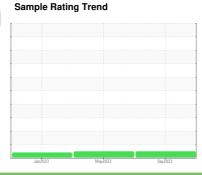


OIL ANALYSIS REPORT

SCHTRUCK 6386 [SCHTRUCK]

Diesel Engine

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





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

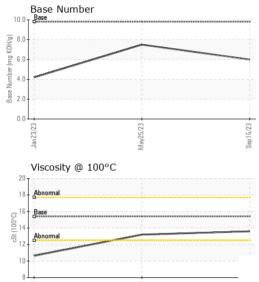
Fluid Condition

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

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0005725	SBP0004386	SBP0002538
Sample Date		Client Info		15 Sep 2023	25 May 2023	23 Jan 2023
Machine Age	mls	Client Info		104680	68776	31818
Oil Age	mls	Client Info		35904	36958	31818
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ATTENTION
CONTAMINATIO	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	0.4
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	30	39	74
Chromium	ppm	ASTM D5185m	>5	4	3	4
Nickel	ppm	ASTM D5185m	>2	0	<1	2
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	29	36	42
Lead	ppm	ASTM D5185m	>30	0	0	9
Copper	ppm	ASTM D5185m	>150	33	65	220
Tin	ppm	ASTM D5185m	>5	<1	2	5
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 1	history1 8	history2 32
	ppm					
Boron		ASTM D5185m	0	1	8	32
Boron Barium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	1 0	8	32 <1
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	1 0 63	8 0 58	32 <1 45
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	1 0 63 1	8 0 58 2	32 <1 45 4
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	1 0 63 1 1037	8 0 58 2 827	32 <1 45 4 564
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	1 0 63 1 1037 1202	8 0 58 2 827 1238 861 1120	32 <1 45 4 564 1748
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	1 0 63 1 1037 1202 983	8 0 58 2 827 1238 861	32 <1 45 4 564 1748 749
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270	1 0 63 1 1037 1202 983 1306	8 0 58 2 827 1238 861 1120	32 <1 45 4 564 1748 749 952
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	1 0 63 1 1037 1202 983 1306 2602	8 0 58 2 827 1238 861 1120 2243	32 <1 45 4 564 1748 749 952 2080
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	1 0 63 1 1037 1202 983 1306 2602 current	8 0 58 2 827 1238 861 1120 2243 history1	32 <1 45 4 564 1748 749 952 2080 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	1 0 63 1 1037 1202 983 1306 2602 current	8 0 58 2 827 1238 861 1120 2243 history1	32 <1 45 4 564 1748 749 952 2080 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20	1 0 63 1 1037 1202 983 1306 2602 current 5	8 0 58 2 827 1238 861 1120 2243 history1 6 2	32 <1 45 4 564 1748 749 952 2080 history2 10 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 1010 1070 1150 1270 2060 limit/base >20	1 0 63 1 1037 1202 983 1306 2602 current 5 3 65	8 0 58 2 827 1238 861 1120 2243 history1 6 2	32 <1 45 4 564 1748 749 952 2080 history2 10 8 91
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 1010 1070 1150 1270 2060 limit/base >20	1 0 63 1 1037 1202 983 1306 2602 current 5 3 65	8 0 58 2 827 1238 861 1120 2243 history1 6 2 74 history1	32 <1 45 4 564 1748 749 952 2080 history2 10 8 91 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method *ASTM D5185m *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m *ASTM D5185m	0 0 0 0 1010 1070 1150 1270 2060 limit/base >20 	1 0 63 1 1037 1202 983 1306 2602 current 5 3 65 current	8 0 58 2 827 1238 861 1120 2243 history1 6 2 74 history1 0.5	32 <1 45 4 564 1748 749 952 2080 history2 10 8 91 history2 0.6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 1010 1070 1150 1270 2060 limit/base >20 >20 limit/base >3 >20	1 0 63 1 1037 1202 983 1306 2602 current 5 3 65 current 0.6 9.8	8 0 58 2 827 1238 861 1120 2243 history1 6 2 74 history1 0.5 9.8	32 <1 45 4 564 1748 749 952 2080 history2 10 8 91 history2 0.6 10.0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	0 0 0 1010 1070 1150 1270 2060 limit/base >20	1 0 63 1 1037 1202 983 1306 2602 current 5 3 65 current 0.6 9.8 21.7	8 0 58 2 827 1238 861 1120 2243 history1 6 2 74 history1 0.5 9.8 22.3	32 <1 45 4 564 1748 749 952 2080 history2 10 8 91 history2 0.6 10.0 21.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm	ASTM D5185m Method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415 Method	0 0 0 1010 1070 1150 1270 2060 limit/base >20 >20 limit/base >3 >20 >30 limit/base	1 0 63 1 1037 1202 983 1306 2602 current 5 3 65 current 0.6 9.8 21.7	8 0 58 2 827 1238 861 1120 2243 history1 6 2 74 history1 0.5 9.8 22.3 history1	32 <1 45 4 564 1748 749 952 2080 history2 10 8 91 history2 0.6 10.0 21.3 history2

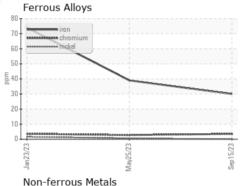


OIL ANALYSIS REPORT

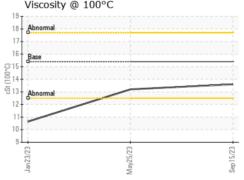


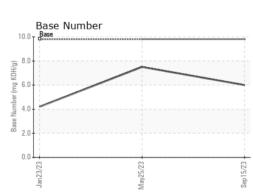
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TIES	method	limit/base	current	history1	history2

Visc @ 100°C	cSt	ASTM D445	15.4	13.6	13.2	▲ 10.64
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Non-lemous Meta	115	
250 T		
copper		
peaganananan ead		
200		
150		
E I		
100		
100		
50 +		
0		-
/23	/23	/23
Jan23/23	1/25	15
Jar	May25/23	Sep15/23
Viccocity @ 10000		







Certificate L2367

Laboratory Sample No. Lab Number

Unique Number : 10660201 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : SBP0005725 : 05958988

Received : 22 Sep 2023 Diagnosed Diagnostician : Wes Davis

: 25 Sep 2023

108 E Bay Road Plattsmouth, NE US 68048

SCHMIDT TRANSPORTATION - 605449

Contact: NICK DOTY doty@liquidtrucking.com T: (402)949-9398

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)

Report Id: SCHPLA [WUSCAR] 05958988 (Generated: 09/30/2023 09:07:25) Rev: 1

Submitted By: CASEY WILKIE