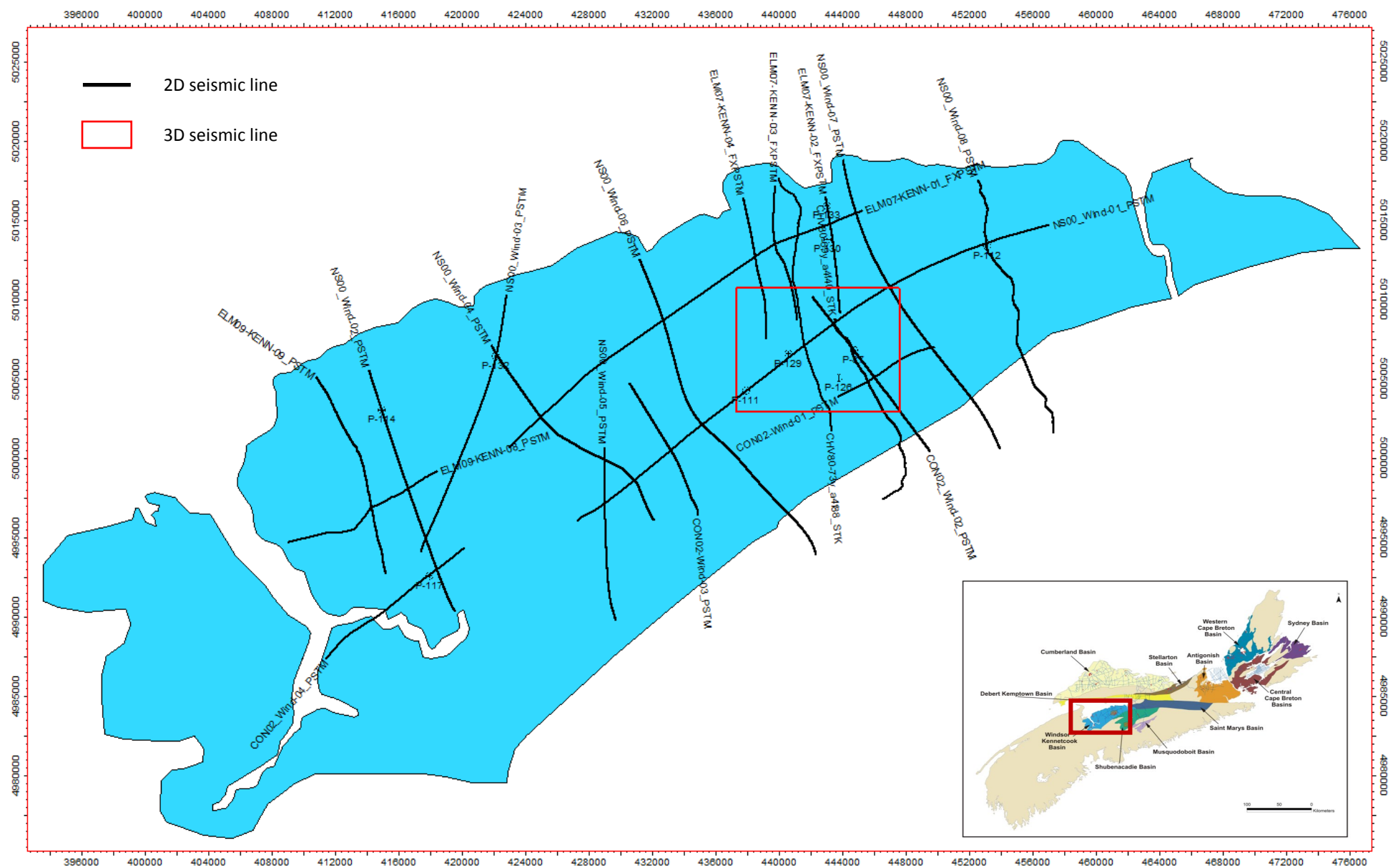


# **Well Ties in the Windsor Basin**

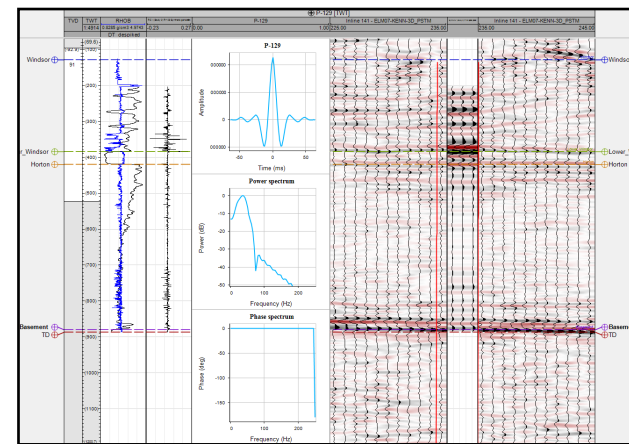
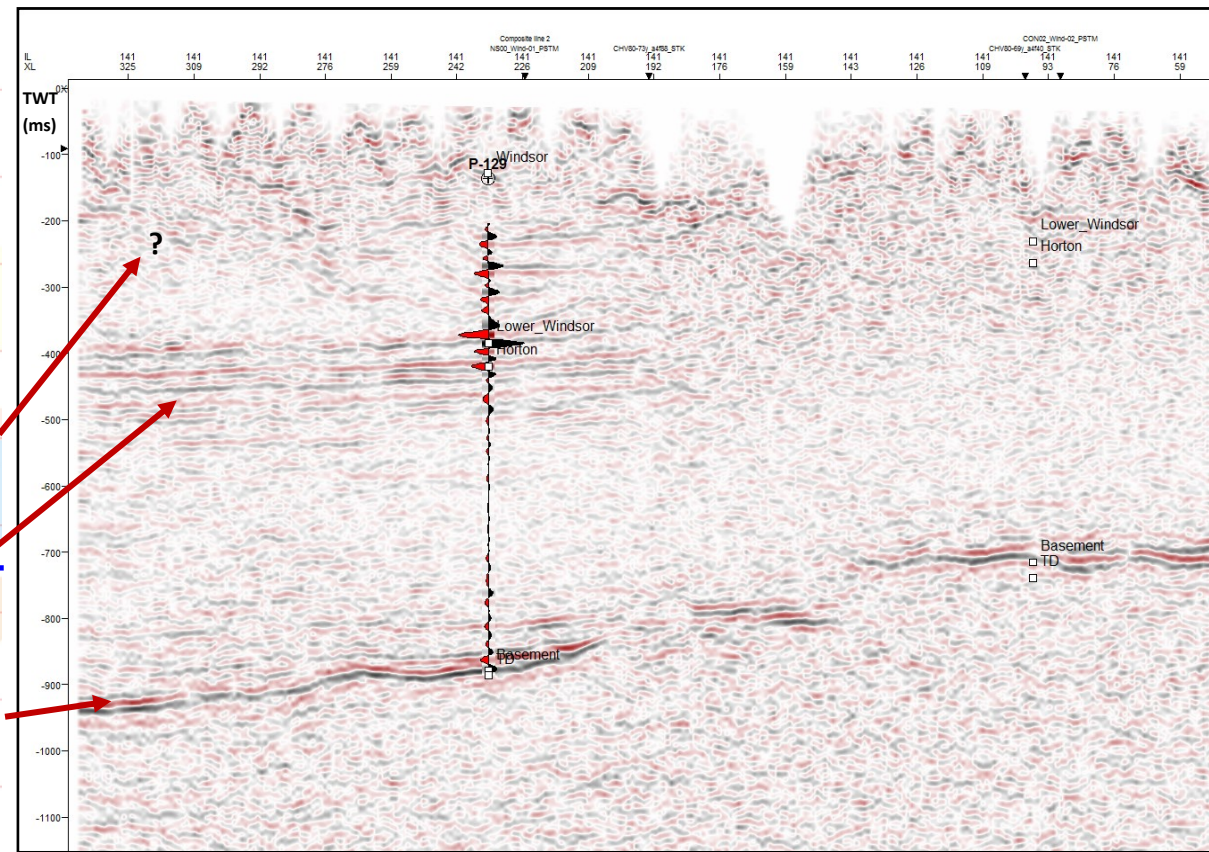
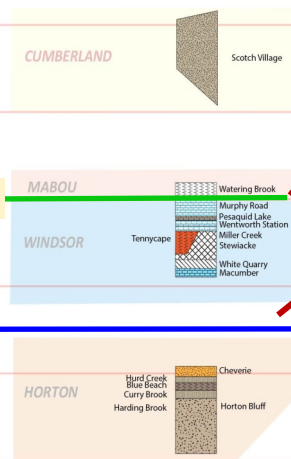
Created by: Helen Cen (Department of Energy, Nova Scotia)



Location Map of the Study Area, Windsor Basin

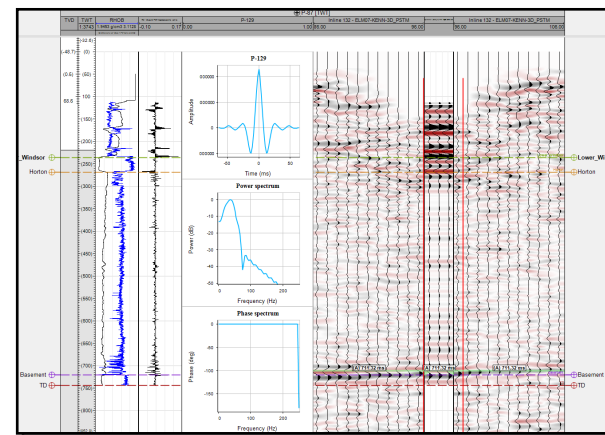
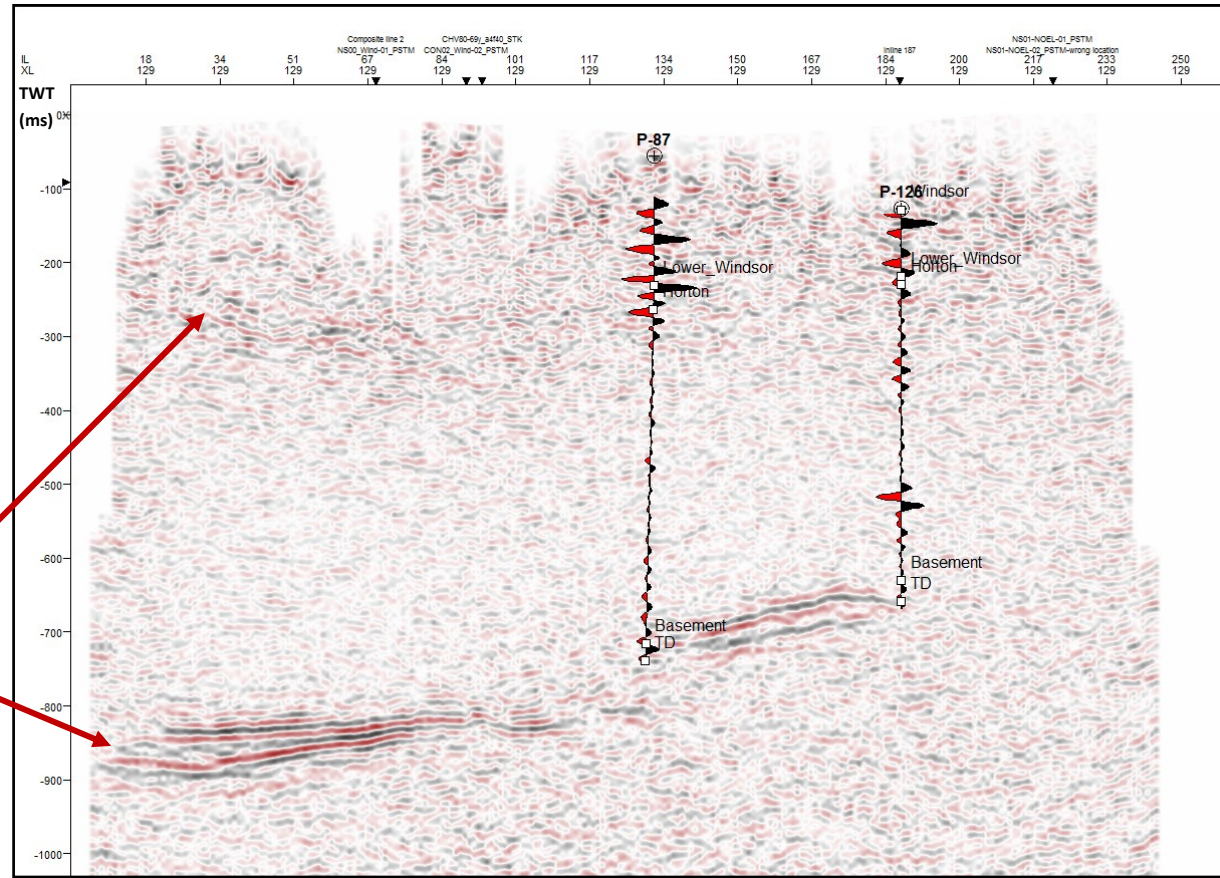
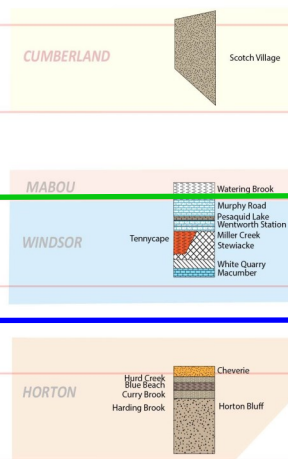


Chronostratigraphic subdivisions			
PERMIAN	Artinskian		
	Sakmarian		
	Asselian		
	Autunian		
	Kasimovian	C/O	
		Stephanian	
	Moscovian	D Arturian	
		C Bolsovian	
	Bashkirian	B Duckmantian	
		A Langsettian	
PENNSYLVANIAN	Cantabrian	Yeadonian	
		Marsdenian	
	Namurian	Kinderscoutian	
		Alportian	
	Ilkhanian	Chokierian	
		Arnsbergian	
	Westphalian	Watering Brook	
		Murphy Road	
	C/O	Pesquid Lake	
		Vernworth Station	
MISSISSIPPIAN	Visean	Miller Creek	
		Stewiacke	
	Llanian	White Quarry	
		Macumber	
	Hollertian	Hurd Creek	
		Blue Beach	
	Tournaisian	Curry Brook	
		Harding Brook	
	Tnz	Cheverie	
		Horton Bluff	
DEVONIAN	Late	Ivorian	
		Hadarian	
	Famennian	Horton	
		Horton	
	Early	Horton	
		Horton	
	Frasnian	Horton	
		Horton	
	Frasnian	Horton	
		Horton	



The figure shows Kennetcook #2 (P-129) well tie with Inline 141 of 3D seismic survey ELM07-KENN-3D. Kennetcook #2 (P-129) well was penetrated the whole successions of Windsor Group, Horton Group and Base-ment. The sonic log (DT) of P-129 well show a peak at the top of basement (at 1904.5m). This DT peak corresponded to a consistent bright strong seismic reflection showing around  $-900\text{ms}$  TWT in inline 141. No strong reflections occurred within the Horton Group result in difficultly separating the Horton Group. Gamma Ray (GR) log of P-129 well showed a big kick at the top of Horton Group (at 805.5m). This kick can be tied with a strong bright seismic reflection at around  $-400\text{ms}$  TWT in inline 141. It's hard to identify the top of the Windsor Group due to the poor resolution of the seismic profile at the top of 200ms (NSDOE, 2016).





The figure shows Noel #1 (P-87) well tie with Xline 132 of 3D seismic survey ELM07-KENN-3D. Two consistent groups of reflections had been identified from seismic profiles: top of Basement and top of Horton Group based on the seismic well tie. The seismic profile showed a consistent bright seismic reflection group at around -850ms TWT in xline 132. This reflection corresponded to a DT peak at a depth of 1390m (top of basement) in the P-87 well. The top of Basement can has been clearly identified and showed continuous strong seismic reflection across the Windsor Basin. Top of Horton Group was marked by the low sonic (DT) and bulk density (RHOB) at 805.5m (top of Horton Group) which corresponded to the slightly discordance seismic reflection at around -250ms TWT in xline 132. The resolution of the seismic profile in the top of 200ms was really poor so that it's hard to identify the top of the Windsor Group. Identifying the top of the Windsor Group was based on tying with the surface geological map (NSDOE, 2016).