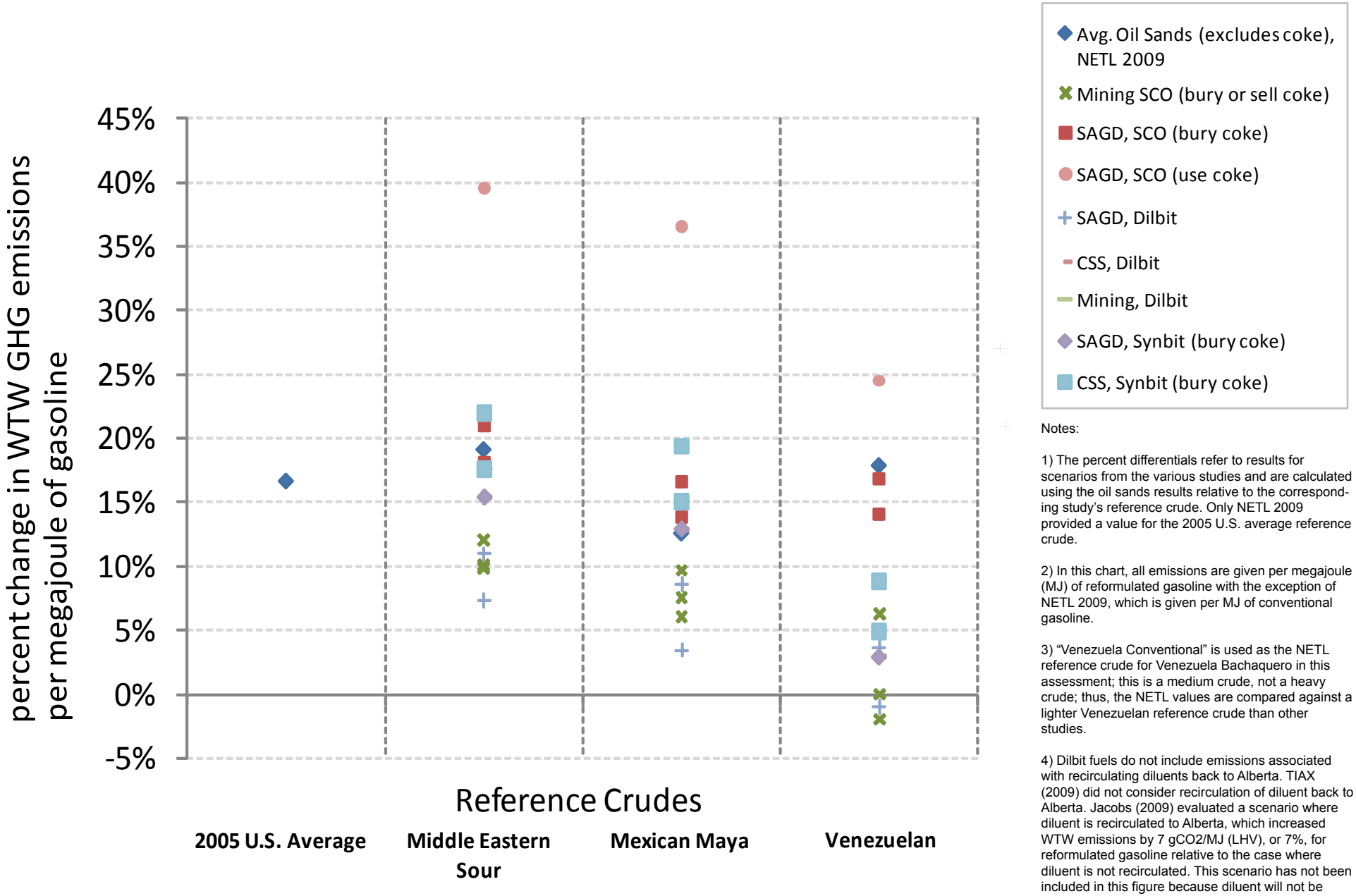

Notes:

1) 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. Only NETL 2009 provided a value for the 2005 U.S. average reference crude.

2) In this chart, all emissions are given per megajoule (MJ) of reformulated gasoline with the exception of NETL 2009, which is given per MJ of conventional gasoline.

3) "Venezuela Conventional" is used as the NETL reference crude for Venezuela Bachaquero in this assessment; this is a medium crude, not a heavy crude; thus, the NETL values are compared against a lighter Venezuelan reference crude than other studies.

4) 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. This scenario has not been included in this figure because diluent will not be recirculated by the proposed Project.
SCO = synthetic crude oil SAGD = steam-assisted

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

KEYSTONE XL PROJECT

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