

OIL ANALYSIS REPORT

Sample Rating Trend





Area Scoop 6 Yard LHD6104 Component

Diesel Engine

PETRO CANADA DURON HP 15W40 (17 LTR)

A recommend that you drain the oil from the component if that so not already been done. We recommend an early resample to monitor this conditione. Age intra Citent Into 20 Jan 2024
component if this has not already been done. We recommed an early resample to monitor this condition. 3370 <
recommend an early resample to monitor this condition. Wer All component wear rates are normal. Contamination There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. Fuel is present in the oil and is lowering the fuels present in the oil and is lowering the fuels present in the oil and is lowering the fuels presence of contaminants. Fuel is present in the oil and is lowering the fuels present in the oil and the owering the fuels present in the owering the oweri
Orient Line Orient Line <thorient line<="" th=""> <thorien line<="" th=""></thorien></thorient>
Bondinon Oil Changed Client Into N/A Sample Status Image ABNORMAL Image Image Contamination Contamination Image Current Nistory2 Nistory2 There is a moderate amount of fuel present in the oil. CONTAMINATION WC Method NEG Image Fuel is present in the oil is no longer serviceable due to the presence of contaminants. VMEAR METALS method Imitibase current Nistory2 Vickel ppm ASTU D5150m >100 57 Vickel ppm ASTU D5150m >100 57 Nickel ppm ASTU D5150m >4 Nickel ppm ASTU D5150m >4 Silver ppm ASTU D5150m >4 Copper ppm ASTU D5150m >4 Copper ppm ASTU D5150m >4 Copper ppm ASTU D5150m >1 Commun ppm
Ware ABNORMAL All component wear rates are normal. CONTAMINATION method limitbase current history1 history2 There is a moderate amount of fuel present in the oil. Fluid Condition Water WC Method >0.2 NEG Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants. Ppm ASTU D5186m >100 57
Water WC Method >0.2 NEG Fuel is a moderate amount of fuel present in the oil. NEG Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants. MEAR METALS method Imit/base current history1 Nickel ppm ASTM 05/85(m) >100 57 Nickel ppm ASTM 05/85(m) >20 1 Nickel ppm ASTM 05/85(m) >20 1 Nickel ppm ASTM 05/85(m) >20 1 Nickel ppm ASTM 05/85(m) >3 1 Silver ppm ASTM 05/85(m) >3 1 Aluminum ppm ASTM 05/85(m) >3 5 Aluminum ppm ASTM 05/85(m) >40 1 Advalum ppm ASTM 05/85(m) >15 <1
Glycol WC Method NEG WEAR METALS method Imit/base current history1 history2 Imit profession for solution profession for solution method Imit/base current history1
Fund Condition Non-Netrol Instant/ Instant/ Instant/ Instant/ Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants. ppm ASTM 05186/m >100 57 Nickel ppm ASTM 05186/m >20 1 Nickel ppm ASTM 05186/m >4 <1
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants. VMEAR ME IALS method limit/base current history1 history2 Iron ppm ASTM 05/85(m) >100 57 Chromium ppm ASTM 05/85(m) >20 1 Nickel ppm ASTM 05/85(m) >24 -1 Nickel ppm ASTM 05/85(m) >3 <1
viscosity. The oil is no longer serviceable due to the presence of contaminants. Iron ppm ASTM D5185(m) >20 1 Nickel ppm ASTM D5185(m) >4 <1
Normania ppm ASTM D5185(m) >20 1 Nickel ppm ASTM D5185(m) >3 <1
Nickel ppm ASTM D5186/m >4 <1 Titanium ppm ASTM D5186/m >3 <1
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Silver ppm ASTM D5185(m) >3 <1 Aluminum ppm ASTM D5185(m) >20 6 Lead ppm ASTM D5185(m) >40 <1
Aluminum ppm ASTM D5185(m) >20 6 Lead ppm ASTM D5185(m) >40 <1
Lead ppm ASTM D5185(m) >40 <1
CopperppmASTM D5185(m)>-3305TinppmASTM D5185(m)>15<1
Tin ppm ASTM D5185(m) >15 <1 Antimony ppm ASTM D5185(m) I I I I Vanadium ppm ASTM D5185(m) I I I I Beryllium ppm ASTM D5185(m) I I I I Cadmium ppm ASTM D5185(m) I I I I ADDITIVES rethod Imit/base current history1 history2 Boron ppm ASTM D5185(m) I I I I Barium ppm ASTM D5185(m) I I I I Molybdenum ppm ASTM D5185(m) I I I I Maganese ppm ASTM D5185(m) I I I I Magnesium ppm ASTM D5185(m) I I I I I Phosphorus ppm ASTM D5185(m) I I I I I Magnesiu
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Boron ppm ASTM D5185(m) 0 17 Barium ppm ASTM D5185(m) 0 0 0 Molybdenum ppm ASTM D5185(m) 60 43 Manganese ppm ASTM D5185(m) 0 <11
Barium ppm ASTM D5185(m) 0 0 Molybdenum ppm ASTM D5185(m) 60 43 Manganese ppm ASTM D5185(m) 0 <1
Molybdenum ppm ASTM D5185(m) 60 43 Manganese ppm ASTM D5185(m) 0 <1 Magnesium ppm ASTM D5185(m) 1010 686 Calcium ppm ASTM D5185(m) 1070 1813 Phosphorus ppm ASTM D5185(m) 1150 987 Zinc ppm ASTM D5185(m) 1270 1224
Manganese ppm ASTM D5185(m) 0 <1 Magnesium ppm ASTM D5185(m) 1010 686 Calcium ppm ASTM D5185(m) 1070 1813 Phosphorus ppm ASTM D5185(m) 1150 987 Zinc ppm ASTM D5185(m) 1270 1224
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Phosphorus ppm ASTM D5185(m) 1150 987 Zinc ppm ASTM D5185(m) 1270 1224
Zinc ppm ASTM D5185(m) 1270 1224
Lithium ppm ASTM D5185(m) <1
CONTAMINANTS method limit/base current history1 history2
Silicon ppm ASTM D5185(m) >25 14
Sodium ppm ASTM D5185(m) 5
Potassium ppm ASTM D5185(m) >20 2
Fuel % ASTM D7593* >5 6.1
INFRA-RED method limit/base current history1 history2
INFRA-RED method limit/base current history1 history2 Soot % % ASTM D7844* >3 1.2



OIL ANALYSIS REPORT

Viscosity	@ 40°C	FLUID DEGRA		method	limit/base	current	history1	history2
150 140 Abnormal		Oxidation	Abs/.1mm	ASTM D7414*	>25	17.5		
130- 		VISUAL		method	limit/base	current	history1	history2
(3) 120 - Base (9) 110		Emulsified Water	scalar	Visual*	>0.2	NEG		
90 - Abnormal		Free Water	scalar	Visual*	>0.2	NEG		
80		FLUID PROPE		method	limit/base	current	history1	history2
Jan 20/24		Visc @ 40°C	cSt	ASTM D7279(m)	118.2	▲ 73.0		
		Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<u>▲</u> 11.4		
Viscosity	@ 100°C	Viscosity Index (VI)	Scale	ASTM D2270*	139	148		
18 - Abnormal		GRAPHS						
() 16 - Base		Iron (ppm)			10	Lead (ppm)		
은 경 ¹⁴ Abnormal		200 - Severe			8	30 - Severe		-
12-		= ¹⁵⁰			εe	50 -		
10		Abnormal				10 - Abnormal		
Jan 20/24		50 -			2	20 -		
	@ 40%C	- 0/24				0/24		1/24
150 Abnormal	@ 40°C	Jan20/24			Jan20/24	Jan 20/24		Jan 20/24
140		Aluminum (ppm)			5	Chromium (p	pm)	
;;;120 - Base € 110 -		40 Severe				severe		
³ 100-		30				30		
90 - Abnormal 80 -		20 - Abnormal			Ed 2	20 - Abnormal		
70		10-			1	10-		
Jan 20/24		0 + + 2				0		24
		-ı Jan20/24			Jan 20/24	Jan20/24		Jan20/24
		Copper (ppm)				Silicon (ppm)		
		400 Severe Sabitoimar				Severe		
		300 -				50 -		
		툡 200 -			⁶ d	40 Abnormal		
		100 -			2	20		
		0			24			24
		Jan 20/24			Jan 20/24	Jan 20/24		Jan20/24
		▲ Viscosity @ 100°	С			Fuel Dilution		-
		Abnormal			10	Severe		1
					8	.0] 4		
		00 16 Base 00 00 00 00 00 00 00 00 00 00 00 00 00			a f a f a f a f a f a f a f a f a f a f	.0 Abnormal		
		12			2	.0-		
		10						4
		Jan 20/24			Jan 20/24	Jan 20/24		Jan20/24
	CALA Laborate		5 Appleb Rece		gton, ON L7 Feb 2024	′∟5H9 La	keshore Gold	rimmins West
	ISO 17025:2017 Lab Nun	nber : 02614386	Teste	e d : 12	2 Feb 2024	Neo Devie		Timmins, ON
	onique nu	mber :5723481 kage :MOB 1(Additional T			2 Feb 2024 - V 40, PercentF		Contact:	CA Dale Arseneau
	To discuss this sample re	eport, contact Customer Serv	vice at 1-8	800-268-213	1.	darsene	eau@ca.paname T.	
UCHACKER!		scope of accreditation, (m) n erpretation are based on the					1:	(705)269-4344 F:

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