

# **OIL ANALYSIS REPORT**

## Sample Rating Trend

NORMAL

#### Area SCHTRUCK Machine Id 6366 [SCHTRUCK] Component

Front Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- GAL)

## DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor.

#### Wear

Metal levels are typical for a new component breaking in.

#### Contamination

There is no indication of any contamination in the oil.

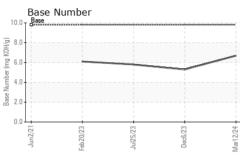
#### Fluid Condition

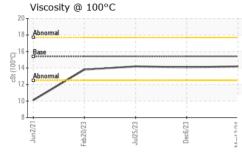
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

,		Jun2021	Feb2023	Jul2023 Dec2023	Mar2024	
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0006997	SBP0005970	SBP0004706
Sample Date		Client Info		12 Mar 2024	06 Dec 2023	25 Jul 2023
Machine Age	mls	Client Info		352561	323569	286806
Oil Age	mls	Client Info		28992	36763	37849
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	21	20	21
Chromium	ppm	ASTM D5185m	>5	2	2	2
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	9	6	8
Lead	ppm	ASTM D5185m	>30	<1	0	0
Copper	ppm	ASTM D5185m	>150	10	12	12
Tin	ppm	ASTM D5185m	>5	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	2
Barium	ppm	ASTM D5185m	0	0	12	<1
Molybdenum	ppm	ASTM D5185m	60	65	61	58
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	1033	945	873
Calcium	ppm	ASTM D5185m	1070	1162	1084	1263
Phosphorus	ppm	ASTM D5185m	1150	1055	983	929
Zinc	ppm	ASTM D5185m	1270	1299	1224	1206
Sulfur	ppm	ASTM D5185m	2060	2982	2720	2662
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	5	4	4
Sodium	ppm	ASTM D5185m		2	0	1
Potassium	ppm	ASTM D5185m	>20	11	14	12
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	9.4	9.6	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	22.8	22.9
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1	20.2	21.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.7	5.3	
Dase Mulliber (DIN)	iliy Kori/y	AGTIM D2030	5.0	0.7	5.5	5.8



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-	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
Dec6/23 Mar12/24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Ma	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROPER		method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.1	14.2
	GRAPHS						
	Ferrous Alloys						
	35 30 iron		     				
Dec6/23	sesses nickel						
-	25						
	20 15						
	10-						
	2/21 0	5/23 -	3/23	2/24			
	Jun2/21 Feb20/23	Jul25/23	Dec6/23	Mar12/24			
	Non-ferrous Meta	ls					
	450 400						
	350 - second lead						
	300						
	E <sup>250</sup>						
	<sup>200</sup> 150						
	100						
	50-						
	23 Z1+10	23	23	24			
	Jun2/21 Feb20/23	Jul25/23 .	Dec6/23	Mar12/24			
	Viscosity @ 100°	_		5	Door Numb	-	
	19 <sub>T</sub>		1	10.	Base Numbe		
	18 - Abnormal 17 -						
	16 Base			(B/HO		1	
	© 15			У Вш.	0-		
	(5) 15 00 14 <sup>4</sup> <sup>14</sup> <sup>3</sup> 13 Abnormal			Jaqua 4	0		-
	12			ase N			
	11			<sup>66</sup> 2.	0		
	9						
	Jun2/21	Jul25/23	Dec6/23	Mar12/24	Jun2/21 Feb20/23	Jul25/23	Dec6/23 Mar12/24
	Ju Je	Jul	De	Mar	Jr	Jul	De
Laboratory Sample No. Lab Number Unique Number		Rece Teste	ived : 18 ed : 19	r, NC 27513 3 Mar 2024 9 Mar 2024 9 Mar 2024 - V		F	ATION - 605449 08 E Bay Road Plattsmouth, NE US 68048 ct. NICK DOTY



Test Package : FLEET Contact: NICK DOTY Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. doty@liquidtrucking.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F:

T: (402)949-9398