

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area SCHTRUCK 6286 [SCHTRUCK]

Diesel Engine

Fluid 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.

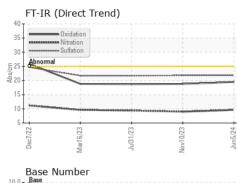
Fluid Condition

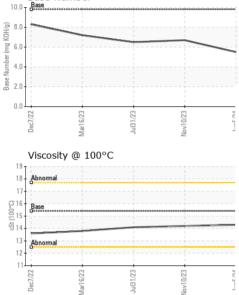
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0007243	SBP0005876	SBP0005001
Sample Date		Client Info		05 Jun 2024	10 Nov 2023	31 Jul 2023
Machine Age	mls	Client Info		489597	454240	421626
Oil Age	mls	Client Info		35357	32614	37349
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	20	12	13
Chromium	ppm	ASTM D5185m	>5	2	1	1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	6	5	5
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	7	6	7
Tin	ppm	ASTM D5185m	>5	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
0		LOTIL DEVOE				
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	<1 history1	0 history2
	ppm		limit/base	-		-
ADDITIVES		method ASTM D5185m		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 0	history1 <1	history2 0
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	0 0 60	current 0 0	history1 <1 0	history2 0 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	current 0 0 63	history1 <1 0 60	history2 0 0 60
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 63 <1	history1 <1 0 60 <1	history2 0 0 60 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	ourrent 0 0 63 <1 1058	history1 <1 0 60 <1 931	history2 0 0 60 <1 1003
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	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	Current 0 0 63 <1 1058 1239	history1 <1 0 60 <1 931 1077	history2 0 0 60 <1 1003 1139
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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 63 <1 1058 1239 1095	history1 <1 0 60 <1 931 1077 876	history2 0 0 60 <1 1003 1139 988
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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 63 <1 1058 1239 1095 1366	history1 <1 0 60 <1 931 1077 876 1235	history2 0 0 60 <1 1003 1139 988 1274
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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	0 0 60 1010 1070 1150 1270 2060	Current 0 0 63 <1 1058 1239 1095 1366 3163	<1 0 60 <1 931 1077 876 1235 2948	history2 0 0 60 <1 1003 1139 988 1274 3027
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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	Current 0 0 63 <1 1058 1239 1095 1366 3163 Current	history1 <1 0 60 <1 931 1077 876 1235 2948 history1	history2 0 0 60 <1 1003 1139 988 1274 3027 history2
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 0 1010 1070 1150 1270 2060 kimit/base >20	current 0 0 63 <1 1058 1239 1095 1366 3163 current 5	<1 0 60 <1 931 1077 876 1235 2948 history1 5	history2 0 0 60 <1 1003 1139 988 1274 3027 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 0 1010 1070 1150 1270 2060 kimit/base >20	current 0 0 63 <1 1058 1239 1095 1366 3163 current 5 2	<1 0 60 <1 931 1077 876 1235 2948 history1 5 <1	history2 0 0 60 <1 1003 1139 988 1274 3027 history2 4 3
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	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 63 <1 1058 1239 1095 1366 3163 current 5 2 2	<1 0 60 <1 931 1077 876 1235 2948 history1 5 <1 2	history2 0 0 60 <1 1003 1139 988 1274 3027 history2 4 3 2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 220 220	current 0 0 63 <1 1058 1239 1095 1366 3163 current 5 2 2 current	<1 0 60 <1 931 1077 876 1235 2948 history1 5 <1 2 history1	history2 0 0 60 <1 1003 1139 988 1274 3027 history2 4 3 2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 limit/base >20 20 3	current 0 0 63 <1 1058 1239 1095 1366 3163 current 5 2 2 current 0.7	<1 0 60 <1 931 1077 876 1235 2948 history1 5 <1 2 history1 0.7	history2 0 0 60 <1 1003 1139 988 1274 3027 history2 4 3 2 history2 0 0.7
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 ppm	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 2060 200 200 200 200 200 200	current 0 0 63 <1 1058 1239 1095 1366 3163 current 5 2 current 0.7 9.6	<1 0 60 <1 931 1077 876 1235 2948 history1 5 <1 2 history1 0.7 9.0	history2 0 0 60 <1 1003 1139 988 1274 3027 history2 4 3 2 history2 0.7 9.4
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 220 20 20 320 320 33 220 330	current 0 0 63 <1 1058 1239 1095 1366 3163 current 5 2 current 0.7 9.6 21.8	<1 0 60 <1 931 1077 876 1235 2948 history1 5 <1 2 history1 0.7 9.0 21.8	history2 0 0 60 <1 1003 1139 988 1274 3027 history2 4 3 2 history2 0.7 9.4 21.7



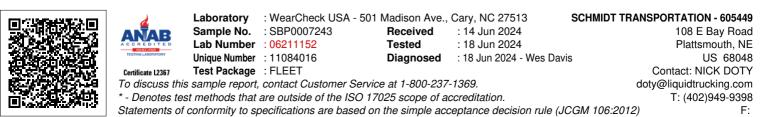
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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
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 PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.3	14.2	14.1

GRAPHS Ferrous Alloys 20 19 E 10 Dec7/22 Mar16/23 Non-ferrous Metals 10 lead Dec7/22 Mar16/23 Viscosity @ 100°C Base Number 19 10.0 18 17 8 (mg KOH/g) ()-16 ()-00 () 15 () 14 6 | umber 4 (Base 13 Abnor 12 11-0.0 Jun5/24 -Jul31/23 -Dec7/22 Dec7/22 Mar16/23 Vov10/23 Mar16/23 Nov10/23 Jun5/24



Submitted By: CASEY WILKIE