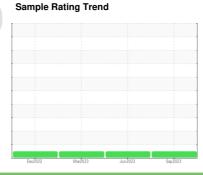


OIL ANALYSIS REPORT

SCHTRUCK 6381 [SCHTRUCK]

Diesel Engine

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





Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

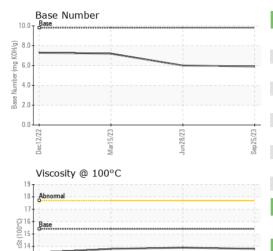
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0005727	SBP0004689	SBP0004163
Sample Date		Client Info		25 Sep 2023	28 Jun 2023	15 Mar 2023
Machine Age	mls	Client Info		183103	145724	108679
Oil Age	mls	Client Info		37379	37045	35310
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	13	18	22
Chromium	ppm	ASTM D5185m	>5	<1	1	2
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	4	7	8
Lead	ppm	ASTM D5185m	>30	0	0	2
Copper	ppm	ASTM D5185m	>150	26	42	40
Tin	ppm	ASTM D5185m	>5	1	3	4
Vanadium	ppm	ASTM D5185m		0	0	<1
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 <1	history2 4
	ppm					· ·
Boron	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m	0	<1	<1	4
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0 0 60	<1 <1	<1	4
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	<1 <1 62	<1 0 63	4 0 55
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	<1 <1 62 <1	<1 0 63 <1	4 0 55 2
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	<1 <1 62 <1 961	<1 0 63 <1 1017	4 0 55 2 897
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 <1 62 <1 961 1134	<1 0 63 <1 1017 1145	4 0 55 2 897 1272 784 1180
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm 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 <1 62 <1 961 1134 996	<1 0 63 <1 1017 1145 1000	4 0 55 2 897 1272 784
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 <1 62 <1 961 1134 996 1266	<1 0 63 <1 1017 1145 1000 1343	4 0 55 2 897 1272 784 1180
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 <1 62 <1 961 1134 996 1266 2293	<1 0 63 <1 1017 1145 1000 1343 2757	4 0 55 2 897 1272 784 1180 2361
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 <1 62 <1 961 1134 996 1266 2293 current	<1 0 63 <1 1017 1145 1000 1343 2757 history1	4 0 55 2 897 1272 784 1180 2361 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 limit/base	<1 <1 62 <1 961 1134 996 1266 2293 current	<1 0 63 <1 1017 1145 1000 1343 2757 history1	4 0 55 2 897 1272 784 1180 2361 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	<1 <1 62 <1 961 1134 996 1266 2293 current 3 1	<1 0 63 <1 1017 1145 1000 1343 2757 history1 4	4 0 55 2 897 1272 784 1180 2361 history2 5 3
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 60 0 1010 1070 1150 1270 2060 limit/base >20	<1 <1 62 <1 961 1134 996 1266 2293 current 3 1 6	<1 0 63 <1 1017 1145 1000 1343 2757 history1 4 2 11	4 0 55 2 897 1272 784 1180 2361 history2 5 3
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 60 0 1010 1070 1150 1270 2060 limit/base >20	<1 <1 62 <1 961 1134 996 1266 2293 current 3 1 6 current	<1 0 63 <1 1017 1145 1000 1343 2757 history1 4 2 11 history1	4 0 55 2 897 1272 784 1180 2361 history2 5 3 20
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 60 0 1010 1070 1150 1270 2060 limit/base >20	<1 <1 62 <1 961 1134 996 1266 2293 current 3 1 6 current 0.7	<1 0 63 <1 1017 1145 1000 1343 2757 history1 4 2 11 history1 0.7	4 0 55 2 897 1272 784 1180 2361 history2 5 3 20 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	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20 >20 >20	<1 <1 <1 62 <1 961 1134 996 1266 2293 current 3 1 6 current 0.7 9.2	<1 0 63 <1 1017 1145 1000 1343 2757 history1 4 2 11 history1 0.7 9.7	4 0 55 2 897 1272 784 1180 2361 history2 5 3 20 history2 0.6 9.5
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 D76145	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20 >20 limit/base >3 >20 >30	<1 <1 <1 62 <1 961 1134 996 1266 2293 current 3 1 6 current 0.7 9.2 21.0 current	<1 0 63 <1 1017 1145 1000 1343 2757 history1 4 2 11 history1 0.7 9.7 22.1	4 0 55 2 897 1272 784 1180 2361 history2 5 3 20 history2 0.6 9.5 21.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	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 method *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844	0 0 0 1010 1070 1150 1270 2060 limit/base >20 >20 limit/base >3 >20 >30 limit/base >25	<1 <1 62 <1 961 1134 996 1266 2293 current 3 1 6 current 0.7 9.2 21.0	<1 0 63 <1 1017 1145 1000 1343 2757 history1 4 2 11 history1 0.7 9.7 22.1 history1	4 0 55 2 897 1272 784 1180 2361 history2 5 3 20 history2 0.6 9.5 21.2



13

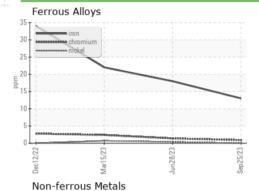
OIL ANALYSIS REPORT

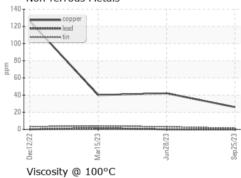


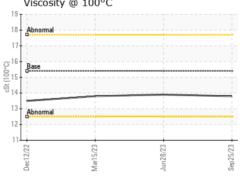
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

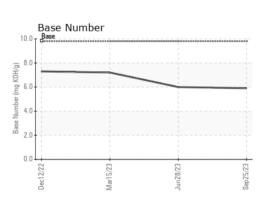
FLUID PHOPENTIES		memod			riistory i	HISTORYZ
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.9	13.8

GRAPHS













Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10671751 Test Package : FLEET

: SBP0005727 : 05965200

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Sep 2023 Diagnosed : 02 Oct 2023

Diagnostician : Wes Davis

SCHMIDT TRANSPORTATION - 605449

108 E Bay Road Plattsmouth, NE US 68048

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)