



02434005

DETAILED SAMPLE LOG

PETRO-LEWIS CORPORATION
CHAMPLIN-CLEAVE #16-32
C/SE/SE Sec. 32-16S-47W
Cheyenne County, Colorado
Elevation: 4137' K.B.

Sample study starts at 3487' in Pennsylvanian.

- 3487-3496 Limestone, white, buff, gray-red, finely crystalline, dense; few micro-fossils; little silty.
- 3496-3508 Siltstone to very, very fine sandstone, brown-red, red, gray, very micro-micaceous, tight, limey.
- 3508-3510 Shale, brown-red, purple, hard.
- 3510-3516 Siltstone to very, very fine sandstone, as above; trace green-gray.
- 3516-3525 Limestone, buff, red, gray, purple, finely crystalline to crystalline, dense; some micro-fossils; considerable sparry calcite.
- 3525-3526 Shale, brown-red, hard.
- 3526-3532 Limestone, red, brown, buff, gray, finely crystalline to slightly crystalline, dense; few micro-fossils.
- 3532-3537 Siltstone to very, very fine sandstone, brown-red, gray, slightly green-gray, micro-micaceous, limey, tight.
- 3537-3539 Shale, brown-red, hard.
- 3539-3546 Limestone, red, gray-red, buff, gray, finely crystalline to very slightly crystalline, dense; trace fossil fragments.
- 3546-3550 Siltstone to very, very fine sandstone, as above.
- 3550-3551 Shale, chocolate, hard, slightly calcareous.
- 3551-3565 Siltstone to very, very fine sandstone, red, brown-red, gray, micro-micaceous, limey.
- 3565-3568 Shale, chocolate, brown-red, hard.
- 3568-3571 Limestone, red-gray, gray, little red and buff, finely crystalline to very slightly crystalline, dense; some pelletal and slightly argillaceous.
- 3571-3572 Shale, as above.
- 3572-3580 Limestone, as above; considerable argillaceous and pelletal fragments.

BEST IMAGE
AVAILABLE

- 3581-3597 Siltstone to very, very fine sandstone, chocolate, brown-red, gray, micromicaceous, limey.
- 3597-3605 Limestone, gray, brown, buff, little red, finely crystalline, dense; trace microfossils.
- 3605-3607 Shale, chocolate, little purple.
- 3607-3612 Limestone, brown to gray, buff, trace red, very finely crystalline to finely crystalline, dense; few microfossils.
- 3612-3634 Siltstone to very, very fine sandstone, brown-red, micromicaceous, limey.
- 3634-3636 Shale, brown-red, hard.
- 3636 Top - SHAWNEE (TOPEKA)
- 3636-3654 Limestone, brown, gray, buff, sublithographic to finely crystalline, dense, trace slightly dolomitic; trace microfossils.
- 3654-3655 Shale, brown-red.
- 3655-3670 Limestone, buff to brown, gray, microcrystalline to some crystalline, dense to slight intercrystalline porosity; few microfossils; very spotted, light brown oil stain in intercrystalline porosity (possibly is fossil vug porosity in part); little interbedded Dolomite, buff to brown, very, very finely crystalline, slightly, 3665-70.
- 3670-3674 Siltstone, gray, micromicaceous.
- 3674-3676 Shale, black.
- 3676-3679 Siltstone, gray-black, limey.
- 3679-3694 Limestone, buff to gray, light brown, very finely crystalline to crystalline, dense to slight intercrystalline porosity; trace very spotted, brown oil stain; little interbedded Dolomite, buff to brown, very, very finely crystalline, dense; some Limestone is abundantly microfossiliferous; trace buff, opaque Chert.
- 3694-3696 Shale, black, carbonaceous.
- 3696-3699 Sandstone, gray and dark gray, very fine, angular, tight, micromicaceous, very limey; with some dark inclusions.
- 3699-3708 Limestone, buff to brown, gray, dark gray, very finely crystalline to slightly crystalline; considerable microfossils; trace white, chalcadonic Chert.
- 3708-3712 Shale, black; with little interbedded Sandstone, as above.
- 3712-3725 Limestone, as above; slightly more dark gray.

- 3726-3735 Limestone, brown, gray-brown, gray, buff, finely crystalline, dense; considerable microfossils; Fusulina; brachiopod shell; trace Dolomite, gray-brown and brown, very, very finely crystalline, dense; trace gray-black, opaque Chert.
- 3735-3738 Shale, black, carbonaceous and gray-black, limey.
- 3738-3752 Limestone, brown to gray, buff, finely crystalline to slightly crystalline, dense to slight interfossiliferous and interoolitic porosity; abundant microfossils; Fusulina; trace gray-black, opaque Chert; trace very spotted, brown oil stain.
- 3752-3755 Siltstone to very, very fine sandstone, gray, dark gray, micromicaceous, very slightly limey.
- 3755-3756 Shale, gray-green.
- 3756-3770 Siltstone to very, very fine sandstone, as above.
- 3770-3783 Limestone, brown to buff, gray-brown, gray, finely crystalline to slightly crystalline, dense to trace interfossiliferous porosity; some microfossils; Fusulina; trace oolitic; traces of buff and tan, semiopaque Chert.
- 3783 Top - HEEBNER
- 3783-3786 Shale, black, carbonaceous, some lignitic.
- 3786-3791 Siltstone to very, very fine sandstone, gray, micromicaceous, limey.
- 3791-3792 Shale, black, hard.
- 3792-3802 Limestone, gray to buff and brown, finely crystalline to slightly crystalline, dense to trace fossil vug porosity; with trace brown oil stain; Fusulina; trace pyrite; considerable microfossils.
- 3802-3811 Limestone, gray to brown, buff, finely crystalline to very finely crystalline, dense; some microfossils.
- 3811-3818 Limestone, buff, white, gray, finely crystalline to slightly crystalline, dense to slight microfossil vug porosity; trace very spotted, brown oil stain.
- 3818-3832 Dolomite, buff to light brown, finely crystalline, granular, vuggy; with very spotted, brown oil stain.
- 3832-3836 Shale, black, very carbonaceous.
- 3836-3851 Siltstone to very, very fine sandstone, gray-white to dark gray, micromicaceous, limey.
- 3851-3853 Shale, black, carbonaceous, trace green and maroon.
- 3853-3857 Siltstone to very, very fine sandstone, gray, buff, very finely crystalline, dense; some microfossils; Fusulina; trace oolitic; traces of buff and tan, semiopaque Chert.

- 3857 Top - MISSOURIAN (LANSING-KANSAS CITY)
- 3857-3867 Limestone, buff, some light brown, white, chalky, finely crystalline to slightly crystalline, most dense; trace fossil vug porosity.
- 3867-3875 Limestone, as above; more white, chalky; and Limestone, buff to white and light brown, finely crystalline, dense, some chalky, little oolitic; with interbedded Dolomite, buff, very finely crystalline, tight, with very spotted, light brown oil stain.
- 3875-3881 Siltstone to very, very fine sandstone, gray, green-gray, micromicaceous, limey.
- 3881-3886 Shale, black, slightly carbonaceous.
- 3886-3897 Limestone, white, cream-buff, light brown, finely crystalline, dense; considerable microfossils and some dense oolitic.
- 3897-3908 Siltstone to very, very fine sandstone, dark gray, green-gray, light gray, micromicaceous, limey.
- 3908-3909 Shale, black, gray-green.
- 3909-3925 Siltstone to very, very fine sandstone, brown-gray, gray, micromicaceous, limey.
- 3925-3936 Limestone, buff, cream-buff, white, tan, very finely crystalline to very slightly crystalline, dense; considerable oolitic and some abundantly microfossiliferous.
- 3936-3938 Shale, black, carbonaceous.
- 3938-3951 Limestone, buff to gray, brown, gray-brown, finely crystalline to very slightly crystalline, dense; some medium oolitic; considerable microfossils.
- 3951-3953 Shale, dark gray, gray-black, trace gray-green, hard.
- 3953-3959 Limestone, buff to brown, gray, dark gray, finely crystalline to crystalline, dense; abundantly microfossiliferous.
- 3959-3960 Shale, as above.
- 3960-3977 Limestone, as above, more brown and dark brown; some fossil fragments.
- 3977-3980 Shale, black, carbonaceous, gray-black, gray, trace green, hard.
- 3980-3993 Limestone, brown, buff-brown, gray, finely crystalline to slightly crystalline; considerable microfossils; trace dense oolitic; little microfossil vug porosity; with trace light brown oil stain.
- 3993-3995 Shale, black, carbonaceous, and gray-black, hard.
- 3995-4019 Limestone, buff to brown, dark brown, very finely crystalline

- 4019-4020 Shale, black, carbonaceous, trace green.
- 4020-4028 Limestone, gray to buff, brown, gray-brown, gray-black, very finely crystalline to finely crystalline, dense; abundantly microfossiliferous; trace fossil fragments.
- 4028-4032 Siltstone to very, very fine sandstone, gray, dark gray, micromicaceous, limey.
- 4032-4033 Shale, black, carbonaceous.
- 4033-4036 Siltstone to very, very fine sandstone, gray, gray-green, micromicaceous, limey.
- 4036-4045 Limestone, buff, light brown, finely crystalline to slightly crystalline, abundant fine to coarse oolitic, and considerable coarsely microfossiliferous; some coarse fossil fragments; little very spotted, light brown oil stain in microfossil and oolitic porosity.
- 4045-4046 Shale, black, carbonaceous.
- 4046-4052 Limestone, brown, dark brown, gray, buff, finely crystalline to very crystalline, dense; abundant microfossils; some coarse fossil fragments (crinoid, brachiopod spina); some argillaceous.
- 4052-4056 Siltstone to very, very fine sandstone, gray to dark gray, gray-green, micromicaceous, limey.
- 4056-4057 Shale, black, dark gray, hard, some micromicaceous.
- 4057-4062 Siltstone to very, very fine sandstone, as above.
- 4062-4070 Limestone, brown, dark brown, gray-brown, gray, finely crystalline to very crystalline; abundantly coarsely microfossiliferous and fossil fragmental; dense.
- 4070-4071 Shale, black, dark gray, gray-black, hard.
- 4071-4080 Limestone, gray, gray-brown, brown, dark brown, buff, finely crystalline to crystalline, dense; abundant microfossils and coarse fossil fragments; little medium dense oolitic.
- 4080-4086 Siltstone, gray, green-gray, dark gray, micromicaceous, limey.
- 4086-4092 Shale, black and gray-black; with interbedded Siltstone, as above.
- 4092-4099 Limestone, buff to light brown, finely crystalline, fine to medium dense oolitic and microfossiliferous; trace brown oil stain.
- 4099-4100 Shale, black, carbonaceous.
- 4100-4106 Limestone, brown to gray and buff, finely crystalline, dense; considerable microfossils; and little dense oolitic.
- 4106-4129 Siltstone to very, very fine sandstone, gray, light gray, green-gray

- 4129-4130 Shale, black, gray-black, trace green.
- 4130-4140 Limestone, buff to brown, finely crystalline to slightly crystalline, dense to some oolitic and micro-vug porosity; abundantly oolitic, slightly oolitic and microfossiliferous; very spotted, light brown oil stain.
- 4140-4146 Siltstone to very, very fine sandstone, gray, green-gray, gray-green, micromicaceous, limey.
- 4146-4161 Limestone, as above; and Limestone, gray to brown, very, very finely crystalline, dense, slightly dolomitic, considerable silty and slightly argillaceous.
- 4161-4164 Shale, black, very carbonaceous.
- 4164-4169 Siltstone to very, very fine sandstone, gray, micromicaceous, limey.
- 4169-4170 Shale, black, hard.
- 4170-4178 Limestone, brown, dark brown, gray-brown, gray, microcrystalline to finely crystalline, dense; some abundantly microfossiliferous; few fossil fragments.
- 4178-4181 Shale, as above, some carbonaceous.
- 4181-4195 Limestone, gray to buff and brown, very finely crystalline to finely crystalline, dense; some microfossils; little dense oolitic and trace oolitic; with interbedded Dolomite, gray, brown-gray, very, very finely crystalline to finely crystalline, dense to granular; with little, very spotted, brown oil stain.
- 4195-4200 Siltstone to very, very fine sandstone, gray, gray-white, micromicaceous, limey.
- 4200-4202 Shale, black, slightly carbonaceous, and gray-black, hard.
- 4202-4216 Limestone, as above; slightly more oolitic and oolitic; with trace light brown oil stain; with interbedded Dolomite, as above; with very spotted, brown oil stain; most is very, very finely crystalline, dense; trace gray, opaque Chert.
- 4216 Base KANSAS CITY
- 4216-4223 Siltstone, gray, micromicaceous, limey.
- 4223-4224 Shale, black, carbonaceous.
- 4224-4232 Sandstone, gray, gray-white, very, very fine, micromicaceous; with dark gray and brown inclusions; limey.
- 4232-4235 Shale, black, dark gray, gray-green.
- 4235 Top - DES MOINES (MARMATON)

- 4246-4260 Limestone, as above; coral (Chaetetes) is more abundant but staining is very spotted (30% of porosity shows staining); less oolitic and more dense oolitic; some large Foraminifera (Neutron porosity 8% to 14%).
- 4260-4274 Limestone, buff, light gray, gray, very finely crystalline to finely crystalline, abundantly oolitic, some oolitic and microfossiliferous; little coral (Chaetetes), no stain; very spotted, brown oil stain in oolitic and microfossiliferous porosity (Neutron porosity 4% to 8%).
- 4274-4276 Shale, black, carbonaceous, little green.
- 4276-4278 Siltstone, gray-green, micromicaceous.
- 4278-4285 Limestone, dark brown, brown, finely crystalline to slightly crystalline, dense; abundant microfossils and fossil fragments.
- 4285-4314 Siltstone to very, very fine sandstone, gray, green-gray, light gray, very micromicaceous, limy; some interbedded black, very carbonaceous Shale.
- 4314-4315 Shale, black, carbonaceous, and gray-black.
- 4315-4319 Siltstone to very, very fine sandstone, as above.
- 4319-4340 Limestone, gray, gray-buff, light brown, very finely crystalline to finely crystalline, dense; considerable microfossils; some pellaoid.
- 4340-4341 Shale, black.
- 4341-4352 Limestone, brown, dark brown, gray, very, very finely crystalline to finely crystalline, dense; few micro-fossils; little argillaceous; little silty and slightly dolomitic.
- 4352-4354 Shale, black, carbonaceous, and gray-black.
- 4354-4364 Limestone, buff to light brown, brown, gray-brown, trace black-brown, very finely crystalline to finely crystalline, dense; considerable coral (Chaetetes) with slight coralline porosity and spotted, brown oil stain; considerable of the coral is secondarily infilled with sparry calcite.
- 4364-4366 Shale, black, gray-black, hard.
- 4366-4400 Limestone, brown and dark brown, very finely crystalline to micro-crystalline, very dense.
- 4400-4406 Limestone, brown to gray-buff, buff, finely crystalline, dense, some siliceous and slightly argillaceous; trace black, opaque Chert.
- 4406 Top - CHEROKEE
- 4406-4411 Shale, black, very carbonaceous.
- 4411-4422 Limestone, brown, dark brown, gray, gray-buff, very finely crystalline.

- 4422-4427 Shale, black, very carbonaceous.
- 4427-4437 Limestone, brown, dark brown, gray, dark gray, very finely crystalline to finely crystalline, dense; considerable microfossils; and trace dense oolitic; some argillaceous and little silty; trace Chert, brown-black, opaque.
- 4437-4438 Shale, black, carbonaceous, and gray-green.
- 4438-4451 Limestone, brown to gray, gray-buff, finely crystalline, dense; abundantly microfossiliferous; little argillaceous; trace gray-black, opaque Chert.
- 4451-4454 Siltstone to very, very fine sandstone, gray, micromicaceous, limey.
- 4454-4469 Limestone, as above; some large forams, ostracods; trace very spotted, brown oil stain in poor microfossil porosity.
- 4469-4471 Shale, black, carbonaceous, and gray-green.
- 4471-4490 Limestone, gray to brown, light brown, very finely crystalline to finely crystalline, dense; abundant microfossils (large forams); trace coral (Chaetetes); trace gray-tan, semiopaque Chert.
- 4490-4497 Limestone, black-brown, gray-black, very finely crystalline, dense, siliceous and argillaceous; with interbedded Shale, black, carbonaceous to hard.
- 4497-4505 Limestone, brown, dark brown, gray, finely crystalline, dense; microfossils fairly abundant; trace coral (Chaetetes).
- 4505-4506 Shale, as above, and dark gray, micromicaceous, limey, and silty.
- 4506-4516 Limestone, brown to gray, dark brown, very finely crystalline to very slightly crystalline, dense; considerable microfossils and some fossil fragments (crinoid, bryozoa, brachiopod spines).
- 4516-4517 Shale, black, carbonaceous, gray and gray-green, micromicaceous.
- 4517-4524 Limestone, as above, some buff, most abundantly microfossiliferous.
- 4524-4526 Shale, black, carbonaceous to hard.
- 4526-4540 Limestone, gray to brown, little dark brown, very finely crystalline to finely crystalline, dense; abundant microfossils; little argillaceous; interbedded Siltstone, dark gray, 4532-34; little white, finely granular to crystalline gypsum and white anhydrite.
- 4540-4541 Shale, black, carbonaceous, and gray-green, hard.
- 4541-4550 Limestone, brown, dark brown, gray, some black-brown, black, and gray-black, very finely crystalline to finely crystalline, dense; few microfossils; some siliceous and argillaceous; trace black, opaque and light gray, semiopaque Chert.

- 4550-4561 Limestone, as above, more siliceous and argillaceous; trace black, and gray-black, opaque Chert; little white gypsum and trace white anhydrite.
- 4561-4574 Limestone, brown, dark brown to gray, some gray-black, gray-brown, black-brown, very finely crystalline to finely crystalline, dense; some argillaceous and slightly siliceous; trace brachiopod spines; some microfossils; trace light gray, semiopaque Chert; little white, granular gypsum.
- 4574-4577 Shale, black, carbonaceous to hard, some splintery.
- 4577-4580 Limestone, as above, most gray-black and brown-black, quite argillaceous; some fossil fragments (brachiopod spines and Fusulina section).
- 4580-4590 Shale, black, carbonaceous to splintery.
- 4590 Top - ATOKA
- 4590-4593 Limestone, gray-black, black, gray, dark brown, finely crystalline, siliceous and argillaceous; some coarse fossil fragments (brachiopod shells and spine).
- 4598-4600 Shale, as above.
- 4600-4611 Limestone, as above, more brown and gray.
- 4611-4618 Shale, black, splintery, little carbonaceous; with interbedded Limestone, dark brown, black, gray-black, brown, gray, very finely crystalline to finely crystalline, dense, siliceous and argillaceous; pyrite.
- 4618-4630 Limestone, as above; most argillaceous; less siliceous.
- 4630-4636 Limestone, gray-black, black, black-brown, gray, very finely crystalline to finely crystalline, dense, very argillaceous, some siliceous; trace fossil fragments; trace pyrite.
- 4636-4637 Shale, black, very splintery.
- 4637-4643 Limestone, as above; most gray-black and black.
- 4643-4649 Shale, black, splintery.
- 4649-4662 Limestone, gray-black, black, gray, very finely crystalline, dense, argillaceous, some siliceous; trace pyrite.
- 4662-4664 Shale, as above.
- 4664-4680 Limestone, as above; some fossil fragments (brachiopod shell, spine); trace Fusulina; trace black, spicular, opaque Chert; pyrite.
- 4680-4681 Shale, black, splintery.
- 4681-4685 Limestone, as above.

- 4686-4691 Limestone, gray-black, black, black-brown, gray, very finely crystalline to finely crystalline, dense, siliceous to silty and argillaceous; few microfossils; pyrite.
- 4691-4692 Shale, black, splintery.
- 4692-4695 Limestone, as above.
- 4695-4697 Shale, as above.
- 4697-4699 Limestone, gray-black, black, dark gray, gray, gray-brown, very finely crystalline to slightly crystalline, dense, siliceous to silty and argillaceous; few fossil fragments; pyrite.
- 4699-4700 Shale, black, splintery.
- 4700-4705 Limestone, as above; some brown.
- 4705-4708 Shale, as above.
- 4708-4720 Limestone, gray-black, black, gray-brown, gray, very finely crystalline to finely crystalline, dense, very siliceous and argillaceous; trace pyrite; with interbedded Shale, black, splintery, 4712-13.
- 4720-4721 Shale, black, splintery, some carbonaceous; trace gray, satiny shale.
- 4721-4727 Limestone, as above.
- 4727-4728 Shale, as above.
- 4728-4741 Limestone, gray-black, black, gray, brown, very finely crystalline to finely crystalline, dense, some silty to siliceous and argillaceous; trace black, opaque Chert.
- 4741-4742 Shale, black, splintery; trace carbonaceous; trace gray-green, satiny.
- 4742-4757 Limestone, gray-black, gray, black, gray-brown, very finely crystalline to finely crystalline, dense, siliceous to silty and argillaceous; with interbedded Shale, as above, 4749-50.
- 4757-4759 Shale, as above.
- 4759-4774 Limestone, as above.
- 4774 Top - MORROW
- 4774-4800 Shale, pale gray, gray-green, pale green, little black, satiny, some splintery.
- 4800-4850 Shale, green, gray-green, green-black, pale gray, black, satiny, some very splintery, little glauconitic; traces of Sandstone, gray, fine, angular, tight, shaly, glauconitic (possibly lentils); pyrite common.
- 4850-4900 Shale, green, gray-green, gray, gray-black, black, satiny, splintery; traces of glauconitic; pyrite common.

- 4900-4950 Shale, gray-black, gray, black, green, gray-green, satiny, splintery; trace glauconite; few loose, scattered, coarse to very coarse, sub-angular to subrounded, quartz wash grains.
- 4950-5008 Shale, black, dark green, gray, gray-green, satiny, splintery; traces of glauconite; pyrite.
- 5008 Top - LOWER MORROW
- 5008-5015 Limestone, buff to light brown, gray, brown, finely crystalline to crystalline, dense, some abundantly fossiliferous; some with imbedded medium to coarse, subangular to subrounded, quartz wash grains; slightly glauconitic; trace interbedded Sandstone, gray, white, very fine, angular, very tight, glauconitic, limey.
- 5015-5033 Shale, black, gray-black, green, gray-green, satiny, splintery.
- 5033-5048 Limestone, buff to gray, brown, very finely crystalline to slightly crystalline, dense; some microfossils and fossil fragments; considerable imbedded, medium to coarse, subangular to subrounded, quartz wash grains; glauconitic.
- 5048-5072 Limestone, buff, tan, gray, very finely crystalline to slightly crystalline, dense; few microfossils; trace fossil fragments (bryozoa); imbedded, medium to coarse, quartz wash grains in limestone common; some very glauconitic.
- 5072 Top - MISSISSIPPIAN (ST. LOUIS)
- 5072-5083 Limestone, buff, light brown, brown-gray, very finely crystalline, very finely to micro-oolitic, dense; Chert, gray, light gray, smoky, opaque and semiopaque; pyrite.
- 5083-5092 Dolomite, brown, light brown, slightly brown-gray, slightly granular, very tight; trace gray, smoky, opaque and semiopaque Chert; trace shadow colites.
- 5092-5104 Dolomite, dark brown to light brown, very finely crystalline to finely crystalline, granular, tight; traces of intergranular and fine, vuggy or oolitic porosity; spotted, poor, dark brown oil stain; very dull fluorescence wet or dry; very slow cut; no free oil.
- 5104 Top - "X" SHALE MARKER
- 5104-5108 Shale, gray, dark gray, gray-black, gray-green, slightly dolomitic, to gray-black, hard, very shaly Dolomite.
- 5108 Top - SPERGEN
- 5108-5120 Dolomite, gray, dark gray, very, very finely crystalline, tight, very silty and argillaceous; with very spotted, dark brown oil stain.
- 5120-5130 Dolomite, dark brown, finely crystalline to slightly crystalline,

- 5130-5150 Dolomite, gray and gray-black, mottled, very finely crystalline, dense, silty and argillaceous; with little Limestone, brown-gray, very finely crystalline to finely crystalline, dense, silty, dolomitic (possibly as lentils).
- 5150-5168 Dolomite, gray, gray-black, mottled, very finely crystalline, dense, silty, some argillaceous; with little Limestone, gray, mottled, and brown-gray, finely crystalline, dense, dolomitic, slightly microfossiliferous.
- 5168 Top - WARSAW
- 5168-5199 Limestone, gray mottled to brown, buff-brown, finely crystalline to crystalline, dense; most abundantly microfossiliferous and some fossil fragments; some dolomitic; traces of glauconite; Chert, gray, light gray, brown-gray, opaque, coarsely fossiliferous.
- 5199 Top - OSAGE
- 5199-5220 Dolomite, buff, light brown, brown, light gray, very finely crystalline to finely crystalline, granular to succrosic, very tight, slightly glauconitic; Chert, white, gray, tan, buff-brown, opaque and semiopaque, blocky; some weathered and trace tripolitic (20% to 25% chert).
- 5220 OSAGE SHALE MARKER
- 5220-5227 Shale. Note: No lithology that can be attributed to this interval was found in the samples.
- 5227-5250 Dolomite, light gray, buff, brown, very, very finely crystalline to very finely crystalline, dense, some very glauconitic; Chert, gray, white, tan, opaque and semiopaque, blocky, some weathered, some glauconitic, trace dolomitic (35% to 80% chert).
- 5250 Top - ST. JOE
- 5250-5268 Limestone, brown and dark brown, very finely crystalline to sub-lithographic, very dense.
- 5268 Top - KINDERHOOK
- 5268-5282 Limestone, light brown, brown, buff-brown, buff, very finely crystalline to finely crystalline, dense; trace finely oolitic; some with imbedded, dark brown, dolomite crystals; some buff, chalky.
- 5282-5296 Limestone, brown-buff-brown, gray-buff, finely crystalline to slightly crystalline, dense; most with imbedded, fine to medium, subangular to subrounded sand grains; some microfossils; trace bright green, waxy, shale laminae.
- 5296 Top - LOWER KINDERHOOK
- 5296-5300 Shale, green, dark green, waxy; and Sandstone, white, fine to medium, trace coarse, angular to subangular, and trace subrounded, friable. Note: Interpreted from drilling time and samples. Logs do not reach.
- 5300 Total depth - Driller