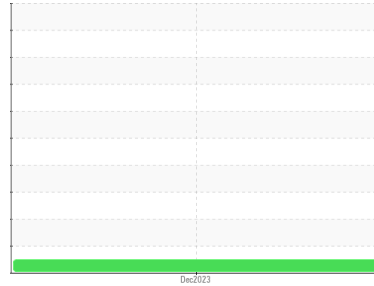


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
HDXAW32BLKBOTTOM

Component
4 New (Unused) Oil
Fluid
WADDICK FUELS AW 32 (--- LTR)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Wear

{not applicable}

Contamination

{not applicable}

Fluid Condition

{not applicable}

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC	---	---
Sample Date	Client Info	21 Dec 2023	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		NORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	NEG	---	---

WEAR METALS

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

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	0	---	---
Barium	ppm ASTM D5185(m)	0	---	---
Molybdenum	ppm ASTM D5185(m)	0	---	---
Manganese	ppm ASTM D5185(m)	0	---	---
Magnesium	ppm ASTM D5185(m)	<1	---	---
Calcium	ppm ASTM D5185(m)	59	---	---
Phosphorus	ppm ASTM D5185(m)	379	---	---
Zinc	ppm ASTM D5185(m)	465	---	---
Sulfur	ppm ASTM D5185(m)	849	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m)	0	---	---
Sodium	ppm ASTM D5185(m)	0	---	---
Potassium	ppm ASTM D5185(m) >20	<1	---	---

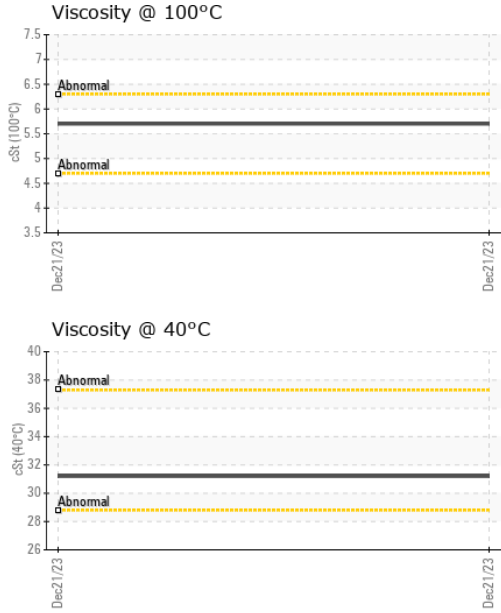
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844*	0	---	---
Nitration	Abs/cm ASTM D7624*	1.5	---	---
Sulfation	Abs/.1mm ASTM D7415*	10.8	---	---

FLUID DEGRADATION


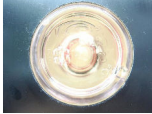
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414*	2.1	---	---

OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	NEG	---	---	
Free Water	scalar	Visual*	NEG	---	---	

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.2	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	5.7	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	124	---	---

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Petro-Canada Technical/Nick Finelli**
Sample No. : PC **Recieved** : 22 Dec 2023
Lab Number : 02604928 **Diagnosed** : 27 Dec 2023
Unique Number : 5698013 **Diagnostician** : Kevin Marson
Test Package : TEST (Additional Tests: FT-IR, ICP, KV100, KV40, Spat, VI)

Mississauga, ON
 CA L5J 1K2
 Contact: Nick Finelli
 nick.finelli@hfsinclair.com
 T:
 F: (877)352-8916

*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.*