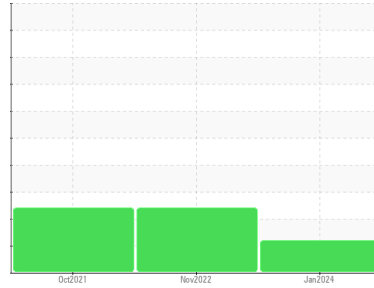




Machine Id
DR148
Component
1 Hydraulic System
Fluid
PETRO CANADA ENVIRON MV 46 (1000 LTR)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0080578	PC0061507	PC0052359
Sample Date	Client Info	20 Jan 2024	17 Nov 2022	14 Oct 2021
Machine Age	hrs	10941	9678	7895
Oil Age	hrs	250	0	0
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >20	2	4	3
Chromium	ppm ASTM D5185(m) >10	0	0	0
Nickel	ppm ASTM D5185(m) >10	<1	<1	<1
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	0	0	<1
Aluminum	ppm ASTM D5185(m) >10	<1	<1	<1
Lead	ppm ASTM D5185(m) >10	<1	2	2
Copper	ppm ASTM D5185(m) >75	<1	<1	<1
Tin	ppm ASTM D5185(m) >10	0	0	0
Antimony	ppm ASTM D5185(m)	0	<1	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	<1	0
Barium	ppm ASTM D5185(m) 0	0	0	0
Molybdenum	ppm ASTM D5185(m) 0	0	0	<1
Manganese	ppm ASTM D5185(m) 0	0	<1	0
Magnesium	ppm ASTM D5185(m) 0	2	4	4
Calcium	ppm ASTM D5185(m) 0	2	4	4
Phosphorus	ppm ASTM D5185(m) 650	454	▲ 258	▲ 255
Zinc	ppm ASTM D5185(m) 0	18	▲ 32	▲ 33
Sulfur	ppm ASTM D5185(m) 1420	1236	▲ 951	▲ 910
Lithium	ppm ASTM D5185(m)	<1	<1	<1

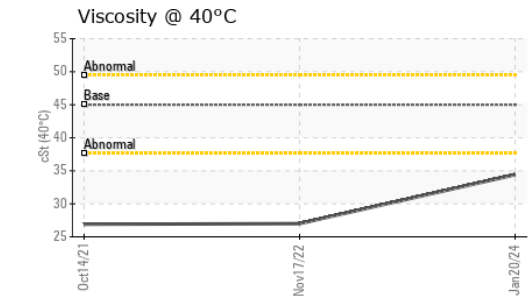
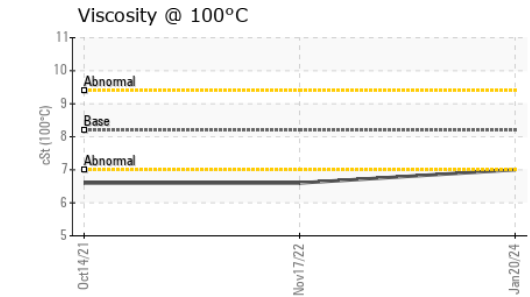
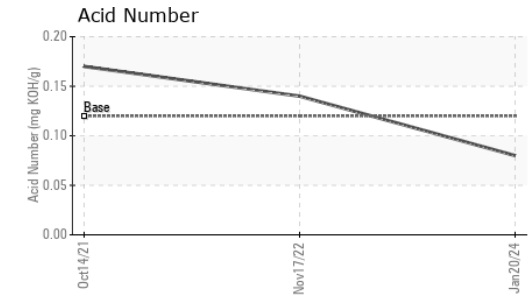
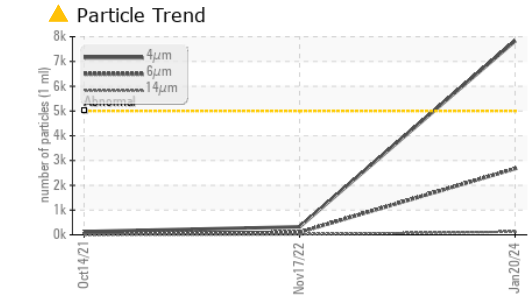
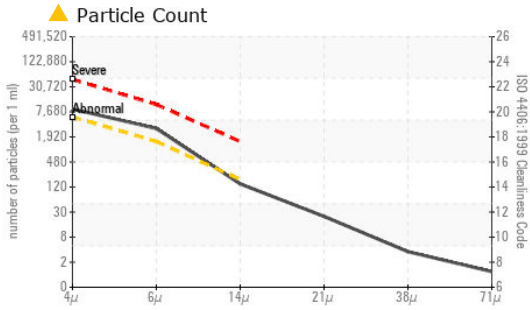
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	<1	2	2
Sodium	ppm ASTM D5185(m)	2	6	5
Potassium	ppm ASTM D5185(m) >20	<1	<1	2

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 7828	322	131
Particles >6µm	ASTM D7647 >1300	▲ 2674	103	35
Particles >14µm	ASTM D7647 >160	126	19	4
Particles >21µm	ASTM D7647 >40	21	7	2
Particles >38µm	ASTM D7647 >10	3	1	0
Particles >71µm	ASTM D7647 >3	1	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/19/14	16/14/11	14/12/9

OIL ANALYSIS REPORT



Laboratory Sample No. : PC0080578
Lab Number : 02612822
Unique Number : 5721917
Test Package : IND 2 (Additional Tests: KV100, VI)

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GPI) - 286 - Shoring & Foundations
Received : 01 Feb 2024
Diagnosed : 05 Feb 2024
Diagnostician : Bill Quesnel
 151 Ram Forest Rd, Stouffville, ON CA L4A 2G8
 Contact: Shannon Abbott sabbott@gipi.com
 T: (905)750-5900
 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.

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.12	0.08	0.14	0.17

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	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	NONE
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*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	45.0	34.4	▲ 27.0	▲ 26.9
Visc @ 100°C	cSt	ASTM D7279(m)	8.2	7	▲ 6.6	▲ 6.6
Viscosity Index (VI)	Scale	ASTM D2270*	158	170	▲ 215	▲ 216

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						