

OIL ANALYSIS REPORT

Sample Rating Trend



SCHTRUCK Machine Id 6405 [SCHTRUCK]

Component 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		SBP0005619	SBP0004346	SBP0002588
Sample Date		Client Info		14 Sep 2023	01 May 2023	16 Jan 2023
Machine Age	mls	Client Info		283851	244663	207450
Oil Age	mls	Client Info		39188	37213	37857
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	٧	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	11	14	13
Chromium	ppm	ASTM D5185m	>5	1	<1	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m		2	6	5
Lead	ppm	ASTM D5185m	>30	0	0	<1
Copper	ppm	ASTM D5185m	>150	11	16	14
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	mag	ASTM D5185m	0	<1	3	24
	ppm ppm	ASTM D5185m	0	<1 0		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	0	3	24
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60		3 0 56	24 0
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 60	0 62 <1	3	24 0 43
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	0 62 <1 1026	3 0 56 <1 885	24 0 43 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	0 62 <1 1026 1148	3 0 56 <1 885 1209	24 0 43 <1 513 1677
Boron Barium Molybdenum Manganese Magnesium	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	0 62 <1 1026	3 0 56 <1 885	24 0 43 <1 513
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	0 62 <1 1026 1148 985	3 0 56 <1 885 1209 921	24 0 43 <1 513 1677 673
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	0 0 60 0 1010 1070 1150 1270	0 62 <1 1026 1148 985 1306	3 0 56 <1 885 1209 921 1205	24 0 43 <1 513 1677 673 879
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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	0 0 60 0 1010 1070 1150 1270 2060	0 62 <1 1026 1148 985 1306 3091 current	3 0 56 <1 885 1209 921 1205 2662 history1	24 0 43 <1 513 1677 673 879 2423 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	0 62 <1 1026 1148 985 1306 3091 current 5	3 0 56 <1 885 1209 921 1205 2662 history1 4	24 0 43 <1 513 1677 673 879 2423 history2 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm 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	0 0 60 1010 1070 1150 1270 2060 kimit/base	0 62 <1 1026 1148 985 1306 3091 current	3 0 56 <1 885 1209 921 1205 2662 history1	24 0 43 <1 513 1677 673 879 2423 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060 kimit/base >20	0 62 <1 1026 1148 985 1306 3091 current 5 2	3 0 56 <1 885 1209 921 1205 2662 history1 4 3 8	24 0 43 <1 513 1677 673 879 2423 history2 8 3 8 8
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 ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 imit/base >20 imit/base	0 62 <1 1026 1148 985 1306 3091 current 5 2 9 S	3 0 56 <1 885 1209 921 1205 2662 history1 4 3 8 8	24 0 43 <1 513 1677 673 879 2423 history2 8 3 8 3 8 <i>history2</i>
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	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 2060 220 220 20 20 20	0 62 <1 1026 1148 985 1306 3091 current 5 2 9 9 current 0.6	3 0 56 <1 885 1209 921 1205 2662 history1 4 3 8 <u>history1</u> 0.5	24 0 43 <1 513 1677 673 879 2423 history2 8 3 8 3 8 history2 0.5
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 ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 <i>limit/base</i> >20 <i>limit/base</i> >3 >20	0 62 <1 1026 1148 985 1306 3091 <u>current</u> 5 2 9 <u>current</u> 0.6 9.6	3 0 56 <1 885 1209 921 1205 2662 history1 4 3 8 <u>history1</u> 0.5 8.8	24 0 43 <1 513 1677 673 879 2423 history2 8 3 8 3 8 history2 0.5 10.7
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 ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 imit/base >20 imit/base >3 >20 >30	0 62 <1 1026 1148 985 1306 3091 <u>current</u> 5 2 9 <u>current</u> 0.6 9.6 22.1	3 0 56 <1 885 1209 921 1205 2662 history1 4 3 8 <u>history1</u> 0.5 8.8 20.1	24 0 43 <1 513 1677 673 879 2423 history2 8 3 8 3 8 history2 0.5 10.7 23.4
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 ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 <i>limit/base</i> >20 <i>limit/base</i> >3 >20	0 62 <1 1026 1148 985 1306 3091 <u>current</u> 5 2 9 <u>current</u> 0.6 9.6	3 0 56 <1 885 1209 921 1205 2662 history1 4 3 8 <u>history1</u> 0.5 8.8	24 0 43 <1 513 1677 673 879 2423 history2 8 3 8 3 8 history2 0.5 10.7
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 ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 2060 200 200 200 200 200 200	0 62 <1 1026 1148 985 1306 3091 <u>current</u> 5 2 9 <u>current</u> 0.6 9.6 22.1	3 0 56 <1 885 1209 921 1205 2662 history1 4 3 8 <u>history1</u> 0.5 8.8 20.1	24 0 43 <1 513 1677 673 879 2423 history2 8 3 8 history2 0.5 10.7 23.4
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 ASTM D7844 *ASTM D7844	0 0 0 1010 1070 1150 1270 2060 <i>limit/base</i> >20 <i>limit/base</i> >3 >20 <i>limit/base</i> >3 30	0 62 <1 1026 1148 985 1306 3091 current 5 2 9 current 0.6 9.6 22.1 current	3 0 56 <1 885 1209 921 1205 2662 history1 4 3 8 history1 0.5 8.8 20.1 history1	24 0 43 <1 513 1677 673 879 2423 history2 8 3 8 3 8 history2 0.5 10.7 23.4 history2

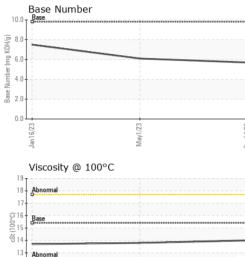


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OIL ANALYSIS REPORT



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723	
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Submitted By: CASEY WILKIE

Page 2 of 2