Sullivan Palatek

OIL ANALYSIS REPORT

PALASYN 45 PALATEK 1807190008 - NDSU RESEARCH CARRINGTON Component

Compressor

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

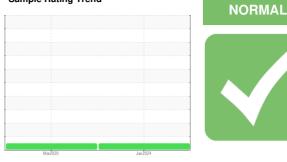
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



Sample Rating Trend



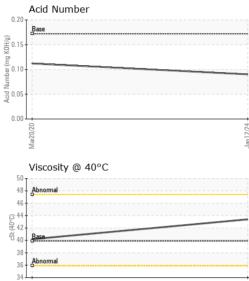
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		UCS06065720	UCS04951402	
Sample Date		Client Info		12 Jan 2024	20 Mar 2020	
Machine Age	hrs	Client Info		4233	0	
Oil Age	hrs	Client Info		700	2000	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
		and the set	Line it //n none		la balance at	la ta ta mu O
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m		0	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	0	0	
Lead	ppm	ASTM D5185m	>25	0	<1	
Copper	ppm	ASTM D5185m	>50	<1	<1	
Tin	ppm	ASTM D5185m	>15	0	0	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	<1	
ADDITIVES		method	limit/base	current	history1	history2
Boron	000	ASTM D5185m	0.0	0	0	
Barium	ppm ppm	ASTM D5185m	0.0	0	0	
	ppm	ASTM D5185m	0.0	0	2	
Molybdenum Manganese		ASTM D5185m	•	0	0	
Manganese	ppm	ASTM D5185m	0.0	0	0	
Calcium	ppm ppm	ASTM D5185m	0.0	0	0	
		ASTM D5185m	966	0 545	609	
Phosphorus Zinc	ppm	ASTM D5185m		545 0	609 4	
Sulfur	ppm	ASTM D5185m	1309	1035	4	
	ppm	ASTIVI DOTODIII	1309	1035		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	4	
Sodium	ppm	ASTM D5185m		0	0	
Potassium	ppm	ASTM D5185m	>20	0	0	
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.172	0.09	0.112	
()	39		-		- —	



Mar20/20

OIL ANALYSIS REPORT

VISUAL



	White Metal	scalar	*Visual	NONE	LIGHT	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris						
		scalar	*Visual	NONE	NONE	NONE	
4	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
4 C C L ne	Appearance	scalar	*Visual	NORML	NORML	NORML	
1	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
				11 11 11			
	FLUID PROPER		method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	39.9	43.4	40.2	
	SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
400 C L me	Color						no image
	Bottom					08	no image
	E 4						
	0 nickel			Jani 2224 1000 Kumber 1000 Kum	Acid Number		
	Non-ferrous Meta Non-ferrous Meta Non-ferrous Meta Copper Uiscosity @ 40°C			Jan 1224 Jan	Base		
	Non-ferrous Meta			12020 12020 100 K0H(a) 12020 100 K0H(a) 12020 1200 1200 12000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 10			
Laboratorv	Non-ferrous Meta Non-ferrous Meta Und Non-ferrous Meta Copper Uiscosity @ 40°C Abnomal Difference Differen		son Ave Ca	Jan 12/24 Acid Mumber (mg 0.00 Acid Mumber (mg 0.00	OZ/02/mW	JE	
Laboratory Sample No.	Non-ferrous Meta Non-ferrous Meta Non-ferrous Meta Copper Uiscosity @ 40°C			Jan 12/24 Acid Mumber (mg 0.00 Acid Mumber (mg 0.00	OZ/02/mW	JE	
	Non-ferrous Meta Non-ferrous Meta UCCCPEW Viscosity @ 40°C Viscosity @ 40°C Viscosity @ 40°C Non-ferrous Meta UCCCPEW Viscosity @ 40°C	501 Madia	dd :19.	47271uer (0.020 HOH0X Build HOX BUIL	OZ/02/mW		МСО-МАХАІ
Sample No.	Non-ferrous Meta Non-ferrous Meta UCC Viscosity @ 40°C Viscosity @ 40°C Solution WearCheck USA - UCS06065720 : 06065720	501 Madia Recieved	d : 19. ed : 22.	(0.22) (0.15 (0.16) (0.00) (0.17) (0.00)	OZ/02/mW		MCO-MAXAI ST FARGO, N
Sample No. Lab Number Unique Numbe	Non-ferrous Meta Non-ferrous Meta Viscosity @ 40°C Viscosity @ 40°C Source WearCheck USA - UCS06065720 : 06065720 : 06065720 : 10837102	501 Madia Recieved Diagnos	d : 19. ed : 22.	(0.22) (0.15 (0.16) (0.17) (0.17) (0.17) (0.17) (0.17) (0.17) (0.10)	OZ/02/mW	WES	MCO-MAXAI ST FARGO, N US 5807
Sample No. Lab Number Unique Numbe Test Package	Non-ferrous Meta Non-ferrous Meta Viscosity @ 40°C Viscosity @ 40°C Source WearCheck USA - UCS06065720 i 06065720 i 10837102 e : IND 2	501 Madia Recieved Diagnost	d : 19 ed : 22 tician : Ang	(1) (1) (1) (1) (1) (1) (1) (1)	OZ/02/mW	WES	MCO-MAXAI ST FARGO, N US 5807 ontact: DALE
Sample No. Lab Number	Non-ferrous Meta Non-ferrous Meta UCC Viscosity @ 40°C Viscosity @ 40°C Solution WearCheck USA - UCS06065720 : 06065720	501 Madia Recieved Diagnos	d : 19. ed : 22.	(0.22) (0.15 (0.16) (0.17) (0.17) (0.17) (0.17) (0.17) (0.17) (0.10)	OZ/02/mW		ST FARGO, N
Sample No. Lab Number Unique Numbe Test Package	Non-ferrous Meta Non-ferrous Meta Viscosity @ 40°C Viscosity @ 40°C Source WearCheck USA - UCS06065720 i 06065720 i 10837102 e : IND 2	501 Madia Recieved Diagnost	d : 19 ed : 22 tician : Ang	(1) (1) (1) (1) (1) (1) (1) (1)	OZ/02/mW	WES	MCO-MAXAII ST FARGO, NI US 5807 ontact: DALE
Sample No. Lab Number Unique Numbe Test Package is sample report	Non-ferrous Meta Non-ferrous Meta Viscosity @ 40°C Viscosity @ 40°C Source WearCheck USA - UCS06065720 : 06065720 : 06065720 : 10837102	501 Madia Recieved Diagnos Diagnost	d : 19 ed : 22 tician : Ang 300-237-1365	(0,0.20 (0,10) (0,10	OZ/02/mW	WES Co dalek@jem	MCO-MAXAI ST FARGO, N US 5807

Contact/Location: DALE K - UCJEMWES