

OIL ANALYSIS REPORT

Area Batch Anneal [Batch Anneal] 335015-UPENDER COIL CAR

Hydraulic System

PETRO CANADA HYDREX AW 46 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

🔺 Wear

The lead level is abnormal. All other component wear rates are normal.

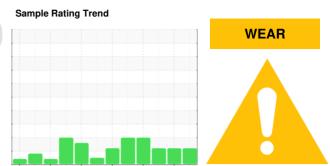
Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

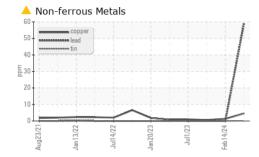
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

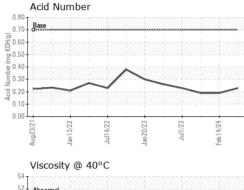
Sample Number Client Info PCA0117655 PCA0112937 PCA010772 Sample Date Client Info 07 Apr 2024 14 Feb 2024 25 Oct 2023 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Imitbase current history1 history2 Iron ppm ASTM 05185m >20 2 0 0 Nickel ppm ASTM 05185m >20 2 0 0 Silver ppm ASTM 05185m >20 2 0 0 Cadmium ppm ASTM 05185m >20 5 1 -1 1 Cadmium ppm ASTM 05185m 20 <1 0 0 0 Cadmium ppm ASTM 05185m 0 0 0 0 0 0	DER COIL	CAR					
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Dit Changed Sample Status Client Info N/A N/A ABNORMAL N/A WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >20 2 0 0 Nickel ppm ASTM D5185m >20 0 0 -1 Titanium ppm ASTM D5185m >20 0 0 -1 Silver ppm ASTM D5185m >20 2 0 0 Lead ppm ASTM D5185m >20 2 0 0 Copper ppm ASTM D5185m >20 5 1 -1 Tin ppm ASTM D5185m >20 5 1 -1 Copper ppm ASTM D5185m >20 5 1 -1 Copper ppm ASTM D5185m 0 -1 0 0 Copper ppm ASTM D5185m 0 -1 0		hrs	Client Info		•	0	0
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Silver ppm ASTM D5185m <1 0 0 Numinum ppm ASTM D5185m >20 2 0 0 ead ppm ASTM D5185m >20 5 1 <1	Nickel	ppm	ASTM D5185m	>20	0	0	<1
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Numinum ppm ASTM D5185m >20 2 0 0 Lead ppm ASTM D5185m >20 5 1 <1	Silver		ASTM D5185m		<1	0	0
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Magnesium ppm ASTM D5185m 0 4 0 8 Calcium ppm ASTM D5185m 50 65 48 60 Phosphorus ppm ASTM D5185m 330 338 313 364 Zinc ppm ASTM D5185m 430 421 381 476 Sulfur ppm ASTM D5185m 760 1393 792 939 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1	Molybdenum	ppm	ASTM D5185m	0	<1	0	0
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Sulfur ppm ASTM D5185m 760 1393 792 939 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1 <1 0 Sodium ppm ASTM D5185m >15 0 <1 <1 0 Potassium ppm ASTM D5185m >20 1 0 0 0 Potassium ppm ASTM D5185m >20 1 0 0 0 Vater % ASTM D6304 >0.05 NEG NEG NEG FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 4 14063 5948 Particles >14µm ASTM D7647 >1300 4 2835 1444 Particles >21µm ASTM D7647 >40 29 7 <th< td=""><td>Phosphorus</td><td>ppm</td><td>ASTM D5185m</td><td>330</td><td>338</td><td>313</td><td>364</td></th<>	Phosphorus	ppm	ASTM D5185m	330	338	313	364
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Silicon ppm ASTM D5185m >15 0 <1 <1 Sodium ppm ASTM D5185m 0 1 0 0 Potassium ppm ASTM D5185m >20 1 0 0 Potassium ppm ASTM D5185m >20 1 0 0 Vater % ASTM D6304 >0.05 NEG NEG NEG FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 ▲ 14063 5948 Particles >6µm ASTM D7647 >1300 ▲ 2835 1444 Particles >14µm ASTM D7647 >160 145 46 Particles >21µm ASTM D7647 >40 29 7 Particles >38µm ASTM D7647 >10 0 1 Particles >71µm ASTM D7647 >3 0 1 <	Sulfur	ppm	ASTM D5185m	760	1393	792	939
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FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 ▲ 14063 5948 Particles >6µm ASTM D7647 >1300 ▲ 2835 ● 1444 Particles >14µm ASTM D7647 >160 145 46 Particles >14µm ASTM D7647 >40 29 7 Particles >21µm ASTM D7647 >10 0 1 Particles >38µm ASTM D7647 >10 0 1 Particles >71µm ASTM D7647 >3 0 1 Particles >04406 (c) >19/17/14 </td <td>Potassium</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>20</td> <td>1</td> <td>0</td> <td>0</td>	Potassium	ppm	ASTM D5185m	>20	1	0	0
Particles >4µm ASTM D7647 >5000 ▲ 14063 5948 Particles >6µm ASTM D7647 >1300 ▲ 2835 ■ 1444 Particles >14µm ASTM D7647 >160 145 46 Particles >21µm ASTM D7647 >40 29 7 Particles >38µm ASTM D7647 >10 0 1 Particles >71µm ASTM D7647 >3 0 1 Dil Cleanliness ISO 4406 (c) >19/17/14 4 21/19/14 20/18/13	Vater	%	ASTM D6304	>0.05	NEG	NEG	NEG
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Particles >21μm ASTM D7647 >40 29 7 Particles >38μm ASTM D7647 >10 0 1 Particles >38μm ASTM D7647 >3 0 1 Particles >71μm ASTM D7647 >3 0 1 Dil Cleanliness ISO 4406 (c) >19/17/14 4 21/19/14 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>1300		A 2835	1444
Particles >38μm ASTM D7647 >10 0 1 Particles >71μm ASTM D7647 >3 0 1 Dil Cleanliness ISO 4406 (c) >19/17/14 ▲ 21/19/14 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm		ASTM D7647	>160			46
Particles >71μm ASTM D7647 >3 0 1 Dil Cleanliness ISO 4406 (c) >19/17/14 ▲ 21/19/14 ● 20/18/13 FLUID DEGRADATION method limit/base current history1 history2	Particles >21µm		ASTM D7647	>40		29	7
Dil Cleanliness ISO 4406 (c) >19/17/14	Particles >38µm		ASTM D7647	>10		0	1
FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>3		0	1
	Dil Cleanliness		ISO 4406 (c)	>19/17/14		1 /19/14	20/18/13
Acid Number (AN) mg KOH/g ASTM D8045 0.70 0.23 0.19 0.19	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	0.23	0.19	0.19

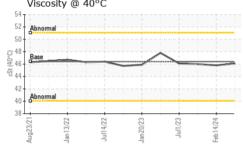




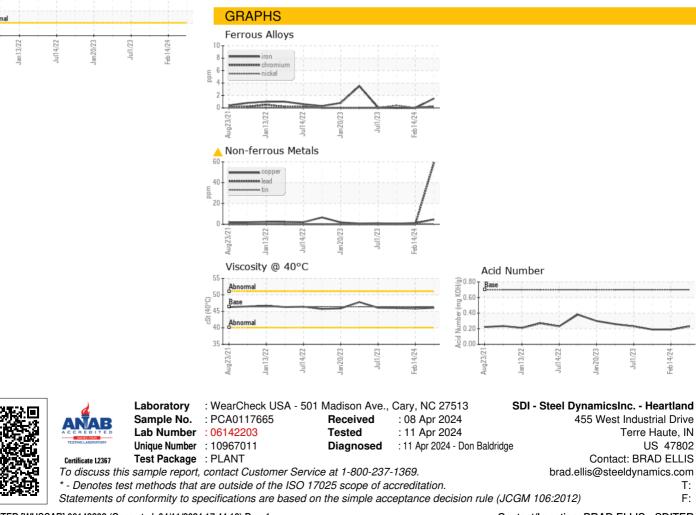
OIL ANALYSIS REPORT







VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	🔺 MODER	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.4	46.1	45.8	46.0
SAMPLE IMAG	iES	method	limit/base	current	history1	history2
Color						
Bottom				C- C		



Report Id: SDITER [WUSCAR] 06142203 (Generated: 04/11/2024 17:44:18) Rev: 1

Contact/Location: BRAD ELLIS - SDITER