

Sample Log

WEIBEL WATER WELL, ALBANY COUNTY

NE NE 36-17-74

Described by H. D. Thomas

- 20 Bent
- 20-30 Gry clay and bent
- 30-40 Gry sh, some bent
- 40-50 Med gry sh, elongate wht strks--calcareous
- 50-60 Do above, lt gry
- 60-70 Same as blw--fissile clayey, bent frag. Lt gry calc argill sh
- 70-80 Lt gry speckled calc sh (almost looks like Ku!)
- 80-90 Ditto 70-80--amazingly like Ku!
- 90-100 Sil (?) sh, ditto 80-90
- 100-110 Ditto 90-100
- 110-120 Lt gry calc sh, same but not so much speckles. Inoc prisms
- 120-130 Gry calc sh, bent, calcite xls--flood of frags composed of randomly oriented Inoceranus prisms
- 130-140 Lt. gry calc silty sh, some bent, some Inoc. prisms
- 140-150 Do, Lt gry argill (bentonitic?) sh, wouldn't wash clean; only slightly calc
- 150-160 Do, no bent--ditto 40-50--swells from acid
- 160-170 Do, some bent--ditto 40-50; several frags calc speckled as @ 70-110
- 170-180 Do, no bent, ditto 60-70
- 180-190 Do, ditto 70-80; more calcareous, tho.

- 190-200 Ditto 70-80--calcareous, silty--Inov. prisms
- 200-210 Do, bent, ditto 190-200, bentonite
- 210-220 Do, bent, ditto. This might be called a bent siltst rather than a shale, some bent
- 220-230 Do, flood bent, ditto--much bent
- 230-240 Do sh, maybe some dikes, no bent. non-calcareous, silty
- 240-250 Do above, one vy fn sdy lam/
- 250-260 Do above, some vy fn silty do, sltly calc, swells w/acid
- 260-270 Do above, ditto 50-60
- 270-280 Do above, ditto 50-60
- 280-290 Some Bent, ditto 50-60, some bentonite
- 290-300 Do above, ditto 50-60
- 300-310 Do, Do 50-60
- 310-320 Do, do, 50-60
- 320-325 Do, do 50-60
- 325-335 Do, do 50-60, vy sltly calc
- 335-340 Do 50-60
- / 340-350 Do 50-60
- 350-360 Do 50-60
- 360-370 Drk fiss sh, one frag deuse gry siltst
362 Hard strk; brownish vitreous non-calc qtzite siltst (?) deuse
w/do shale
Do 50-60; swells w/acid; some brush rock as @ 362
- 370-380 Ditto sh, some wht bent, few frags calc sh
- 380-385 Fair arnt deuse brnish siltst, along w/do sh
Much brn rock as @ 362

- 385-390 Mostly brn sil rock as @ 362, some ditto--less siltst, fissile non calc shale
- 390-395 Do sh, little siltst
- 395-400 Drk fss sh
- 405-410 Drk fss sh (not as siliceous as that near btm of hole)
- 410-415 Drk fss sh, some bent; samples coated from bentonite; no good speckle, some frags silty
- 415-495 All non-calc

Redrescribed 7/28/61

- 390-395 Mixed med gry non-calc sh, argillaceous--sft when wet & brn rk as @ 362
- 395-400 Med gry non-calc argill sh, sft when wet.
- 400-405 Do sh, some silty
- 405-410 Do 400-05
- 410-415 Do; some bent; some dense drk sh which doesn't swell or get soft when wet.

Examined from btm to top 7/28/61
All noncalcareous--All Mowry Shale

- 415-420 Ditto below; (420-25) some dense compact drk sh which doesn't get soft when wet; some opaline material
- 420-425 Ditto below; some good speckles--some bentonite
- 425-430 Ditto below; some fry siltst laminae, some speckles
- 430-435 Ditto below
- 435-440 Med gry sil sh; some good speckles; smooth, compact; some chit frags; several frags bent

- 440-445 Ditto below; samples muddy--probable bentonite?
- 445-450 Lighter gry sil sh; considerable good speckles; some light gray siltst laminae

med
gy

lighter

- 450-455 Med. gry sil sh (slightly lighter than below); no good speckles as below. cons vy fn gry siltst & silty laminae
- 455-460 Ditto below; some bent?
- 460-465 Drk gry sil sh; vy little speckled; some gry silt strks, chit frags
- 465-470 Drk gry sil sh; few frags speckled; one frag bent; chit frags
- 470-475 Drk gry sil sh, some w/consp. specklings; chit frags
- 475 Circ--15 Min--Ditto below
- 475-480 Drk gry sil sh; some conspicuously speckled; several frags light-gry lam siltst; chit frags
- 480-485 Drk gry sil sh, mostly speckled; fish scale
- 485-490 Dark gry sil sh; some speckled; fish scale
- 490-495 Drk gry sil sh; mostly highly speckled (looks almost like Ku); some not speckled
- 495 circ--15 mins

WEIBEL WATER WELL

Wm. Eastwood

- 495-510 90% dk gray to black, blocky shale containing scattered white, calcareous (?) specks and rare fish scales
10% white to light gray, very fine grained, limestone. Rare pink, angular, coarse quartz and/or feldspar fragments (cavings?), rare white calcite crystal masses. Shale fragments contain silty and sandy stringers at 505-10
- 510-520 90+% dk gray to blk, blocky shale, abundant white specks, rare fish scales and teeth or spines. Rare fragments of the shale have silty laminae. Rare limestone and calcite as above. Very rare quartz as above.
- 520-525 Shale, dark gray to black, blocky; white specks in shale rare to common. Rare limestone, calcite, and quartz as above.
- 525-530 Shale as above, about 15% medium gray to grayish brown silty shale, maybe calcareous and appears to be interbedded or inter-laminated with the black shale.
- 530-535 Black and gray shale as above, rare light gray fine grained sandstone. Sample contains very common fragments of limestone, calcite, and quartz as above and may be a sample.
- 535-545 80% black shale as above, rare white specks. Rare to common limestone as above. Rare to common light gray very fine grained sandstone. Amount of sandstone increases downward.
- 545-555 70%+ medium to coarse, rounded to subangular slightly frosted clear quartz grains.
30% shale and very fine grained sandstone as above. Rare to common coarse, pink grains of quartz (?).
- 555-560 90% very coarse quartz grains and pink grains of quartz or feldspar (?). Most of the grains subangular. Rare shale.
- 560-565 50% medium to coarse sand grains as above, 50% black shale, gray limestone and gray fine-grained sandstone as above.

- 565-575 50% medium, subrounded, quartz sand grains as in 545-555;
40% shale etc. as above, rare to common very coarse sand
grains as in 555-560.
- 575-580 70% medium, subrounded to subangular quartz grains, 20%
very coarse clear quartz and pink quartz and feldspar. Rare
shale.
- 580-585 50% medium and coarse sand grains as above.
30% light gray fine-grained quartz sandstone containing common
black grains and possibly with calcareous cement.
20% black shale.
- 585-603 60% fine-grained sandstone with black grains as above.
10% coarse quartz and feldspar grains as above.
30% black shale. Rare limestone fragments
- 603 T.D.