

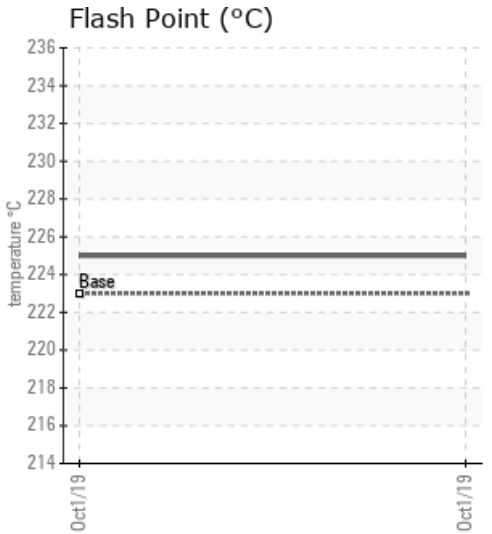
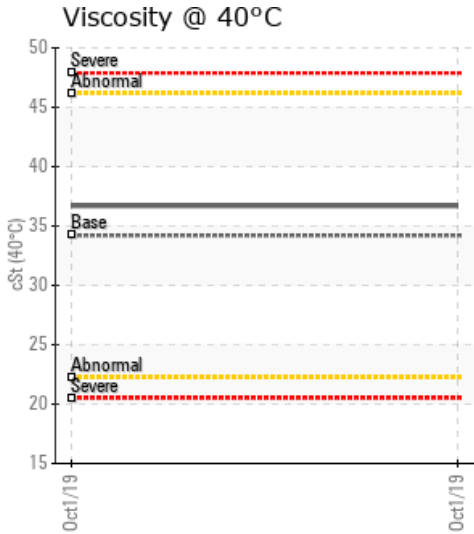
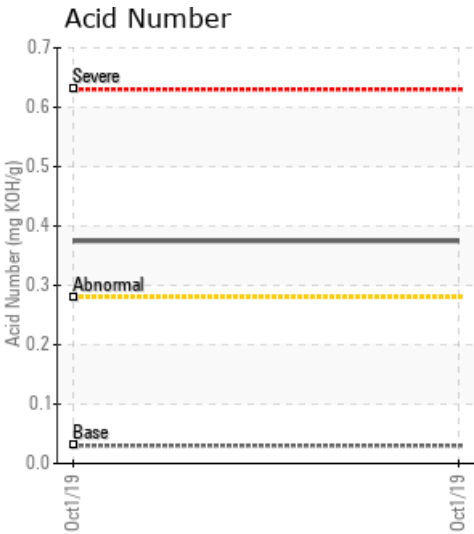
**[12-31-53-19W5] H-431**

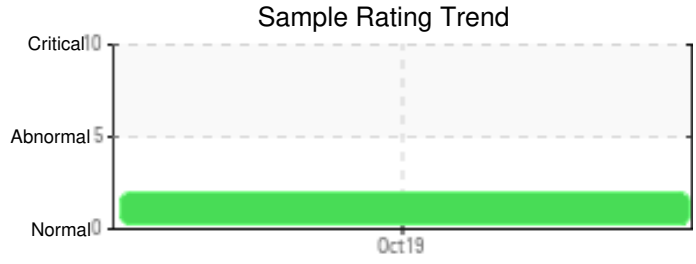
Customer:	System Information	Sample Information
PEYTO EXPLORATION 12-31-53-19W5 Box 7198 EDSON, AB T7E 1V4 Canada Attn: Steve Warren Tel: E-Mail:	System Volume: 0 ltr Bulk Operating Temp: Not Specified Heating Source: Blanket: Fluid: PETRO CANADA PETRO-THERM Make:	Lab No: 02312941 Analyst: Peter Harteveld Sample Date: 10/01/19 Received Date: 10/07/19 Completed: 10/18/19

Recommendation: The fluid is in a fair condition and suitable for further use. AN is slightly elevated. This indicates some light fluid degradation. Pentane Insoluble (solids) content (0.42%) is getting close to the reportable limit of 0.5%. Filtration of the fluid is recommended. Please re-sample in 6 months.

Comments: Pentane Insolubles levels are abnormally high. Acid Number (AN) is abnormally high.

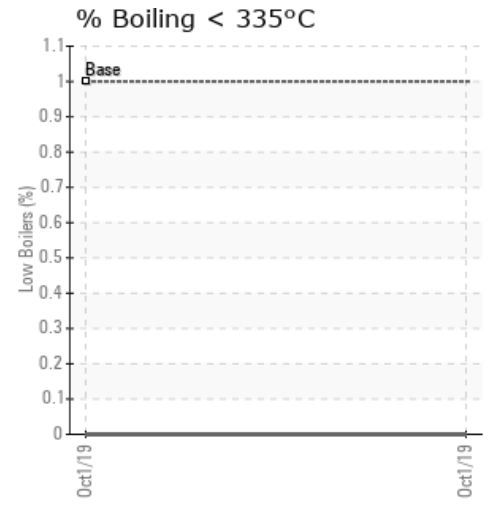
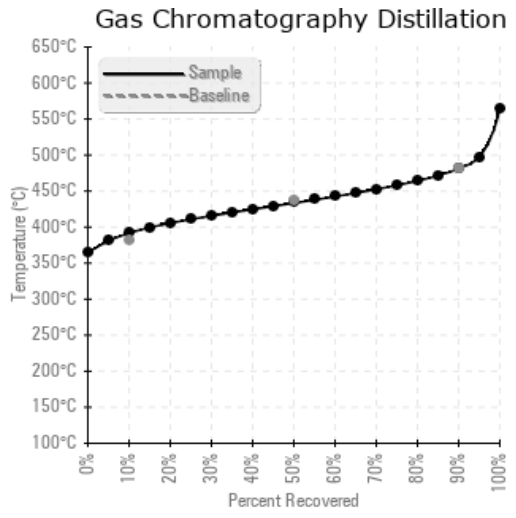
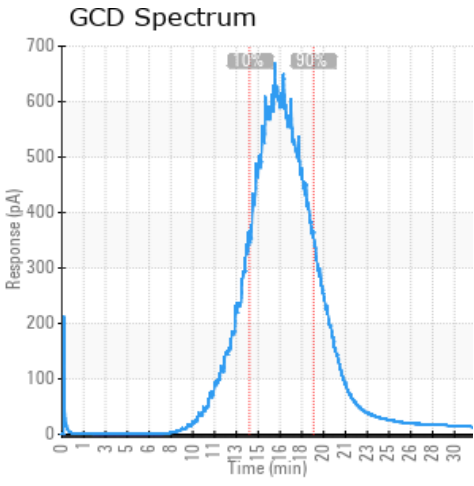
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
10/01/19	10/07/19	6y		437 / 225	5.3	36.7	0.375	0.421	737 / 392	812 / 433	898 / 481	0.00
Baseline Data				433 / 223		34.2	0.03		720 / 382	817 / 436	900 / 482	1.00





Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
10/01/19	2	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0
Baseline Data			0	0						0			0	0					0				0	

Elemental analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



### Historical Comments


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