

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id DHP13BLKTOP

Component **3 New (Unused) Oil** Fluid WADDICK FUELS DSHP13BLK (--- LTR)

DIAGNOSIS

Recommendation

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

Wear

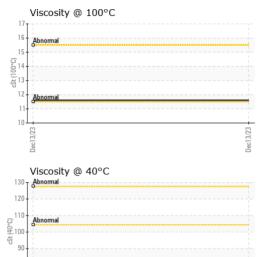
{not applicable}

Contamination {not applicable}

				Dec2023			
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		PC			
Sample Date		Client Info		13 Dec 2023			
Machine Age	hrs	Client Info		0			
Dil Age	hrs	Client Info		0			
Dil Changed		Client Info		N/A			
Sample Status				NORMAL			
CONTAMINA	ΓΙΟΝ	method	limit/base	current	history1	history2	
Water		WC Method		NEG			
WEAR METAI	_S	method	limit/base	current	history1	history2	
ron	ppm	ASTM D5185(m)		<1			
Chromium	ppm	ASTM D5185(m)		0			
Nickel	ppm	ASTM D5185(m)		0			
Fitanium	ppm	ASTM D5185(m)		0			
Silver	ppm	ASTM D5185(m)		0			
Aluminum	ppm	ASTM D5185(m)		1			
_ead	ppm	ASTM D5185(m)		0			
Copper	ppm	ASTM D5185(m)		0			
Fin	ppm	ASTM D5185(m)		0			
Antimony	ppm	ASTM D5185(m)		0			
/anadium	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)		1			
Barium	ppm	ASTM D5185(m)		0			
Volybdenum		ASTM D5185(m)		59			
Manganese	ppm ppm	ASTM D5185(m)		0			
Vagnesium		ASTM D5185(m)		1020			
0	ppm						
	ppm	ASTM D5185(m)		1050			
Phosphorus	ppm	ASTM D5185(m)		1100			
Zinc	ppm	ASTM D5185(m)		1190			
Sulfur _ithium	ppm	ASTM D5185(m) ASTM D5185(m)		2890 <1			
	ppm		limit/base				
		method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)		4			
Sodium	ppm	ASTM D5185(m)	00	<1			
Potassium	ppm	ASTM D5185(m)	>20	0			
INFRA-RED		method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0			
Nitration	Abs/cm	ASTM D7624*		4.1			
Sulfation	Abs/.1mm	ASTM D7415*		17.6			
FLUID DEGRA	DATION	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*		12.8			



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Dec13/23

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 PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		77.4		
Visc @ 100°C	cSt	ASTM D7279(m)		11.6		
Viscosity Index (VI)	Scale	ASTM D2270*		142		
SAMPLE IMAG	iES	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
			-			

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Petro-Canada Technical/Nick Finelli Laboratory CALA Sample No. : PC Recieved : 22 Dec 2023 Lab Number : 02604932 Diagnosed : 28 Dec 2023 Mississauga, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5698017 Diagnostician : Kevin Marson CA L5J 1K2 Test Package : TEST (Additional Tests: FT-IR, ICP, ICP-NEWOIL, KV100, KV40, Spat, VI) Contact: Nick Finelli To discuss this sample report, contact Customer Service at 1-800-268-2131. nick.finelli@hfsinclair.com Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: Validity of results and interpretation are based on the sample and information as supplied. F: (877)352-8916

Contact/Location: Nick Finelli - PCA_193805