

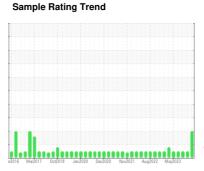
OIL ANALYSIS REPORT

DS-206

B59764 - HYDRAULIC POWER UNIT DS MFG MEZZ (S/N 42002)

Hydraulic System

PETRO CANADA PURITY FG HYDRAULIC AW 68 (--- GAL)





DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

Fluid Condition

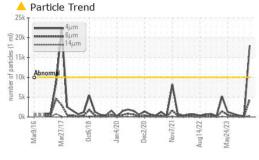
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

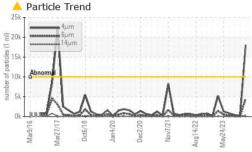
CAMPLE INCOM	AATION		15 5. 0		1.5 4	L
SAMPLE INFORM	IA HON	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0872441	WC0856014	WC0838659
Sample Date		Client Info		04 Jan 2024	06 Nov 2023	10 Sep 2023
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	0	<1
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	0	<1	<1
Tin	ppm	ASTM D5185m	>20	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES			IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		0	<1	<1
Calcium	ppm	ASTM D5185m		0		
				_	<1	<1
Phosphorus	ppm	ASTM D5185m		468	453	421
Zinc	ppm	ASTM D5185m ASTM D5185m		468 0	453 0	421 4
	ppm	ASTM D5185m		468	453	421
Zinc	ppm ppm	ASTM D5185m ASTM D5185m	limit/base	468 0	453 0	421 4
Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>15	468 0 489	453 0 494 history1	421 4 493
Zinc Sulfur CONTAMINANTS	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	>15	468 0 489 current	453 0 494 history1	421 4 493 history2
Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>15	468 0 489 current	453 0 494 history1	421 4 493 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	>15	468 0 489 current 4 0	453 0 494 history1 2 <1	421 4 493 history2 3 0
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	>15 >20	468 0 489 current 4 0	453 0 494 history1 2 <1 0	421 4 493 history2 3 0 <1
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	>15 >20 limit/base	468 0 489 current 4 0 0	453 0 494 history1 2 <1 0	421 4 493 history2 3 0 <1
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	>15 >20 limit/base >10000	468 0 489 current 4 0 current 18016	453 0 494 history1 2 <1 0 history1 269	421 4 493 history2 3 0 <1 history2 399
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647	>15 >20 limit/base >10000 >1300	468 0 489 current 4 0 0 current 18016 4550	453 0 494 history1 2 <1 0 history1 269 77 7	421 4 493 history2 3 0 <1 history2 399 104
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >10000 >1300 >160	468 0 489 current 4 0 0 current ▲ 18016 ▲ 4550 ▲ 329	453 0 494 history1 2 <1 0 history1 269 77 7	421 4 493 history2 3 0 <1 history2 399 104
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >10000 >1300 >160 >40 >10 >3	468 0 489	453 0 494 history1 2 <1 0 history1 269 77 7 1 0 0	421 4 493 history2 3 0 <1 history2 399 104 11 5 1
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >10000 >1300 >160 >40 >10	468 0 489 current 4 0 0 current ▲ 18016 ▲ 4550 ▲ 329 ▲ 80 5	453 0 494 history1 2 <1 0 history1 269 77 7 1 0	421 4 493 history2 3 0 <1 history2 399 104 11 5 1
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647	>15 >20 limit/base >10000 >1300 >160 >40 >10 >3	468 0 489 current 4 0 0 current 18016 4550 329 80 5 1	453 0 494 history1 2 <1 0 history1 269 77 7 1 0 0	421 4 493 history2 3 0 <1 history2 399 104 11 5 1

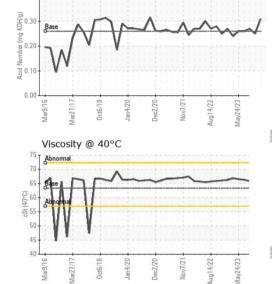


Acid Number

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	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2

CAMPLEIMACE	_	an alle a al	Discolation of the		la la tament	la la da un c
/isc @ 40°C	cSt	ASTM D445	63.34	66.4	67.6	65.8

Color





GRAP	HS							
Ferrou	s Alloys	5					▲ Particle Count	11.600
T							491,520	T26
	chromium nickel						122,880 Severe	-24
八							30,720 - Abnormal	-22
	\sim	<u> </u>		_	_		7 6801	20
Mar27/17	0ct6/18	Jan4/20	Dec2/20	Nov7/21	Aug14/22	May24/23	1,920 - 1,920	+20 +18 +16 +14 +12
Non-fe	errous N	4etals				_	99 yill 480	-16
	_ copper]						120	14
*****	lead tin						30	12
1/4		444						
XAX	_ ^					1	8	10
Mar9/16	Oct6/18	Jan4/20 -	Dec2/20	Nov7/21	Aug14/22	May24/23	2-	8
Marý Marý	0	Jan	Dec	No	Augl	May2		
Viscosi	ity @ 4	0°C					4μ 6μ 14μ 21μ 38μ Acid Number	71 <u>ŭ</u>
Abnormal							\$0.40 Tanasarana ana ana ana ana ana ana ana ana an	1111
Base Admorma	7						2 0.30 Base	
- Atmormal	V						5 0.20 S	
- 44	- 1						Base 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	
4		-	-		7		Aoid Aoid Aoid Aoid Aoid Aoid Aoid Aoid	+
Mar27/17	Oct6/18	Jan4/20	Dec2/20	Nov7/21	Aug14/22	May24/23	Mar9/16 Mar27/17 Oct6/18 Jan4/20 Dec2/20 Mov7/21	// Zyz // Z





Laboratory Sample No. Lab Number **Unique Number** Test Package : IND 2

: WC0872441 : 06056630 : 10822579

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 10 Jan 2024 Diagnosed

: 11 Jan 2024 Diagnostician : Wes Davis

Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)

HORMEL FOODS - AUSTIN

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