

NORMAL



Machine Id
IMM #1 (S/N 14015)

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX AW 46 (1000 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0080863	PC0076981	PC0076951
Sample Date	Client Info	20 Jun 2024	15 Jan 2024	11 Jul 2023
Machine Age	mths	Client Info	0	0
Oil Age	mths	Client Info	0	0
Oil Changed	Client Info	Not Changed	N/A	N/A
Sample Status		NORMAL	NORMAL	SEVERE

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >20	2	0	1
Chromium	ppm	ASTM D5185(m) >20	<1	0	0
Nickel	ppm	ASTM D5185(m) >20	<1	0	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	<1	<1	0
Lead	ppm	ASTM D5185(m) >20	0	0	0
Copper	ppm	ASTM D5185(m) >20	2	<1	<1
Tin	ppm	ASTM D5185(m) >20	0	0	0
Antimony	ppm	ASTM D5185(m)	0	0	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

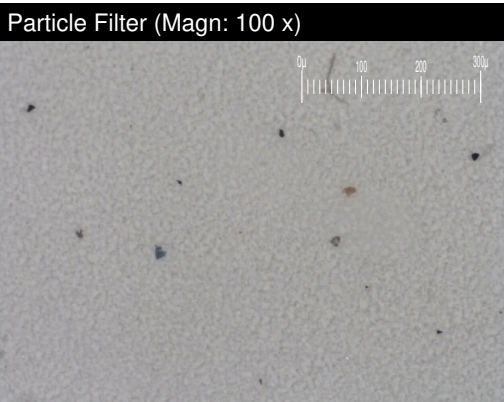
method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 0	1	0	0
Barium	ppm	ASTM D5185(m) 0	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 0	0	0	0
Manganese	ppm	ASTM D5185(m) 0	0	0	0
Magnesium	ppm	ASTM D5185(m) 0	2	<1	<1
Calcium	ppm	ASTM D5185(m) 50	39	57	35
Phosphorus	ppm	ASTM D5185(m) 330	316	335	424
Zinc	ppm	ASTM D5185(m) 430	333	411	329
Sulfur	ppm	ASTM D5185(m) 760	701	785	874
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

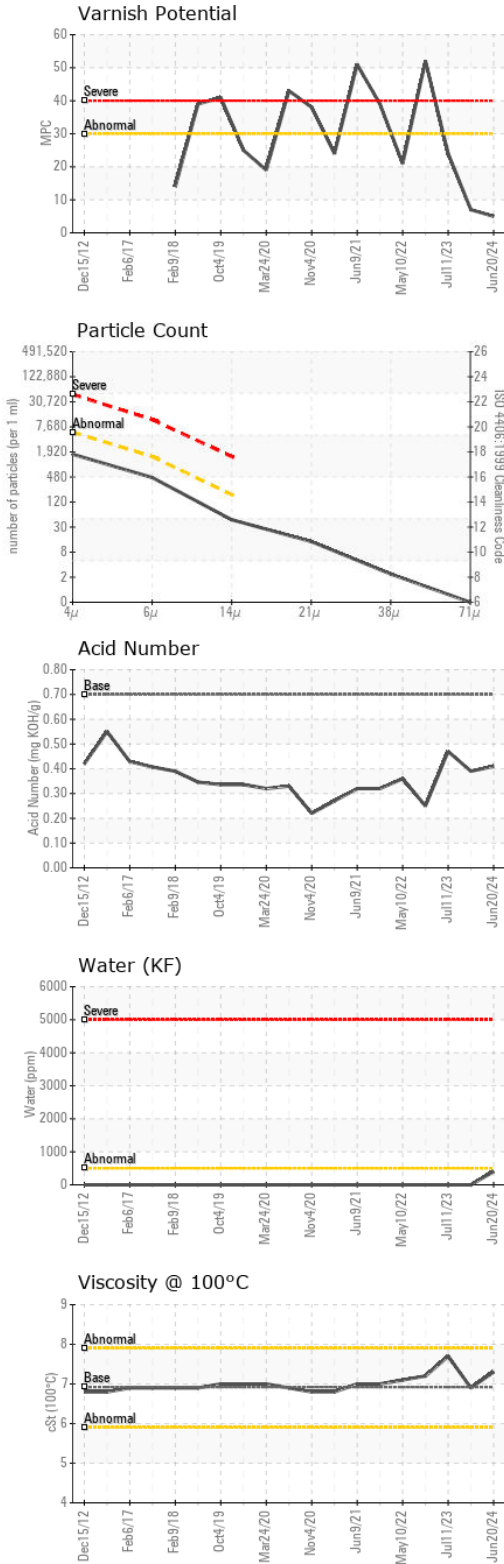
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >15	1	0	0
Sodium	ppm	ASTM D5185(m)	<1	0	0
Potassium	ppm	ASTM D5185(m) >20	<1	<1	<1
Water	%	ASTM D6304* >0.05	0.040	---	---
ppm Water	ppm	ASTM D6304* >500	402	---	---

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	1478	2785	▲ 64008
Particles >6µm	ASTM D7647 >1300	409	834	▲ 15388
Particles >14µm	ASTM D7647 >160	40	68	134
Particles >21µm	ASTM D7647 >40	12	16	12
Particles >38µm	ASTM D7647 >10	2	2	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	18/16/12	19/17/13	▲ 23/21/14



OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	0.41	0.39	0.47
MPC Varnish Potential	Scale	ASTM D7843(m)*	>15	5	7	▲ 24

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	.2%	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	45.5	44.2	48.8
Visc @ 100°C	cSt	ASTM D7279(m)	6.92	7.3	6.9	7.7
Viscosity Index (VI)	Scale	ASTM D2270*	104	122	112	124

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						
PrtFilter					no image	no image
MPC						



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080863
Lab Number : **02647630**
Unique Number : 5813182
Test Package : IND 2 (Additional Tests: Bottom, BottomAnalysis, FILTERPATCH, KF, KV100, MPC, PrtFilter, V) Contact: Frank Maio

ROPAK PACKAGING CANADA
 2240 WYECROFT RD
 OAKVILLE, ON
 CA L6L 6M1
 Contact: Frank Maio
 Frank.Maio@mauserpackaging.com
 T: (905)465-9019
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

MPC (Varnish Test)



Sample Color & Clarity



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