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**Open File 3776**

**DESCRIPTIONS OF SOME CORES FROM THE CAMBRIAN OF THE  
NORTHERN INTERIOR PLAINS, NORTHWEST TERRITORIES**

By

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Although every effort has been made to ensure accuracy, this Open File Report has not been edited for conformity with Geological Survey of Canada standards.

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## BELE O-35

**Cores 1 and 2:** 1330.5-1353.2 m

Core 1, 1330.5-1340.6 m. Rec. 9.8 m. 9 boxes.

Core 2, 1340.6-1353.2 m. Rec. 12.6 m. 11 boxes.

Well preserved core.

Mount Cap Fm; possibly topmost part of Mount Clark Fm.

Core depths do not match log character; equivalent log depths are 1329-1351.7 m.

(Log depths)

### MOUNT CAP FM

1329-1330 m *Interbedded sandstone-shale-mudstone:*

Sandstone: very fine grained, silty to argillaceous, bioturbated. Two discrete sandstone beds (16-18 cm thick) separated by shale/mudstone. Each beds has an abrupt, slightly loaded basal contact. Upper contacts are gradational. Burrow mottled with some discrete, short, vertical burrows preserved (1-2 cm long; 0.5-1 cm diameter). Lower sandstone bed contains black grains of medium sand (perhaps chert). Clay content imparts greenish hue to rock.

Mudstone: greenish grey; sandy lenses and sand-filled burrows.

Interval essentially consists of two fining-upward successions: sandstone to mudstone, erosionally overlain by next sandstone.

1330-1335.6 m *Shale:* fissile to platy. Abundant laminae of silt and very fine sand. Near top of interval there is a thin zone (<1 cm thick) containing scattered, black medium sand grains (possibly chert). Some small, sand-filled burrows present.

1335.6-1336.1 m *Dolostone:* light to medium grey, very finely crystalline to dolomicritic.

Nodular appearance. "Nodules" of dolomite separated by argillaceous zones. Abrupt base and top. Some short, narrow, calcite or dolomite-filled fractures (mm wide, 1-2 cm long). Nodules contain small, 1-2 mm diameter, circular objects of unknown origin.

1336.1-1338.5 m *Shale/mudstone:* greenish-grey colour. Silty to dolomitic mudstone grading up into medium grey, silt-laminated shale that is present in the top 0.75 cm. Basal contact is gradational - consists of greenish coloured mudstone containing irregular beds and nodules of dolostone.

1338.5-1342 m *Dolostone:* light grey. Very finely crystalline to dolomicritic. Nodular to irregularly bedded. Clay-rich between nodules/beds. Small (few mm wide and long), white, rectangular objects may be shell debris. Near base of interval there are small, circular objects 1-3 mm in diameter consisting of a white outer rim, cored with darker material. Basal contact is abrupt but irregular, possibly due to loading.

1342-1343 m *Mudstone:* greenish grey; silty. Discrete small burrows to burrow mottled. Some scattered fine to medium sand grains near base. Basal contact not preserved but rapid change in lithology suggests abrupt contact.

1343-1343.14 m *Dolostone:* light grey; nodular appearance; argillaceous. Loaded, irregular basal contact.

1343.14-1343.23 m *Sandstone:* dark greenish hue due to matrix of green clay. Fine to medium

- grained. Grains of black sand in a dolomite/clay cement/matrix. No internal sedimentary structures.
- 1343.23-1343.7 m *Sandstone*: light grey. Abrupt base/top. Very fine grained in basal 2-3 cm; upper 3-4 cm consists of medium grained sand grading up into fine grained sand. The upper bed has scattered black sand grains. Ripple cross laminae in upper bed.
- 1343.7-1344.22 m *Sandstone*: dark greenish hue due to clay content. Similar to interval 1343.14-1343.23. No internal sedimentary structures. Contains at least two irregular bands of light grey, very fine grained sandstone about mid-way through interval (3-8 mm thick). Abrupt, load deformed basal contact.
- 1344.22-1344.57 m *Sandstone*: very fine grained; light grey; argillaceous; burrow mottled to laminated. Gradational basal contact. Some discrete, small vertical burrows preserved.
- 1344.57-1344.73 m *Mudstone*: contains lenses and laminae of very fine grained sand plus sand-filled burrows. Abrupt, load deformed basal contact.
- 1344.73-1345.5 m *Sandstone*: light grey; very fine grained. Argillaceous laminae. Laminated to thinly bedded (up to 2 cm thick); some burrow mottled zones. Discrete, 3-5 mm diameter vertical burrows are preserved in places, especially within the middle of the interval. Gradational basal contact.
- 1345.5-1346.8 m *Mudstone*: light to medium grey. Silt and sand laminae, plus sand-filled small burrows. Burrow mottled in places. Abrupt basal contact.
- 1346.8-1348 m *Sandstone*: similar to interval 1344.73-1345.5 m but with less preservation of bedding, more burrow mottling. Gradational basal contact.
- 1348-1349.3 m *Shale/mudstone*: fissile shale grading up into silty/sandy mudstone. Blebs, laminae and burrow fill of silt/sand. Greenish grey colour.
- 1349.3-1350.1 m *Argillaceous sandstone*: irregular blebs, stringers and lenses of light grey, very fine grained sandstone separated by green coloured silty to sandy argillaceous material. Overall, the interval has a mottled to nodular appearance.
- 1350.1-1350.9 m *Shale*: greenish grey colour. Small blebs and laminae of silt/sand. Rapid change from underlying unit.
- 1350.9-1351.2 m *Sandstone*: greenish hue due to green clay content. Very fine to fine grained; some zones of scattered medium sand grains. Abundant thin beds and coarse laminae. Burrowed. Abrupt basal contact.
- 1351.2-1351.7 m *Sandstone*: light grey; argillaceous. Burrow mottled. Contains green clay.

Comment: low-energy marine deposits.

### **COLVILLE D-45**

Only examined that part of core in which Wielans et al. (1990) reported a rich source rock at 3094 ft. Consists of a thin bed (about 5-8 cm thick) of a brownish grey mudstone. This is presumably the "kukersite" described by Wielans et al. It is located at the top of a thin fining-upward unit that consists of a thoroughly bioturbated, argillaceous, very fine grained sandstone that gradually changes upward into a bioturbated silty to sandy mudstone, in turn capped by the non-bioturbated brownish grey "kukersite" interval. The "kukersite" is in turn abruptly overlain by another thoroughly bioturbated, argillaceous, very fine grained sandstone.

#### Reference:

Wielans, J.B.W., von der Dick, H., Fowler, M.G., Brooks, P.W., and Monnier, F.

1990: Geochemical comparison of a Cambrian alginite potential source rock, and hydrocarbons from the Colville/Tweed Lake area, Northwest Territories. Bulletin of Canadian Petroleum Geology, v.38, p.236-245.

### **COLVILLE E-15**

1) Examined the interval correlative to the "kukersite"-bearing zone of Colville D-45. This part of core has been severely oversampled and only parts of interval are preserved in broken fragments, none of which look like the "kukersite" seen in D-45. Preserved core consists of thoroughly bioturbated, argillaceous, very fine grained sandstone.

However, two zones of brownish grey mudstone were noted at 4927 (1.47% TOC) and 4927.5 ft (0.75% TOC) - these were tested for source rock potential. They occur as thin beds (2-8 cm thick) within an interval of bioturbated, argillaceous, very fine grained sandstone.

Similar looking brownish grey mudstone was noted in a dolostone unit between 4940-42 ft (0.4% TOC), where it occurs within argillaceous partings (sampled).

2) Examined formational and member contacts of the Saline River Formation.

*Franklin Mtn-Saline River contact:* a rapid transitional change from shale with thin interbeds of dolostone and anhydrite of the Saline River Fm through a zone of increasing dolostone and less shale and anhydrite, into a thick bed of dolostone. Dolostone beds are generally finely laminated, commonly contorted, and locally brecciated.

*Upper clastic mbr/Evaporite mbr contact:* an abrupt change from a finely laminated, highly contorted to brecciated bed of dolostone (greenish grey colour with zones of maroon coloured strata) of the Evaporite mbr. To a greenish grey to maroon shale of the Upper clastic mbr.

*Evaporite mbr/Lower clastic mbr contact:* Poorly preserved core. Evaporite member consists of interlaminated to thinly interbedded dolostone, salt, and anhydrite (commonly with distorted laminae/beds) overlying shale with thin (mm to cm thick) beds of dolostone and anhydrite. The change apparently is rapid.

*Saline R./Mt Cap contact:* If the contact is at 4610 ft the core is missing and the nature of the contact is not possible to document. However, in general, shale beds above this level are a lighter grey than shale beds below and the dolostone beds tend to be more contorted and brecciated than those below. The contact could be as low as 4624 ft - the dolostone bed immediately above this level has many features in common with dolostone beds of the Saline River Fm. (i.e., has some contorted and brecciated laminae and appears to contain some anhydrite), whereas those below have fewer similarities. However, the 4624 ft level has no feature to suggest the presence of a major unconformity.

**EWEKKA C-11**

**Core 1:** 1279-1281.92 m. Rec. 2.92 m. 2 boxes.

Well preserved, full-diameter core.

Mount Clark Fm.

1279-1279.45 m *Shale*: medium/dark grey; platy. Basal contact is rapidly transitional with underlying lithology.

1279.45-1279.7 m *Sandstone*: contains a basal layer of pebbly sandstone about 2-3 cm thick. Irregular lenses, wisps, and laminae of grey, clay-rich material. Light grey. No visible sedimentary structures. Fine grained; silica cement. Abrupt, loaded basal contact.

1279.7-1280.04 m *Sandstone*: medium to coarse grained. May contain some bioclasts. Possibly cemented by dolomite. Light to medium grey. Some crude, subparallel laminae present, but mostly without visible sedimentary structures. Interval appears to consist of 3 sandstone beds separated by clay-rich beds. Lower contact of each bed is abrupt and load deformed. Sampled at 1279.8 m.

1280.4-1281.92 m *Dolostone*: medium grey; very fine to finely crystalline; possibly sandy. Contains large, salt-filled fractures. No obvious sedimentary structures. Has a petroliferous odour when broken.

**LOON CREEK #2 G-78**

**Core 8** 4772-4792 ft. Rec. 5 ft. 1 box

**Core 9** 5077-5093 ft. Rec. 9 ft. 2 boxes.

Poorly preserved

Saline River Fm.

Pinkish red, crystalline salt in both cores but in core 8 there are thin beds of fissile, red and greyish green shale and silty shale. The latter commonly contain current ripple laminae.



## NORTH COLVILLE L-21

**Core 1:** 3685-3699 ft. Rec. 13 ft. 3 boxes

**Core 2:** 3700-3730 ft. Rec. 30 ft. 7 boxes

**Core 3:** 3730-3760 ft. Rec. 30 ft. 7 boxes.

Well preserved core.

Mount Cap and Mount Clark formations, and Precambrian.

## MOUNT CAP FM

3685-3693 ft *Shale*: fissile; dark grey; some silt laminae. Rapidly gradational basal contact.

3693-3695 ft *Siltstone-Sandstone*: thoroughly bioturbated, light greenish grey, argillaceous, coarse grained siltstone to very fine grained sandstone. Small (about 5 mm diameter), short, subvertical burrows infilled with light grey, coarse silt/very fine sand. Parts of the interval are burrow mottled. A rapid transition into overlying non-bioturbated shale, a more gradual transition from underlying shale.

3695-3698 ft *Shale*: similar to the shale at 3685-93 ft but has a slight greenish hue.

3698-3700 Missing core (shale interval according to log response)

3700-3704.25 *Shale*: similar to 3695-98 ft interval. Base marked by a thoroughly bioturbated, possibly glauconitic, argillaceous to silty, very fine grained sandstone erosionally overlying a dolostone. The sandstone contains small (<5 mm) dolostone clasts.

3704.25-3709 ft *Dolostone*: medium grey; argillaceous. Mottled/nodular appearance in places. Zones with high content of clay have the mottled/nodular appearance. Very finely crystalline. Circular, sub-horizontal burrows scattered throughout interval. Abrupt basal contact.

Large, open to salt-filled vugs present. Some are lined with bitumen. Also, some closed fractures.

Areas where displacive crystals have formed: prismatic calcite/dolomite or calcite-replaced gypsum(?).

Some possible shelly debris, but it is very indistinct.

3709-3711.5 ft *Sandstone*: thoroughly bioturbated, argillaceous, coarse grained siltstone to very fine grained sandstone. Clay imparts a light greenish colour. Most of burrows are silt/sand-filled and tend to be light grey in colour. Bioturbation ranges from discrete identifiable burrows to burrow-mottling. Mostly subhorizontal burrows with a few, short, vertical types.

Basal contact appears to be abrupt.

3711.5-3715.25 ft *Dolostone*: similar to dolostone described above. Some stylolites. A prominent band of large diameter (up to 1 cm) horizontal burrows about 8 ins below top of unit.

Vugs are present in top 4 ins and about mid-way through interval. Abrupt basal contact.

3715.25-3731 ft *Siltstone/sandstone*: argillaceous, coarse grained siltstone to very fine grained sandstone. Discrete burrows to burrow mottled. Clay imparts light green colour to rock (similar to unit at 3709-3711,25 ft). Abrupt basal contact.

Upper 10 ins is coarser grained (fine to medium sand) and contains an abundance of dark green to black chert grains in a matrix of silt and green clay (gives a false impression that some sand grains are glauconite). Base of this coarser unit appears to be abrupt but is

distorted due to extensive burrowing.

3731-3732.1 ft *Dolostone*: medium grey; very finely crystalline; argillaceous. Nodular to mottled appearance. Abrupt basal contact. Large pyrite nodules present. Near base of interval are clusters of prismatic crystals within mud-filled, irregularly shaped vugs - they appear to be pseudomorphs of gypsum.

3732.1-3741 ft *Siltstone/sandstone*: argillaceous, bioturbated, coarse grained siltstone to very fine grained sandstone. Abrupt basal contact. Discrete silt/sand-filled burrows (light grey colour) to burrow mottling. Small, short, vertical and subhorizontal burrows (cf. Unit 3709-11.5 ft). About 15 ins above base of unit is a 2-3 ins thick band of shale with silt laminae.

3741-3743.5 ft *Dolostone*: similar to dolostone units above. Contains horizons with prismatic pseudomorphs after gypsum crystals. Base is rapidly transitional with underlying unit.

3743.5-3744.25 ft *Sandstone*: medium grained. Has mottled appearance due to patches of quartz-rich, quartz-cemented sandstone interspersed with areas of sandstone containing an unknown black substance (?bitumen). No visible sedimentary structures. Basal contact disrupted by burrows.

3744.25-3748.75 ft *Dolostone*: similar to dolostone units described above. Contains a band of prismatic crystals (?pseudomorphs after gypsum) about mid-way through interval. Abrupt basal contact.

#### MOUNT CLARK FM

3748.75-3752.5 ft *Sandstone*: varies from very fine to medium grained. Internal facies changes from top to bottom are as follows:

a) Uppermost 5 ins: fine grained sandstone, stained black (?bitumen)

b) 8 ins of light green, thinly bedded, quartzose, very fine to fine grained sandstone containing small diameter (few mm) vertical burrows.

c) 18-20 ins of interlaminated green clay and light grey, very fine grained sandstone. Laminae are slightly contorted in places. Subparallel laminae. Some possible, small diameter, horizontal burrows. Uppermost 5 ins is a bed of sandstone containing small, light grey, up to 5 mm diameter chert pebbles.

d) Basal 10-12 ins consists of yellow/orange stained, very light green to light grey, very fine grained sandstone. Contact with overlying unit is irregular and erosional. A deep, steep-sided cavity is eroded into this basal unit and infilled with sand and green-coloured clay. Base of unit is abrupt and erosional.

#### PRECAMBRIAN

3752.5-3760 ft *Sandstone*: maroon to brick-red colour; very fine to fine grained; finely laminated (subhorizontal to cross laminated). Some disrupted laminae. Some thin horizons contain small (<5 mm long) mud clasts.

*Comment*: Cambrian strata mostly deposited in a low-energy marine depositional environment.

### TENLEN A-73

Continuously cored

The following descriptions highlight the facies at contacts between the various Cambrian formations and members.

*Franklin Mountain-Saline River contact:* (about 7346 ft). Base of the Franklin Mountain Fm is marked by a 30 cm thick brecciated, very finely crystalline dolostone bed that rests abruptly on green shale of the Saline River Fm. The following vertical facies change at the boundary are present:

Brecciated dolostone (30 cm)

About 1.8 m of green shale with laminae and very thin beds of siltstone and dolomicrite - many beds/laminae are contorted and a few are brecciated.

Red/maroon shale with laminae and very thin beds of siltstone and dolomicrite (same as the green shale except the colour).

*Upper clastic-Evaporite member contact:* (at 7440 ft). Beds of the Evaporite member consist of thinly to thickly bedded dolostone separated by thin muddy layers. Abruptly overlain by about 10 cm of green laminated shale of the Upper clastic member, which rapidly changes colour to red/maroon.

*Evaporite-Lower clastic member contact:* (at about 7607 ft). A gradational change upward from interbedded mudstone and laminae and thin beds of dolostone to thicker bedded, laminated dolostone interbedded with laminae and very thin beds of mudstone and anhydrite. This gradational change occurs over a 30 cm interval. Some of the thicker dolostone beds of the Lower clastic member have a nodular appearance that may be due to bioturbation; other dolostone beds commonly are finely laminated.

## TWEED LAKE A-67

**Core 1:** 1276-1287.5 m. Rec. 11.5 m

Mount Cap Fm

**Core 2:** 1287.6-1302.1 m. Rec. 14.5 m

Mount Cap and Mount Clark formations, and Proterozoic.

## MOUNT CAP FM

1276-1278.05 m *Sandstone*: very fine grained, argillaceous, medium grey. Thoroughly bioturbated. Nodular appearance due to presence of lenses and anastomosing laminae of clay. Most of clay laminae are less than 5 mm thick, but with a 1-cm thick clay-rich bed at 1277.5 m (a potential source rock with % organic carbon of 2.67%). Lowermost 30-40 cm of interval has a greenish tinge, probably due to the presence of glauconite. This part of interval also contain some remnant bedding (1 cm thick bands). Within the bottom 10-15 cm the “nodules” of very fine grained sandstone are separated by areas containing medium grained sand (possibly derived from underlying bed by burrowing organisms). Abrupt basal contact.

1278.05-1279.8 m *Sandstone*: medium to coarse grained; brownish grey with some greenish hued zones (?glauconite). Basal 10 cm is a bed of coarse grained, bitumen stained, light grey, cross bedded sandstone with an abrupt base and top. This is overlain by about 9 cm of fine to medium grained, brownish-grey, cross-laminated sandstone that grades up into burrowed (*Skolithus*-like burrows) sandstone, in turn grading up into thoroughly bioturbated, medium to coarse grained sandstone. The latter contains distinct, narrow (<3 mm wide), white, vertical burrows - the white colour is due to the presence of “clean” sand as the burrow fill.

1279.8-1284.75 m *Sandstone*: fine grained, brownish grey. Abrupt upper contact, gradational basal contact - in fact the sandstone is part of and overall coarsening upward cycle that starts at 1290.5 m with a shale. Vertical succession in the sandstone interval is as follows (base-to-top):

1.21 m of very thin to thin beds of very fine grained sandstone, beds separated by clay laminae and/or interlaminated clay and sand. Sandstone beds tend contain discrete burrows or may be thoroughly bioturbated. The laminated units tend to be <1 cm thick and may contain small burrows.

60 cm of strata similar to underlying beds but the sandstone beds are thicker and clay/sand laminated units are fewer.

69 cm of massive to vaguely cross-bedded very fine grained sandstone.

1.7-1.8 m of vaguely bedded to massive sandstone with clay partings/laminae and possibly some bioturbated zones.

45 cm of bioturbated fine grained sandstone.

1284.75-1285.3 m *Interlaminated to interbedded sandstone and shale*: similar to the lowermost beds of overlying interval but with more shale laminae/beds and more bioturbation.

1285.3-1290.5 m *Shale*: greenish grey. Contains abundant laminae and very thin beds of very fine grained sandstone. Also abundant are sand-filled burrows. A general coarsening-upward aspect to the interval. Abrupt basal contact; gradational upper contact. About 55 cm

above base of interval there is a 30 cm thick zone that contains an abundance of sand-filled burrows, far denser than in other parts of the interval.

#### MOUNT CLARK FM

1290.5-1295.4 m *Sandstone*: medium to coarse grained, varicoloured - mostly light grey with patches of green, black, and rusty-yellow. The green is due to presence of glauconite, the black to bitumen, and the rusty colour is presumed to be oxidized glauconite. Mostly thoroughly bioturbated with some zones containing discrete vertical burrows. Two types of vertical burrows occur, rarely together: one is narrow (<4 mm) and infilled with "clean" white sand, the other is broader (5-10 mm) and is not infilled with "clean" white sand. Some thin zones where remnant bedding (subhorizontal laminae) can be seen. Gradational lower contact.

1295.4-1301 m *Sandstone*: fine to medium grained, generally cross bedded; bitumen stained. Generally dark grey (due to bitumen staining). Very porous. Lowermost 35 cm consists of thoroughly bioturbated, dark grey, medium grained sandstone. Contains several generations of vertical burrows. The "last" generation of burrows are up to 5 mm wide and infilled with "clean" sand. This burrowed bed is abruptly overlain by cross bedded sandstone. There are multiplesets of cross beds and they become less distinct up-section. At about 1296.5 m there are some distorted cross beds.

----- UNCONFORMITY -----

#### PRECAMBRIAN

1301-1302.1 m *Mudstone*: red, fractured. Slickensides on some fractures, others are calcite-filled. Some of fractures are circular to spiral-like. Top 45 cm contains burrows that are filled with sand derived from overlying Cambrian material. Burrows range from subhorizontal to vertical and are up to 5 mm wide.

Interpretation: marine sandstone and shale. Initial sandstone deposited in a high-energy environment subject to periods of stability allowing organism to burrow into sand. Subsequent deposits were formed in a lower energy environment where longer periods of relatively calm conditions allowed beds to be thoroughly bioturbated.

## TWEED LAKE C-12

**Core 1** 1312-1323.2 m. Rec. 10.45 m. 8 boxes

Core depth relative to log depth is about 1 m too low; top of core on logs should be about 1311 m. Missing part of core from base.

Mount Cap and Mount Clark formations.

## MOUNT CAP FM

(Core depths)

1312-1315.5 m *Sandstone*: light to medium grey. Bed thickness highly variable, ranging from mm laminae to 25 cm. Beds range from massive in appearance to laminated, and some are thoroughly bioturbated. Bioturbated beds are argillaceous. Some mudstone interbeds within central part of unit. Gradational basal contact - grades upward from laminated shale into burrowed, silty to sandy mudstone, into a thoroughly bioturbated, argillaceous sandstone.

1315.5-1318.2 m *Shale/mudstone*: Predominantly fissile, medium to dark grey shale with silt laminae. Scattered throughout are thin beds and lenses of fine to medium grained sandstone - one such beds is a 3-4 cm thick, medium grained sandstone containing green coloured clay. Some sandy interbeds are burrowed. Shale takes on a greenish hue in lower half of unit and contains more burrows than upper half. Basal contact not preserved but appears to be a rapid transition from burrowed sandstone.

## MOUNT CAP FM

1318.2-1319.37 m *Sandstone*: fine to medium grained, extensively burrowed in most beds.

Some large *Skolithus*-like burrows. A few non-burrowed, but apparently structureless, few mm to 6 cm thick, sandstone beds. Burrowed beds are very argillaceous.

1319.37-1319.59 m *Sandstone*: medium to coarse grained. Planar cross beds. Some bitumen in the pores.

1319.59-1321.45 m *Sandstone*: fine to medium grained, green coloured clay matrix. Well sorted sand grains. Thoroughly bioturbated - some vertical burrows are preserved.

1321.45-1322.2 Missing core

Comment: mostly deposited as low-energy, subtidal marine sediments.

### TWEED LAKE M-47

**Core 1** 1217-1224 m. Rec. 7.05 m. 5 boxes. Well preserved.

Core depth appears to be about 2 m lower than equivalent log response (log depths 1215-1222 m).

Mount Cap Formation.

### MOUNT CAP FM

(Log depths)

1215-1216.5 m *Sandstone*: light grey, very fine grained. Mostly burrowed with some remnant thin beds. Irregular, anastomosing laminae. Gradational basal contact.

1216.5-1217 m *Interbedded sandstone-argillaceous siltstone*: bioturbated.

1217-1219 m *Interbedded sandstone-mudstone*: gradual downward decrease in sandstone content. Sandstone beds are bioturbated and commonly load deformed. Mudstone beds contain some laminae of silt/sand and sand-filled burrows.

1219-1222 m *Shale/mudstone*: fissile to platy. Abundant laminae of silt/very fine sand. Some thin beds of laminated or burrowed sandstone. Medium grey in upper half; has a greenish hue in lower half. Scattered throughout unit are intervals with sand-filled, subhorizontal burrows.

**WINDFLOWER G-77**

**Core 3** 1350-1370 ft. Rec. 20 ft. 5 boxes.

Very poorly preserved, highly unlikely that 20 ft of core is represented.

Saline River Fm.

Green, red, and grey shale interlaminated to interbedded with light grey gypsum/anhydrite. Disrupted beds are very common. Gypsum/anhydrite commonly in nodular beds. Some beds contain contorted laminae - possible due to flowage. Possibly some thin carbonate beds.