

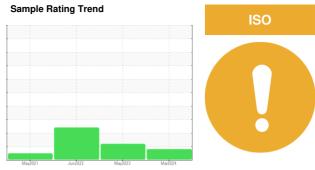
OIL ANALYSIS REPORT

VIAM/BLDG 3/Injection Mold Machine Id [VIAM^BLDG 3^Injection Mold] INJ MOLD 07

Component

Hydraulic System

PETRO CANADA HYDREX AW 46 (--- GAL)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

May2021 Jum2022 May2023 Mar2024						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0005068	KFS0002456	KFS0000692
Sample Date		Client Info		18 Mar 2024	16 May 2023	29 Jun 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ABNORMAL	ATTENTION
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1	<1	<1
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>20	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	<1	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	2	<1	<1
Tin	ppm	ASTM D5185m	>20	0	<1	0
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 0	current 0	history1	history2 0
	ppm ppm					
Boron	• •	ASTM D5185m	0	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	0 0	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 <1	0 0 0	0 0 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 <1 <1	0 0 0 <1	0 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0	0 0 <1 <1 0	0 0 0 <1 2	0 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 0 50	0 0 <1 <1 0 43	0 0 0 <1 2 41	0 0 0 0 0 0 46
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 50 330	0 0 <1 <1 0 43 322	0 0 0 <1 2 41 319	0 0 0 0 0 0 46 330
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 0 50 330 430	0 0 <1 <1 0 43 322 397	0 0 0 <1 2 41 319 385	0 0 0 0 0 46 330 390
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 50 330 430 760	0 0 <1 <1 0 43 322 397 1234	0 0 0 <1 2 41 319 385 1417	0 0 0 0 0 46 330 390 1304
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 0 50 330 430 760	0 0 <1 <1 0 43 322 397 1234 current	0 0 0 <1 2 41 319 385 1417 history1	0 0 0 0 0 46 330 390 1304 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base	0 0 <1 <1 0 43 322 397 1234 current	0 0 0 <1 2 41 319 385 1417 history1	0 0 0 0 0 46 330 390 1304 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base	0 0 <1 <1 0 43 322 397 1234 current <1	0 0 0 <1 2 41 319 385 1417 history1 <1	0 0 0 0 0 46 330 390 1304 history2 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base >15	0 0 <1 <1 0 43 322 397 1234 current <1 <1	0 0 0 <1 2 41 319 385 1417 history1 <1 <1	0 0 0 0 0 46 330 390 1304 history2 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base	0 0	0 0 0 <1 2 41 319 385 1417 history1 <1 <1 <1	0 0 0 0 0 46 330 390 1304 history2 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base >15 	0 0 -1 -1 0 43 322 397 1234	0 0 0 <1 2 41 319 385 1417 history1 <1 <1 <1 <1 <1	0 0 0 0 0 46 330 390 1304 history2 <1 <1 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >1300 >320 >80	0 0	0 0 0 <1 2 41 319 385 1417 history1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	0 0 0 0 0 46 330 390 1304 history2 <1 <1 0 history2 1415 480
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >1300 >320 >80	0 0 0 <1 <1 0 43 322 397 1234 current <1 <1 0 current 1168 469 71 24 2	0 0 0 <1 2 41 319 385 1417 history1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	0 0 0 0 0 46 330 390 1304 history2 <1 <1 0 history2 1415 480 89
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 0 0 50 330 430 760 limit/base >15 >20 limit/base >1300 >320 >80 >20 >4	0 0	0 0 0 <1 2 41 319 385 1417 history1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	0 0 0 0 0 46 330 390 1304 history2 <1 <1 0 history2 1415 480 89 25



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : KFS0005068

: 06124832

Unique Number : 10938983

Test Package : IND 2

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: 21 Mar 2024

: 22 Mar 2024

: 22 Mar 2024 - Wes Davis

87 Parktower Road Manchester, TN US 37355 Contact: Eric Thompson

ethompson@viammfg.com T: (931)461-2300

VIAM/VICAM Manufacturing - Tennessee

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Received

Diagnosed

Tested