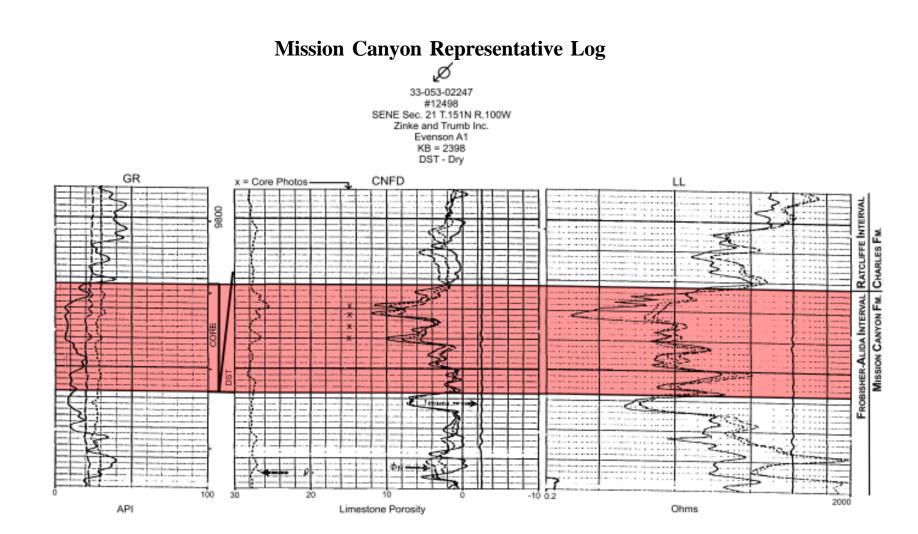


Ratcliffe Interval, Charles Formation Well Core: File # 10758; API: 33-105-01111 SESW Sec. 31 – T153N – R102W Core Photo - Log Depth: 8,967.8 – 8,968.2 feet Calcitic dolostone; dolomudstones overlain by thin laminated packstones and a thin intraclastic grainstone textures (mud dominated overlain by mud filled grain supported and rounded intraclast above an erosion surface); interpreted to be overwash deposits on supratidal flat

Porosity appears to be fine grained intercrystalline dolomite and vugular resulting from primary deposition or replacement and the dissolution of grains. Core plug porosity 10.7%

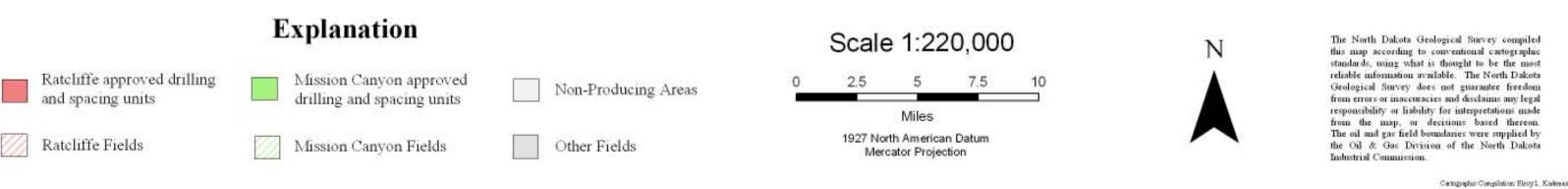


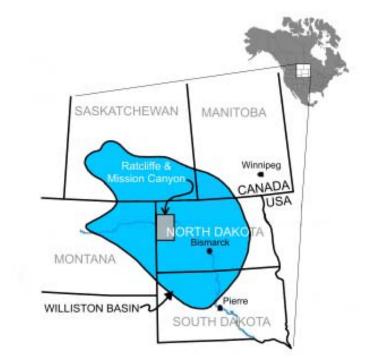
Ratcliffe Interval, Charles Formation Well Core: File # 10758; API: 33-105-01111 SESW Sec. 31 – T153N – R102W Core Photo - Log Depth: 8,980.8 – 8,981.4 feet Dolomitic limestone; wackestone texture (mud dominated with less than 50% grains); few skeletal grains and disturbed bedding interpreted to be subtidal deposits burrowed by sediment dwelling organisms Porosity appears to result from dolomitization of limestone and minor dissolution of grains. Core plug porosity 19.1%





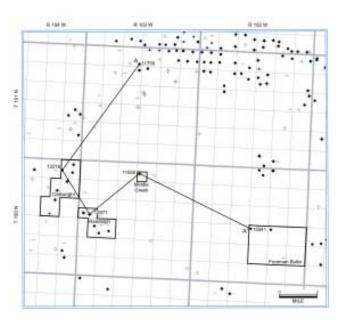
Frobisher Alida Interval, Mission Canyon Fm. Well Core: File # 12498; API: 33-053-02247 SENE Sec. 21 – T151N – R100W Core Photo - Log Depth: 9831.8 – 9,832.7 feet Limestone; wackestone to packstone textures (mud dominated with less than 50% grains to mud filled grain supported); grains appear to be dominated by peloids, ooids, and a few skeletal fragments and oncolites; suture seam stylolites indicate compaction dissolution Porosity appears to be intraparticle and vugular resulting from dissolution of grains and incomplete cementation; fractures contribute to porosity and permeability. Core plug porosity 9.5% Frobisher Alida Interval, Mission Canyon Fm. Well Core: File # 12498; API: 33-053-02247 SENE Sec. 21 – T151N – R100W Core Photo - Log Depth: 9839.2 – 9,839.9 feet Limestone; packstone to grainstone textures (mud filled grain supported to grain supported); grains appear to be dominated by peloids, ooids, pisolites and a few skeletal fragments including brachiopods; cemented crusts interpreted to indicate subaerial exposure surfaces Porosity appears to be vugular and interpartical resulting from dissolution of grains and incomplete cementation. Minor reduction of porosity by cementation, probably anhydrite and/or calcite. Dissolution of grains suggest subaerial exposure. Core plug porosity 7.8%

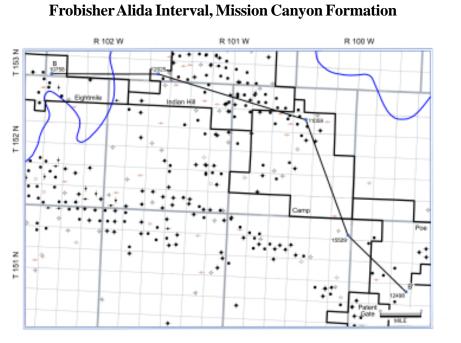




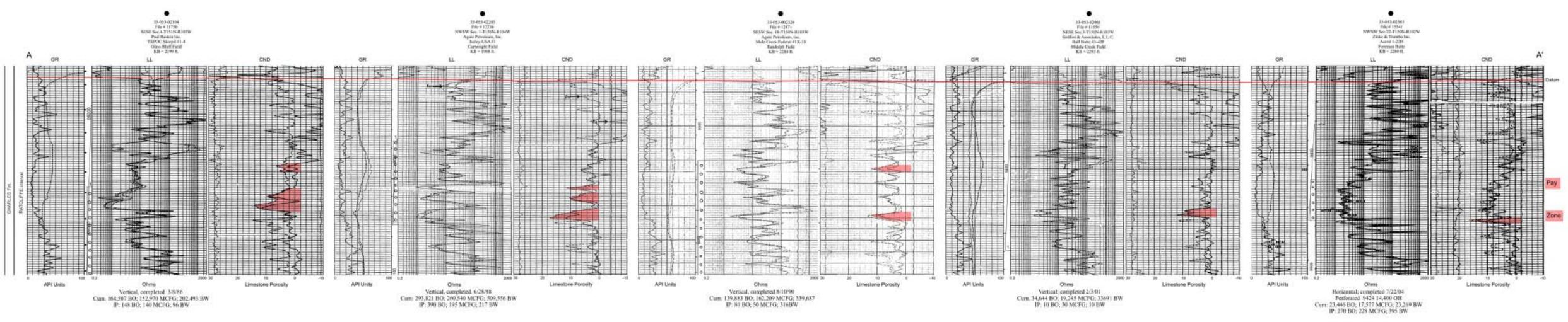
Location of Cross Sections

Ratcliffe Interval, Charles Formation





Ratcliffe Interval Cross Section



Frobisher Alida Interval Cross Section

