

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area SCHTRUCK 6417 [SCHTRUCK]

Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

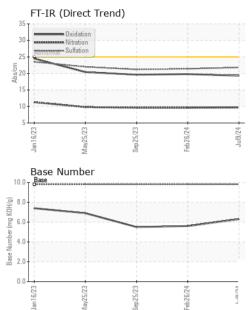
Fluid Condition

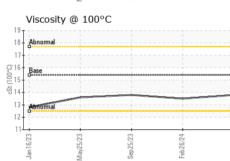
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0007760	SBP0006644	SBP0005731
Sample Date		Client Info		09 Jul 2024	26 Feb 2024	25 Sep 2023
Machine Age	mls	Client Info		233607	185407	145760
Oil Age	mls	Client Info		38456	39647	37625
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	N	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	18	19	20
Chromium	ppm	ASTM D5185m	>5	1	1	2
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	5	6	8
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	19	34	39
Tin	ppm	ASTM D5185m	>5	1	2	3
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	nnm	ACTM DE10Em		-	0	0
Caumum	ppm	ASTM D5185m		0	0	0
ADDITIVES	ppin	method	limit/base	0 current	0 history1	0 history2
	ppm		limit/base	-	-	-
ADDITIVES		method	0	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 0	history1 3	history2 1
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	0 0 60	current 0 0	history1 3 0	history2 1 <1
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	current 0 0 60	history1 3 0 59	history2 1 <1 62
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	current 0 0 60 <1 948 1170	history1 3 0 59 <1	history2 1 <1 62 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	Current 0 0 60 <1 948 1170 1042	history1 3 0 59 <1 928 1039 994	history2 1 1 <1 62 <1 954 1092 923
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270	current 0 0 60 <1 948 1170	history1 3 0 59 <1 928 1039 994 1246	history2 1 1 <1 62 <1 954 1092 923 1212
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	Current 0 0 60 <1 948 1170 1042	history1 3 0 59 <1 928 1039 994	history2 1 1 <1 62 <1 954 1092 923 1212 2139
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270	Current 0 0 60 <1 948 1170 1042 1308	history1 3 0 59 <1 928 1039 994 1246	history2 1 1 <1 62 <1 954 1092 923 1212
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method 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	current 0 0 60 <1 948 1170 1042 1308 2834 current 5	history1 3 0 59 <1 928 1039 994 1246 2223 history1 6	history2 1 <1 62 <1 954 1092 923 1212 2139 history2 4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 60 1010 1070 1150 1270 2060 kimit/base >20	current 0 0 60 <1 948 1170 1042 1308 2834 current 5 2	history1 3 0 59 <1 928 1039 994 1246 2223 history1 6 3	history2 1 <1 62 <1 954 1092 923 1212 2139 history2 4 3
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060 kimit/base >20	current 0 0 60 <1 948 1170 1042 1308 2834 current 5	history1 3 0 59 <1 928 1039 994 1246 2223 history1 6 3 9	history2 1 <1 62 <1 954 1092 923 1212 2139 history2 4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 60 1010 1070 1150 1270 2060 kimit/base >20	current 0 0 60 <1 948 1170 1042 1308 2834 current 5 2	history1 3 0 59 <1 928 1039 994 1246 2223 history1 6 3	history2 1 <1 62 <1 954 1092 923 1212 2139 history2 4 3
ADDITIVES 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	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 limit/base >20	current 0 0 60 <1 948 1170 1042 1308 2834 current 5 2 6 current 0.6	history1 3 0 59 <1 928 1039 994 1246 2223 history1 6 3 9 history1 0 0.6	history2 1 <1 62 <1 954 1092 923 1212 2139 history2 4 3 18 history2 0.6
ADDITIVES 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	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 2060 200 200 200	current 0 0 60 <1 948 1170 1042 1308 2834 current 5 2 6 current 0.6 9.7	history1 3 0 59 <1 928 1039 994 1246 2223 history1 6 3 9 history1	history2 1 <1 62 <1 954 1092 923 1212 2139 history2 4 3 18 history2
ADDITIVES 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	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 limit/base >20 20 limit/base	current 0 0 60 <1 948 1170 1042 1308 2834 current 5 2 6 current 0.6	history1 3 0 59 <1 928 1039 994 1246 2223 history1 6 3 9 history1 0 0.6	history2 1 <1 62 <1 954 1092 923 1212 2139 history2 4 3 18 history2 0.6
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ADDITIVES 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	method ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 200 200 200 320 320 33 200 330	current 0 0 60 <1 948 1170 1042 1308 2834 current 5 2 6 current 0.6 9.7 21.8	history1 3 0 59 <1 928 1039 994 1246 2223 history1 6 3 9 history1 0.6 9.6 21.4	history2 1 <1 62 <1 954 1092 923 1212 2139 history2 4 3 18 history2 0.6 9.6 21.2



OIL ANALYSIS REPORT





VIOUNE		method	inniv base	Guircin	matory	riistor y z
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	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.5	13.8
GRAPHS						

GRAPHS Ferrous Alloys

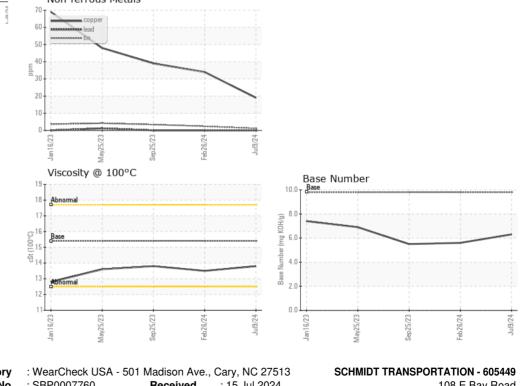
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Laboratory Sample No. : SBP0007760 Received 108 E Bay Road : 15 Jul 2024 Lab Number : 06237287 Tested : 17 Jul 2024 Plattsmouth, NE US 68048 Unique Number : 11126121 Diagnosed : 17 Jul 2024 - Wes Davis Test Package : FLEET Contact: NICK DOTY Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. doty@liquidtrucking.com T: (402)949-9398 * - 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:

Report Id: SCHPLA [WUSCAR] 06237287 (Generated: 07/17/2024 07:29:52) Rev: 1

Submitted By: CASEY WILKIE

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