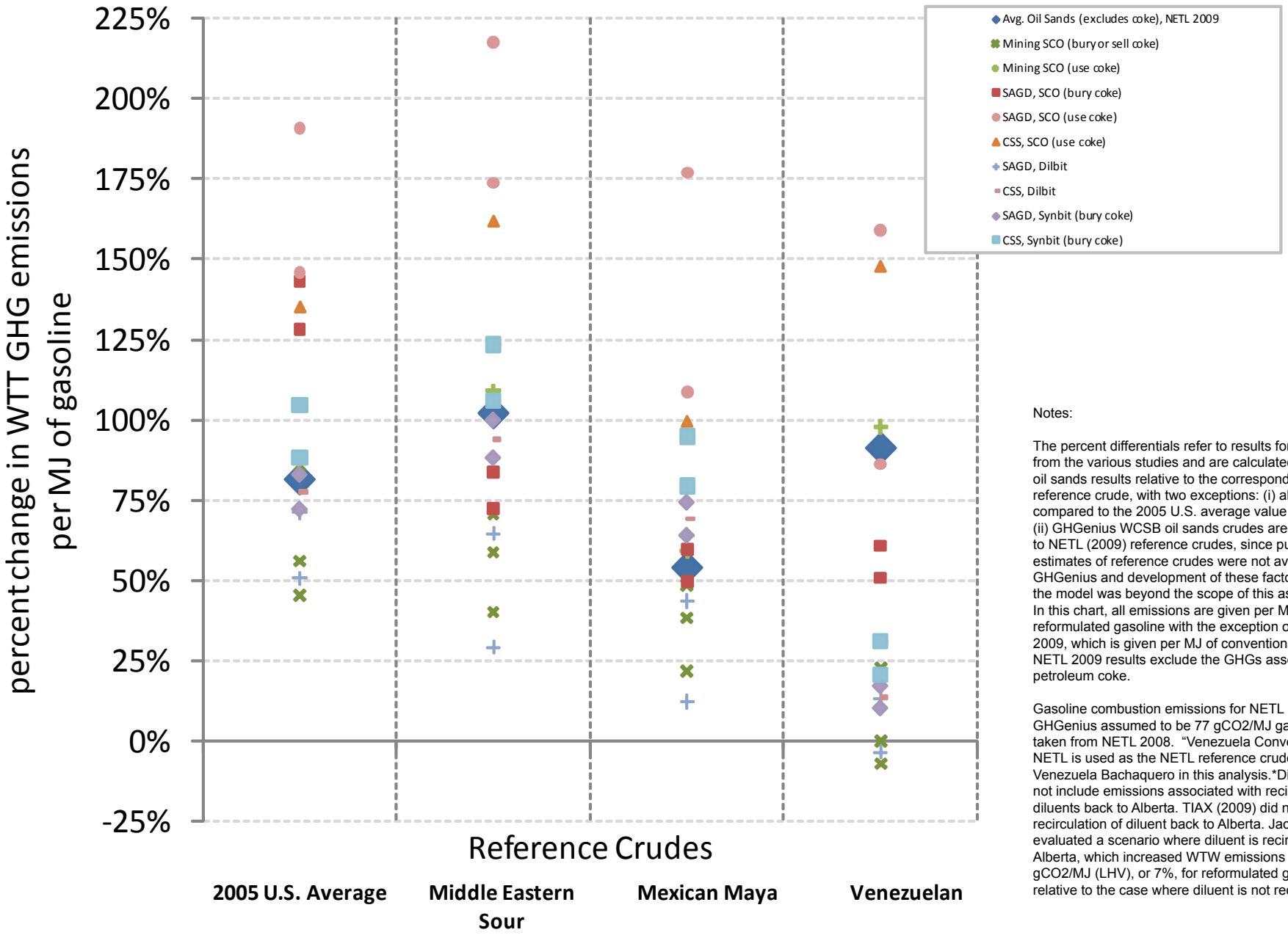

Notes:

The percent differentials refer to results for scenarios from the various studies and are calculated using the oil sands results relative to the corresponding study's reference crude, with two exceptions: (i) all studies are compared to the 2005 U.S. average value from NETL; (ii) GHGenius WCSB oil sands crudes are compared to NETL (2009) reference crudes, since published estimates of reference crudes were not available for GHGenius and development of these factors within the model was beyond the scope of this assessment. In this chart, all emissions are given per MJ of reformulated gasoline with the exception of NETL 2009, which is given per MJ of conventional gasoline. NETL 2009 results exclude the GHGs associated with petroleum coke.

Gasoline combustion emissions for NETL and GHGenius assumed to be 77 gCO2/MJ gasoline, taken from NETL 2008. "Venezuela Conventional" in NETL is used as the NETL reference crude for Venezuela Bachaquero in this analysis.*Dilbit fuels do not include emissions associated with recirculating diluents back to Alberta. TIAX (2009) did not consider recirculation of diluent back to Alberta. Jacobs (2009) evaluated a scenario where diluent is recirculated to Alberta, which increased WTW emissions by 7 gCO2/MJ (LHV), or 7%, for reformulated gasoline relative to the case where diluent is not recirculated.

Sources: Data from NETL 2009, Jacobs 2009, TIAX 2009, GHGenius 2010.

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Figure 3.14.3-2
Comparison of the Percent Differential for WTT GHGs from Gasoline Produced from Canadian Oil Sands Relative to Reference Crudes