

OIL ANALYSIS REPORT

Area KEMP QUARRIES / BCS - GRAVETTE Machine Id OHT119 Component

Transmission (Auto)

PETRO CANADA PRODURO TO-4 SAE 30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-2 changed fluid and filters $\ensuremath{\mathsf{)}}$

Wear

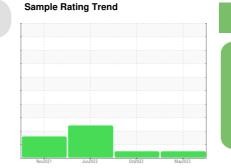
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.



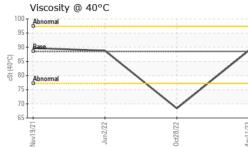


NORMAL

		140 V2 04	50 JUN2022	0012022 11	MI4X7722		
SAMPLE INFOF	RMATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		PCA0085730	PCA0070219	PCA0037503	
Sample Date		Client Info		11 May 2023	28 Oct 2022	02 Jun 2022	
Machine Age	hrs	Client Info		26286	25713	25218	
Oil Age	hrs	Client Info		26286	495	25218	
Oil Changed		Client Info		Changed	N/A	Changed	
Sample Status				NORMAL	NORMAL	ABNORMAL	
WEAR METAL	S	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>160	14	19	48	
Chromium	ppm	ASTM D5185m	>5	<1	0	<1	
Nickel	ppm	ASTM D5185m	>5	0	0	0	
Titanium	ppm	ASTM D5185m		<1	<1	<1	
Silver	ppm	ASTM D5185m	>5	0	0	<1	
Aluminum	ppm	ASTM D5185m	>50	<1	3	<u> </u>	
Lead	ppm	ASTM D5185m	>50	4	10	19	
Copper	ppm	ASTM D5185m	>225	22	47	129	
Tin	ppm	ASTM D5185m	>10	4	2	6	
Antimony	ppm	ASTM D5185m					
Vanadium	ppm	ASTM D5185m		0	0	0	
Cadmium	ppm	ASTM D5185m		0	0	<1	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2	<1	3	6	
Barium	ppm	ASTM D5185m	0	11	0	0	
Molybdenum	ppm	ASTM D5185m	0	23	2	1	
Manganese	ppm	ASTM D5185m	9	<1	<1	<1	
Magnesium	ppm	ASTM D5185m	1	372	19	26	
Calcium	ppm	ASTM D5185m	3131	1977	2959	2731	
Phosphorus	ppm	ASTM D5185m	1194	904	1013	936	
Zinc	ppm	ASTM D5185m	1281	1033	1206	1177	
Sulfur	ppm	ASTM D5185m	3811	3640	5300	5738	
CONTAMINAN	NTS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>20	14	12	a 26	
Sodium	ppm	ASTM D5185m		1	0	5	
Potassium	ppm	ASTM D5185m	>20	<1	3	3	
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	>0.1	NEG	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	NEG	



OIL ANALYSIS REPORT



	Visc @ 40°C	cSt	ASTM D445		88.8	68.4	88.8	
/	SAMPLE IM	AGES	method	limit/base	current	history1	history	
\checkmark	Color				no image	no image	no image	
0ct28/22 +	May11/23							
	Bottom				no image	no image	no image	
	GRAPHS							
	Iron (ppm)			120	Lead (ppm)			
	250 - Severe			100				
	200 - Abnormal			80				
	100			40	O			
	50 -			20				
	Nov19/21		0ct28/22 +	May11/23	Nov19/21	Jun2/22 +		
	۽ Aluminum (ppn		Octi	May	ể Chromium (p			
				12		рш <i>)</i>		
	80 - 9			10	Ĩ			
	Abnormal							
	20			4	-			
	0							
	Vov19/21		0ct28/22	May11/23	Nov19/21	Jun2/22 0ct28/22		
	Copper (ppm)		-		Silicon (ppm)	-		
	500 400 - Severe			40	Severe			
				30		<hr/>		
	Band Abnormal			튭.20	Abnormal			
	100			10				
	55 51 0			0		22	4	
	Nov19/21		0ct28/22	May11/23	Nov19/21	Jun2/22 0ct28/22		
	Viscosity @ 40°	°C		3500	Additives			
	95 - 90 - Base			3000	calcium	IS		
	00 00 00 00 00			2500 <u><u>E</u> 2000</u>	. ZINC			
	ල් ⁸⁰ Abnormal 75		- /	1500				
	70-		\checkmark	1000		**************************************	*****	
	42 12/61/0/		0ct28/22 -	May11/23	Nov19/21	Jun2/22 - 0ct28/22 -	5	
	Nov		Oct	May	Nov	Jur Octi		
Laboratory Sample No Lab Numbe	: PCA0085730	- 501 Madis Received Diagnose	: 22	ry, NC 27513 Kemp Quarries - Benton County Stone - G May 2023 15100 N Hy May 2023 Sulphur Spring:				
Unique Numl te L2367 Test Packa	ber : 10483504	Diagnost		n Felton		US 72 Conta		
	ort, contact Customer Se	ervice at 1-8	00-237-1369).	gra	vette@bentoncc		

