

## **OIL ANALYSIS REPORT**

Sample Rating Trend





### PETRO CANADA HYDREX AW 46 (300 LTR)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The amount and size of particulates present in the system is acceptable. There is no indication of any contamination in the component.

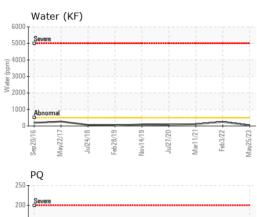
#### Fluid Condition

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

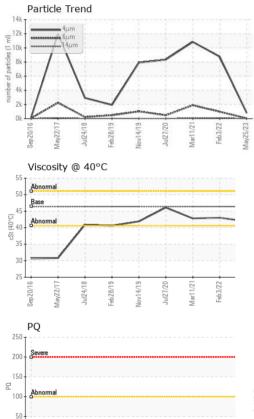
5mp2016 Mmy2017 Ju22018 Feb2019 Ju22020 Mmz2021 Feb2022 Mmy2023							
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		WC0804548	WC05504434	WC0547235	
Sample Date		Client Info		25 May 2023	03 Feb 2022	11 Mar 2021	
Machine Age	mths	Client Info		0	61	0	
Oil Age	mths	Client Info		0	5	0	
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2	
PQ		ASTM D8184		10	15		
Iron	ppm	ASTM D5185m	>20	2	2	1	
Chromium	ppm	ASTM D5185m	>20	<1	6	<1	
Nickel	ppm	ASTM D5185m	>20	0	0	0	
Titanium	ppm	ASTM D5185m		0	0	0	
Silver	ppm	ASTM D5185m		0	<1	0	
Aluminum	ppm	ASTM D5185m	>20	<1	0	0	
Lead	ppm	ASTM D5185m	>20	0	0	<1	
Copper	ppm	ASTM D5185m	>20	8	8	7	
Tin	ppm	ASTM D5185m	>20	<1	0	0	
Antimony	ppm	ASTM D5185m				0	
Vanadium	ppm	ASTM D5185m		0	0	0	
Cadmium	ppm	ASTM D5185m		0	0	0	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	0	0	
Barium	ppm	ASTM D5185m	0	0	0	0	
Molybdenum	ppm	ASTM D5185m	0	0	0	0	
Manganese	ppm	ASTM D5185m	0	<1	0	0	
Magnesium	ppm	ASTM D5185m	0	4	3	1	
Calcium	ppm	ASTM D5185m	50	29	41	34	
Phosphorus	ppm	ASTM D5185m	330	331	355	328	
Zinc	ppm	ASTM D5185m	430	359	390	391	
Sulfur	ppm	ASTM D5185m	760	1704	1496	1414	
CONTAMINANT	S	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	<1	0	<1	
Sodium	ppm	ASTM D5185m		<1	0	0	
Potassium	ppm	ASTM D5185m	>20	<1	0	0	
Water	%	ASTM D6304	>0.05	0.004	0.024	0.011	
ppm Water	ppm	ASTM D6304	>500	41.3	249.0	113.5	
FLUID CLEANLI	NESS	method	limit/base	current	history1	history2	
Particles >4µm		ASTM D7647		801	8742	10836	
Particles >6µm		ASTM D7647	>5000	27	979	1898	
Particles >14µm		ASTM D7647	>640	4	93	64	
Particles >21µm		ASTM D7647	>160	1	21	14	
Particles >38µm		ASTM D7647	>40	0	2	1	
Particles >71µm		ASTM D7647		0	0	0	
Oil Cleanliness		ISO 4406 (c)	>/19/16	17/12/9	20/17/14	21/18/13	



# **OIL ANALYSIS REPORT**





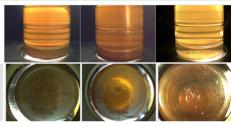


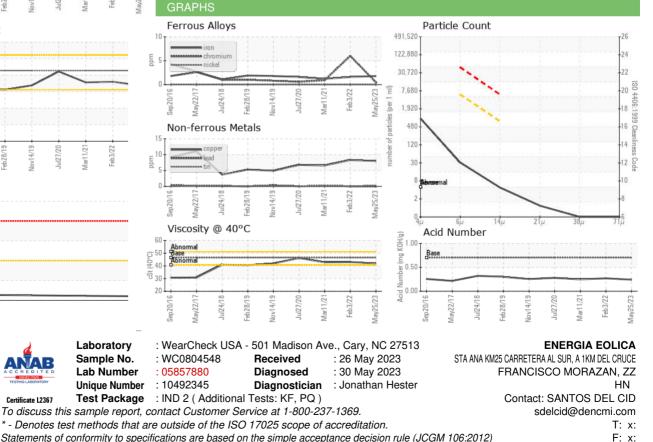
Π

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	0.24	0.27	0.249
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	NONE	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 PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.4	41.9	43.0	42.8
SAMPLE IMAGES		method	limit/base	current	history1	history2

Color

Bottom





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

Certificate L2367

Contact/Location: SANTOS DEL CID - ENEFRA