hole (E-log & USGS WRD log filed under Drill Hole - E-logs - Top, R)

26-12N-2W

Jackson County, Arkansas

T.D. - 805

0-10 Surficial sand & gravel; tan clay; filled tubes, small, calcareous, branching

10-20 Similar; many filled tubes; trace of shell material & gast.

20-30 Sand, clean, mostly coarse; qtz granules; chert granules; & granules of dk-gr rock = igneous?

30-40 Sand, clean to clayey, mostly coarse; mostly quartz, but 10% dk-gy to blk and dk gr; grannbs of qtz & yel-br chert; small pebbles of yel-br ch; pebbles & size pieces of calcareous masses of interwoven filled tubes and projections

40-50 As above but 95% sand; some bright-green grains

USGS - Newport test.

50 - 60	Sand, clean, c - gr; qtz & ch granules; tr small ch pebbles; tr calcareous masses.
60 - 70	Sand, clean, c - gr; qtz grns; small pebbles of br ch & mottled lt-gy - dk-gy (igneous?) rock.
70 - 80	sand, clean, polished grains, very coarse; Many qtz & ch granules; dark sand grs; dk-gy, dk-green, & gy rock grains & granules
80 - 90	Similar; 1 yel-br chert pebble.
90 - 100	Sand, polished vc; granules of quartz, chert, and rock fragments
100 - 110	Similar, sl finer
110 - 120	Sd, clean, polished, med - vc; ch qtz & rock fragment granules
120 - 130	Gravel, sub rounded, mostly under ½", chert (some dolocastic), quartz, granite?; clay, med lt gy, f - med sdy.

Alluvium 121
Clay

Casing @ 127'

USGS Newport test

130-140 Clay as above & 50% fine-grnd & c-sd as above (sd & G = slump.)
140-150 clay, dull med-gy, vf-mic, f-silty
150-160 clay as above
160-170 Clay as above; some sd & other debris = slump.
170-180 Clay, dull med-gy, vf mic, vf-silty.
180-192 Clay as above -- very homogeneous.
192-203 Clay as above
203-214 Clay as above
214-225 Clay as above; little or no reaction in acid; in water, breaks up some = sl swelling.
225-236 Similar; perhaps finer grained.
236-246 Trace lt-br siderite Similar; & siderite
246-257 Similar (very small sample)
257-268 Clay & siderite as above
268-278 Similar
278-289 Only a trace of sample; clay
289-301 " " " " " "
300-311 Clay, dull med-gy, vf mic; siderite
311-322 Clay as above; vsl limy; siderite
322-332 Similar
332-343 Very small sample - clay

USGS Newport test

343-354 Clay, dull med lt gy, vf mic little if any lime reaction.

354-365 Very small sample - clay

365-375 " " " "

Clayton 375-386 Rupelian - Foram glauc marl Small sample -- silty clay

386-397 Clay? sample looks like dried

Porters Creek Clayton 375 mud balls.

397-408 Similar

408-419 Similar - small sample

419-430 Clay, med lt gy, vf mic; drills or washes to clay balls.

Clayton K 425 (430 fossils)

430-440 Similar -- sl better sample.

440-451 Similar; 2 pieces of siderite? (reacts a little faster than most) coated with dk to v dk-green grains -- glauconite? - residue bright green grains of glauc?

451-461 Clay, dull med-gy, vf mic; to siderite

461-472 Similar for most part but also v limy sl vf glauc silt = marl; reacts rapidly in acid & disintegrates to vf glauc silt & clay

USGS Newport test

472-483 Similar - some v limy silty clay + some clay as in samples above; 1 piece of shell

483-493 clay, dull med-gy, limy, sl silty, fossiliferous; micro-fossils; tr shell fragments.

493-504 Clay, dull med-gy, v limy, sl silty; shark's tooth.

504-515 clay, dull med-gy, v limy, sl silty to v f sdy, finely glauc in part; foss(?) fragments. 1 piece of wh calcite.

515-525 Clay, dull med-gy, sl silty, v limy; drills to mud balls; finely glauc

525-536 Similar.

536-547 Similar & granules + of dK-br siderite; tr pyrite

547-558 Sh, dull med-gy, f-mic, limy; produces plastic bubbles as do limy samples above.

558-568 Sh, dull med lt gy, limy, silty, f-glauc foss; many shell fragments; pyrite; limonite;

USGS Newport test

568-579 Slts dull med-gy, v glauc, much v f-f sdy, limy; glauc coarser than above; foraminifera

579-590 Sdy slts as above & dull med-gy clay; shell fragments

590-601 Sdy slts & clay

601-612 Sd, lt-gy, glauc, vf to f-gr; & many med to c grs (slump??)

612-623 Sd, med lt gy, glauc, limy, clayey, vf to f gr; many free med to coarse, none seen in aggregates; probably friable layers of med-gr ss

623-633 Sand, lt-gy, glauc, med-c gr; drills free; glauc in med grs

633-643 Sand, as above (drills free); sandstone, dull med-gy, v clayey, glauc, foss, vf to c gr; probably clayey layers in cleaner sand.

643-654 As above; some clayey layers, but less; samples may be overwashed.

654-665 Sand, lt-gy, free drilling, f-med gr, to c grs; med-gr glauc; small tooth (1x3 mm); some of the darker glauc? grs show moderate phosphate content but may be pale glauc.

Newport test (USGS)

665-676 Sand, free drilling, lt-gy, glauc, sl phos, f- to med-gr;

676-687 SS, free drilling, lt-gy, glauc, m to c grained; some granules of chert, qtz, phos, etc; shell fragments; and med-gy to reddish-brown clayey v glauc, ≠ med- to c-gr ss.

687-697 SS, yel-br to lt-gy, drills free for most part, ≠ glauc, med to c-gr; some qtz & ch grans; aggregates are very glauc & have a lt br matrix that is in part siderite; small teeth

697-708 Sd, free drilling, glauc, f to md gr; to qtz grans

708-718 SS, med lt gy, glauc, lime f to md gr; drills free mostly, but some aggregates with lime matrix & some with limy clay matrix; free qtz & ch grans; some clay, siderite

718-729 As above but more clay & more siderite; some phosphatic grains & granules

USGS Newport test

729 - 740 55, mostly frac-drilling, but some aggregates, v. glauc, limy, sideritic, silphis, f to med-gr', 20% dall med-gy clay

740 - 750 Similar; probably mostly 2 lime matrix.

750 - 757 In part Similar to above, some pgrite; Mostly fragment of wh, lt-gy, med-dk-gy, and mottled lt & dk gy chert; some shows weathered, rounded surface of pebbles -- = chert pebble conglomerate

Ord 757 - 760 Some chert as above but mostly Ojpk

Ls, med lt gy to lt olive-gy, vf grain to ~~dense~~ ds; trace of f-x/ln ls = pebble??; Acid treatment of ds ls indicates trace of dol rhombs.

760 - 770 Ls, lt-olive-gy, f-grain to ds

770 - 772 Ls lt brgy to lt olive, f-grain to ds / tiny dol rhombs on etched surface

772 - 782 As above

782 - 793 Ls, lt olive-gy, dolic, ~~vf to~~ f-grain to ds; many small dol rhombs in most pieces

USGS Newport test

793-800 Ls, lt-olive-gy, dolic, slsdy, f-grnn; f- to md xd & fr sd grs in a few pieces; tiny dol rhombs in most pieces; pyrite

800 - 805 Ls, lt olive-gy, f-grnn, l. ds; only a trace, if any, dol.

TD-805

Arkansas Geological Commission No 46
Max Allison No. 1 Collison
24-7N-6W White County, Arkansas
(Near west Point)
TD-691?
(No E-log)

0-79 No samples
79-82 Sh, orchy stone dull med-lt-gy, sl silty, vf mic; no action in acid or water.
82-87 No sample
87-101 Sh as above.
101-122 Sh, as above; no action in acid or water; trace of siderite.
122-142'10" Sh, med-gy, sl silty, vf mic; no action in water or acid; trace of siderite.
~~142'10"-370 No samples~~
142'10"-163'4" Sh as above
163'4"-? Dirty sample -- much as above
to 370 No samples
370-390 Mud-caKe = unwashed samples
390-421 Sh, med-gy, sl silty, limy, f. mic; some pieces of limy siltstone that react rapidly to destruction in acid; no action in water; shell fragments.
421-~~444~~ 441? Sh, med dK gy, soft, f-mic, v silty; no reaction in acid
441-461 Sh, med-gy, f. mic, sl silty; shell fragments

Allison - Callison
24-7N-6W

~~K PP~~ Looks like PP

462-483	Sh, med dK gy, mic, v silty
476-496	Similar
496-517	Similar
538-559	Mixture of med-gy clayey sh & med dK-gy silty sh.
559-579	Sim
579-610	Sh, med-dK-gy, f mic, silty; no acid reaction,
600-620	Similar; quite a lot of siderite that may be from above.
620-625	Similar.
625-630	Similar; much Med-gy sh from above.
630-635	Similar
635-640	Similar; several large pieces of siderite; no direct evidence of unusual slump - but some med-gy sh and a few granules from above
640-645	Similar.
645-650	Sh, med dK gy, mic, silty; siderite.
650-655	Similar
655-660	Similar
660-665	Similar
665-670	Similar

RM Allison - Callison
24-7N-6W

670-675 Sh, med-dk gy, F-mic, s/silty; siderite.

675-680 Similar

680-691 No samples

TD: 691 ?

Arkansas Geological Commission No. 6

Jacobs No. 1 Le Grande

SWSE 34 - 9N - 1W El. - 225±

Jackson County, Ark.

528 - 1913

528 - 538	DK-gy lignitic shale
538 - 550	Some f sandy lt gy silt
	silt
565	Lignite
570	Silt & lignite
575	Same
585	Same
595	Sediments? granular red-br.
666	Silty clay
675	Lignitic clay
685	Lignite & wh clay

Samples not good enough to justify effort. Lower samples examined & no evidence of Paleozoics found.

Arkansas Geological Commission No. 453

Barnett ~~Co~~ Farm (Sulphur Rock Quad)

10-13N-6W (Probably NW NW)

Independence County, Arkansas (30-4E 5)

0-30	No samples
30-35	Sh, med-dk-gy, f-mic, sl weathered; siderite
35-40	Sh, med-dk-gy, f mic, sl limy
40-45	Similar -- trace of siderite
45-50	Sh, med-gy to olive-gy, fissile, f-mic, non-limy; much siderite
50-55	Sh, med dk-gy, f-mic, limy; siderite
55-60	Similar
60-65	Sh, med-gy to med-dk-gy, f-mic sl limy; trace of siderite
65-70	Sh, med-dk-gy, f-mic; sl limy to non-limy; siderite.
70-75	Similar; much siderite
75-80	Similar
80-85	Sh, siderite as above & earthy to x'lln med ltgy x foss ls; pelecypods & brachiopods.

Barnett
10-13N-6W

85-90 Sh, med-dk-gy, sl limy, f-mic; siderite; one crinoid

90-95 Sh, med-dk-gy, f-mic; v sl limy if at all; siderite.

95-100 Similar

105-110 Similar

110-115 Sh, med-gy to med-dk-gy, vf mic, sl limy; siderite

115-120 Similar

120-125 Similar

125-130 Similar, much siderite

130-135 " " "

133-140 Sh, med-dk-gy, sl limy, vf mic; tends to break up into thin flakes in acid; siderite

140-145 Similar

145-150 Similar

150-155 Similar

155-160 Sh, med-gy, vf mic, sl limy; siderite

160-165 Similar

165-170 Sh med-gy to md dk-gy, f-mic, sl limy; breaks into flakes in acid; siderite

Barnett - 10-13-6

170-175 Sh & siderite as above

175-180 Sh, med-gy, f mic, limy; instantly breaks into small flakes in acid; siderite

180-185 Similar

185-190 Similar Sh made up of thin flakes of ~~or~~ fragile paper-thin layers.

190-195 Similar

195-210 Sh as above; fossile fragments -- brachiopods, pelecypods, etc.

200-205 Sh, med-gy, sl limy, f-mic, foss; brach, pelecy, etc; tr siderite, pyrite

205-209 Sh, med-dk-gy, limy, vf mic, pyrite & siderite

209-215 Sandstone, lt-gy, sl limy, vf-fgr, drills free for the most part, well sorted sub-rounded to sub-ang probably sl sil or clayey -- does not disaggregate in acid. No sand

215-20 SS as above

220-225 Similar, tr crin & shell frags

225-230 SS, lt-gy, sl limy, vf gr; sub-ang grs; fossil fragments, mostly free drilling

230-235 Similar

235-240 SS, lt-gy, sl limy, vf to f gr; frac med rd & fr grs; fossil fragments;

Barnett 10-13 #6w

240-245 Ss, lt-gy, sl limy, vf-gr, trace foss fragments, scattered rd + fr med grs

245-250 Ss, lt-gy, sl limy, vf-f gr, lt gr-gy sl sdy clay (10%) sd grs are sub-ang to sub-rnd, cement probably is silica,

250-255 Ss, lt-gy limy, vf- to f-gr, foss fragments; tr vf glauc; rapid action in acid but does not disaggregate

253-261(?) similar

261-265 No sample

265-270 Ls, med-lt-gy sl sdy to v sdy, foss, vf xlln, vf to f sand grs + foss fragments in granular limestone matrix; tr med oolz; brachs, crin, etc; pyrite; disaggregates in acid, leaving a heavy residue of sub-ang sd grs, some silt & some clay.

270-275 Ss, med-lt-gy, v limy, vf to f gr, foss fragments

Barnett 10-13N-6W

275-280 SS, lt-gy, sl limy, vf to f-gr; sub-ang; tr pyrite

280-285 SS, med lt gy, sl limy, f-gr; ~~to med~~ fair reaction in acid but does not disaggregate.

285-290 Ss, lt-gy, "bright"; sl limy, f-gr;

Mbr 289+ drills free for the most part; 20% dK-gy Sh as below

290-295 Sh, med-dK-gy, sl limy, f. mic; pelecypods, brachs, etc

295-300 Sh as above; no fossils noted

300-305 Sh med-dK-gy, sl limy, f. mic; siderite

305-310 Similar - much siderite

310-315 " " "

315-320 " " " ; pyrite

320-325 Sh, ~~med-dK-gy~~ dK-gy ~~to dk-gy~~, sl limy to non-limy, vf mic; siderite; pyrite

325-330 Sh, dK-gy, vf mic; 25% siderite, md-dr, f-gran;

330-335 Sim. dar

Barnett 10-23N-6W

335-340 Sh, dk-gy, v sl limy, f-mic; 10% red-br siderite; tr pyrite.

340-345 Similar

345-350 Sh, med-dk-gy, sl limy, vf-mic; 30% ~~dk-gy~~ red-br siderite

350-~~355~~ 360 Sh, med-dk-gy, sl limy, vf mic; 5% red-br siderite.

360-365 Similar; tr pyrite

365-370 Similar; tr foss frags; siderite

370-375 Sh, ~~red~~ dk-gy, vf mic, sl limy; tr gast & pyritized first frag?; pyrite, 5% siderite

375-380 Similar; no fossils seen; some less reddish siderite that reacts faster in acid but not at a limestone rate.

380-385 Sh, dk-gy, v sl limy if at all, f-mic; ≤ 5% siderite

385-390 Similar; sl more siderite

390-395 Similar; dirty sample

395-400 Similar; clean sample; trace of foss frags; 5% siderite;

Mr 398 Mm? Est 10% slts, med-dk-gy, limy, f-mic;

Barnett 10-13N-6W

400-405 Siltstone, med-dk-gy to dk-gy, lmy, f. mic; reacts rapidly in acid at first, continues slow reaction for several minutes;

405-410 Trace of s, derite that may be from above; otherwise, med-dk-gy? Siltstone, lmy, f-mic

410-415 Mixture of siderite sh as above & lmy siltstone as above.

T.D. - 415

Arkansas Geological Commission No. 40.
(Olyphant Quad)

C.R. Croft Assoc. No. 1 Hinkle
23-11N-4W — C NW NW NE
Independence Co., Ark (10-1207)

0-10 No samples
10-20 Sand, yel-gy m to c-gr; tr ch grans
20-25 Similar; 5% coarser sand & fragments of chert pebbles.
25-30 Sand, yel-gy, med to vc gr; ch grans & pebbles -- some oolch, & sdy ch.
30-35 Similar; 10% granules & pebbles.
35-40 Sd as above; 40% ch gravel; mostly small pebbles & granules but fragments suggest larger pebbles; many types of ool & of sdy ch.
40-45 Gravel; mostly weathered Boone ch; several granules & chips of ool ch
45-50 Sand, yel-gy, med to vc gr; 10% grans and small pebbles of ool ch; sdy ch, & weathered yel-br decalcified ch.
50-55 Gravel; broken pebbles of ool, sdy, and homogeneous ch; little or no sand -- may have been washed out.

Craft-Hinkle 23-11N-4W

55-60 Gravel; chert pebbles - col, sdy, etc; no sd

60-65 Sand, yel-gy, med to v cgr; 50% chert granules and small pebbles; one med-dk gy hard siltstone pebble.

65-70 Similar; 40% gravel -- some granules of gr-gy f-gr rock that may be igneous.

70-75 Sand, yel-gy, f to vc; 5% ch granules; trace of gr-gy f-gr rock.

75-80 Gravel; mostly granules and small pebbles; 25% f to v c sand; some col ch; many of pebbles are med dk-gy igneous(?) rock, some are med-lt gy igneous(?) rock -- not White River gravel.

80-85 Sand, yel-gy, f to v c; ~~gr~~; 20% granules and small pebbles of col ch, granite(?), & dark rock.

Alluvium 0-5 KT

85-90 Sand, yel-gy, f to v c; ~~gr~~ 5% grans and small pebbles of ch, dk rock, etc; tr shell fragments in K or T matrix

90-~~95~~ 92 Sand as above; shell fragments in K or T matrix; 20% granules and small pebbles of ch and med to dk-gy rock; trace of pink granite?.

Craft-Hinkle 23-11N-4W

92-93½ Sand, yel-gy, f to vc, ~~gr~~; 20% granules and small pebbles of chert, dark-rock, gr-gy rock; 2% + wh, sucrose, well sorted, non-limy, f-gr ss - - probably a bed, not pebbles.

93½-100 Sand, yel-gy, f to vc; 10% granules and small pebbles of gt3, ch, and lt & dk igneous(?) rock; 5% wh f-gr non-limy ss.

100-105 Sand, yel-gy, f-vc; 5% grans & small chips (no pebbles) of ch, gt3, dk-gy & lt gr gy igneous(?) rock; tr wh f-gr ss; dull med-gy f-mic clay - - may be a layer in sand, reworked, etc - - non-sdy, v sl limy;

Kinderhook, Alluvium, 105 Miss

105-110 50% sand & granules as above but likely slump. Claystone; dull med-gy, f-mic, silty, sl limy.

110-115 60% sd & granules 40% med-gy claystone as above

Craft-Hinkle 23-11N-4W

115-120 Claystone, dull med-gy, f-mic sl limy; br-gy siderite; sand above cemented.

120-125 Similar

125-130 Similar

130-135 Similar

135-140 Sh, med-gy, vf mic, f silty, v sl limy to non-limy; dk br-gy siderite

140-195 Sh, med-gy, vf mic, f-silty, sl limy; soft & flaky; 5% ± 10% br-gy siderite = layers at least ¼" thick.
hint of foss shell @ 180

195-265 Sh, med-gy, f-mic, sl silty, flaky; sl limy; 5% red-brn to br-gy siderite in layers at least ¼" thick, shell (pelecypod?) imprint @ 246'.

265-290 Sh, med-gy, f-mic, flaky, sl limy; < 5% red-br siderite; trace of shell fragments; tr pyrite

Change - (flaky sh) siderite / no siderite (silty sh)

290-300 Sh as above & med-gy v limy foss siltstone; reacts vigorously & for several minutes in acid; res ∧ Sil aggregate to soft silty clay; crin, breaks, little or no siderite.

Craft-Hinkle 23-11N-4W

300-350 Sh, med-gy, f-mic, sl limy to v. limy, slightly silty, Res sil aggregate; tr cris in more limy part. little or no siderite; in part, thin layer(s) of v. silty clayey fossiliferous in limy siltstone

350-398 Slts, med-gy to olive-gy, f-mic, v. limy; rapid & long (thin steady med+) reaction in acid; Res: lt-br (bleached) soft r f gr sil aggregate

398-435 Slts, med-gy to med-dk-gy, f-mic, limy (sustained reaction in acid); Res: dull br gy (bleached) r f gr sil (?) aggregate; a few pieces of smooth br-gy siderite

435-512 Sh, med-dk-gy, f-mic, sl limy to limy, silty; tr of siderite; fossils mostly pelecypods on bedding planes.

512-545 Sh, med-dk-gy, f-mic, sl limy to limy, silty; fossil impressions on some bedding planes

545-585 Slts, med-dk-gy, f-mic, clayey (sustained reaction in acid) sl limy to limy, interbedded w/ dk-gy sl limy silty sh; tr calcite on fractures.

Craft-Hinkle 23-11N-4W

585-600 Siltstone, dk-gy, sl limy (slow, sustained reaction); pyrite; test for phos = negative, even though it looks somewhat like granular sh.

600-650 Sh, dk-gy, sl limy, silty; br-gy siderite

650-679 Slts, med-dk-gy, sl limy to non-limy, clayey

679-727 Sh, dk-gy, silty, v sl limy if at all; tr dk-br-gy siderite.

727-746 Slts, dk-gy, clayey, v sl limy; tr br-gy siderite

746-772 Sh, dk-gy, silty; tr br-gy siderite

772-809 Slts, med-dk-gy, sl limy to limy, clayey; interbedded with silty shale. Resi Hbrgy(bleached) sil aggregate.

809-846 Sh, med-dk-gy, vsl limy to non-limy, sl silty to silty, f-mic; trace of brach? impressions; red-br siderite.

Craft-Hinkle 23-11N-4W

846 - 855 Slts, med-dk-gy, sl limy to limy (slow to moderate sustained reaction), f-mic, clayey. Res: lt-br rfgr sil. aggregate

855 - 898 Sh, dk-gy, f-mic, sl silty, v sl limy. No siderite (tr limy)

Fault ? @ 910

898 - 921 Slts, med-dk-gy, f-mic, sl limy, clayey; slickensides on many pieces & calcite xlls (905 - 913)

921 - 936 Sh, dk-gy, f-mic, sl limy to limy, silty; trace of calcite on fractures.

936 - 965 Slts, dk-gy, f-mic, limy (sustained med reaction), clayey; interbedded with dk-gy silty sh; tr siderite

Darker sh

965 - 1000 Sh, dk-gy to black, f-mic, non-limey, silty; very dark & sl splintery, gritty when flaked; no phos

@ 985 - qtz xlls (or glass) and one piece of qtz fracture-fill? -- seemed out of place.

1000 - 1005 No sample ??

Craft-Hinkle 23-11N-4W

1005-1030 Sh, greyish-black, f-mic, v silty, moderately limy (slow, sustained reaction); tr calcite on fractures

1030-1032 Mostly gy-blk limy silty sh as above; ξ ls, dull med-gy, v silty, rapid reaction in acid leaves disaggregated clay ξ silt(?) residue; tr crin + other Foss in ls. VP-rlln IN

1032-1038 Much as above but only a few pieces of ls.

1038-1060 Sh, gy-blk, f-mic, moderately limy, (sustained ~~slow~~ moderate reaction), v silty

1060-1070 Slts, gy-black, moderately limy, f-mic, clayey

1070-1090 Slts as above but med-gy in part ξ more limy -- does not disaggregate.

1090-1098 Slts, dk-gy, f-mic, limy, clayey; tr of siliceous matrix

1098-1104 Slts as above ξ 50% chert, dk-gy to dk-br-gy, sl limy; tiny grains of calcite ξ ? in siliceous matrix; grades into limy sil siltstone.

mbn 11100±

Craft-Hinkle 23-11N-4W

1104-1109 Ls, dull med-gy, silty sil, vfxlln; some disaggregates in acid; interbedded with dk-br-gy limy chert and dk-gy limy siltstone.

1109-1117 Chert, dk-br-gy, limy, silty, dirty in part; grades into silty limestone & limy siltstone.

1117-1121 Similar

1121-1125 Slts, dk-gy, f-mic, limy, in part siliceous; some, but not much dk-br-gy silty chi residue is aggregate -- silt + silica

1125-1132 Chert, dk-br-gy, limy to non-limy, silty; dirty sample from rust -- probably metal from bit.

1132-1135 Similar - some lighter (br-gy to lt-br-gy) chert

1135-1140 Ch, lt-gy to dk-br-gy, limy at pinpoint areas; mostly silty, dirty, but some nearly translucent, showing many small inclusions.

Craft Hinkle 23-NW-4w

1140 - 1143 Ch, lt-br-gy to br-gy, sub translucent, specular; many small inclusions.

1143 - 1146 Ch, med-lt-gy to lt-br-gy, v slightly limy (pinpoint), specular; many tiny inclusions.

1146 - 1149 Similar; & a few pieces of limy chert that grade into sil f-xlln ls

1149-1150 Ch, med-lt-gy, sl limy to limy; res finely porous chert; ~~the~~ much ~~some~~ bone-wh sil matrix around calcite grains or xlls, & much ds med-lt-gy ch

1150 - 1152 Dirty sample - wire & rust, chert, much as above??

1152 - 1155 Ch, lt-gy to lt-yel-gy, limy, specular; many tiny inclusions.

1155 - 1157 Similar

1157 - 1159 Ch, lt-gy to lt-yel-gy, ds to to tiny lgts xlls -- imperfect. limy, specular; ~~y~~ the marl limy part leaves a siliceous residue in acid

1159 - 60 Similar

Croft-Hinkle 23-11N-4W

1160-1163 ch, lt-gy to med-lt-gy, limy to ds; more spicular limy part leaves a siliceous aggregate in acid; many small bright qtz xlls or sd grs with 2d growth; probably xlls

1163-65 ch, wh to lt-gy, limy, spicular; many tiny bright qtz xlls or grains with 2d growth.

1165-70 70% ch as above; limy qtz xlls; 30% ch, dk-gy to gy-blk, ds; gy-blk sh

Mbn / MDc 1168

1170-74 30% sh, med-gy to med-dk-gy, siliceous, pyritic; vf nd & fr sd in several pieces of sh.

MDc 1172 / Dp 70% ch, med-gy to lt br-gy ds, sl pyritic; some inclusions

1174-1177 Ch, med dk gy to br-gy, ds, dolic in part; interbedded w/ med-dk-gy vf. rhombic sil dolomite v slow acid reaction - leaving sil agg no sand seen & no qtz xlls

Craft-Hinkle 23-11N-9W

1177-1180 Ch, med-gy, dolic, sl pyritic, ds; med-gy v sil xf rhombic dol

glauc
1180-1186 Ch, med-gy, dolic, sl pyritic, ds; med-gy glauc v sil vf rhombic dol.

1186-1189 Similar - more bright-green glauconite in the dolomite.

DP sil(?) 1191?? 1189-1193 Ls, very lt gy, f to med xlln; no dol & no residue for some pieces; drills to powder in part

sil, dolic
1193-1196 Ls, lt-gy, glauc, vf to f med xlln; drills to xls & powder

1196-1199 Ls, lt-gy, sl glauc, vf to f med xlln; 5% med-lt-gy ds ch; interbedded w/ med ltgy f-rhombic limy dol

1199-1202 Ls, v-lt-gy, v sl glauc, vf to f med xlln; drills to xlls; 5% ± lt-gy to med-gy ds ch.

1202-1203 ?

1203-1207 Ls v ltgy sl vf glauc, vf to f xlln, drills to xlls; 10% lt-gy to med-gy ds ch

TD-1207

Arkansas Geological Commission No. 33

Buffalo Oil - Terry Peel No1 26-6N-3W - Woodruff Co.

0 - 988 No samples

988 - 1547 - Not examined

1547 - 1594 Sh, med-gy, f-mic, mu-limy.

1594 - 1600 No samples.

T.D - 1600

well did not reach the Paleozoics

Arkansas Geological Commission No. 955
Dee Linn No. 1 Cushman Water Well No 1
SW SW 9 - 14N - 7W Independence Co, Ark.

0 - 5	Chert, weathered yellow-brown, dense to porous
5 - 10	Similar
10 - 15	Similar
15 - 20	Similar
20 - 25	Similar; mostly milky wh ds ch.
25 - 30	Similar
30 - 35	Ch, weathered yel-br, 60% dense to 40% porous
35 - 40	Similar
40 - 45	Similar
45 - 50	"
50 - 55	" dirty sample
55 - 60	Ch, weathered yel-br, dense to porous; (50%) more weathered than samples above; much A
~~60 - 65~~	of sample looks like v f gr chert breccia residue -- f-sand size chert grains in a weathered earthy matrix
60 - 65	Similar
65 - 70	Similar
70 - 75	Similar

Cushman No 1 WW HN-7W

75-80 Siliceous, hematitic? residue from weathering? Looks like f-to med-gr decalcified fossil. hash with few if any fossils still recognizable; may be just decalcified, deeply weathered Boone ls.

80-85 60% yel-gy to red-br weathered hash; 40% weathered dense to porous chert, hematitic?

85-90 Similar; some red-br hematite (?) cement of the hash

90-95 Similar; one crin?

95-100 mbn sltLs 90± 5% Ls, lt-yel-br, f-grnn; no dolomite, no residue; 95% chert & hematitic weathered hash

100-105 Ls, lt yel-br, f-grnn; chert debris,

105-110 Sh, lt olive-gy to red-br silty, weathered; mostly Ls & ch as above

110-115 Mixture, as above

115-120 Ls, lt-yel-br, ds & non-dolic to dolic w/ tiny dolomite rhombs; some chips have both lithologies. 30% mixture as above

Cushman No 1 WW 14N - 7W

120-125 Ls, yel-gy, f-gran except where f rhombs of dol are present; pyrite

125-130 Ls, lt-olive-gy, dolic, f-gran; some pure ls, some dolic ls in same piece

130-135 Similar

135-140 Ls, lt olive-gy dolic (vf-rhombs) f-gran; pyrite

140-145 Ls, lt-olive-gy, vf gran; no dol & no res (Looks out of place = Op?)

145-150 Ls, lt-olive-gy, f-gran to f-xlln; dolic in part; tr/t-gr-gy dolic sh

150-155 Ls & tr sh as above

155-160 Ls, lt-olive-gy, sl dolic, f-gran; trace lt-gr-gy dolic ordinary sh

160-165 Ls, lt-olive-gy, f-gran to sub-lithographic tr lt-gr limy sh

165-170 Ls, lt-olive-gy, v dolic, f-gran to f-rhombic;

170-175 LS, lt-olive-gy, f-gran to ds

175-180 Sh, gr-gy, v limy

180-185 Dol, lt-gy, sl limy, v f rhombic

185-190 Ls, lt olive-gy, vsl dolic f-gran to ds

Cushman No. WW 14N-7W

190-195 Similar & lt gr-gy limy to dolic sh

195-200 Ls & sh as above

200-205 Dol, lt-gy, sl limy v f rhombic

205-210 Ls, lt-olive-gy, sl dolic f-gran to v f rhombic; small xlls of pyrite scattered through the ls.

210-15 Dol, lt-olive-gy, sl limy, v f rhombic

215-220 Ls, lt brgy sl dolic f-gran to f-xlln

220-225 Ls, lt-olive-gy, sl dolic, f-gran

225-230 Similar & some med-gy to olive-gy pelletal ls

230-235 Ls, lt-olive-gy, v sl dolic, f-gran to ds; to lt-gr limy sh

235-240 Similar

240-245 Dol, lt olive-gy, sl limy, v f rhombic

245-250 Similar & ls as above

250-255 Mixture dol & ls as above; to lt-gr limy sh

255-260 Dol, lt-olive-gy, sl limy, v f rhombic

260-265 Similar

265-270 Ls, lt-olive-gy, v sl dolic, f-gran to ds

270-275 Similar & lt br v f-rhombic dol

275-280 Ls, lt-olive-gy - v sl dolic, f-gran to ds

280-285 Ls as above & gr-gy limy sh; tr of f rd & fr sd in sh

285-290 Similar & pyrite

Cushman WW No. 1 - 14N-7W

290-295 Ls, lt-olive-gy, dolic, f-gran to f- dolic; lt-gr-gy sl sdy (f-m) sh; pyrite

295-300 Similar

300-305 Dol, lt-br-gy, sl limy, v.v.f-rhombic; lt-gr vf dolic sh -- tr sd grs; pyrite

305-310 Similar; little if any sand.

310-315 Similar & 20% br-gy vf-rhombic dol

315-320 Dol, lt br gy, vf-rhombic; much lt-gr-gy dolic, pyritic sh; tr f to c rd frsd

320-325 Similar, less sh; little if any sand

325-330 As above

330-335 As above

335-340 Dol, lt-br-gy, vf rhombic; tr lt-gr sh; pyrite.

340-345 Similar

345-350 Similar

350-355 Similar

355-360 Similar

360-365 Similar

365-370 Similar

370-375 Similar

375-380 Similar

380-385 Similar; many 1/2" to 3/4" flks of lt-gr sl pyritic sh.

Cushman ww #1 14N-7W

385-390 Dol, lt-br-gy, sandy, vf rhombic;

Joachim 320
OSP med to c rd & fr sd in dol matrix;
lt-gr sh
390-~~400~~ 395 Sandstone, drills free f to med-gr;
rd & fr grs

395-400 SS, drills free in part, dolic in part
f- to med-gr; 30% lt br vf rhombic
dolomite -- non-sdy in part

400-405 SS, drills free, rd & fr f-to med-gr;
lt-gr sh

405-410 Similar

410-415 SS, drills free, rd & fr f-to med-grs.

415-420 Similar -- siliceous cement in part

420-425 SS, drills free, rd & fr f-to med-grs

425-430 Similar

430-435 Similar; mostly f-gr

435-440 SS, drills free, rd & fr f-gr; some
med grs.

440-445 Similar; more med-grs.

445-450 SS, drills free, rd & fr f-to med gr;

450-455 SS, drills free, rd & fr f-gr; ~~few~~ only a few
med grs

455-460 Similar

Cushman No 1 WW 14N-7W

460-465 SS, drills free, rd & fr f- to med-gr

465-470 Similar

470-475 Similar

475-480 Similar

480-485 Similar

485-490 Similar

490-495 Similar

495-500 Similar -- some grs in the upper range of med
very near ½ mm

500-505 Similar "

505-510 Similar "

510-515 Similar "

515-520 Similar "

$\frac{051}{00}$ 523±

520-525 SS as above & 30% lt-olive-gy
sandy f- rhombic dol

525-530 Similar -- still 50% SS

530-535 70% Free drilling f to med gr ss -- some cgrs
15% lt-gy dolic ss
15% olive-gy sl sdy f-rhombic dol.

535-540 Dol, lt-olive-gy, f-sdy, f-rhombic

540-545 No sample

545-550 Dol as above

TD - 550

Arkansas Geological Commission No. 1327.

375 Dol / OSP

Dee Lion Cushman UU No 3

SWSE 16-14N-7W

(Samples need to be washed)

0-35 No samples

35-40 Ls, lt olive-gy, foss, f-gran, bracks, etc

40-45 Similar

45-50 Dirty sample
Red-brown cavity filling of
= Chert sand & dirt

50-55 Ls as above

Samples too dirty to run

Dol / OSP 375

485± / oe

TD - 550

PG 1150 CH 1965 MP MP | Mlr mr mm 3370 Mbn | MDc 3580 3590 DP 3670 Sil | oc 3717 3720 oF 3780 Olr 4130 | OJ 4253 DSP 4340 De | Opw 5410 (?) 5740 Oc 6595 Or

Arkansas Geological Commission No. 1749

Wyoming O&G No 1 Reaper
SE NE NE SW
14 - 10N - 7W White County, Ark

GL = 600'± (Topo) TD - 6705

Bed 1 - 40 - 2400

0 - 40 No sample

40 - 50 Small sample
SS, yel-br, f & med gr

50 - 60 SS, dirty, silty, vf to f gr

60 - 70 Silty, med-gy, ~~vsilty~~ vf sdy

70 - 80 SS, dirty, vf - f gr; silty

80 - 90 SS, med-gy, mic, v silty vf to f gr,
& dk-gy mic silty sh

90 - 100 Similar

100 - 10 SS, weathered yel-br, silty f-gr;
trace of free m & c gr

110 - 120 Sh med-dk-gy, silty, mic - no lime

120 - ~~130~~ 140 Similar

140 - 150

~~130 - 140~~ Sh as above & med lt gy v f-f gr SS
interlaminated w silty, vf sdy sh

130 - 160

~~140 - 150~~ SS, med lt gy, siliceous, finely glauc
(pinpoint), vf - to f-gr; nn limy

160 - 170 Similar

170 - 180 Sh, med-dk-gy, f-mic, silty

180 - 190 Sh, med dk-gy, f-mic v silty;
Shaly silts in part

Wyoming - Reaper 14-10N-7W

190 - 200 Similar

200 - 210 Similar

210 - 260 Similar (10' samples)

260 - 320 Sh, med dk gy, mic, silty; clayey
an occasional bed of ~~shaly~~ siltstn

321 - 350 ss, lt brn gy, mic, silty, sideritic, sl limy, f. gr; beds of med-dk. gy silty sh

350 - 70 ss, med lt gy, well sorted, clean, vf gr.

370 - 80 Similar but also clayey, silty, med-dk-gy vf. gr ss,

380 - 400 crin ss, med-gy, silty, clayey, sl limy vf to f gr; pyrite; one crin @ 390-400

400 - 410 ≅ 20% ss as above
80% med-dk. gy mic, silty sh

410 - 420 Similar - mixed ss & sh

420 - 440 Sh, med dk gy, v silty, mic; some clayey silts & vf sdy silts

440 - 650 Silts, med-gy to med dk gy VF sdy mic, clayey, v sl limy - pinpoint

Wyoming - Casper lt - 10N - 7W

650 - 690 Siltstone, lt-gy to med lt gy, clean, well sorted, c-gr; tr mica

690 - 700 Slts as above ε tr crin; tr v lt my slts; one piece of lt br vit ool ls; glauc

700 - 710 Similar - finely drilled samples ε ls is poorly represented by only a few pieces.

710 - 780 Slts, med lt gy, mic, sl limy; vf sdy, c-gr; layers of med dk gy silty sh; trace bracks

780 - 820 Slts, med-gy, mic, clayey

820 - 830 Sh, med dk gy, f-mic, silty

830 - 840 Slts, med-dk-gy, mic, clayey f-gr; some pieces have siliceous cement; non limy some med dk gy silty shale

840 - 860 Sh, med dk gy, f-mic, silty

860 - 880 Slts, med-gy, f-mic, clayey; tr of f-gr ss; one piece of f to med gr fess, limy ss

Wyoming - Reaper 14-10N-7W

880 - 900 Slts as above - probably mostly slump

& SS, med lt gy sl limy, lt limy f-gr - to med grs. Much md/lt-gy "weathered" earthy soft claystone -- may be clay ~~galls~~ pebbles, etc, that weathered before or during deposition

900 - 920 SS, med-gy, sl silty, ~~sl~~ limy ~~to lmy~~, f to med gr; "weathered lt-yel-gy & red-br clay fragments that probably are pieces of clay pebbles if they belong in the samples and are not pumped in; trace of glauc in SS; Cri & other? foss fragments

920 - 940 SS, med lt gy, limy to v limy, f to med gr; clay fragments as above, Cri

C-grs
940 - 960 SS as above but some C-grs; still clay fragments; Cri in, brach; some md dk gy silty shale

vc grs
960 - 1000 SS as above, & some vc grs still many "weathered clay pebbles"

Wyoming - Reaper 14 - 10N - 7W

1000 - 1080 SS, med ltgy, v limy, f to med-gr; scattered c to vc grs; weathered clay; crin and other foss fragments

1080 - 1090 SS, med ltgy, v limy, f to med-gr; trace c grs; little if any weathered clay; crin.

1090 - 1130 SS, med ltgy, v limy, m to c gr; tr vc grs & grans; crin

PG 1130± Chv f gr

1130 - 1190 SS, med lt-gy, silty, v f gr; not limy.

1140 - 1200 Slts, med-dk-gy, mic, vf sdy; tr med-dk-gy sh Some c-gr ss & grans are assumed to be slump

1200 - 1250 Slts, med-gy to med dk gy, mic, clayey

1250 - 1270 Sh, med-dk-gy, mic, silty

1270 - 1310 UNWASHED - probably f-sdy slts

1310 - 1320 Slts, med-gy, mic, vf sdy, c-gr,

1320 - 1360 Slts, med-gy, mic, clayey, c-gr

Wyoming - Reaper 14-10N 7W

1360 - 1390 Ss, lt-gy, vf to f gr; to md grs; drills free but many grains are broken

1390 - 1440 Powdered sample
Slts, md lt-gy mic, vf sdy.

1440 - 1450 Sh, med dk gy, mic, v silty to sl silty; non-living

1450 - 1490 Sh, med dk gy, mic; not living, not silty

1490 - 1500 Sh, med-dk gy, mic, silty

1500 - 1560 Powdered
Slty, med-lt gy, mic, vf sdy?, c-gr

1560 - 1590 Powdered
Ss, med ltgy, mic, silty, vf to f gr

1590 - 1620 Powdered
Slts, med-gy to med dk gy, f-md, clayey, c-gr.

1620 - 1630 small sh sample
Ss, med-gy, silty, f-mic, f to md gr

1630 - 1640 Dirty - similar?

1640 - 1660 Ss, med-lt gy, silty, f to md gr; may be a trace of c-grs
drilled to grains

Wyoming-Reaper 14-10N-~~7~~ 8W

1660-1690 Unwashed

Sh, med dk-gy, f-mic

1690-1700 Unwashed

Ss, med-lt-gy, mic, silty, vf to fgr

1700-1770 Ss, med-lt-gy, clean, sl limy, vf to f gr; & med dk-gy f-mic silty Sh

1770-1930 Ss, lt-gy, clean, ~~sl limy~~, f-gr; still 20% 30% med-dk-gy silty Sh in each 10' sample; all samples alike. May not be representative.

1930-1980 Sh, med dk-gy, f-mic; & slts, med-gy, mic, clayey, c-gr; ~~PCh~~ 1965 1980 in part, v silty

1980-2100 Sh, med-dk-gy, vf mic, sl silty, sl limy; clean shale; tr pyrite siderite

2100-2110 Sample lost from broken envelope

2110-~~2190~~ 2200 Sh, med-dk-gy, sl limy, clean; siderite; trace pyrite; pelecypod at 2130-40'; fish fragments 2160-2170, 2170-2180

~~2190~~

~~2290-2300 Sh as above; dirty sample~~

Wyoming - Reaper 14 - 10N - 7W

2200 - 2230 Sh, med-dk-gy to dk-gy, vf mic, sl limy, soft; siderite; trace of fossil impressions

2230 - 2300 Sh as above? Dirty samples

2300 - 2330 No samples

2330 - 2500 Dirty samples

Sh, med-dk-gy, soft, sl limy; tr siderite

~~2500~~ Samples below 2500 run w/ E-log not yet available

2500 - 2540 Dirty Sh, dk-gy, ~~v sl limy; platy~~; clayey; ~~medium soft - mostly~~; siderite

2540 - 2590 Sh, med dk gy to dk-gy, sl limy ~~siderite?~~ vf mica ~~Nothing finely mic - barely visible~~

2590 - 2605 Slty, Norkota med-dk-gy, f-mic, sl limy; siderite

2605 - 2735 Sh, dk-gy to blk, soft, clayey sl limy to limy; edges are soft that cuttings ~~samples~~ are sub-rounded - ~~almost greasy; most of sample is powder~~ but - tiny particles in the powdered sample are v. limy. - E log suggests probable limy layers - ~~washed sample - still v-fine - shows v limy to lt grains~~

wyoming - Reaper 14-10N-7W

2735 - 2810 Sh, dK-gy, limy; powdered samples; ~~the powder is limy~~

2810 - 2910 Sh, ~~powdered~~, dK-gy, v limy; Siderite

Reaction of washed rf ~~ss~~ samples is so strong that some or much lt-dk-gy is present; reaction is prolonged = some siderite or lime enclosed in clay

2910 - 3050 Sh, dK-gy, ~~#~~ limy to v limy. Powdered samples

3050 - 3110 Sh, dK-gy, sl limy to limy, powdered samples

3110 - 3220 Sh, dK-gy, v limy; siderite; powdered samples

Recheck of washed samples

Sh, med-dK-gy to dK-gy, material washed out of powder ~~#~~

limy to v. limy; Acid reaction is med-dk-gy limy Sh; the reaction corresponds to resistivity; in acid is much faster in fine material

some small pieces of clayey ls?; siderite;

All shale is reasonably slow even in coarser = clay-cemented carbonate

Soft. Little P - 3100 - 80

sl to moderate P - 3180 - 3220 matrix? final reaction is very

fr med-gy limy s/ts slow = siderite?

3220 - 3250 Sh, med-dK-gy, sl limy to limy, to dK-gy

Recheck - sl limy to v limy - may in part be fewer shale; vf mic; powdered samples

sl to 3250 - 3320 Clean Samples brownish-black

Moderate phos to 3240 Sh, dK-gy; sl limy to limy, little or no phos,

vf to f mic; sl slty; reasonably hard

fr siderite; fr pelecypods?

Wyoming - Reaper 14-10N-7W tolving

3320-3370 Sh, dk-gy, f-mic, silty, sl limy, sl tr pyrite; the more silty part is not very fissile and is more limy.

3370-3380 Sh, dk-gy, silty, very hard, f mic sl limy to limy; siliceous shale in part; clayey, limy vf gr siltstone in part; extended reaction in acid

3380-3420 Slts, dk-gy, f-mic, v clayey, ~~sl tr pyr to~~ limy, vf gr; hard, brittle; 30% + dk-gy tobr-gy sl limy to very sl silty med-hard shale.

3420-3500 (Sample 3420-30 contains first "ls" amount of drilling lag not yet determined but will be checked below)

"Ls" med-gy to br-gy, v silty, f-grain; interbedded with dk-gy v limy siltstone; high percentage of siliceous silt aggregate in residue - probably 50% + silica, probably cryptocrystalline; more than 50% of sample is dk-gy silty sh - ~~Storm~~ from above

Tiny orthocone 3420-3500

Wyoming - Reaper 14 - 10N - 7W

3500-3510 "Ls," med-gy, v silty, f-gran; sub-translucent edges before acid; reaction in acid is vigorous to completion; residue of sil silt aggregate, but some separation into smaller pieces; much of sample is limy dK-gy f. mic siltstone; some dK-gy limy sh.

3510-~~3550~~ 3550 As above, but only a little "ls"

Mostly dK-gy v f mic limy slts

3550-3580 "Ls," med-gy, v silty, f-gran; 50% dK-gy limy, f. mic slts; tr foss fragments; tr pyrite

small coiled cephalopod 3550-60

3580-90 Very little "ls" -- nearly all slts

3590-3600 First chert

Most of sample is dK-gy silty, sl limy sh; a few pieces of dull dK-gy to brownish-gy chert -- looks a great deal like the sh but is siliceous; tr ls as above

Wyoming - Reaper - 14-10N-7W

3600-3620 No ch - Slts, dK-gy, limy, f. mic; ~~[illegible]~~ med-gy sil "ls"; dK-gy Sl limy to limy Sh; tr pelecypods, 3610-20', tr pyrite

Interval is slts, Probably dK-gy, crin though several pieces of med-gy sil "ls" or slts are present in each sample; the dk & lt differ largely in color

3620-30 No sample

3630-40 Mostly dK-gy slts - some Sh
A few pieces of med-gy sil "ls"
a few ~~orr~~ pieces of dull med-gy chert

3640-50 Mostly dK-gy limy slts but several pieces of dull dk gy to br-gy chert = Siliceous siltstone or shale
"Moorefield" lithology

3650-60 Mostly dK-gy limy slts, but several pieces of med-gy sil "ls"
"Moorefield" lithology

3660-3700 chert, med-gy to med dK gy, dense Sl limy; trace of lt-br-gy f. xlln ls; much dK-gy limy slts & Sh -- probably from shale because ch & ls look like reasonably clean Mkst, ?? DP however, one piece of slts contains a small lens of ds ch much like the other chert.

3680-3690 - 1 piece blk ch
3690-3700 - 1 piece med-dK-gy crin ls = dirty ls

little if any res or dol

Wyoming Reaper 14-10N-7W

3700-3710 Mostly sh & slts

2 pieces "dirty" crin ls — 1 piece med-gy sil foss? ls = crin

Several pieces of chert - med-gy to dk br gy, f mottle med-gy & br-gy

3710-20 Mostly sh & slts

several pieces "dirty" crin ls — ch, ds, med-dk-gy, med-gy, f-mottled; ls, br-gy, crin, f-xlln -- leaves no res

3720-30 lt br gy vf-rhombic dolomite ← some of chs sl dol/c small orthoconc — ls above but a much higher (s/l silt agg res) percentage of ch & ls

3730-3740 ss, bright-gr, glauc, limy? vfgr = OC? pyrite-tr grsh — ls, clean lt-gy to lt br gy f-grain to med xlln; to OC; no residue

C-xlln ls looks like OF

small gast dk-gy = from above?

chert, ds, dull med-gy & br gy

much dk-gy sh & slts

3740-50 Similar - some new white med-xlln ls

3750-60 Similar

3760-70 Similar

3770-80 Similar

3780-3800 Unwashed (No OP) probably similar

OF ls, med lt-gy to lt-gy, f to med xlln; some white vf xlln matrix; some C-xlln pieces with little or no matrix, but pyritic in part

About 20' lag?

Wyoming - Reaper 1# - 10N - 7W (Platte)

3800-10 Ls, lt br gy, f-xlln; ~~dk br gy~~ f-grain, no del, no res
3810-20 Much silty sh, ~~f~~
3820-30 Probably similar - nearly all shale
3830-40 Ls, lt-br-gy, f-xlln; tr ds wh ch; sh ~~f~~
3840-50 Ls, lt olive-gy, slightly dolic f-grain; no del rhombs in ls
3850-60 Ls, lt-br-gy f-xlln; tr dk-gy sh - no res; tr lt-gr-gy sh
3860-3900 Ls, lt-br-gy f-xlln; tr dk-gy sh - from above? Dirty samples
3900-3940 Dirty samples, Ls lt br gy f-xlln; ~~f~~ ls lt olive-gy f-grain ds
3920-30 Sample marked 3949
3940-50 Ls, lt-br-gy to lt-olive-gy, f-grain to f-xlln; no del, no res = Platte type
trace brach

3940-50 Similar - mostly sh
3950-70 Similar - poor samples
3950-70
3970-4000 Ls, lt-olive-gy, f-grain (Platte)
3970-4020
4000-40 Ls, med-gy, f-grain; no del, no res
tr asst?
4020-4030
4040-4050 Ls med/lt-gy to med-gy f-grain

Wyoming - Reaper 14-10N 7W

4030 4040

4050 - 4060 Ls, med-gy to med-dK-gy, ds to f-gran; one med rd & Fr sd gr in one chip; trace brach; nodol

4060 - 4110 4040 - 60

4110 - 4130 Ls, med-gy, f-gran tds

4130 - 4140 OP 4130

4130 - 60 Dol, dull lt-br-gy, tr vf to m sdy f-rhombic; still much ls as above - could be interbedded, but probably not

4140 - 60

4160 - 4180 Dol as above & lt-gy vf rhombic dol

4160 - 4190 tr vf to f rd & fr sd

4180 - 4210 Dol, med-lt-gy, sl sdy, f-rhomb; scattered f- to med sd grs, abundant in a few pieces

4190 - 4210

4210 - 4230 Dol, med-lt-gy, v sdy, f-rhombic; abundant f- med rd & fr sd grs

4210 - 20

4230 - 4240 Dol, med-lt-gy sl sdy f-rhombic scattered f-m rd & fr sd grs (Duplicate sample - the other 4230-40 is dolic f med gr SS)

~~4240 - 50~~ 3

4240 - 4250 Dol, med lt gy to lt olive-gy v sdy, f-rhombic

OS 4250 OSP 4245

4250 - 4255 SS, lt-gy, sl dolic, vf to ~~f~~ med gr

Wyoming - Reaper 24-10N-7W

4295 4255
4255 - 4265 SS, ~~med~~ lt gy, sl dolic vf to med-grs;
4255 4290 grs are rd & fr - drills free in part
4265 - 4300 SS, lt-gy, vf to ~~med~~ f-gr; tr med grs; a little
reaction in acid = siliceous
4290 4300
4300 - 4310 SS, lt-gy to wh, vf to f gr;
to med-grs; siliceous;
Samples are largely black SH -
only a few pieces of wh SS; free
grains, if any, washed out.
4300 30 no reaction in acid
4310 - 4340 SS, lt-gy to wh, vf to f-gr;
and med lt gy to olive-gy dolic
f to med gr ss; some med-gy f-rhombic
dol w/ little or no sd.
OSF 4330± (Most of samples are dk-gy SH)
OF
30 35
4340 - 45 Dol, dull med-gy f to med sdy, f-rhombic
35 40
4345 - 50 Dol as above & lt-gy vf to f gr
sil ss
40 60
4350 - 4370 Dol, dull med-gy to (lt brn-gy
sl sdy ~~to sdy~~, vf-rhombic,
scattered to (abundant) (few pieces only) f-med
rd & fr sd grs
4360 4370
4370 - 4380 Dol, dull lt brn gy, vf rhombic;
little if any sd in most pieces;
Scattered sd in some

Wyoming - Reaper 16-10N-7W

4370 - 81

4380 - 4390 Dol, dull lt brn gy, sl sdy vf rhombic, scattered f-f sand sd
(Schlumberger depth 4381)

4403 - 4435 Dol, med lt gy to lt olive gray, f to med gy vf rhombic; trace of f to m sdst
only a few pieces of the smaller

4435 - 4450 Similar - dirty samples (with some sdst)

4450 - 5300 Powdered, unwashed samples, not run
(See end of log - below TD @ 6705)

5300 - 5315 Cuttings are small but clean
Dol, med-gy to lt brn gy, sl limy, sl sdy,
f-rhombic; scattered f to med sd

5315 - 5330 Ls, med-gy, f-gray; no dol
no vcs

5330 - 35 Ls as above, but sl dolic in part

5333 - 5370 Dol, med lt gy, vf rhombic;
widely scattered f-m sd grs; some (30%)
Ls as above; contrast between
darker Ls & lighter dol; some Ls
Tends to leave a silty clay
aggregate residue; some Ls = nodol, no Res.

Wyoming-Reaper 14-10N-2W

5370-5380 Ls, med-dK-gy, dolic, f-grn to f-xlln; chert, lt br gy, ds, faintly mottled, sl limy = lime in pinpoint areas and along contacts tr brach
chert brach

5380-85 Dol, med lt gy, vf-rhombic & ls, med-gy, sl dolic, vf grn; Ch; both lt br & dK br gy, ds, sl limy

5385-5410 Dol, med lt gy, v limy, sandy, vf rhombic; abundant f-med rd & fr sd grs; little other residue

5410-15 Dol, med lt gy, v limy, sl sdy, vf rhombic; may be dolic ls only a few sd grs

5415-30 Ls, med lt gy, dolic, vf xlln; trace f-med sd

5430-55 Dol, med-gy to lt dK-br gy, v limy, sl clayey vf rhombic; only a trace of sd; tr ls as above
some med-dK-gy vf grn to ds ls

5455-70 Res-dK & lt gy sil silt or clay aggregate
Similar, but more sand

5470-75 Dol, med-gy to lt br gy, v limy, vf rhombic; little if any sand.
some ls as above

5475-80 Res; sil silt aggregate
Similar. a few sd grs.

Wyoming - Reamer 14-10N-7W

5480 - 5510 Ls, med-gy to br-gy, sl dolic to v dolic vf xlln; trace f-m sd
Res: moderate to light - lt-br sil silt aggs free

5510 - 25 Ls, med dk-gy, sl dolic, vf xlln; med res - lt brgy sil silt-
little if any sand; mostly disaggregated

5525 - 50 Ls, med-lt-gy to lt brgy, sl dolic
vf - xlln; just 1 or 2 free sd grs
Res moderate - lt-br-gy to br gy sil silt aggs free

5550 - 5560 Ls, med-gy, sl dolic vf xlln;
mostly ~~aggregate~~ free
~~OP~~ 5560 tr sil lt-br-gy silt res/ tr ~~poss~~ fsd in res
OP?

5560 - 5590 Dol, med lt gy (cream), vf rhombic;
clean; no sd - Res - free lt-gy sil silt
or clay
OP?

5590 - 5600 Dol, med-dk-gy, vf rhombic;
trace of f sd?; tr lt-br-gy ds
sl mottled ch; sil silt aggregate res
heavy br-gy

5600 - 5655 Dol, dk-br-gy, vf rhombic; pyrite;
DK-gy dol sil silt aggregate res/ ~~Drlg~~
= heavy -- nearly 100%
This dol much like that above
but is much darker.

5655 - 5665 Dol, med-lt-gy, vf rhombic;
one free sd grain; sil silt
aggregate res.

5665 - 5700 Dol, med-gy f-m rhombic
F-sd in some pieces
Ls, med lt gy, sl dolic, f-grain
Note: Larger cuttings & mixed lithology
(ls, sdy dol, lt dol, dk dol) probably
caused by change from air to mud?)

Wyoming – Reaper 14-20N-7W

5700 – 5705 Dol, dull dk-br-gy, f-rhombic, uniform.
Sample: Res – some sil silt tr f sd
R – br-gy disaggregated sil/silt & 3 grs f sd

5705 – 5720 Dol as above & lt-br-gy f-gran to vf xlln dolic ls; tr v sdy (f-m) dol but no sand in most pieces; tr Hbr ch;
~~Probably Sample above is representative & this is mixed~~
R – ~~as~~ br-gy sil/silt, mostly free; tr f sd

5720 – 25 Mixture of lithologies
1 Dolomite, dull-br-gy, f-rhombic
Res – Free Clay
2 ls, med dk gy, to med-gy sl f-msly, sl pelletal, vsl dolic vf xlln to vf f gran
3 ls, lt olive-gy pelletal vf gran
R – lt-br to dk-br sil/silt – 50% free

5725 – 35 Similar; no sd

5735 – 40 Similar, trace f-med sd ls

O.W 5740

5740 – OC 5745 Dol, lt br gy, vf rhombic; clear calcite in fractures; some dk-br-gy dol
R – Rich coarse H-br-gy sil/silt aggregate some free; tr H-gy ch

5745 – 50 Chert Similar & 5% lt br gy to milky-white ds chert.
R – As above – more chert

5750 – 5760 Dol as above; < 5% ch; 10% f med-gy dolic f-gran ls

5760 – 5765 Similar but < 5% ls

Wyoming - Reaper 19 - 10N - 7W

5765 - 70 Ls, med-gy to olive-gy, dolic, f-grain to vf xlln; 20% ± dol as above; Siliceous silt aggregate residue

5770 - 75 Similar - 40% dol

5775 - 80 > 50% dol

5780 - 90 Dol, dull br gy, (limy) s/sdy, vf rhombic < 10% ls; f to med sd grs concentrated in a few thin layers; most of sample is sand free. Sample in 2 parts - coarse cuttings mostly dol, fine cuttings 50% ls

5790 - 5800 Ls, med dk-gy, dolic, f-grain; trace f-to med sd in a few pieces; 20% dol as above.

5800 - 5805 Dol, dull br-gy, limy, vf rhombic, 10% ± ls

5805 - 5825 Ls, med dk gy to lt br gy, dolic, f-grain; red clay flakes 20% lt br gy vf rhombic limy dol

5825 - 35 Ls, med dk gy, & dull br gy, dolic, f-grain, (to locally pelletal) rd & fr sd grs in a piece or two; 30% dull lt br gy limy vf-rhombic dol

5835 - 40 Similar - no sand seen

Wyoming - Reaper 14-10N-7W

5840-5855 Ls, med-gy to dK-gy, ~~f~~ v f gran, 20% lt olive-gy, v f- rhombic dol tr dK reddish-br & lt smoky gy ds ch; much f to med sd is a few pieces of ls - none in others

oolls

One piece f-m ool to oolitoid dK ls. @ 5830-55

5855-65 Ls, med-gy to dK-gy, sl oolitoid, sl dolic, f-gran; 2+ pores (medium) dK-gy to black sl lissy ch or sil sh.

blk ch

5865-70 Similar chert is med br gy ds

5871-95 Ls, (lt br-gy), to med-gy to dK br gy, s/dolic, f-gran; oolitoid in a few pieces; tr pyrite in upper part

5895-5920 As above; & lt br to dK-br ds ch

br ch

5920-5950 Ls, med-gy to med-dK-gy, dolic, sl ool in parts for f-m sd. f-gran; 3% to med lt gy v f rhombic dol, (One piece @ 5933-40 contains a c gr of sd.) lt br gy Sub-translucent ch, med-oolitoid ~~ch~~ in part; lt br gy opaque ds ch

oolitoid br ch

Wyoming - Reaper 17 - 10N - 7W

5950 - 5960 Ls, lt olive-gy to med dK gy, dolic, vf gran; 30% med lt gy vf rhombic dol; opaque lt brgy ds ch, tr pyrite

5960 - 5980 Dol, lt brgy to med lt gy, f-rhombic; Sil silt agg res ~~tr clear to Ls as above~~ ~~Sh~~ wh / sl noKy-gy & lt br gy ds ch

5980 - 6000 Ls, med-gy to med dK gy, dolic, vf xlln; sub-oolitoid in part. tr ch; wh suboolitoid; lt-br, Res: sil silt aggregate

6000 - 6015 Ls, med-gy to lt olive-gy, dolic, f-gran; oolitoid in part & 30% to 50% med lt gy

6015 - 6025 Ls as above & 30% ? vf-rhombic living dol - - sil silt aggregate res; pyrite

6025 - 35 Dol, med lt-gy to med-gy, living, vf rhombic; Kil lt-gy sil silt aggregate; Ch, lt brgy to mdKy-wh, suboolitoid. 40% lt olive-gy to med-gy vf-gran ls

6035 - 6050 Ls, med-gy to med-dK gy, dolic, vf gran; 40% med dK-gy vf-rhombic dol; sil silt agg Res. tr clear f-med sdy ch (orthoquartzite) & tr sil sdy ls.

Wyoming – Casper 14 – 10N – 7W

6050 - 6065 Ls, med-dk-gy to olive-gy, sl dolic, vf xlln; 90% med dk gy + med lt gy lmy vf rhombic dol. ch; tr lt br ds; sl sil silt res

6065 - 6075 Similar but 80% ls; lt-br ds ch

6075 — 6085 Similar — 90% med-dk-gy dol, Scm med lt-gy dol

6085 - 6100 Ls, lt olive-gy to med-dk gy, dolic, vf gran, 30% dol, med lt gy, vf rhombic; ch; tr wh & lt br

6100 - 6120 Dol, med-lt to med-gy, sl lmy, vf rhombic; tr f-m sd grs; R. sil silt agg. ch; lt-gy transl; pyrite

6120 - 6150 Dol, med-lt gy to med-gy, sl lmy vf rhombic; sl tr sd; pyrite R; sil silt agg; tr lt br gy ds ch to transl lt gy ch

Wyoming Resper 14-20N-7W

6150 - 6185 Dol lt-br-gy, vf rhombic pyrite Agg Sil silt res; tr milky wh ch, may be fsdy in part - some look like orthoquartzite, but grains are indistinct probably xlln qtz masses; tr lt-br sub-trans ch

6185 - 6235 10% Dol as above; med-gy, dolic, vf-gran; tr wh ch & lt-br ch Res Sil silt agg

6235 - 6215 Dol, lt-br gy to med-gy, vf to f rhomb; tr wh sub-colorless ch; tr lt-br ch

6265 - 75 Dol med-gy to br-gy, vf to f rhombic, Sil matrix - f dolorhombic in a few pieces but less than 50% wh sil matrix; tr wh & tr lt-br ds ch

6275 - 6295 Dol, med-gy to br gy, vf to f rhomb; tr lt br ch; R - sil silt agg

6295 - 6300 Dol med-gy to br-gy, sl sdy, f-rhomb, f to med rd & fr sd in several pieces. R - sil silt agg

6300 - 6310 Dol, med-gy to br-gy, vf to f rhombic, f-m rd & fr sd in some pieces; dol, is oolitoid, in part - dolomitized oolite? R - sil silt agg Tr pyrite

Wyoming - Reaper 14-10N-7W

6310 - 6320 Dol, med-gy to br-gy, f-rhombic
No res in piece tested

~~6320 - 6330 f rd dfr sd in few pieces~~

6320 - 6330 Dol as above; scattered f rd dfr sd in many pieces - R sil silt agg

6330 - 6345 Dol, med-gy, f-rhombic; scattered f to rnd rd dfr sd grs tr wh sil matrix - f x lladel. Res; sil silt agg

6345 - 6355 Very small samples
As above?

6355 - 65 Dol, med-gy, to br-gy f to rnd rhombic, scattered f - rnd rd dfr sd; R; sil silt agg

6365 - 70 Dol, ~~med~~ as above, but lt/dk, f any sd

6370 - 80 Dol, as above, scattered f-rnd sd

6380 - 6390 Rest similar to 6365 - 70 Some md lt gy vf rhombic dol. samples rust(?) stained

6390 - 6400 Dol, med-gy, vf to f rhombic; Dol, med-dk gy, tobr-gy vf to f rhombic; 5% med-dk gy f-grain ls (from above ???) tr lt br ds cl

Wyoming - Casper 14 - 10N - 7W

6400-6415 Dol, med-gy to lt-olive-gy, f-rhombic; tr F-med sd; tr lt-br ds ch; tr wh cloudy ch; Res; sil silt ~gy

6415-6440 Similar but no sd seen; tr med-rhombic dol w/ wh ch matrix

6440-6450 Dol, med-gy to lt olive-gy, vf to f-xlln; tr lt brgy to lt-gy ds ch Res; sil silt ~gy; tr wh sil matrix is f-m rhombic xlln dol

6450-55 Similar; tr vd to f sd - much in one large piece, scattered grains in other pieces

6455-6470 Dol, med-gy to lt-olive gy, vf to f-rhombic; scattered f to med rdt tr sd (very little); tr lt br trans ch Res - Both dark & light sil silt ~gy

6470-6500 Dol, med-gy to olive-gy, vf to f-rhombic; lt-br-gy to ewh ds ch tr-dolarhombic ch; ~~Res~~ med rhombs in wh matrix tr dk-gy clayey dol Res; sil silt ~gy - dk res From dk-dol

Wyoming - Casper 12 - 30N - 79W

6500 - 6555 Dol, med-gy to olive-gy, vf to f rhombic, ~~med rhomb~~
5% lt-br-gy f wh ds ch
Res; Si/Si lt agg ; pyrite
tr wh matrix in f-rhombic dol

6555 - 6565 Dol, lt-gy to med-dk-gy, vf to f. rhombic;
pyrite; 5% wh + lt-br ds ch
Res: - Si/Si lt agg

6565 - 6570 As above f vf - med, rhombic
dol w/ wh ch matrix - some
dolo rhombic wh ch, ~~- Res; some disaggregated~~

6570 - 6595 Dol med-gy to med dk gy, vf to med rhomb;
Med X/l 1% lt-gy ds ch; some f-med dolo rhombic wh ch
Res; Si/Si lt aggregate tr pyrite

6595 - 6600 Dol, med lt gy to med-gy, vf to med rhombic;
C-sd trace of f to c sd tr sd grs
Chi 1% lt-br-gy ds
Res; Si/Si lt agg

Wyoming - Reaper 14-10N-7W

6600-6610 Dol, med-gy to olive-gy, vf to med rhombic; wk ch matrix common (1%) in f-m rhombic dol; <1% wk ds dolorhombic to sub oolitic ch Res; sil silt agg no sand noted

6610-6615 Dol + ch ss? bone, trace of f-m sd in dol + tr f-sd in wk ch

one sample

6615 to ? Similar —

Samples start again @ 6675

6675-6690 Dol, med-gy to lt-br-gy, f to med (mostly med) rhombic; 1% + ch-gy, lt br gy ds ch; tr wk f dolorhombic ch; no sd seen Res; sil salt agg + pyrite

6690-6700 Dol, med-gy to olive-gy, vf to med-rhombic; tr wk f-med dolorhombic ch 5%-10% lt-gy, wk, lt-br ds ch; tr f-oolitic lt br ds ch trace smoky (purple?) ch; clear ch, sl sdy No sd noted (r f-med sd (mostly free) Res; sil silt agg + dolocastic ch

Samples to 6700

TD - Drlr - 6705, Schlum 6614 (see next page)

Wyoming - Ranger 14-10N-7W

(Samples 4450- were washed & examined after first run-through)

Samples described below are fine air-drill(?).

4450-65 Dol, lt olive-gy to br gy vf rhombic
Rea: little that belongs - trace(d)
med sdl gr & some blk-Sh

4465-70 Ls, med dk-gy, dolic, f: gran, scattered f-m rnd & fr sdl
R - vf - med rnd & fr sdl - in attached clusters = poorly sorted

4470-75 Dol, br-gy, limy, vf-rhombic, some vf sdl, tr f-med sdl
R - Sd as above

4475-80 Dol, lt-br-gy to br-gy, sandy, limy, vf-rhombic, tr of "edgewise conq" in one piece of vsdy & limy dol
R - Sh as above

4480-85 Dol, lt br gy, limy, vf-f med sdy, vf rhombic; tr of med dk-gy Ls
R - sd as above

Wyoming - Reaper 19 - 10N - 7W

4485 - 4490 Dol, lt br gy ~~sl~~ (lmy) vf sdy; dk-gy to dk gr-gy clay partings

R - sd, mostly vf-f gr, dk-gr gy sh

4490 - 4495 As above, large piece of gr-gy f pyritic sh

R - sh & vf-f sd from above pieces

4495 - 4500 As above; dol is finely mottled = pellets, xls, ?.

R - vf to f sd & tr sh.

4500 - 4505 Dol, lt br-gy, ~~sl~~ lt br-gy, calc mud sds, vf-rhombic

4505 - 4510 Dol, lt br gy vf rhombic; little if any sand; Disaggregated silty clay Res

4510 - 4530 Dol, br-gy & sdy, vf rhombic; vf to f sd; tr dk-gy shale in lower part

4530 - 4550 Dol, dull br gy, vf rhombic; dk-gy & gr-gy pyritic sh.

4550 - 45 Res dk br-gy sil silt or clay aggregate - even in dolomitic cuttings

Wyoming - Kemper 14 - 10 N - 7W

4550 - 4580 Dol, dK-brn-gy, silty or clayey, vf rhombic; some dK-brn-gy clay
R - dK brn-gy sil silt ş clay

4580 - 4610 Dol, med-gy, clean, vf rhombic
R - lt-gy sil silt ş clay
trace f sd in lower 10'

4600 - 4615 Dol, lt-brn-gy to med-gy, vf rhombic, trace vf-f rd ş f sd
Res; lt brn sil silt agg + vf to f sd

4615 - 4635 As above + but little or no sd
Res - tr lt brn sil silt agg

4635 - 45 Dol med lt gy to lt brn gy vf rhombic
20% med dK-gy f-grn ls
R - lt-brn sil silt agg

4645 - 4650 No sample

4650 - 4675 Do, lt-brn gy, vf rhombic,
10%-20% med dK-gy slightly ls
Res - lt-brn-gy sil silt agg

Wyoming - Kemper 14 - 10N - 7W

4675 - 4690 Ls, med-dk-gy, silty dolic, vf gran
Ξ br-gy tiny vf rhombic dol
Res - much br-gy sil silt
aggregate

4690 - 4730 No sample

4730 - 4740 50% br-gy to med dk-gy
sl dolic f-gran ls
50% br-gy tiny vf rhombic
dol ; Res - sil silt agg
from dol ; tr frags
silt from ls

4740 - 45 No sample

4745 - 50 Ls & dol = above.

4750 - 60 Ls, br-gy, tod k-gy dolic, vf gran
R - br-gy sil agg (not much)

4760 - 4780 Ls, br-gy, tod k-gy dolic, vf gran, Ξ 20% - 40% lt br gy to lt-gy vf rhombic dol
R - med amt lt-gy & br-gy sil agg

4780 - 4800 Ls, br-gy to dk-gy dolic,
vf gran ; only trace lt-gy dol
R. Little - br-gy sil agg

4891-95
4890-95
4295-4900
4895-4900

Wyoming - Reeper 14-10N · 7W

4800 - 4830 Ls, med-gy to br-gy, dolic, vfgrnd
gets darker downward
R - lt-gy to lt brg sil/silt agg
to free grains

4830 - 40 Ls as above ± 50% lt br gy
v f xbedded dol
R - lt-gy to lt brgy sil/silt
295 d to f-m sd 4833-40

4840 - 50 Ls ± dol as above; f med sd
fr sd, mostly in the ls
R - heavy lt-br-gy to br-gy
sil silt aggregate - sdy
in part; f-med sd fr sd

4850 - 60 Dol, lt br gy, limy, v f xbedded,
Some ls as above; f-med
sd ± fr sd, esp 4850-55
R - heavy lt-br sil silt aggs
f-med sd fr sd

4860 - 80 Ls, med dk-gy, dolic, vf grnd,
R - V light (all ls) in upper
10' - moderate sil, silt aggs
in lower 10'

4880 - 90 Dol, med-ltgy to br gy,
limy, v f xbedded; Some ls as above
R - much lt-gy sil silt aggs

Wyoming - Reaper 14-10N-7W

4890 - 4900 Ls f dol as above 50-50
Some f-med ad f-c sd,
esp in 4° 20-95
K - Moderate to heavy
~~H~~ Heavy silt/clay
only a trace of sd

4900 - 4950 Ls, pr-gy to med-dk-gy,
dolic, vf granular; f-med sd
@ 49 ~~10~~-30; ~~most~~ samples
(10-50%)
contain some limy dol
that leaves a sd/silt/clay +
~~Some~~ much free silica?
the ls is vf grnd to dst and
leaves ~~no~~ little or no res,
only some clay flakes
K - Moderate siliceous silt or
clay residue from all samples
but mostly fine; aggregate
from a few to several pieces,
especially sandy pieces.

Wyoming - Reagan 14-10N-7W

4950 - 5000 Ls, med-dk-gy to olive-gy, dol, vf gran to ds; scattered vf to f sand in a few pieces of each sample. Res - Sil silt aggregate from most pieces; some contain vf-f sd.

H2S odor here & there

5000 - 5050 Ls as above; scattered f-med sd

Res; Heavy, sil silt, both free & in aggregate; samples 5000 - 5025 & 5040 - 45 = mostly lt-med gy sil silt; 5025 - 5040 & 5045 - 50 = dk-br-gy sil silt.

H2S odor

5050 - 5095 Ls, med dk gy to dk-gy, dolic, f-gran to ds; trf-med sd, esp. 5070 - 80; much clay? or sil silt (grains) released in acid = dk-br gy mud

H2S odor

Res; heavy but much is disaggregated lt-gy to dk-br gy sil silt agg & free grains; probably clay in part = stays off the bottom

Wyoming - Reaper 14-10N-7W

5095 - 5100 No sample

5100 - 5150 Ls, br-gy to olive-gy, dolic, ~~sl~~ vf gram tods; a few fine grains (f-m) of sd; pyrite R; heavy, mostly br-gy disaggregated sil silt or clay, some aggregate

5150 - 5155 Ls, br-gy to dk-gy, dolic, vf gram tods; little if any sand

R - Sil silt, mostly disaggregated

5155-60 No samples

5160-80 Ls, br-gy, silty, vf gram tods; R - lt-br sil silt

5180 - 5200 Dol, med lt-gy, limy, vf, rhombic 5% dk-gy sh

Rw - little other than shale & fr vf - F sd

~~5200~~

Wyoming - Reaper 14-10N-7W

5200 - 5250 Dol lt-brgy, limy, v f xlnmbic, interbedded with 20% lt med-gy sl dolic v f granular ls; Mod to hvy Res: sil silt, mostly disaggregated, some gr-gy clay, str f sd

5250 - 5300 Similar; early reaction in acid is rapid, slowing to an active "dolomite reaction" that is persistent. Res: some "etched" vf-f sd in upper 30 feet; lightamount of lt-gy sil silt - some ogg, mostly fine; dk-gr-gy to med dk gy dolic clay

End of rewashed samples

5300 → See descriptions above

Ark Geol Comm No 1326 (2000'W of No. 1)

Dee Linn #2 Cushman W W Mbn 70 BMSS 75 Sil 95 OC 100 OF 140 OP 5-745'
NW NW 16-14N-7W Independence Co, Ark, 380 465 595

0-5 - Ch, yellowish-brown, decalcified; some porous, "bone" ch, but mostly dense

5-45 Similar

45-65 Ch, lt yel-gy, ds to tripolitic

65-70 Similar, red-br to purple in part

70-75 Ch as above + tan ls (or sdy fine-grng)

Mbn/BMSS =70' dull reddish-brown, hard, phosphatic ls/limy, vf to f gr, condente ?? Mn ?

75-80 Clay, yel-wh earthy, conglomeratic, leached

BMSS/Sil 75' limestone

80-85 Ls, pinkish-wh, m-c xlln, pink xlls weathered in part; dk-br-gy to brick-red (when scratched) weathered Mn ?, or ?

85-90 Ls as above

90-95 Ls as above; many pink xlls

95-100 Ls as above & lt of yel-green

Sil/OC 95-105 Clay: weathered Cason ?

OF 100-105 Similar

105-110 Ls, pinkish wh, med c xlln, crin

Cushman ww #2 HN - 7W

110 - 125 Ls, pinkish-white, m-c xlln, many pink xlls; tr pyrite

125 - ~~130~~ 140 Ls, lt gy to lt yel-gy, f to med xlln, med xls in much finer matrix; trace of pink xls; (No OP)

~~OP~~ OP 140

140 - 160 Ls, lt olive-gy, sl dolic, vf gran to ds, tr pyrite; R - very little exc. pyrite

~~160~~

160 - 165 Dol, med lt gy, irreg, vf ~~rhombic~~ R - Pyrite

165 - 185 Ls, lt br-gy to lt olive-gy, sl dolic vf gran to ds R - tr pyrite

185 - 200 Ls, lt br-gy sl dolic, vf gran to ds R - tr pyrite

200 - 225 Similar; R; moderate - br-gy free sil silt or clay

225 - 240 Ls, pale lt br (much lighter than above) sl dolic, vf gran to ds R - small - lt-br-gy sil silt or clay (v fine)

240 - 250 Ls, lt br-gy to lt olive-gy, sl dolic ~~foldic~~ vf gran to ds R - small - lt-br-gy to br-gy sil silt or clay - free

1

Cushman WW #2 14N-7W

250-270 Ls, lt olive-gy sl dolic, vf gran beds
R v small - - clay?

270-275 Ls, lt-gy to lt br, sl dolic, vf gran beds?, gr-gy clay
R - gr-gy silty clay & lt-gy sil silt or clay

275-280 Ls, lt-br gy to br-gy, dolic, vf-gran, much gr-gy clay
R - heavy - br-gy sil silt ogy; gr-gy clay

280-~~300~~ 295 Ls, pale lt br, v dolic, vf gran;
R - small, lt-gy sil silt or clay, free

295-300 Ls, pale lt br gr-gy clay, sl dolic, ds
R - small, lt-gy sil silt or clay

300-310 Ls, pale lt-br gy, dolic, ~~ds~~ vf gran
R - small - tr lt br sil silt or clay

310-350 Ls, pale lt-br-gy, sl dolic, vf-gran to ds; trace bright-green sh
R - small to moderate - lt-br sil silt or clay to lt-gr sh

350-360 Ls, lt br gy, sl dolic, vf-gran beds
R moderate - lt-br-gy sil silt or clay

360-65 Ls, lt br gy, tr gl sh v dolic, vf gran; may be 50% vf dol v hard; lt gr sh
R moderate to heavy, lt-br sil silt or clay, mostly free

Cushman WW #2 14N 7W

365 - 375 2 lithologies

Ls, lt-br, ds

Ls; lt-br, v dolic, f-, rhombic

R - small - lt-br sil silt or clay - free

375 - 380 OP OS Ls, pale lt br, ds R - little

380 - 400 OS - Dol, pale lt br, lmy, v f-rhombic

R - small to moderate - lt-br sil/silt or clay, free

400 - 455 Dol, lt br gy, sl lmy, v f-rhombic

R - 400 - 405 f-med sd
410 - 420 br sd
435 - 445 br sd 450 - 455 br sd
Otherwise, small amount of free sil silt or clay

455 - 465 Dol, lt-br-gy, sl lmy, sdy, v f-rhombic

OS / OSP 465 R - mainly fr f-m sd

465 - 500 SS, lt-gy, f to med gr; grs rd & fr drill free; grain decreases downward = fewer of the larger grains

500 - 515 SS, lt-yel-gy, vf-f gr; to med grs; rd & fr; drills free; a few aggregate lumps show little if any carbonate cement

Cushman ww #2 14N - 7W

515 - 555 SS, yel-gy, to white f to med gr, rd ç fr - drills free

555 - 560 SS, yel-gy, vf to f gr, silty (unwashed?) - many bp crushed grains - no reaction in acid.

560 - 565 SS, stained reddish-brown, rd ç fr f - med gr, dilic at least in part

565 - 570 SS, yel-gy, rd ç fr, vf to med-gr - sl silty or clayey

570 - 75 Similar - unwashed - even unwashed - little if any reaction in acid

575 - 590 unwashed SS, lt yel-gy, vf to med-gr, many bright faces - broken or 2d growth; most grains are rd ç fr

590 - 595 washed SS, lt-yel-gy, vf to med gr, rd ç fr drills free

OSP 595

595 - 600 Dol, lt-br-gy f-med xl, v f vbrn dic.

Cushman WW #2 14N - 7W

600 - 605 Dol, lt-br gy, f-m sdy, vf rhombic = 30% sd. R - sd & tr lt-br gy sil silt or clay-free

605 - 610 Dol, med lt gy, vf rhombic R - tr f sd; small amt lt-olive-gy sil silt-free

610 - 615 Dol, med lt gy, vf rhombic; scattered f to med sd in about 50% of pieces R - sd & med-gr-gy, sil silt or clay free alternate amt

615 - 620 Dol, med lt gy, vf rhombic R - lt-olive-gy sil silt or clay, free

620 - 30 Dol, med lt gy & lt br gy, vf rhombic 10% wh f-m gr lmy ss R - sd & tr lt br gy sil silt or clay-free sdy

630 - 35 Dol, lt br gy to olive-gy, f-rhombic scattered f-m rd & fr sd gr ss R - sd & tr lt-br gy sil silt or clay-free

635 - 40 Dol, lt-olive-gy, vf to f rhombic R - tr f sd; tr lt-br gy, sil silt or clay, free

640 - 45 Dol as above & 50% wh limy f-m gr ss R - sdy aggregates & sd - tr of silt-free

645 - 650 Dol, lt-olive-gy, vf rhombic; & Dol, br-gy, v sdy (f-m), limy, vf rhombic; rapid reaction in acid R - sdy aggregates & sd - tr of silt-free

Cushman WW #2 (4N - 7W)

650 - 655 Dol, lt-olive-gy, sdy (scattered f sized), vf rhombic;
R - tr sd, tr silt or clay - free

655 - 65 Dol, br-gy, vf rhombic;
trace med lt gy limy sdy (f-m)
dol; R - tr sd, tr silt or clay, free

665 - 670 Dol, br-gy, vf to f rhombic
R - tr f sd, tr silt or clay, free

670 - 675 Dol, lt-br-gy, f- rhombic,
clear f-mgr orthoquartzite;
R - tr free sd, but mostly clear orthoquartzite

675 - 690 Dol, br-gy, vf to f rhombic
R - little - one small aggregate: orthoqtz.te?

690 - 695 SS, lt-br-gy, sl limy, v dolic,
f-mgr; poorly sorted; R - SS aggregate

695 - 700 SS as above - - mostly free dolitic
30% Dol, br-gy, vf to f rhombic
R - free sd, mostly vf to f,

700 - 705 Similar
R - mostly sd, free, vf to f;
tr clay or silt

Cushman WW #2 14N - 10W

705 - 10 Dol, med-gy, vf to f rhombic; tr free f-msd grs, but none in dol
R - f-sd & dk-br silt or clay - free (DK-br bubbles in acid)

710 - 715 Dol, ~~#~~ br gy, sdy (f-m) f-rhombic
R: f-m sd; dk-br silt or clay, some agg, (DK-br bubbles in acid)

715 - 720 Dol, med lt gy to med gy, v f rhombic
R - little if any

720 - 25 Dol, as above but sl darker
R - tr f sd; moderate amt of lt-md DK br silt or clay,

725 - 735 Dol, med-lt-gy to olive-gy, limy, V sl sdy (f-m) v f rhombic; many fracture fills of wh c-xlly calcite;
R: tr f sd; lt-br silt or clay - free

735 - 740 Dol, lt-br gy to olive-gy, v sdy, vf-rhombic; abundant f-m sd & fr sd grs; trace lt-gr-gy clay.
R - f to md sd; lt-br silt or clay - free

740 - 750 30% sdy dol as above; some "coated" sd grs - almost oolites of very large nuclei
70% Dol, dk br gy, vf rhombic
R - DK-br bubbles in acid
f-md sd - tr br-gy silt or clay, free

T.D. - Probably 750, but last bag shows only a single number 745

Manning & Martin No1 Cartwright
NE SW Sec 16, T 7N, R 8E, Crittenden County – Drilled 1937
Samples 2030 – 3510 T.D. 3510

2030 – 2170 – Very little sample in bag?
2170 – 90 clay, med-gy, mic; several pieces of lignite.
2180 – 2200 Little sample
2200 – 2230 Similar sh & trace lignite
2230 – 2250 Little sample
2250 – 2280 Similar sh, lignite
2280 – 2300 Little sample
2300 – 10 Similar sh, lignite
2310 – 40 Little sample
2340 – 50 Similar sh & lignite
2350 – 80 Little sample
2380 – 90 Similar sh & lig
2390 – 2410 Little sample
2410 – 20 Sh, med-gy to olive-gy, mic
2420 – 40 Little sample
2440 – 50 Sh as above & lt-gy limy, clayy, mic
2450 vf gr ss
2450-60 NS
2460 – 70 Sh & ss as above
2470 – 2500 little or no sample
2500 – 2560 Sh, silty & clayy ss, etc, Foraminifera still trace of lignite

M & M Cartwright 16-7N-8E

2600 - 3200	Not examined
3200 - 3252	NS
3252 - 3255	Coring - f-c ss free drlg
3255 - 3300	NS
3300 - 3302	Sh, lignite, f-mgr sd
3302 - 07	Sd, clear, f-c gr; free drlg
3307 - 12	Sd, f-c; sh, sdy; lig,
3312 - 16	Glauc f-c gr sd, free; sh, etc
3316 - 20	Mostly med-gy mic sh
3320 - 30	F-to vc sd - some grans
K Ord 3330 - 100's	Core: 3323 sh, dk-gy, mic; plant debris 3324 sh, lt-gy, sl glauc, limy, cong, f-gr; Tiko op some ¼" rock fragments; many coalified plant stems.
3330 - 40	LS, med dk-gy to dk-gy, f-gran; sub oolitic R - Som dr-gy silt or clay - free
3340 - 50	As above - oolits well developed in some pieces R - dk br sl silt or clay
3350 - 60	LS, med-dk-gy to dk-gy, mottled, vf gran to ds; may be clastic grains in lighter matrix R - dk muddy cuttings; tr silt or cly

M+M Cartwright 16-7N-8E

3360-65 Ls, med dk-gy, mottled, sl dolic to dolic, vf gran to ds;
R- lt br silt or clay

3365-70 Ls, med dk-gy, sl dolic, vf gran to ds;
brecciated; Lr clastic -- in part
pd-grains in a lighter matrix
veinlets, webs, etc stand out on etched pieces
R- lt-br silt or clay

3370-80 Ls, med dk-gy, mottled, vf gran to ds; rapid reaction = no dol
R- lt br-gy clay or silt

3380-90 Ls, med dk gy, oolitic, f-gran, med-to-c- ools well developed in lighter (spar) matrix;
R- moderate sil silt or clay.

3390-3400 Ls, med-dk-gy, mottled, f-gran to ds; may be clastic but not ool.
R- dk-gy clay, partly; tr. br-gy silt or clay free

3400-3405 Ls, med-dk-gy, dolic, vf gran to ds, 50% may be limy dol - vf rhombs; 50% = ds ls.
R- lt-br gy sil silt aggregate. rock may be less dolic that it appears when etched.

M+M Cartwright 16-7N-5E

3405-3410 Ls, med-dK-gy, mottled, v sl dolic, s.lt?
vf grain to ds; wh calcite in
thin veins; calcite "=par" between
grains that look clastic but
could be breccia; some "figured" fs = ostracods
R - lt-v lt brn-gy silt+clay, frac; tr dK-gy clay

3410-3420 Ls, med-dK-gy, sl dolic (20%) s.lt?
vf grain to ds; some clastic?
grains in clear calcite
R - Many be less dolic than indicated
R - moderate lt-br gy sil silt aggregate

3420-30 Similar - 30% dol

~~3430-7~~ R - moderate - lt-br-gy sil silt agg
may be less dolic than indicated

3430-40 Ls, med-dK-gy, dolic (35%) s.lt?
vf grain to ds; pellets or
clastic grains faintly visible
in some pieces; tr dK-gy sh
R - moderate to heavy lt br gy sil silt agg; some
may be more silty than dolic

3440-50 Ls, med-dK-gy, dolic (35%) s.lt?
vf grain to ds; sl pelletal;
layer of dK-gy clay
R - heavy; dK-br-gy siliceous
silt agg & dK-gy sh

MEM Cartwright - 16 - 7A - 82

3450-60 Ls, med-dk-gy, silty, clastic, oolitoid, f-grn to ds; f-c rd to subrd grains in clear matrix; silt "etches out" on surfaces
R - moderate amt dk-br-gy silt or clay-homogenous agg.

3460 - 70 Ls, med-dk-gy to olive-gy, silty, sl clastic, vf grn to ds; silt "etches out"; some clastic c-grs & hint of fossils
R; - Heavy dk-br gy sil silt or clay agg

3470 - 80 Ls, med-dk-gy to dk br-gy, silty, clastic; vf grn to ds; pyrite, clay; one piece of wh, limy, sl siliceous, vs lot of grains.
R - vf-f sd; moderate, dk br-gy silt or clay agg to fine.

3480 - 90 Ls, med-dk-gy, clastic, oolitoid, vf-grn to ds; many well rounded ~~med~~ med "ools" in clear calcite matrix; to pyrite; more "silty" pieces or less clastic to non-clastic
R - moderate - br-gy sil silt or clay aggregate to fine

M+M Cartwright 16-7A-82

3490-3500 Ls, med-dk-gy, sl silty, f-gran to ds;
R-moderate, br-gy sil silt or clay agg to free; tr dk-gy clay partings

3500-3510 Ls, med-dk-gy, silty, sl dolic, vf gran to ds; some vt dol rhombs in the more silty part
R-moderate - br-gy sil silt or clay aggregate to free; honeycomb, in part.

TD- 3510

Beard - Evans

Stover - Horne - logged

Sinclair Carmichael - logged

Ark La Mc Gowan

Stephens - Wand

Carter - Morrilton Lumber Co

Shell Stewart

SDX - Wright - logged

Phillips Stark Gas Logged

Jon Hon Hart Logged

SDX - Morris # 662

(Run to 5080 - TD 6020

All in box 3)

Pan Am Bozeman

Ark W - Mosby

Mobil - Ison

Midwest Sebastian Coal & Mining

Ambassador Stribling

Stephens Horne

Hogan

Pan Am A - 18 Zone

Pan Am USA C - Sawtooth

Benham tree

(over)

City of Marshall
Independence Grand Co
Roney Hurst
Boyd Williams
Vic Rutherford #3 / #5 - 7
Basil McCollum Logged
Charleys Copperhead "
Skyline - Albert Estate "
Continental Scrubb "
Carter Graham "
Humble - Hampton "
Arkla Dowling "
Peyton Creek Co 5-9
City of Yellville
Cecil Barnes
Leonard Martin
City of Salem
Anton Boltz - Randolph County 60 - 205
unknown - Carroll Co