

OIL ANALYSIS REPORT

HDXAW46BLKTOP

Component

3 New (Unused) Oil Fluid

WADDICK FUELS AW 46 (--- LTR)

Sample Rating Trend



DIAGNOSIS

Recommendation

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

Wear

{not applicable}

Contamination

{not applicable}

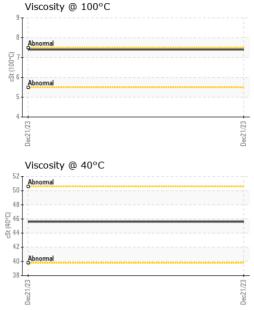
Fluid Condition

{not applicable}

				Dec2023		
SAMPLE INFORM	MATION	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		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method		NEG		
WEAR METALS	3	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)		57		
Phosphorus	ppm	ASTM D5185(m)		364		
Zinc	ppm	ASTM D5185(m)		451		
Sulfur	ppm	ASTM D5185(m)		822		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINAN	ΓS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		<1		
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*		10.7		
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*		2.2		



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 PROPER	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		45.6		
Visc @ 100°C	cSt	ASTM D7279(m)		7.4		
Viscosity Index (VI)	Scale	ASTM D2270*		125		
SAMPLE IMAG	ES	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
BOLLOTT						



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number

Unique Number : 5698007

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Petro-Canada Technical/Nick Finelli : PC : 02604922

Recieved

: 22 Dec 2023 Diagnosed Diagnostician : Kevin Marson

: 27 Dec 2023 Test Package : TEST (Additional Tests: FT-IR, ICP, KV100, KV40, Spat, VI)

Mississauga, ON CA L5J 1K2 Contact: Nick Finelli nick.finelli@hfsinclair.com

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.