



<b>Container Identification</b>					
PB3A					
<b>Operator Name</b>				<b>Laboratory Number</b>	
HITIC ENERGY				14OR800814A	
<b>Unique Well Identifier</b>		<b>Well Name</b>			
100/01-18-065-18W5/00		HEL Hz KABOB 1-18-65-18			
<b>Field or Area</b>		<b>Pool or Zone</b>		<b>Sampler's Company</b>	
KAYBOB		NOT AVAILABLE		CENTENNIAL WELL TESTING	
<b>Well License</b>		<b>Elevation</b>		<b>Test Type</b>	
0453977		KB m      GRD m		Test No.	
				Name of Sampler	
				NOT AVAILABLE	
<b>Test Interval or Perfs mKB</b>		<b>Sampling Point</b>			
		STOCK TANK			
				Separator   Reservoir   Source   Sampled   Received	
				Pressure (kPa)	
				Temperature	
<b>Date Sampled</b>		<b>Date Received</b>		<b>Date Analyzed</b>	
Jan 10, 2013		Jan 14, 2014		Jan 16, 2014	
				<b>Date Reported</b>	
				Jan 16, 2014	
				<b>Location - Approved By - Title</b>	
				Calgary - Valentina Strelnikova - Supervisor	
<b>Other Information</b>					
TIGHT HOLE					

\* Results relate only to the items tested

Note: Sampling Point, Unique Well Identifier and/or Pool or Zone information was unavailable at time of reporting. This information is integral to AGAT's WebFLUIDs, a comparison, history and trending analysis system.

### Sample Properties

<b>Colour of Clean Oil</b>	<b>Colour Number ASTM D-1500</b>
Yellow	#3.0 A.S.T.M.

#### B.S.& W. (Volume Fraction) ASTM D-4007

Water	Sediment	Total
0.016	Trace	0.016

#### Density - After Cleaning ASTM D-5002

<b>API Gravity @ 15°C</b>	<b>Relative</b>	<b>Absolute (kg/m<sup>3</sup>)</b>
42.24	0.8145	813.7

<b>Total Sulphur Mass Fraction (ASTM D-4294)</b>	<b>Pour Point (°C) (ASTM D-97) (ASTM D5853)</b>
0.00028	-18

#### Viscosity ASTM D-445/ASTM D-4072

Temp °C	Absolute (mPa*s)	Kinematic (mm <sup>2</sup> /s)
25	2.53	3.14
38	1.94	2.43
50	1.57	1.99

#### Other Comments:

The Distillation temperatures have been corrected to 101.3 kPa (Abs).

### Distillation - ASTM D86

Volume Fraction	Temp (°C)
0.05	96.9
0.10	113.1
0.15	126.5
0.20	139.2
0.25	156.4
0.30	176.9
0.35	201.2
0.40	222.7
0.45	246.1
0.50	267.6
0.55	289.7
0.60	314.6
0.65	341.4

<b>Method</b>
A.S.T.M. -D86*

<b>Initial Boiling Point (°C)</b>
68.6

<b>Absolute Barometric Pressure (kPa)</b>
89.1

<b>Room Temp (°C)</b>
23.0

<b>Final Boiling Point (°C)</b>	<b>Characterization Factor</b>
356.9	12.1

<b>200 °C Naphtha</b>	<b>275 °C Kerosene</b>	<b>350 °C Light Gas Oil</b>
0.35	0.17	0.19

<b>Recovered</b>	<b>Residue</b>	<b>Distillation Loss</b>
0.71	0.28	0.01

Note: When applicable, B.S.&W. analyses conducted with non-saturated Toluene and centrifuged at room temperature.

