

OIL ANALYSIS REPORT

Sample Rating Trend



KEMP QUARRIES / PRYOR STONE [67853] WL137 Component

Front Left Final Drive

PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

PETRO CANADA PROD	OURO TO-4 SAE 50	(GAL)	Apr2020	Nov2021 Jul2022	FebZ023 Jul2023	Dec2023	
DIAGNOSIS	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		PCA0084400	PCA0086225	PCA0084226
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	2146
all filters changed.)	Oil Changed		Client Info		Oil Added	Oil Added	Changed
Wear	Sample Status				NORMAL	NORMAL	NORMAL
All component wear rates are normal. Contamination	CONTAMINA	TION	method	limit/base	current	history1	history2
There is no indication of any contamination in the oil.	Water		WC Method	>0.2	NEG	NEG	NEG
Fluid Condition	WEAR META	LS	method	limit/base	current	history1	history2
The condition of the oil is acceptable for the time in	Iron	ppm	ASTM D5185m	>800	9	10	24
service.	Chromium	ppm	ASTM D5185m	>10	0	0	0
	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m	>15	0	0	0
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m	>75	1	1	4
	Lead	ppm	ASTM D5185m	>10	<1	<1	0
	Copper	ppm	ASTM D5185m	>75	1	<1	2
	Tin	ppm	ASTM D5185m	>8	<1	<1	<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	<1	0	0
	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	0	0	<1	0
	Manganese	ppm	ASTM D5185m	0	<1	0	<1
	Magnesium	ppm	ASTM D5185m	9	19	4	15
	Calcium	ppm	ASTM D5185m	3114	3407	3811	3446
	Phosphorus	ppm	ASTM D5185m	1099	914	1032	1011
	Zinc	ppm	ASTM D5185m	1245	1116	1369	1252
	Sulfur	ppm	ASTM D5185m	7086	4132	4944	6309
	CONTAMINA	NTS	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>400	13	15	14
	Sodium	ppm	ASTM D5185m		1	<1	<1
	Potassium	ppm	ASTM D5185m	>20	0	<1	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	>0.2	NEG	NEG	NEG
	— 147 .						

scalar *Visual

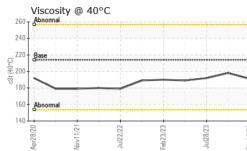
NEG

NEG

Free Water Report Id: KEMPRY [WUSCAR] 06049670 (Generated: 01/04/2024 10:01:02) Rev: 1



OIL ANALYSIS REPORT



	Visc @ 40°C	cSt	ASTM D445	213.9	191	198	192
	SAMPLE IMA	AGES	method	limit/base	current	history1	history2
Juli22/23	Color				no image	no image	no image
Feb23/23 Jul28/23 Dec16/23	Bottom				no image	no image	no image
	GRAPHS					1	
	Iron (ppm)			31	Lead (ppm)		
	1500 - Severe			2			
E	1000 Abnormal			20 톱 11			
	500 -			10			
		12				3 2	5
	Apr28/20 Nov11/21	Jul22/22 Feb23/23	Jul28/23	Dec16/23	Apr28/20	Jul22/22 Feb23/23	Jul28/23
	Aluminum (ppm)		31	Chromium (p	pm)	
	150 -			2	Courses		
	500 Abnomal			21 톱 11			
	Abnormal			10) - Abnormal		
	0						
	Apr28/20	Jul22/22 Feb23/23	Jul28/23	Dec16/23	Apr28/20	Jul22/22 Feb23/23	Jul28/23
	Copper (ppm)	, <u></u>			Silicon (ppm)		-,
	200 Severe			80	Severe		
,	150-			60			
	Abnormal			40	Abnormal		
	50			20			
	Apr28/20	Jul22/22 - Feb23/23 -	Jul28/23 -	Dec16/23	Apr28/20	Jul22/22 - Feb23/23 -	Jul28/23 -
	∉ _≊ Viscosity @ 40°		ηΓ	Der	ਵ ≗ Additives	Ju	ηſ
	260 Abnormal			400)T		\wedge
Ę	240 - 220 - Base			3000	- zinc	3	
	3 220 - Base			2500 2000	• • • • • • • • • • • • • • • • • • • •		
	160 - Abnormal			150		A STREET, STRE	And a state of the
	Apr28/20	2/22	8/23 -		8/20	3/23 -	8/23
	Apr28/20 Nov11/21	Jul22/22 Feb23/23	Jul28/23	Dec16/23	Apr28/20 Nov11/21	Jul22/22 Feb23/23	Jul28/23
Laboratory Sample No. Lab Number Unique Number Test Package	: WearCheck USA : PCA0084400 : 06049670 : 10810278 : MOB 1	- 501 Madise Recieved Diagnose Diagnostie	:02. d:04.	ry, NC 27513 Jan 2024 Jan 2024 In Felton	3 Kemp (Quarries - Pryor	Stone - Pryo 1050 E 520 F Pryor, C US 7436 Contac