

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

## Machine Id **3K-5A** Component **Compressor** Fluid **HP R&O ISO 100 (--- GAL)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		HPL0005009	HPL0004541	HPL0004513
	Sample Date		Client Info		15 Apr 2024	13 Mar 2024	15 Feb 2024
	Machine Age	hrs	Client Info		0	0	0
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>50	0	0	0
	Chromium	ppm	ASTM D5185m	>10	<1	0	<1
	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>25	0	<1	2
	Lead	ppm	ASTM D5185m	>25	0	<1	0
	Copper	ppm	ASTM D5185m	>50	2	2	<1
	Tin	ppm	ASTM D5185m	>15	0	<1	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	2	2	3
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	0	1	<1
	Water		WC Method	>0.1	NEG	NEG	NEG
	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
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	1	0
	Boron	ppm	ASTM D5185m		0	0	0
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		1	0	0
	Molybdenum	ppm	ASTM D5185m		0	0	0
	Manganese	ppm	ASTM D5185m		1	<1	0
	Magnesium	ppm	ASTM D5185m		<1	0	0
	Calcium	ppm	ASTM D5185m		11	8	10
	Phosphorus	ppm	ASTM D5185m		197	188	215

Zinc

Sulfur

Acid Number (AN)

Visc @ 40°C

ASTM D5185m

ASTM D5185m

ASTM D445

mg KOH/g ASTM D8045

ppm

ppm

cSt

Contact/Location: M.S. MANHART - MARROB

0

17548

0.67

95.0

0

17629

0.59

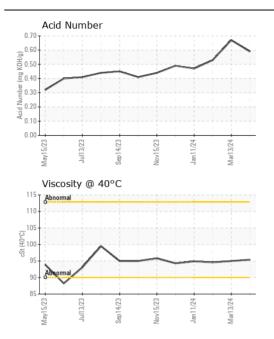
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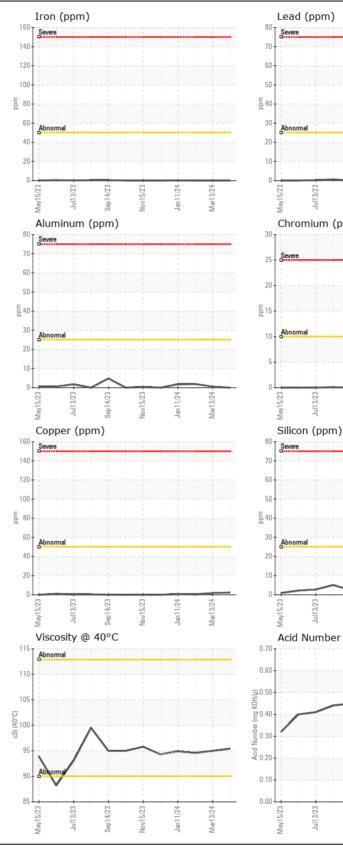
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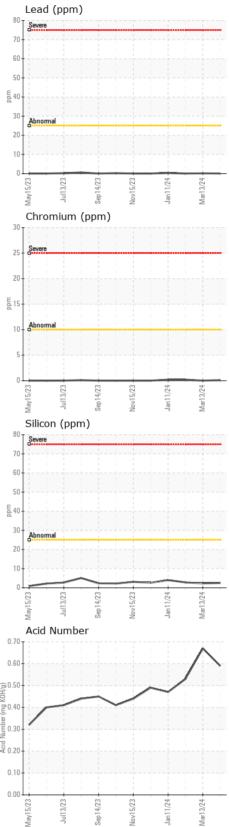
16216

0.53

94.6









MARATHON PETROLEUM CO. Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. IL. REFININF DIVISION, 400 S MARATHON AVE : HPL0005009 Received : 22 Apr 2024 Lab Number : 06156184 ROBINSON, IL Tested : 23 Apr 2024 Unique Number : 10991607 : 23 Apr 2024 - Wes Davis US 62454 Diagnosed Test Package : MOB 2 Contact: M.S. MANHART Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. mmanhart@marathonpetroleum.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (618)544-2121 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x:

Contact/Location: M.S. MANHART - MARROB Page 2 of 2