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Successful Testing on Heavy Crude in Canadian Oil Sands

- Independent test results on ultra heavy crude oil in Canada prove successful;
- HCD Multi-Flow[®] demonstrates the potential to reduce diluent usage in the industry;
- Results indicate potential to significantly reduce diluent costs for Canadian oil sand producers.

Hydrocarbon Dynamics Limited ("HCD") announces that testing on crude oil samples from two significant Canadian oil sands producers has been undertaken by the independent group AGAT Laboratories in Canada. The test results were excellent and succeeded in their primary goal of reducing viscosity, in some cases by up to 94.1%, also materially lifting API on the ultra heavy crude oils.

These results could have significant implications for reducing costs for Canadian oil sand producers by reducing diluent usage within the Canadian oil sands and heavy oil industries where large quantities of diluent (often light oil, condensate, naptha, syncrude etc.) are used to assist in the production, handling and transport of Alberta's viscous oils. Typically, producers of these heavy oils require a diluent to native crude ratio of 30%:70% with some requiring up to 50%.

In the recent testing, HCD Multi-Flow® was applied at various concentrations to raw crude before the addition of diluent to see if the HCD Multi-Flow® could reduce the amount of diluent required to transfer the crude oil. The testing was performed with heavy oils from two major producers in the Athabasca Oil Sands and was found to have a marked effect on viscosity reduction, density and API gravity of both sample sets from the two different companies. In one case the application of Multi-Flow dropped the viscosity of the crude oil by 89.4% and increased API by 2.20 at 7.5C. In the second case the viscosity was reduced by 94.2% with an increase in API of 2.46 at 15C. With agitation only and no heat or other chemical additions, HCD Multi-Flow® demonstrated it has the potential to significantly reduce diluent usage in the industry.

These tests, foreshadowed in the December Quarterly Report, follow on from other successful tests on diluent reduction that indicate diluent could be reduced by 35-50% with the application of relatively small amounts HCD Multi-Flow[®].

HCD will now seek to work with heavy and ultra heavy oil producers to secure field trials where HCD Multi-Flow® can be tested to accurately determine its technical and commercial efficacy on specific fields in normal operating conditions.

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