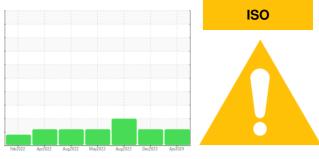


## **OIL ANALYSIS REPORT**

Sample Rating Trend



**BL-43** Component West Gearbox Fluid PETRO CANADA SYNDURO SHB ISO 220 (9 GAL)

### DIAGNOSIS

Machine Id

#### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

## Wear

All component wear rates are normal.

## Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

#### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

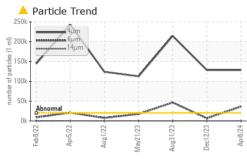
SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2		
Sample Number		Client Info		SBP0000910	SBP0001140	SBP0001822		
Sample Date		Client Info		08 Apr 2024	12 Dec 2023	31 Aug 2023		
Machine Age		Client Info		0	0	0		
Oil Age		Client Info		0	0	0		
Oil Changed		Client Info		N/A	N/A	N/A		
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2		
PQ		ASTM D8184		33	15	16		
Iron	ppm	ASTM D5185m	>200	9	3	4		
Chromium	ppm	ASTM D5185m	>15	0	0	0		
Nickel	ppm	ASTM D5185m	>15	<1	0	0		
Titanium	ppm	ASTM D5185m		0	0	0		
Silver	ppm	ASTM D5185m		0	0	0		
Aluminum	ppm	ASTM D5185m	>25	<1	0	0		
Lead	ppm	ASTM D5185m	>100	0	0	0		
Copper	ppm	ASTM D5185m	>200	2	0	0		
Tin	ppm	ASTM D5185m	>25	<1	0	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		
Barium	ppm	ASTM D5185m	5.0	0	0	7		
Molybdenum	ppm	ASTM D5185m	0.0	0	0	0		
Manganese	ppm	ASTM D5185m		1	0	0		
Magnesium	ppm	ASTM D5185m	5.0	2	0	5		
Calcium	ppm	ASTM D5185m	5.0	7	0	0		
Phosphorus	ppm	ASTM D5185m	100	301	292	290		
Zinc	ppm	ASTM D5185m	5.0	0	0	3		
Sulfur	ppm	ASTM D5185m	1900	1077	675	741		
CONTAMINANTS	6	method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	<u>⊳50</u>	15	14	9		
Sodium	ppm	ASTM D5185m	200	2	0	0		
Potassium	ppm	ASTM D5185m	>20	2	0	<1		
Water	%	ASTM D6304		0.001	0.003	0.003		
ppm Water	ppm	ASTM D6304	>2000	9	30	34.0		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2		
Particles >4µm		ASTM D7647	>20000	<b>128411</b>	128544	214510		
Particles >6µm		ASTM D7647	>5000	<u> </u>	6882	<b>4</b> 6559		
Particles >14µm		ASTM D7647	>640	192	154	<b>A</b> 282		
Particles >21µm		ASTM D7647	>160	40	53	<b>5</b> 0		
Particles >38µm		ASTM D7647	>40	2	0	3		
Particles >71µm		ASTM D7647	>10	0	0	0		
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<u> </u>	▲ 24/20/14	▲ 25/23/15		
FLUID DEGRADA		method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.3	0.95	0.84	0.81		
:34:09) Rev: 1	- 0			S	Submitted By: NATHAN KUGLER			

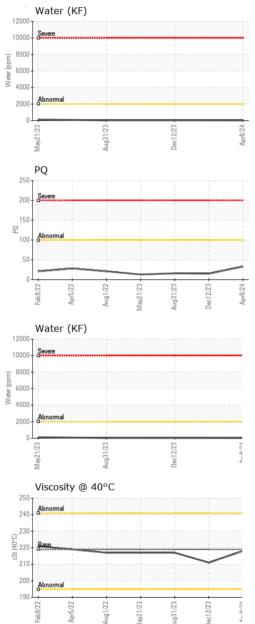
Report Id: MONHAL [WUSCAR] 06151075 (Generated: 04/19/2024 09:34:09) Rev: 1

Submitted By: NATHAN KUGLER

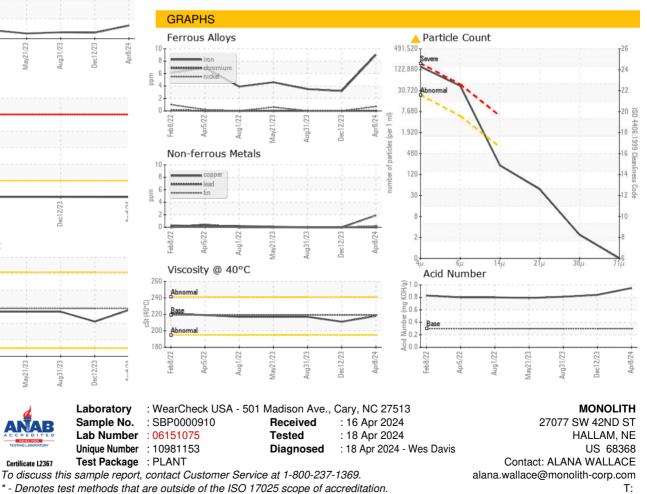


# **OIL ANALYSIS REPORT**





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	NONE	NONE	NONE
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	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
FLUID PROPERT Visc @ 40°C	IES cSt	method ASTM D445	limit/base 219	current 218	history1 211	history2 217
	cSt					
Visc @ 40°C	cSt	ASTM D445	219	218	211	217



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

Report Id: MONHAL [WUSCAR] 06151075 (Generated: 04/19/2024 09:34:09) Rev: 1

Submitted By: NATHAN KUGLER

Page 2 of 2

F: