

OIL ANALYSIS REPORT

Sample Rating Trend





Area (70859PC) Feldman Lumber-Tractor [Feldman Lumber-Tractor] 196D255 Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0106081	PCA0091121	
Sample Date		Client Info		30 Jan 2024	15 Mar 2023	
Machine Age	mls	Client Info		69920	51882	
Oil Age	mls	Client Info		18038	3746	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINA	ΓΙΟΝ	method	limit/base	current	history1	history
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history
Iron	ppm	ASTM D5185m	>80	4	5	
Chromium	ppm	ASTM D5185m		<1	<1	
Nickel	ppm	ASTM D5185m		0	0	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>30	3	3	
Lead	ppm	ASTM D5185m		0	0	
Copper	ppm	ASTM D5185m		9	5	
Tin	ppm	ASTM D5185m	>5	ء <1	<1	
Vanadium	ppm	ASTM D5185m	20	<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history
Boron	ppm	ASTM D5185m	2	27	23	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	50	64	60	
Manganese	ppm	ASTM D5185m	0	<1	<1	
Magnesium						
Ũ	ppm	ASTM D5185m	950	735	799	
Calcium	ppm ppm			735 1164	799 1137	
	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995			
Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m	1050	1164	1137	
Phosphorus	ppm	ASTM D5185m ASTM D5185m	1050 995	1164 903	1137 940	
Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180	1164 903 1073	1137 940 1114	
Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base	1164 903 1073 3260	1137 940 1114 2635	
Phosphorus Zinc Sulfur CONTAMINA	ppm ppm ppm ppm NTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1050 995 1180 2600 limit/base	1164 903 1073 3260 current	1137 940 1114 2635 history1	 history.
Phosphorus Zinc Sulfur CONTAMINAI Silicon	ppm ppm ppm ppm NTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1050 995 1180 2600 limit/base >20	1164 903 1073 3260 current 3	1137 940 1114 2635 history1 6	 history:
Phosphorus Zinc Sulfur CONTAMINA Silicon Sodium	ppm ppm ppm ppm ppm VTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >20	1164 903 1073 3260 current 3 1	1137 940 1114 2635 history1 6 0	 history.
Phosphorus Zinc Sulfur CONTAMINAI Silicon Sodium Potassium	ppm ppm ppm ppm ppm VTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >20 >20	1164 903 1073 3260 current 3 1 <1	1137 940 1114 2635 history1 6 0 2	 history
Phosphorus Zinc Sulfur CONTAMINAL Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm NTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 <i>limit/base</i> >20 >20 <i>limit/base</i> >3	1164 903 1073 3260 current 3 1 <1 <1 current	1137 940 1114 2635 history1 6 0 2 2 history1	 history history
Phosphorus Zinc Sulfur CONTAMINAL Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm vTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 imit/base >20 20 imit/base >3 >20	1164 903 1073 3260 current 3 1 <1 <1 current 0.2	1137 940 1114 2635 history1 6 0 2 2 history1 0.2	 history history
Phosphorus Zinc Sulfur CONTAMINA Solicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm vTS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	1050 995 1180 2600 imit/base >20 20 imit/base >3 >20	1164 903 1073 3260 current 3 1 <1 <1 current 0.2 6.6	1137 940 11114 2635 history1 6 0 2 history1 0.2 6.5	 history history. history.
Phosphorus Zinc Sulfur CONTAMINA Solicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm vTS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	1050 995 1180 2600 limit/base >20 limit/base >3 >20 >30 limit/base	1164 903 1073 3260 current 3 1 <1 <1 current 0.2 6.6 18.1	1137 940 1114 2635 history1 6 0 2 history1 0.2 6.5 17.9	 history2 history2

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

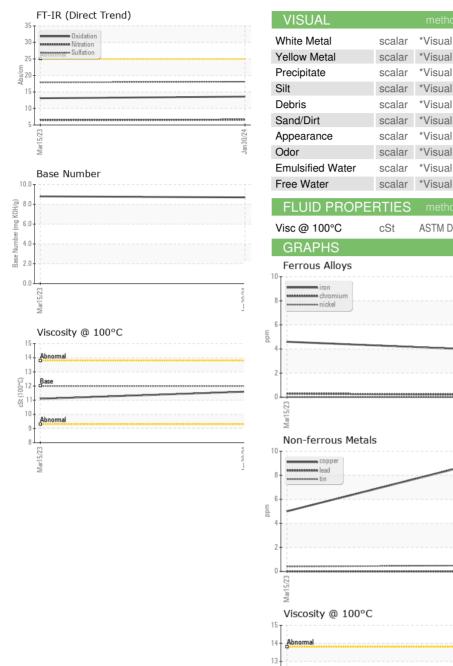
There is no indication of any contamination in the oil.

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.



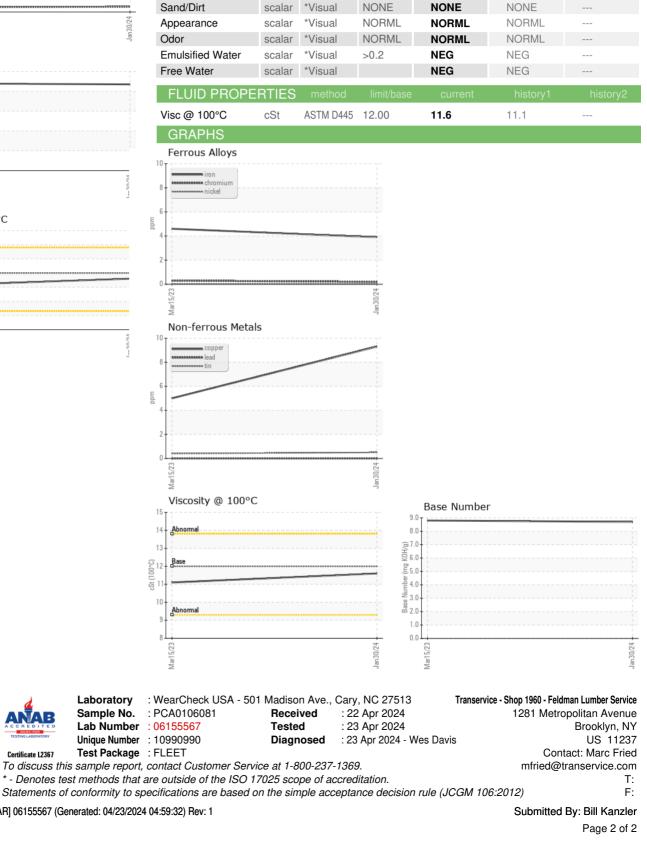
OIL ANALYSIS REPORT



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Laboratory

Sample No.



NONE

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Certificate 12367