

WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION ATTENTION

Machine Id **731118** Component **Hydraulic System** Fluid **PETRO CANADA HYDREX MV 46 (--- GAL)**

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

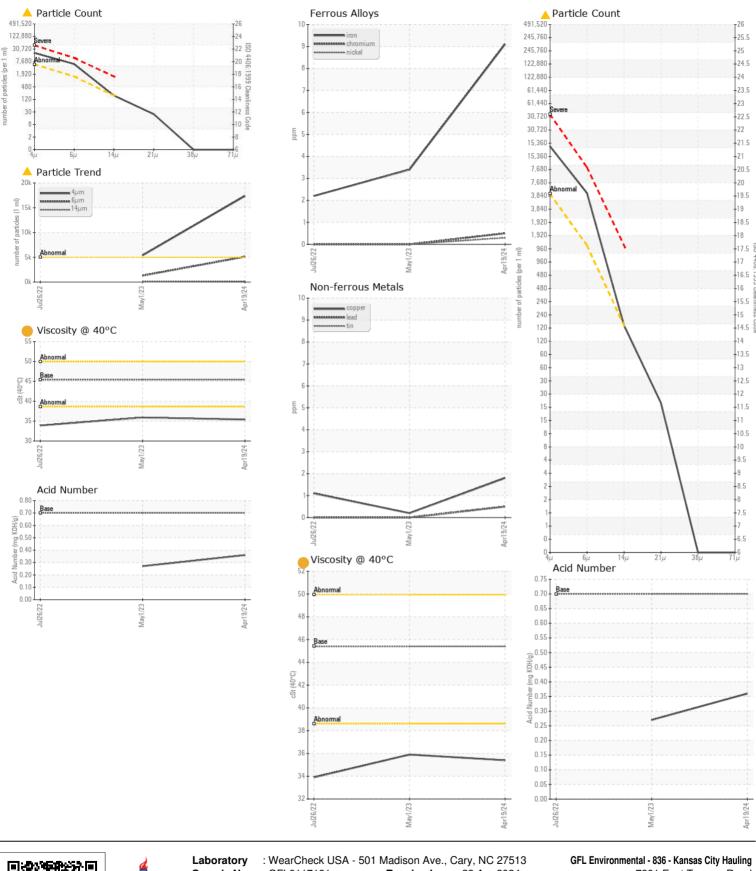
There is a high amount of particulates present in the oil.

FLUID CONDITION

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. Confirm oil type.

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Test UOM Method Limit/Ab Current History1 History2 Sample Dumber Client Info 19 Apro24 Of My2023 26 Jul 2022 Machine Age hrs Client Info 6619 4652 2874 Oil Age hrs Client Info 64619 4652 2874 Oil Age hrs Client Info Not Changed Not Changed Changed Filter Age hrs Client Info Not Changed Changed Changed Sample Data Client Info Not Changed Changed Changed Changed Silter P Ppm ASTM D5185m >10 <1 0 0 Nickel ppm ASTM D5185m >10 <1 0 0 Aluminum ppm ASTM D5185m >10 <1 0 0 Aluminum ppm ASTM D5185m >10 <1 0 0 Vanadium ppm ASTM D5185m >10 <1 0							
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Oil Age hrs Client Info 6619 4652 2874 Filter Age hrs Client Info 2400 1350 Oil Changed Client Info Not Changed Not Changed Filter Changed Client Info Changed Anneged Sample Status Client Info Changed ATTENTION ATTENTION Iron ppm ASTM D5185m >20 9 3 2 Chromium ppm ASTM D5185m >10 <1 0 0 Nickel ppm ASTM D5185m >10 <1 0 0 Aluminum ppm ASTM D5185m >10 <1 0 0 Vanadium ppm ASTM D5185m >10 <1 0 0 Vanadium ppm ASTM D5185m >20 4 3 2 Yellow Metal scalar Yisual NONE NONE NONE NONE Yellow Metal scalar Yisual <td< th=""><th>Sample Date</th><th></th><th>Client Info</th><th></th><th>19 Apr 2024</th><th>01 May 2023</th><th>26 Jul 2022</th></td<>	Sample Date		Client Info		19 Apr 2024	01 May 2023	26 Jul 2022
Filter Age hrs Client Info 2400 2400 1350 Oil Changed Client Info Not Changed <	Machine Age	hrs	Client Info		6619	4652	2874
Oil Changed Filter Changed Sample StatusClient Info Client InfoNot Changed Changed ABNORMALNot Changed Changed ATTENTIONNot Changed Changed ATTENTIONIronppmASTM D5185m ATTENTION20932ChromiumppmASTM D5185m ASTM D5185m>10<100NickelppmASTM D5185m ASTM D5185m10<100NickelppmASTM D5185m ASTM D5185m0000AluminumppmASTM D5185m ASTM D5185m10200LeadppmASTM D5185m ASTM D5185m>10<100VanadiumppmASTM D5185m VisualNONENONENONENONEVellow Metalscalar*VisualNONENONENONENONENONESiliconppmASTM D5185m Visual>20432Patricles >4µmASTM D7647 ASTM D7647>5000A 173675386Particles >4µmASTM D7647 ASTM D7647>1000Particles >4µmASTM D7647 ASTM D764700Particles >4µmASTM D7647 ASTM D7647218Particles >51µmASTM D7647 	Oil Age	hrs	Client Info		6619	4652	2874
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Molybdenum ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	0	0	0	<1
Manganese ppm ASTM D5185m 1 <1	Barium	ppm	ASTM D5185m	0	0	0	0
Magnesium ppm ASTM D5185m 0 5 8 2 Calcium ppm ASTM D5185m 50 54 37 40 Phosphorus ppm ASTM D5185m 330 324 255 274 Zinc ppm ASTM D5185m 430 364 296 334 Sulfur ppm ASTM D5185m 760 871 548 940 Acid Number (AN) mg KOH/g ASTM D8045 0.70 0.36 0.27	Molybdenum	ppm	ASTM D5185m	0	<1	0	<1
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Sulfur ppm ASTM D5185m 760 871 548 940 Acid Number (AN) mg KOH/g ASTM D8045 0.70 0.36 0.27	Phosphorus	ppm	ASTM D5185m	330	324	255	274
Acid Number (AN) mg KOH/g ASTM D8045 0.70 0.36 0.27		ppm	ASTM D5185m	430	364	296	334
	Sulfur	ppm	ASTM D5185m	760	871	548	940
Visc @ 40°C cSt ASTM D445 45.4 935.4 35.9 33.9	()	mg KOH/g	ASTM D8045	0.70	0.36	0.27	
	Visc @ 40°C	cSt	ASTM D445	45.4	9 35.4	35.9	33.9



Sample No. Received : GFL0117191 : 23 Apr 2024 7801 East Truman Road Ĕ Lab Number : 06158438 Tested Kansas City, MO : 24 Apr 2024 : 25 Apr 2024 - Don Baldridge US 64126 Unique Number : 10993861 Diagnosed Test Package : FLEET (Additional Tests: PrtCount) Contact: Loyce Stewart Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. loyce.stewart@gflenv.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: GFL823,834,836,837,840 - Loyce Stewart - GFL836 Page 2 of 2