

OIL ANALYSIS REPORT

Sample Rating Trend NORMAL



KEMP QUARRIES / PRYOR STONE [67853] WL137 Component

Transmission (Manual) Fluid

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

	(,	Apr2020	Nov2021 Jul2022	Feb2023 Jul2023	Dec2023	
DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		PCA0084407	PCA0086241	PCA0084224
Resample at the next service interval to monitor. (Sample Date		Client Info		16 Dec 2023	06 Oct 2023	28 Jul 2023
Customer Sample Comment: Pm2 performed. All	Machine Age	hrs	Client Info		32690	32269	31785
oil samples taken. Engine oil, transmission oil, and	Oil Age	hrs	Client Info		905	484	1020
all filters changed.)	Oil Changed		Client Info		Changed	Oil Added	Changed
Wear All component wear rates are normal	Sample Status				NORMAL	NORMAL	NORMAL
All component wear rates are normal.	CONTAMINAT	ION	method	limit/base	current	history1	history2
There is no indication of any contamination in the	Water		WC Method	>0.1	NEG	NEG	NEG
oil. Fluid Condition The condition of the oil is acceptable for the time in service.	WEAR METAL	S	method	limit/base	current	history1	history2
	Iron	ppm	ASTM D5185m	>200	<1	3	4
	Chromium	ppm	ASTM D5185m	>5	0	3	0
	Nickel	ppm	ASTM D5185m	>5	0	0	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m	>7	0	0	0
	Aluminum	ppm	ASTM D5185m	>25	<1	2	3
	Lead	ppm	ASTM D5185m	>45	0	0	0
	Copper	ppm	ASTM D5185m	>225	4	5	6
	Tin	ppm	ASTM D5185m	>10	<1	0	<1
	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	2	2	1	3
	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	0	0	2	2
	Manganese	ppm	ASTM D5185m	9	<1	0	<1
	Magnesium	ppm	ASTM D5185m	1	23	22	32
	Calcium	ppm	ASTM D5185m	3131	3049	3198	3121
	Phosphorus	ppm	ASTM D5185m	1194	914	813	936
	Zinc	ppm	ASTM D5185m	1281	1078	1123	1155
	Sulfur	ppm	ASTM D5185m	3811	3402	4016	4379
	CONTAMINAN	ITS	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>125	5	6	4
	Sodium	ppm	ASTM D5185m		2	0	2
	Potassium	ppm	ASTM D5185m	>20	0	2	0
	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
			43 <i>(</i>) 1				

scalar *Visual

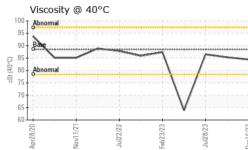
NEG

NEG

Free Water



OIL ANALYSIS REPORT



	FLUID PR	OPERTIES	S method	limit/base	current	history1	history2				
	Visc @ 40°C	cSt	ASTM D445	88.5	84.4	85.3	86.5				
\neg	SAMPLE I	MAGES	method	limit/base	current	history1	history2				
/23 /23 /23	Color				no image	no image	no image				
Jul26/23/23	Bottom				no image	no image	no image				
	GRAPHS										
	Iron (ppm)			10							
	300 -			8	0 -						
Ed	200 - Abnormal			4 G	Abnormal						
	100-			2							
	20 00	22	23		21	22	23				
	Apr28/20 Nov11/21	Jul22/22	Feb23/23 Jul28/23	Dec16/23	Apr28/20 Nov11/21	Jul22/22 Feb23/23	Jul28/23				
	Aluminum (p	pm)	-,	,1	Chromium (p	pm)					
	40 -			1							
	Abnormal				⁶ - Abnormal						
	20-10-				4 - 2		~				
	0	2			0	3					
	Apr28/20	Jul22/22	Feb23/23 Jul28/23	Dec16/23	Apr28/20 Nov11/21	Jul22/22 Feb23/23	Jul28/23				
	Copper (ppn	ו)	_,	30	Silicon (ppm)						
	400 -			25	Sminne						
E dd	300 - Abnormal			20 틆 15							
	200 -			10	0						
					0						
	Apr28/20 Nov11/21	Jul22/22	Feb23/23 Jul28/23	Dec16/23	Apr28/20 Nov11/21	Jul22/22 Feb23/23	Jul28/23				
(1-04) 183	Viscosity @ 4			_	Additives	- L	-				
	100 Abnormal			350 300	0 - calcium	s	\int				
	UNK N MULTING AND		1Γ	250 E 200	0 - zinc	-	1				
cst (k	80 - Abnormal		$\backslash /$	E 200 150			1				
	60		V	50			V				
	Apr28/20 -	Jul22/22 -	Feb23/23 . Jul28/23 .	Dec16/23 -	Apr28/20 -	Jul22/22 - Feb23/23 -	Jul28/23 -				
Laboratory Sample No. Lab Number Unique Number Test Package scuss this sample report, c	: WearCheck U : PCA0084407 : 06049691 : 10810299 : MOB 1	SA - 501 Mao Recievo Diagno Diagno	dison Ave., Ca ed : 02 sed : 04 stician : Se	ary, NC 2751 Jan 2024 Jan 2024 an Felton		Quarries - Pryo					