

## Attachment 1 - Explanation of Appendices

### Appendices 1, 2, and 3 - Upper Mannville B4B Pool, Upper Mannville II Pool and Upper Mannville V2V Pool

Appendices 1, 2, and 3 contain photos and well logs for core that were reviewed in the areas surrounding these three pools. Each photo has been consistently labeled as follows:

- The top of the core interval is located on the bottom right of the photo.
- The base of the core interval is located at the top left of the photo.
- The posted depths refer to the core depths at the end of the boxes.
- Sequence names are placed immediately below the interpreted top for that sequence and are denoted using the following abbreviations:
  - BVF – Wabiskaw B Valley-fill
  - Wab C – Wabiskaw C
  - DVF – Wabiskaw D Valley-fill
  - McM A2 – McMurray A2 Sequence
  - McM – McMurray
- Where the actual top is not in the photo (e.g., BVF) the formation abbreviation is located at the top of the first core box in the photo.
- Where appropriate, there are descriptive notes (e.g., contact).

The well logs, density-neutron and resistivity logs, follow each core photo and are annotated with the RGS tops and markers and ISH interpreted Wabiskaw B cemented horizons. These tops and markers are labeled as follows:

- Wabiskaw marker – black solid line
- Wabiskaw B valley-fill – solid dark blue line
- ISH Horizon 2 – thin dashed green line
- ISH Horizon 4 – thin dashed pink line
- ISH Horizon 6 – thin dashed red line
- ISH Horizon 7 – thin dashed black line
- ISH Horizon 8 – thin dashed grey line
- Wabiskaw C sand – dashed yellow line
- Wabiskaw D shale – solid pink line
- Wabiskaw D valley-fill – solid light blue line
- McMurray A channel – dashed red line
- McMurray A1 sequence – solid red line
- McMurray A2 sequence – dotted red line
- McMurray B1 channel – dashed black line
- McMurray channel – solid yellow line
- McMurray C channel – dotted yellow line

Refer to the RGS tops and markers spreadsheet if clarification is required.

The well logs also contain annotations located between the neutron-density log and the resistivity log (the depth registration column). The dark red rectangle, on the left-hand side of the depth registration column, shows the core depths of the photo on the well log. The light red rectangle, on the right-hand side of the depth registration column, shows where the core photo depth has been adjusted to match the well log response. Some wells do not have a light red annotation on the well logs as these wells did not need to have the core depths adjusted.

#### Appendix 5 – Wabiskaw B Valley-Fill Cemented Zones – Core Photos

Appendix 5 contains the photos and well logs for 28 core that were reviewed in the Kirby area, to better understand the nature of the cemented zones within the Wabiskaw B valley-fill. The core photos are annotated as follows:

- The top of the core interval is located on the top right of the photo.
- The base of the core interval is located at the bottom left of the photo.
- The posted depths refer to the core depths at the end of the boxes.
- Arrows point out areas of interest.
- Some photos contain blue outlined rectangles to reveal the close-up area(s) of the core, which are shown on the subsequent slide(s).

The well logs are annotated with the RGS tops and markers and ISH Energy Wabiskaw B valley-fill cemented horizons, as in Appendices 1, 2, and 3. For labeling details see description above.

The core depth and adjusted core depth annotations are the same as in Appendices 1, 2, & 3. See description above for details.

#### Appendix 5 – Wabiskaw B Valley-Fill Cemented Zones – Cross-sections

There are 3 cross-section lines with 2 cross-sections for each line, one with a structural datum and one with a stratigraphic datum. The wells are annotated with the RGS tops and markers and ISH Energy Wabiskaw B valley-fill cemented horizons, as in Appendix 1, 2, and 3. For labeling details see description above.

Please note: for well locations within the cross-sections where core photos are available over part of the log, the well logs are annotated just below the well header with “See Core Photo in Appendix”.