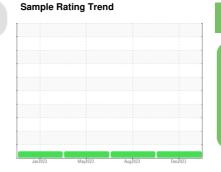


OIL ANALYSIS REPORT

(60464PC) Feldman Lumber-Tractor [Feldman Lumber-Tractor] 196D521 Component Diesel Engine Fluid

PETRO CANADA DU





NORMAL

Resample at the next service interval to monitor.

There is no indication of any contamination in the

Metal levels are typical for a new component

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

oil is suitable for further service.

DIAGNOSIS Recommendation

Wear

oil.

breaking in. Contamination

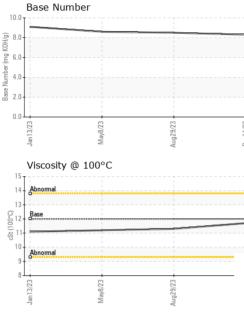
Fluid Condition

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0106082	PCA0098297	PCA0089311
Sample Date		Client Info		11 Dec 2023	29 Aug 2023	08 May 2023
Machine Age	mls	Client Info		63999	29 Aug 2023 62148	59126
Oil Age	mis	Client Info		1851	3202	4937
Oil Changed	11115	Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
		method	limit/base	current	history1	history2
Fuel		WC Method		<1.0	<1.0	<1.0
Water			>0.2	<1.0 NEG	<1.0 NEG	<1.0 NEG
		WC Method	>0.2	NEG	NEG	NEG
Glycol				NEG		
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	5	7	8
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm		>2	<1	0	0
Titanium	ppm	ASTM D5185m	0	0	0	0
Silver	ppm		>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	6	5	4
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m		0	2	2
Tin Vanadium	ppm	ASTM D5185m ASTM D5185m	>5	<1 <1	0 <1	<1 0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES	ppm		limit/base	-	-	-
		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	34 0	9	8
Barium	ppm	ASTM D5185m				÷
Molybdenum	ppm	ASTM D5185m	50	66 <1	61 0	56 <1
Manganese Magnesium	ppm	ASTM D5185m ASTM D5185m	950	<1 817	904	<1 867
Calcium	ppm	ASTM D5185m	1050	1151	904 890	1055
Phosphorus	ppm	ASTM D5185m	995	1017	848	904
Zinc	ppm ppm	ASTM D5185m	995 1180	1229	1076	1162
Sulfur	ppm	ASTM D5185m		3055	2813	3335
CONTAMINAN		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		3	5	6
Sodium	ppm	ASTM D5185m		1	<1	1
Potassium	ppm	ASTM D5185m	>20	6	6	3
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624		6.2	6.2	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	17.8	18.0
FLUID DEGRAI	DAT <u>IO</u> N	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.4	13.4	13.4



OIL ANALYSIS REPORT

VISUAL



	2 CZIONEW Viscosity @ 100° 15 Ahnomal 10 9 8 CZICLUE CZIONEW CZIONEW CZIONEW CZICLUE CZIONEW CZICLUE CZIC	C	Aug29/23	8 (0)HO) Base Number (mg KOH/0) Base 2	Base Number	May0.23	
	Viscosity @ 100°	C	Aug29/23	10	1.0 1.0 1.0		
	Viscosity @ 100°	C	Aug29/23	10			
	CZ/Eluer Viscosity @ 100°	C	Aug29/23				
			Aug29/23	Dec11/23			
	2						
	6- 4-						
	8						
	Non-ferrous Meta	als	Aug29/23	Dec11/23			
	2		No. of Concession, Name of Street of				
	udd 4			/			
	8- nickel						
	Ferrous Alloys						
	Visc @ 100°C	cSt	ASTM D445	12.00	11.7	11.3	11.2
			method	limit/base		history1	history2
				>0.2			NEG NEG
Dec	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
11/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Sand/Dirt		*Visual	NONE	NONE	NONE	NONE
							NONE
							NONE NONE
		scalar					NONE
	Deci1/23	White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water Free Water Visc @ 100°C GRAPHS Ferrous Alloys	White Metal scalar Yellow Metal scalar Precipitate scalar Silt scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar Free Water scalar Visc @ 100°C cSt GRAPHS Ferrous Alloys	Yellow Metal scalar *Visual Precipitate scalar *Visual Silt scalar *Visual Debris scalar *Visual Sand/Dirt scalar *Visual Sand/Dirt scalar *Visual Appearance scalar *Visual Odor scalar *Visual Emulsified Water scalar *Visual Free Water scalar *Visual Fre	White Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Precipitate scalar *Visual NONE Silt scalar *Visual NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual >0.2 Free Water scalar *Visual Visc @ 100°C cSt ASTM D445 12.00 GRAPHS Ferrous Alloys	White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual NORML NORML Emulsified Water scalar *Visual NORML NORML NEG Free Water scalar *Visual NORML NEG Free Water scalar *Visual NORML NEG Free Water scalar *Visual NIT Sand Dirt Scalar *Visual NORML NORML MORML MORML NORML Scalar *Visual NORML NORML Precipitate Scalar *Visual NORML Sand Dirt Scalar *Visual NORML Sand Dirt Scalar *Visual NORML MORML MORML MORML MORML NOR	White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Codor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual NORML NORML NORML NEG NEG Free Water scalar *Visual NORML NEG NEG Free Water scalar *Visual *Visual NEG NEG Free Water scalar *Visual *

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