

DGS core 3503
Richland - Jackson
Hohler #1
permit 297

SUN OIL COMPANY-DUNCAN, #1 HOHLER, RICHLAND COUNTY, JACKSON TWP., OHIO. SECTION 28.
330 SN. 330 EW. 34 1/2.

Sample Description from Gull River to Total Depth.

- 3600 - 3660 Limestone, tan, lithographic to fragmental.
- 3660 - 3670 Dolomite, white, fine to medium crystalline, scattered fluorescence, no stain, faint cut, no visible porosity.
- 3670 - 3680 Dolomite as above, good gold fluorescence, no visible stain, trace porosity, slow fair cut.
- 3680 - 3683 5 minute sample, dolomite as above with trace finely crystalline dolomite with good stain, fluorescence and cut. 10 minute sample dolomite white to brown, good fluorescence, stain and cut. 15 minute sample as above. 20 minute sample dolomite, white, finely crystalline, slightly glauconitic, no show-dull orange fluorescence, trace green shale, traces pyrite.
- 3683 - 3685 Dolomite as above, trace fluorescence - sample almost all caves.
- 3685 - 3690 Dolomite, white to light green, glauconitic, silty, very finely crystalline, tite to slightly porous. Fluorescence in 20% of sample, faint cut, trace stain. 5 minute sample as above, 10 minute sample dolomite as above, about 50% of sample fluoresces, fair cut, good odor. 15 minute sample dolomite as above, about 60% of sample fluoresces, fair cut, good odor.
- 3690 - 3692 Dolomite as above, 90% fluoresces - (still very low porosity) 10 minute sample, 20 minute sample as above, 90% fluorescence. 30 minute sample as above about 60% fluorescence - (still very low porosity).

CORE #1 3692 - 3717

CUT 25' REC. 25'

- 3692 - 3696.5 Dolomite, light tan to greenish gray, finely crystalline, glauconitic, pyritic, pale blue-gold fluorescence, good odor, very low porosity to tite, scattered layers of very glauconitic material, widely scattered vugs up to 3/4 inch, occasional traces of oil in vugs.
- 3696.5 - 3697.5 Dolomite as above, interbedded with layers of green shale.
- 3697.5 - 3702 Dolomite, light grey to tan, finely crystalline, tite, with occasional patches of low porosity, occasional vugs and occasional short vertical fractures bleeding light yellow oil, pale yellow to blue fluorescence in the porous spots.
- 3702 - 3702.5 Dolomite as above, with thin scattered glauconitic zones and abundant large vugs up to 1 1/2 inch with free oil.
- 3702.5 - 3705 Dolomite, light grey to greyish green, finely crystalline, argillaceous in part, scattered low porosity, with bluish fluorescence; rare pin point vugs.

- 3705 - 3708.5 Shale, green, dolomitic, with several thin zones of edgewise conglomerate involving shale and dolomite. The shale grades to grey-green dolomite in places with occasional spots of porosity with fluorescence, trace bleeding oil.
- 3708.5 - 3713 Dolomite, light grey to greenish grey, glauconitic, slightly porous to tite, good bluish-gold fluorescence in the porosity, widely scattered vugs up to 3/4".
- 3713 - 3717 Dolomite as above, interbedded with dolomitic green shale, scattered low porosity with good fluorescence, scattered traces of bleeding oil.

CORE #2 3717 - 3742
CUT 25' REC. 25'

- 3717 - 3725.5 Dolomite, light to medium grey, finely crystalline, rare small scattered vugs, argillaceous, glauconitic; very low porosity to tite, good pale fluorescence in porosity. (Porosity very spotty below 3723) 15-20° dip apparent in part of core.
- 3725.5 - 3726.5 Dolomite, pale grey to green, very finely crystalline, very argillaceous, tite, no show.
- 3726.5 - 3729 Dolomite, grey to tan and shale, green to grey, dolomitic, forming a well-developed edgewise conglomerate with dip of about 15-20°; occasional trace of porosity and pin points of bleeding oil - tite overall. Few interbeds of grey green very argillaceous dolomite or dolomitic shale.
- 3729 - 3738 Dolomite, tan, finely crystalline, tite, with occasional pin point vugs and hair line fractures of bleeding oil. Few interbeds of shale, dolomitic and few conglomeratic zones (A 6" zone of saturated dolomite and low porosity at 3733 and 6" of saturated finely crystalline glauconitic dolomite at 3734-3734.5) (A very slight bit of porosity in the dolomite from 3736.5 - 3737.5 with good fluorescence).
- 3738 - 3741 Shale, grey, green, very dolomitic, with interbeds of dolomite as above, tite with very few streaks of fluorescence.
- 3741 - 3742 Dolomite, light grey to tan, finely crystalline, conglomerate in part, traces of porosity, bleeding salt water.

CORE #3 3742 - 3767
CUT 25' REC. 25'

- 3742 - 3744 Dolomite, grey to green, very finely crystalline, argillaceous, glauconitic, pyritic, tite to very slightly porous, no show, occasional partings of grey green shale. Well developed set of mud cracks at 3744 on bedding plane.
- 3744 - 3744.5 Shale, green, pyritic, dips indicated of from approximately 2 or 3° up to 15°.
- 3744.5 - 3749 Dolomite, tan, fine to medium crystalline, trace glauconite, scattered pin point vugs, tite to very low porosity, occasional hair line fracture. Core bleeding salt water with occasional pin points of yellow oil

- 3749 - 3750 Dolomite, grey, green, very finely crystalline, very glauconitic, interbedded with thin green shale partings.
- 3750 - 3760 Dolomite, tan, finely crystalline, trace glauconite, tite to very slightly porous, widely scattered vugs up to 1" in diameter, occasional rare trace oil in vugs, core bleeding salt water. Zone of pyrite 3/4 inch thick along bedding plane at 3753. Dip of 25° on this plane.
- 3760 - 3765 Dolomite, greenish grey, very finely crystalline, very glauconitic, very low porosity, no show. Occasional thin shaly partings or zones indicating a dip of 20°.
- 3765 - 3765.5 Shale, bright green, pyritic.
- 3765.5 - 3767 Dolomite, tan, finely crystalline, tite to occasional slight porosity, widely scattered small vugs up to 1/4" in diameter, no show.
- CORE #4 3767 - 3817
CUT 50' REC. 50'
- 3767 - 3770.7 Dolomite, grey, microcrystalline, argillaceous, very pyritic, argillaceous interbeds indicate dips up to 35° in top foot. Bedding becomes essentially flat below this. Tite, no show.
- 3770.5 - 3772.5 Dolomite, tan to light grey, microcrystalline, tite, to very low porosity, widely scattered small vugs up to 1/4", pyritic and argillaceous in part.
- 3772.5 - 3774 Dolomite, light grey, microcrystalline, very argillaceous with partings of grey to grey-green shale, pyritic, tite, no show.
- 3774 - 3777 Dolomite as above, with large almost vertical vugs or fractures completely filled with pyrite.
- 3777 - 3785.5 Dolomite, tan to light grey, very finely crystalline, tite to very slightly porous, widely scattered pin point vugs. Argillaceous in part. Vertical and high angle pyrite filled irregular fracture planes from 3778 to 3782.
- 3785.5 - 3787 Dolomite as above, with green argillaceous streaks. 1" vugs filled with pyrite at 3785.7.
- 3787 - 3795 Dolomite, tan, finely crystalline, tite to slightly porous, scattered pin point vugs. Rare thin argillaceous laminae.
- 3795 - 3796.7 Shale, grey to grey-green, very dolomitic, minute pyrite crystals.
- Glenwood - Trempealeau contact
- 3796.7 - 3803.5 Dolomite, tan to buff, finely crystalline, widely scattered pin point vugs with rare vugs up to 3/4". Tite to very porous, no shows.
- 3803.5 - 3808 Dolomite as above, with large abundant vugs up to 1 1/2" in diameter. The matrix appears tite and the vugs are not interconnected.

- 3808 - 3817 Dolomite as above, but very widely scattered pin points to $\frac{1}{4}$ " vugs. Tite.
Entire core bleeding water - no shows
- 3817 - 3820 Shale caves - first sample after trip.
- 3820 - 3835 Dolomite, cream, finely crystalline.
- 3835 - 3840 Dolomite as above, becoming grey; slightly argillaceous with a trace of glauconite.
- 3840 - 3845 Dolomite, cream, finely crystalline.
- 3845 - 3850 Dolomite, cream, finely crystalline, very slightly glauconitic.
- 3850 - 3855 Dolomite as above, with traces of green glauconitic dolomitic siltstone and trace pyrite.
- 3855 - 3860 As above, more glauconitic.
- 3860 - 3865 Siltstone, green, dolomitic, glauconitic, with minor amount dolomite, buff, finely crystalline, glauconitic.
- 3865 - 3870 Dolomite and siltstone as above, abundant pyrite.
- 3870 - 3875 Dolomite, buff to very light grey, finely crystalline, glauconitic, pyritic, trace above siltstone.
- 3875 - 3905 Dolomite, light grey to buff, finely crystalline, very slightly glauconitic and pyritic.
- 3905 - 3910 Dolomite, buff to light grey, finely crystalline, glauconitic and pyritic, few fine quartz grains.
- 3910 - 3920 Dolomite as above, becoming sandier

TD 3920

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G. H. Davis