

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id 69K-2A (S/N X22XG503) Component

Compressor Fluid HP R&O ISO 100 (35 GAL)

DIAGNOSIS

Recommendation

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.

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n2015 Nov2015 Mav2016 Oct2016 Mar2017 Aug2017 Jan2018 Jul2023

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		HPL0002593	HPL0002587	HPL0003075
Sample Date		Client Info		15 Nov 2023	16 Oct 2023	14 Sep 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	4	5	6
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m		<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	5	4	11
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	3	2	2
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		<1	0	<1
Calcium	ppm	ASTM D5185m		5	0	4
Phosphorus	ppm	ASTM D5185m		175	163	157
Zinc	ppm	ASTM D5185m		0	5	0
Sulfur	ppm	ASTM D5185m		15385	14455	17996
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	4	3
Sodium	ppm	ASTM D5185m		2	1	1
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.39	0.06	0.45



Abnom

Abnorma 90 80

Nov16/15

May16/16

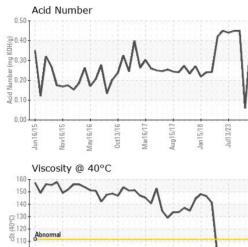
Jun16/15

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OIL ANALYSIS REPORT

VICUAL



	VISUAL		method	limit/bas	е	currer	nt	ł	nistory	1	his	story2
M	White Metal	scalar	*Visual	NONE		NONE		N	ONE		NOI	NE
	Yellow Metal	scalar	*Visual	NONE		NONE		N	ONE		NOI	NE
non II	Precipitate	scalar	*Visual	NONE		NONE		N	ONE		NOI	NE
	Silt	scalar	*Visual	NONE		NONE		N	ONE		LIG	
	Debris	scalar	*Visual	NONE		NONE			ONE		NOI	
	Sand/Dirt	scalar	*Visual	NONE		NONE		N	ONE		NO	NE
Mar16/17 Aug15/17 Jan15/18 Jul13/23	Appearance	scalar	*Visual	NORML		NORML			ORML			RML
Mar16/17 Aug15/17 Jan15/18 Jul13/23	Odor	scalar	*Visual	NORML		NORML			ORML			RML
	Emulsified Water	scalar	*Visual	>0.1		NEG			EG		NEC	
	Free Water	scalar	*Visual			NEG			EG		NEC	
NN	FLUID PROPERT	IES	method	limit/bas	е	currer	nt	ł	nistory	1	hi	story2
	Visc @ 40°C	cSt	ASTM D445			100		99	.8		100	
	SAMPLE IMAGES	\$	method	limit/bas	е	currer	nt	ł	nistory	1	his	story2
Mar16/17 - Aug15/17 - Jan15/18 - Jul13/23 -	Color					no image	9	nc	o image	2	no ii	mage
	Bottom					no image	9	nc	image	è	no i	mage
	GRAPHS											
	Iron (ppm)					ead (pp	m)					
	Severe		11111111111111111111111111111111111111		100	Severe						
	100		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	E dd	E0 1							
					الم ال	Abnormal						
	Jun16/15	6/17	Aug 15/17	Jul13/23 -	6/15	6/15	6/16	0ct13/16	6/17	5/17	Jan 15/18	Jul13/23 -
	Jun16/15 Nov16/15 May16/16	Mar16/17	Aug 15/17 Jan 15/18	IIII	Jun16/15	Nov16/15	May16/16	0ct1	Mar16/17	Aug15/17	Jan1	Jult
	Aluminum (ppm)				C	hromiu	m (pp	om)				
	100 Severe		110000000000		³⁰ T S	Severe						
a di seconda di s	50				E 20	Abnormal						
La construction de la construction	Abnormal			\sim	10- 6							
	6/15 3/15 3/16	6/17	5/17.	3/23	115 to	3/15	3/16	3/16	6/17	5/17	5/18	3/23
	Jun 16/15 Nov16/15 May16/16 Oct13/16	Mar16/17	Jan 15/17	Jul 3/23	Jun16/15	Nov16/15	May16/16	0ct13/16	Mar16/17	Aug15/17	Jan 15/18	Jul13/23
	Copper (ppm)					ilicon (p				-	-	
	200 Severe				100 -	Severe						
	100 - Abnormal		1	E E E E E E E E E E E E E E E E E E E	50	Abnormal						
	0		8	2	0		9	9	<u> </u>	17		53
	Jun 16/15 Nov16/15 May16/16 Oct13/16	Mar16/17	Jan 15/17	Jul13/23	Jun16/15	Nov16/15	May16/16	0ct13/16	Mar16/17	Aug15/1	Jan 15/18	Jul13/23
	⊰ ≥ ≤ ° Viscosity @ 40°C	N	Υ.ΎΥ			izid Num		0	2	A	- T	2
	200 T			WHOX	А - т 0.60	iciu Nuff	ibel		ooobaa			
150 (5) 150 (5)	150 - Abnormal			Bull	A 0.60 0.40 0.20 0.00	11111111	55533	111	Λ.			-
52	Abnormal 100 - Abnormal		F	imber	0.20	n-	~	~	m	TIT	~	V
		+17	18+	cid Nu	با 0.00 ي	15	16	91	17-		10	23
	un16/ ov16/ ay16/	lar16/	ug15, an15/	A	in16/	ov16/	ay16/	lct13/	lar16/	ug15/	an15/	Jul13/
Laboratory Sample No. Lab Number		i01 Madi Receive Diagnos	ison Ave., Ca d : 24 sed : 27	רחמו	Jun16					400 S	ROLEI MARAT ROBIN: US	HON A

Contact/Location: M.S. MANHART - MARROB