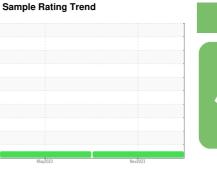


## **OIL ANALYSIS REPORT**

### Area (AW115P) Feldman Lumber-Tractor [Feldman Lumber-Tractor] 196D525 Component Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)





NORMAL

### 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.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2							
Sample Number		Client Info		PCA0098282	PCA0098279								
Sample Date		Client Info		02 Nov 2023	12 May 2023								
Machine Age	mls	Client Info		33814	30017								
Oil Age	mls	Client Info		3000	4545								
Oil Changed		Client Info		Changed	Changed								
Sample Status				NORMAL	NORMAL								
CONTAMINAT	ION	method	limit/base	current	history1	history2							
Fuel		WC Method	>5	<1.0	<1.0								
Water		WC Method	>0.2	NEG	NEG								
Glycol		WC Method		NEG	NEG								
WEAR METAL	S	method	limit/base	current	history1	history2							
Iron	ppm	ASTM D5185m	>80	9	8								
Chromium	ppm	ASTM D5185m	>5	<1	<1								
Nickel	ppm	ASTM D5185m	>2	0	0								
Titanium	ppm	ASTM D5185m		0	0								
Silver	ppm	ASTM D5185m	>3	0	0								
Aluminum	ppm	ASTM D5185m	>30	3	12								
Lead	ppm	ASTM D5185m	>30	0	0								
Copper	ppm	ASTM D5185m	>150	20	<1								
Tin	ppm	ASTM D5185m	>5	1	0								
Vanadium	ppm	ASTM D5185m		<1	0								
O a share's see													
Cadmium	ppm	ASTM D5185m		0	0								
ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	0 history1	history2							
	ppm ppm		limit/base		-								
ADDITIVES		method ASTM D5185m		current	history1	history2							
ADDITIVES Boron	ppm	method ASTM D5185m	2	current 7	history1 22	history2							
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0 50	current 7 0	history1 22 0	history2 							
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 7 0 65	history1 22 0 57	history2  							
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 7 0 65 <1	history1 22 0 57 <1	history2   							
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995	current 7 0 65 <1 903	history1 22 0 57 <1 851 1204 957	history2    							
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	2 0 50 0 950 1050 995 1180	Current 7 0 65 <1 903 992	history1 22 0 57 <1 851 1204 957 1198	history2    							
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 50 950 1050 995	current           7           0           65           <1           903           992           904	history1 22 0 57 <1 851 1204 957	history2							
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	2 0 50 0 950 1050 995 1180	current           7           0           65           <1           903           992           904           1162	history1 22 0 57 <1 851 1204 957 1198	history2							
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	2 0 50 950 1050 995 1180 2600	Current 7 0 65 <1 903 992 904 1162 2774	history1 22 0 57 <1 851 1204 957 1198 3609	history2							
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 >20	current           7           0           65           <1           903           992           904           1162           2774           current	history1           22           0           57           <1           851           1204           957           1198           3609           history1	history2							
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Chosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	2 0 50 950 1050 995 1180 2600 Limit/base >20	current           7           0           65           <1           903           992           904           1162           2774           current           6	history1           22           0           57           <1           851           1204           957           1198           3609           history1           2	history2 history2							
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	2 0 50 950 1050 995 1180 2600 Limit/base >20	current           7           0           65           <1           903           992           904           1162           2774           current           6           1	history1         22         0         57         <1         851         1204         957         1198         3609         history1         2         <1         17         history1	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 ppm	method           ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>Imit/base</b> >20 <b>Imit/base</b> >3	current         7         0         65         <1         903         992         904         1162         2774         current         6         1         current         0.3	history1         22         0         57         <1         851         1204         957         1198         3609         history1         2         <1         17         history1         0.1	history2 history2							
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>Imit/base</b> >20 <b>Imit/base</b> >3	current         7         0         65         <1         903         992         904         1162         2774         current         6         1         current         0.3         8.0	history1         22         0         57         <1         851         1204         957         1198         3609         history1         2         <1         17         history1         0.1         6.5	history2 history2 history2 history2 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 ppm	method           ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>Imit/base</b> >20 20 <b>Imit/base</b> >20	current         7         0         65         <1         903         992         904         1162         2774         current         6         1         current         0.3	history1         22         0         57         <1         851         1204         957         1198         3609         history1         2         <1         17         history1         0.1	history2 history2 history2 history2 history2							
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 t t t t	method         ASTM D5185m         ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <i>imit/base</i> >20 <i>imit/base</i> >3 >20	current         7         0         65         <1         903         992         904         1162         2774         current         6         1         current         0.3         8.0	history1         22         0         57         <1         851         1204         957         1198         3609         history1         2         <1         17         history1         0.1         6.5	history2 <tr th="" tt<=""></tr> <tr><th>ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation</th><th>ppm ppm ppm ppm ppm ppm ppm ppm ppm t t t t</th><th>method         ASTM D5185m         ASTM D5185m</th><th>2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> &gt;20 <b>imit/base</b> &gt;3 &gt;20 &gt;3 &gt;20</th><th>current         7         0         65         &lt;1         903         992         904         1162         2774         current         6         1         current         0.3         8.0         19.0</th><th>history1         22         0         57         &lt;1         851         1204         957         1198         3609         history1         2         &lt;1         17         history1         0.1         6.5         18.1</th><th>history2 history2 history2 history2</th></tr>	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 t t t t	method         ASTM D5185m         ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >20 <b>imit/base</b> >3 >20 >3 >20	current         7         0         65         <1         903         992         904         1162         2774         current         6         1         current         0.3         8.0         19.0	history1         22         0         57         <1         851         1204         957         1198         3609         history1         2         <1         17         history1         0.1         6.5         18.1	history2 history2 history2 history2
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 t t t t	method         ASTM D5185m         ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >20 <b>imit/base</b> >3 >20 >3 >20	current         7         0         65         <1         903         992         904         1162         2774         current         6         1         current         0.3         8.0         19.0	history1         22         0         57         <1         851         1204         957         1198         3609         history1         2         <1         17         history1         0.1         6.5         18.1	history2 history2 history2 history2							



cSt (100°C) Ba

Abnorm

May12/23

# **OIL ANALYSIS REPORT**

scalar

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scalar

\*Visual

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NONE

VISUAL

White Metal

Yellow Metal

Precipitate

Silt

Debris

