

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

SJB2816

Diesel Engine Fluid PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

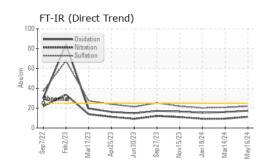
Fluid Condition

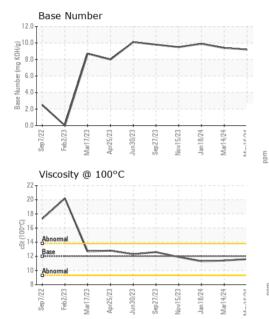
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

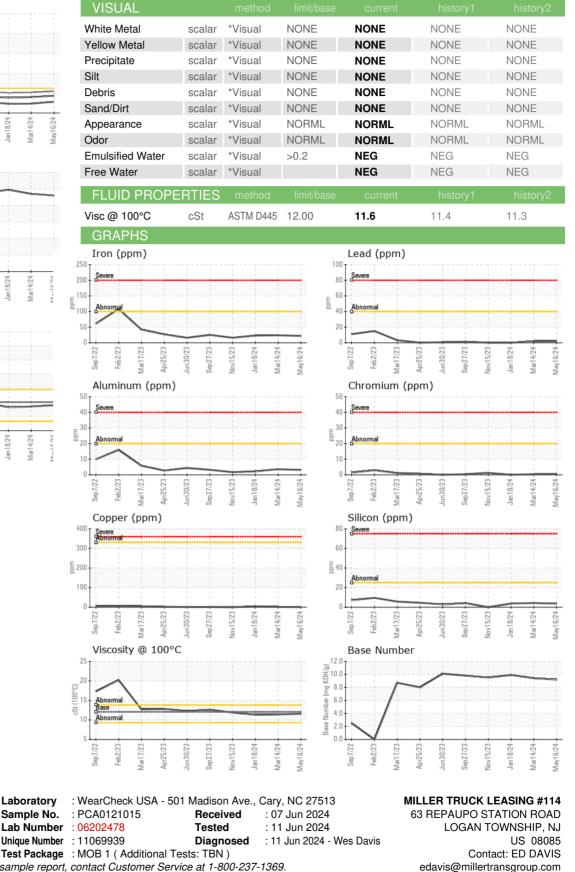
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0121015	PCA0116905	PCA0113589
Sample Date		Client Info		16 May 2024	14 Mar 2024	18 Jan 2024
Machine Age	mls	Client Info		267742	252781	243187
Oil Age	mls	Client Info		14956	0	6803
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	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 METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	22	24	23
Chromium	ppm	ASTM D5185m		<1	<1	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m	~	0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	4	2
Lead	ppm	ASTM D5185m	>40	2	2	0
Copper	ppm	ASTM D5185m		<1	2	5
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m	210	۰ <1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
	ppm				-	-
ADDITIVES	PPIII	method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	2	current 0	history1 2	history2 6
ADDITIVES Boron Barium		method	2 0	current 0 0	history1 2 2	history2 6 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 0 0 62	history1 2 2 64	history2 6 0 68
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 0 0 62 <1	history1 2 2 64 <1	history2 6 0 68 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 0 0 62 <1 943	history1 2 2 64 <1 910	history2 6 0 68 0 1080
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 0 0 62 <1 943 1079	history1 2 2 64 <1 910 1141	history2 6 0 68 0 1080 1356
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	2 0 50 0 950 1050 995	Current 0 62 <1 943 1079 1029	history1 2 2 64 <1 910 1141 1053	history2 6 0 68 0 1080 1356 1220
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180	Current 0 0 62 <1 943 1079 1029 1220	history1 2 2 64 <1 910 1141 1053 1216	history2 6 0 68 0 1080 1356 1220 1536
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	2 0 50 0 950 1050 995	Current 0 62 <1 943 1079 1029	history1 2 2 64 <1 910 1141 1053 1216 3276	history2 6 0 68 0 1080 1356 1220 1536 4190
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600	Current 0 62 <1 943 1079 1029 1220 3310 Current	history1 2 2 64 <1 910 1141 1053 1216 3276 history1	history2 6 0 68 0 1080 1356 1220 1536 4190 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current 0 0 62 <1 943 1079 1029 1220 3310 current 4	history1 2 2 64 <1 910 1141 1053 1216 3276 history1 4	history2 6 0 68 0 1080 1356 1220 1536 4190 history2 4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	Current 0 62 <1 943 1079 1029 1220 3310 Current	history1 2 2 64 <1 910 1141 1053 1216 3276 history1	history2 6 0 68 0 1080 1356 1220 1536 4190 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current 0 0 62 <1 943 1079 1029 1220 3310 current 4	history1 2 2 64 <1 910 1141 1053 1216 3276 history1 4	history2 6 0 68 0 1080 1356 1220 1536 4190 history2 4 33 6
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current 0 0 62 <1 943 1079 1029 1220 3310 current 4 25	history1 2 64 <1 910 1141 1053 1216 3276 history1 4 46 12 history1	history2 6 0 68 0 1080 1356 1220 1536 4190 history2 4 33 6 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25 >20	current 0 62 <1 943 1079 1029 1220 3310 current 4 25 4 25 4 1.7	history1 2 2 64 <1 910 1141 1053 1216 3276 history1 4 46 12 history1 1.2	history2 6 0 68 0 1080 1356 1220 1536 4190 history2 4 33 6 history2 1.2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >25 >20	current 0 62 <1 943 1079 1029 1220 3310 current 4 25 4 current	history1 2 64 <1 910 1141 1053 1216 3276 history1 4 46 12 history1	history2 6 0 68 0 1080 1356 1220 1536 4190 history2 4 33 6 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current 0 62 <1 943 1079 1029 1220 3310 current 4 25 4 25 4 1.7	history1 2 2 64 <1 910 1141 1053 1216 3276 history1 4 46 12 history1 1.2	history2 6 0 68 0 1080 1356 1220 1536 4190 history2 4 33 6 history2 1.2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	current 0 0 62 <1 943 1079 1029 1220 3310 current 4 25 4 25 4 1.7 1.3	history1 2 2 64 <1 910 1141 1053 1216 3276 history1 4 46 12 history1 1.2 9.4	history2 6 0 68 0 1080 1356 1220 1536 4190 history2 4 33 6 history2 1.2 9.2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 imit/base >25 imit/base >3 >20	current 0 62 <1 943 1079 1029 1220 3310 current 4 25 4 25 4 1.7 11.3 22.0	history1 2 2 64 <1 910 1141 1053 1216 3276 history1 4 46 12 history1 1.2 9.4 20.8	history2 6 0 68 0 1080 1356 1220 1536 4190 history2 4 33 6 history2 1.2 9.2 20.2



OIL ANALYSIS REPORT







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.

250

200

100

50

50

40

30

20 10

0

400

300

la 200

100

25

20

15

Laboratory

Sample No.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: MILLOG [WUSCAR] 06202478 (Generated: 06/11/2024 13:35:22) Rev: 1

Certificate 12367

Contact/Location: ED DAVIS - MILLOG

T: (856)214-3521

F: (856)214-3663