

Date Logged: November 8, 2016

Released as part of Appendix 6 in
AER/AGS Open File Report 2017-08

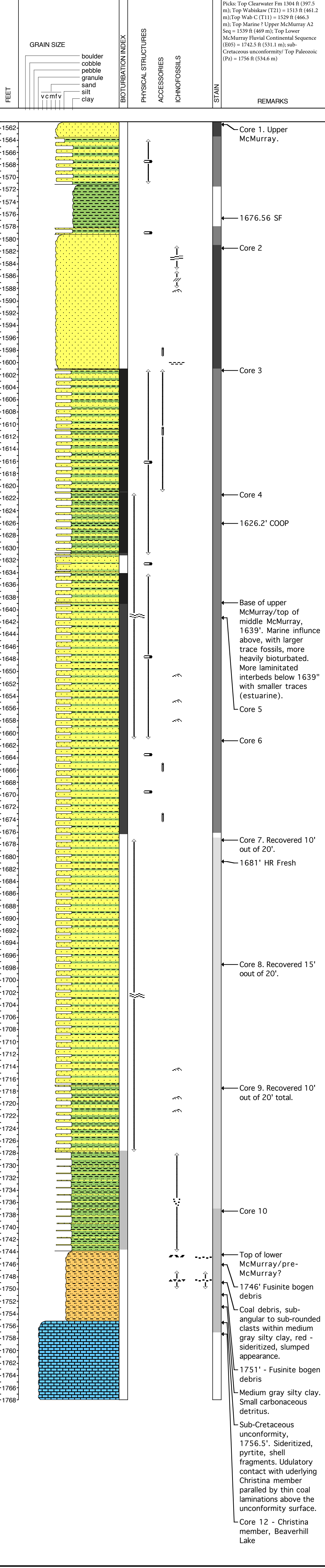
Logged by: J. Peterson

Ground: 755.9 m (2479.99 ft); KB: 759.3 m (2491.14 ft)

Remarks: Facies associations and picks done for regional mapping. Used earlier as part of Staff Submission Group (SSG) exhibits for the omnibus Gas over Bitumen Hearing. Logged again by J. Peterson as part of regional litho- and biofacies/stratigraphy compilation. Core is all in the McMurray Formation, but appears to be largely marine; later palynology work shows palynomorphs typical of the upper McMurray Fm; and not of the overlying Wabiskaw successions.

Boxes marked in feet; logged and plotted in feet.

Core Storage Location: AER Core Research Centre Calgary



AppleCore Legend









LITHOLOGY

	SAND/SANDSTONE		SHALEMUDSTONE		organic shale		LIMESTONE
	silty sand		silty shale		coal		Calcareous shale
	shaly sand		sandy shale		breccia		Lost Core
	sandy silt		clay/claystone				

CONTACTS

	Sharp		Erosional
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PHYSICAL STRUCTURES

	Current Ripples		Trough Cross-strat.		Oscillatory Ripples		Planar Tabular Bedding
	High Angle Tabular Bedding		Low Angle Tabular Bedding		Wavy Parallel Bedding		Synaeresis Cracks

LITHOLOGIC ACCESSORIES

	Silt Lamina		Shale Lamina		Pebbles/Granules		Glauconitic
	Feldspathic		Lithic		Rip Up Clasts		Coal Fragments
	Wood Fragments		Salt & Pepper				

ICHTHOFOSSILS

	Rootlets		Skolithos		Planolites		Gyrolithes
	Diplocraterion		Arenicolites		Escape Trace		Cylindrichnus
	Bergaueria		Astrosoma		Thalassinoides		Chondrites
	Teichichnus		Anconichnus				

Pick	Type of Surface	Description	Quality Code**
T21	Transgressive	Wabiskaw Marker Top Wabiskaw Mbr. 'A'	Good - Very Good
T15	Transgressive	Top Wabiskaw Mbr. 'B'	Good - Very Good
E14	Major Erosion	Wabiskaw Internal Incision	Good - Very Good
T11	Transgressive	Base First Regional Marine Shale in the Clearwater Fm. Top Wabiskaw Mbr. 'C'	Very Good-Excellent
T10.5	Transgressive	Top Wabiskaw Mbr. 'D' Incised Valley-Fill Deposit	Excellent-Very Good
E10	Disconformity/ Unconformity	Top Upper McMurray Fm Major Erosion Surface	Excellent -Very Good
E5	Disconformity/ Unconformity	Top Lower McMurray Fm. Major Erosion Surface	Variable Very Poor -Fair
Sub-Cret. (Pal.)	Unconformity	Base of McMurray Fm Major Erosion Surface	Variable Very Good-Excellent (However this is sometimes difficult to pick in areas of significant clastic karst-infill, or where marl is above the sub- Cretaceous unconformity)

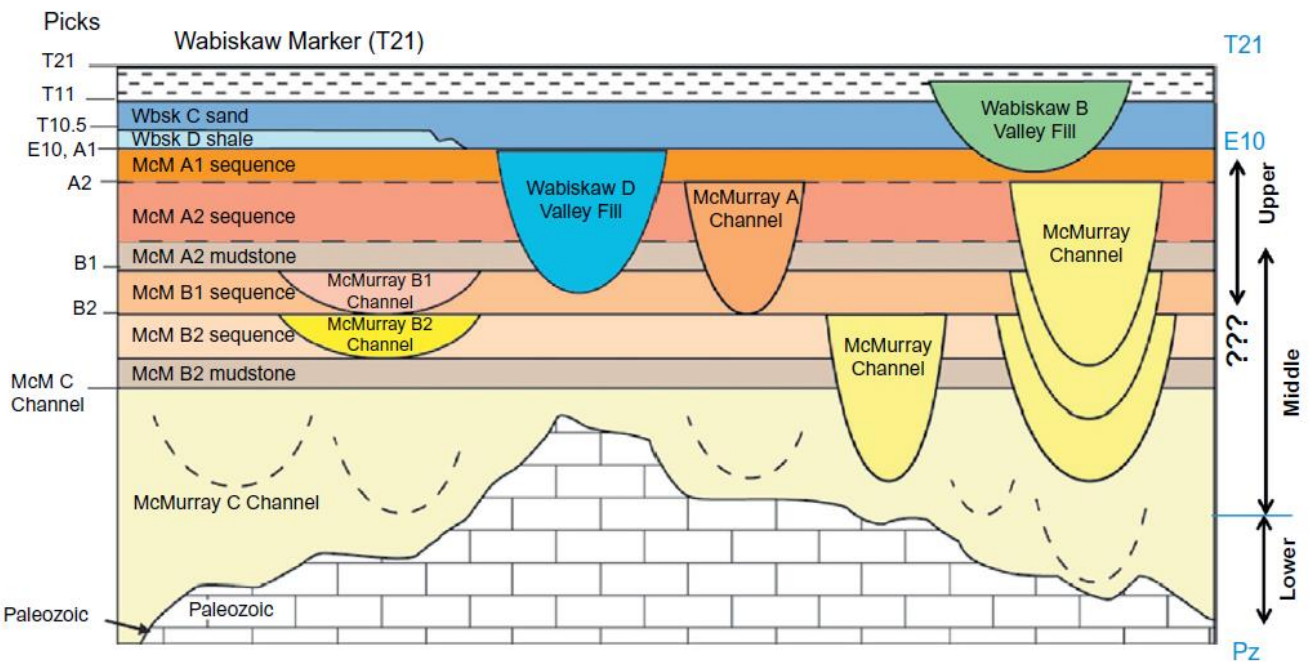
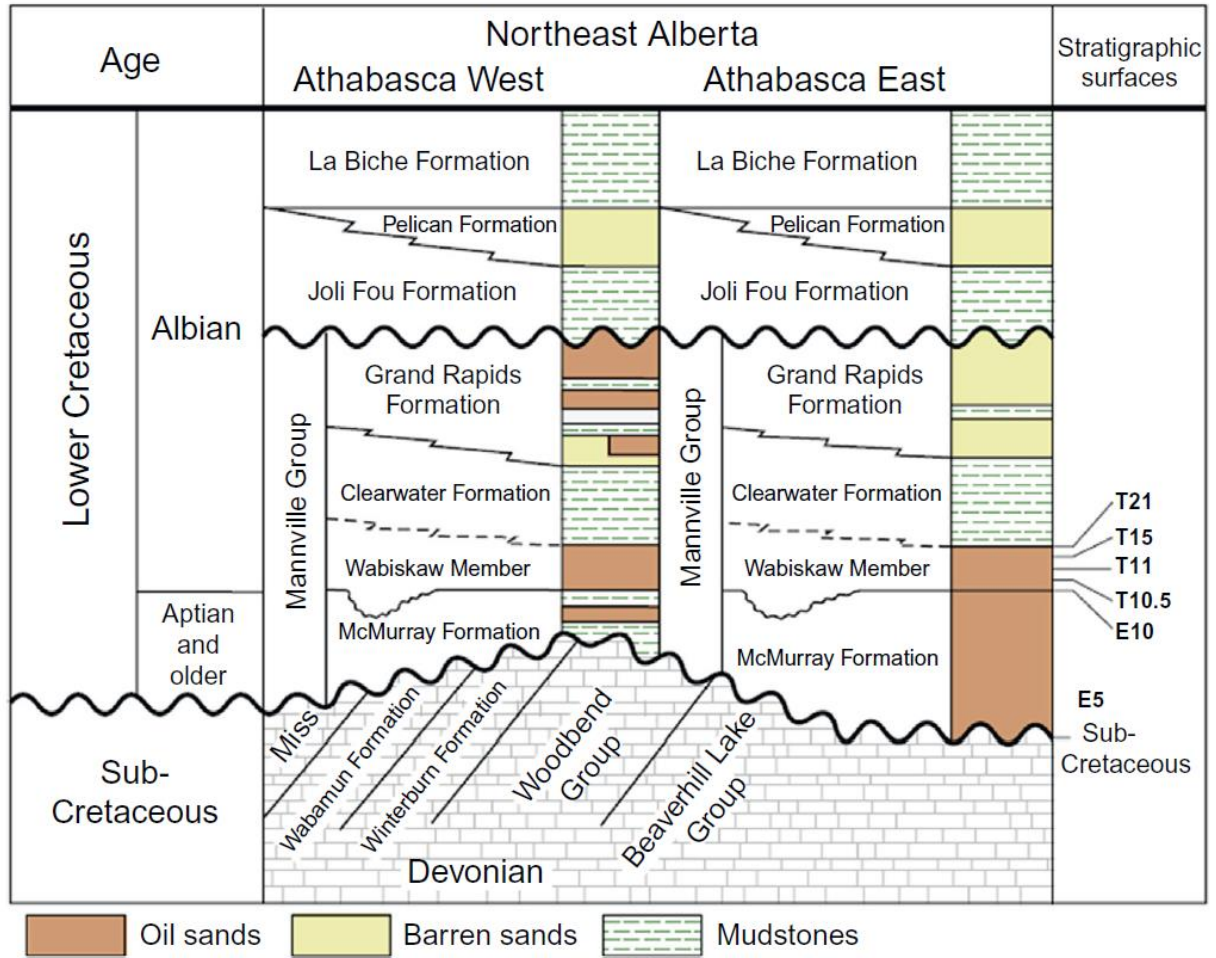
* Abbreviations: Group, Grp.; Formation, Fm.; Member, Mbr.

** Quality Codes are relative: Excellent to Very Good, can be picked on all wire-line logs and seismic; Poor to Very Poor, need to be confirmed by outcrops or core, difficult to pick on wire-line logs, somewhat easier to pick on seismic.

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Stratigraphic Nomenclature for Picks



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