

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

PLATE FREEZER POWER PACK 4 (S/N S0395MFMPTHAA3) Component

Hydraulic System

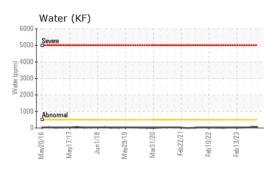
PETRO CANADA PURITY FG AW HYDRAULIC 46 (65 GAL)

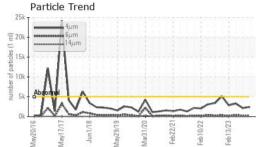


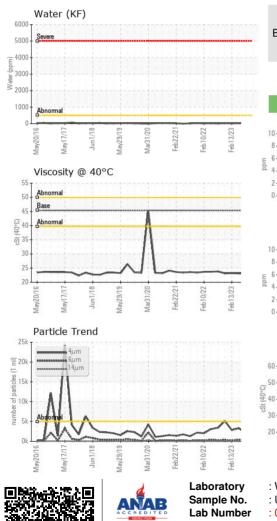
DIAGNOSIS	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		USP0003737	USP0000611	USP248077
Resample at the next service interval to monitor.	Sample Date		Client Info		13 Nov 2023	10 Aug 2023	10 May 2023
Wear	Machine Age	hrs	Client Info		0	0	0
All component wear rates are normal.	Oil Age	hrs	Client Info		0	0	0
Contamination	Oil Changed		Client Info		N/A	N/A	N/A
There is no indication of any contamination in the	Sample Status				NORMAL	NORMAL	NORMAL
oil. The amount and size of particulates present in the system are acceptable.	WEAR METALS		method	limit/base	current	history1	history2
Fluid Condition	Iron	ppm	ASTM D5185m	>20	2	5	3
The AN level is acceptable for this fluid. The	Chromium	ppm	ASTM D5185m	>20	2	2	2
condition of the oil is suitable for further service.	Nickel	ppm	ASTM D5185m	>20	0	0	<1
	Titanium	ppm	ASTM D5185m		<1	0	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>20	0	0	<1
	Lead	ppm	ASTM D5185m	>20	0	0	0
	Copper	ppm	ASTM D5185m		1	1	1
	Tin	ppm	ASTM D5185m		0	0	<1
	Vanadium	ppm	ASTM D5185m		<1	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		0	<1	0
	Molybdenum	ppm	ASTM D5185m		0	0	<1
	Manganese	ppm	ASTM D5185m		0	0	<1
	Magnesium	ppm	ASTM D5185m		0	<1	0
	Calcium	ppm	ASTM D5185m		0	0	0
	Phosphorus	ppm	ASTM D5185m		112	190	181
	Zinc	ppm	ASTM D5185m		0	51	48
	Sulfur	ppm	ASTM D5185m		0	47	0
	CONTAMINANTS	6	method	limit/base		history1	history2
	Silicon	ppm	ASTM D5185m	>15	2	3	2
	Sodium	ppm	ASTM D5185m		<1	0	1
	Potassium	ppm	ASTM D5185m		0	<1	<1
	Water	%	ASTM D6304		0.004	0.004	0.003
	ppm Water	ppm	ASTM D6304		46.2	42.9	29.3
	FLUID CLEANLIN	NESS	method	limit/base		history1	history2
	Particles >4µm		ASTM D7647		2414	2136	3266
	Particles >6µm		ASTM D7647		195	238	357
	Particles >14µm		ASTM D7647		5	6	7
	Particles >21µm		ASTM D7647		1	2	1
	Particles >38µm		ASTM D7647		0	1	0
	Particles >71µm		ASTM D7647		0	0	0
	Oil Cleanliness		ISO 4406 (c)		18/15/10	18/15/10	19/16/10
	FLUID DEGRAD		method	limit/base		history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.26	0.46	0.54	0.56



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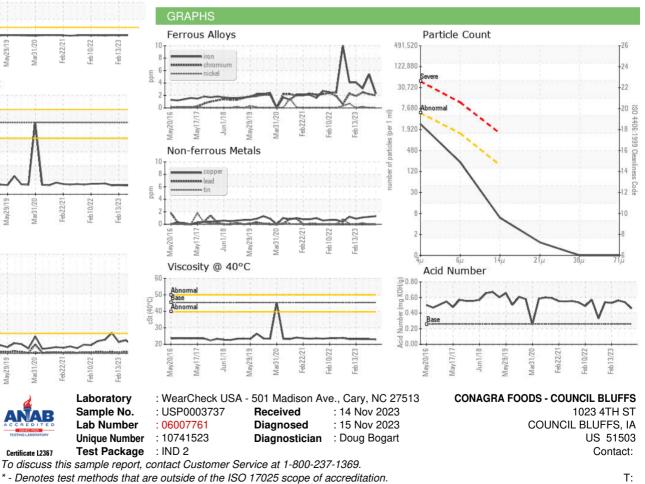






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.36	22.9	23.1	23.1
SAMPLE IMAGES	;	method	limit/base	current	history1	history2
Color				Canada Santa		

Bottom



* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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