

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

CALFLO AF - PCA0119676

New (Unused) Oil

PETRO CANADA CALFLO AF (--- LTR)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Sample Number Client Info PCA0119676	04451 5 11505	MATION					
Sample Date Client Info 30 May 2024 Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info N/A Sample Status NORMAL CONTAMINATION method limit/base current history1 history1 Water WC Method NEG WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m 0 Aluminum ppm ASTM D5185	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0	Sample Number		Client Info		PCA0119676		
Oil Age hrs Client Info N/A Oil Changed Client Info N/A Sample Status NORMAL CONTAMINATION method limit/base current history1 history Water WC Method NEG WEAR METALS method limit/base current history1 history Iron ppm ASTM D5185m 0 Chromium ppm ASTM D5185m 0 Nickel ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Lead ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Copper ppm <	Sample Date		Client Info		30 May 2024		
Contact Cont	Machine Age	hrs	Client Info		0		
NORMAL	Oil Age	hrs	Client Info		0		
CONTAMINATION method limit/base current history1 history1 Water WC Method NEG WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m 0 Chromium ppm ASTM D5185m 0 Nickel ppm ASTM D5185m 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Copper ppm ASTM D5185m 0 Copper ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0	Oil Changed		Client Info		N/A		
WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m 0 Chromium ppm ASTM D5185m 0 Nickel ppm ASTM D5185m 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Lead ppm ASTM D5185m 0 Copper ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 DCadmium ppm ASTM D5185m 0 0	Sample Status				NORMAL		
WEAR METALS method limit/base current history1 nistory1 Iron ppm ASTM D5185m 0 Chromium ppm ASTM D5185m 0 Nickel ppm ASTM D5185m 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Lead ppm ASTM D5185m 0 Copper ppm ASTM D5185m 0 Copper ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history1	CONTAMINAT	ION	method	limit/base	current	history1	history2
Chromium	Water		WC Method		NEG		
Chromium ppm ASTM D5185m 0 Nickel ppm ASTM D5185m 0 Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Lead ppm ASTM D5185m 0 Copper ppm ASTM D5185m 0 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 <1	WEAR METAL	.S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m		0		
Nickel	Chromium	ppm	ASTM D5185m		0		
Silver	Nickel		ASTM D5185m		0		
Aluminum	Titanium	ppm	ASTM D5185m		0		
Lead	Silver	ppm	ASTM D5185m		0		
Copper ppm ASTM D5185m <1 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 <1	Aluminum	ppm	ASTM D5185m		0		
Tin	Lead	ppm	ASTM D5185m		0		
Tin	Copper	ppm	ASTM D5185m		<1		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 <1	Tin	ppm	ASTM D5185m		<1		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 <1	Vanadium	ppm	ASTM D5185m		0		
Boron	Cadmium	ppm	ASTM D5185m		0		
Barium ppm ASTM D5185m 0 <1 Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 0 0 Calcium ppm ASTM D5185m 0 2 Phosphorus ppm ASTM D5185m 0 2 Zinc ppm ASTM D5185m 0 2 Sulfur ppm ASTM D5185m 10 33 CONTAMINANTS method limit/base current history1 history Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 1 FLUID DEGRADATION method limit/base current history1 history1	Boron	ppm	ASTM D5185m	0	0		
Manganese ppm ASTM D5185m 0 <1 Magnesium ppm ASTM D5185m 0 0 Calcium ppm ASTM D5185m 0 2 Phosphorus ppm ASTM D5185m 0 2 Zinc ppm ASTM D5185m 0 2 Sulfur ppm ASTM D5185m 10 33 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m 4 Sodium ppm ASTM D5185m 1 FLUID DEGRADATION method limit/base current history1 history1	Barium	ppm	ASTM D5185m	0	<1		
Magnesium ppm ASTM D5185m 0 0 Calcium ppm ASTM D5185m 0 2 Phosphorus ppm ASTM D5185m 270 290 Zinc ppm ASTM D5185m 0 2 Sulfur ppm ASTM D5185m 10 33 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m 4 Sodium ppm ASTM D5185m 1 FLUID DEGRADATION method limit/base current history1 history1	Molybdenum	ppm	ASTM D5185m	0	0		
Calcium ppm ASTM D5185m 0 2 Phosphorus ppm ASTM D5185m 270 290 Zinc ppm ASTM D5185m 0 2 Sulfur ppm ASTM D5185m 10 33 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m 4 Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 1 FLUID DEGRADATION method limit/base current history1 history1	Manganese	ppm	ASTM D5185m	0	<1		
Calcium ppm ASTM D5185m 0 2 Phosphorus ppm ASTM D5185m 270 290 Zinc ppm ASTM D5185m 0 2 Sulfur ppm ASTM D5185m 10 33 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m 4 Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 1 FLUID DEGRADATION method limit/base current history1 history1	Magnesium	ppm	ASTM D5185m	0	0		
Phosphorus ppm ASTM D5185m 270 290 Zinc ppm ASTM D5185m 0 2 Sulfur ppm ASTM D5185m 10 33 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m 4 Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 1 FLUID DEGRADATION method limit/base current history1 history			ASTM D5185m	0	2		
Zinc ppm ASTM D5185m 0 2 Sulfur ppm ASTM D5185m 10 33 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m 4 Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 1 FLUID DEGRADATION method limit/base current history1 history	Phosphorus		ASTM D5185m	270	290		
Sulfur ppm ASTM D5185m 10 33 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m 4 Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 1 FLUID DEGRADATION method limit/base current history1 history			ASTM D5185m	0	2		
Silicon ppm ASTM D5185m 4 Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 1 FLUID DEGRADATION method limit/base current history1 history				10	33		
Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 1 FLUID DEGRADATION method limit/base current history1 history	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 1 FLUID DEGRADATION method limit/base current history1 history	Silicon	ppm	ASTM D5185m		4		
FLUID DEGRADATION method limit/base current history1 history	Sodium	ppm	ASTM D5185m		1		
	Potassium		ASTM D5185m	>20	1		
Acid Number (AN) mg KOH/g ASTM D8045 0.03 0.048	FLUID DEGRAI	NOITAC	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.03	0.048		



OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual		NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32.7	32.54		
Visc @ 100°C	cSt	ASTM D445	5.40	5.84		
Viscosity Index (VI)	Scale	ASTM D2270	99	123		
SAMPLE IMAG	ES	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Ferrous Alloys 10 8 6 10 10 10 10 10 10 10 10 10			May30/24			
Non-ferrous Metals	5					
8 copper 6 copper 1 c			May30/24			
Viscosity @ 40°C				Acid Number		
Abnormal	***************************************	***************************************).0 Qi).0 Vi).0 Vi).	J5 J4		
35 +			E 0.0	Base		
Base Abnormal			0.0	02		
25			- A 0:0	00		
May30/24.			May30/24	May30/24.		May30/24
Ma			Ma	Ma		May





Certificate 12367

Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : PCA0119676 Lab Number : 06199716

ś

Unique Number : 11061839

Received : 04 Jun 2024 Tested Diagnosed

: 07 Jun 2024

: 07 Jun 2024 - Jonathan Hester Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI) **COLE OIL AND PROPANE** 265 FOREST AVE FOND DU LAC, WI US 54935

Contact: JOE BANASZEK joe@coleoil.net T:

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)

Report Id: COLFON [WUSCAR] 06199716 (Generated: 06/07/2024 19:51:10) Rev: 1

F: