



Quinplex® Synthetic Food Grade Oil

Emerald Performance Products – Cheyenne, Wyoming

Ingersoll Rand Compressor



- Increased oil drain intervals from 1,000 to more than 5,000 hours
- Saved \$4,062 after 5,000 hours of use on two compressors

Customer Profile

A manufacturer of quality foam-control additives for the food industry, Emerald Performance Products has been an LE customer since 1999.

Application

Emerald has two Ingersoll Rand UP6-30 rotary screw compressors.

Challenge

With the previous oil, compressors were running hot, and the oil oxidized and turned black in less than 1,000 hours of operation.

Solution

Mike Carter, LE lubrication consultant, recommended Quinplex® Synthetic Food Grade Oil (4046), which is NSF H1 registered and cleared for use in USDA-inspected

facilities. Quinplex Synthetic Food Grade Oil has superior low-and-high-temperature performance and excellent load-carrying capacity, anti-wear properties and seal compatibility.

Results

After converting, Emerald's oil analysis showed the Quinplex Synthetic Food Grade Oil (4046) was still good for service after 5,000 hours of operation. Using the LE oil, Emerald achieved a combined cost savings for the two compressors over the 5,000-hour period of \$4,062. (See table below.)

Other LE Products Used

- Quinplex® Food Machinery Lubricant (4025)
- Quinplex® White Gear Lubricant (4090)
- Monolec® Multiplex Lubricant (4622)
- Monolec® R & O Compressor/Turbine Oil (6406)

Previous compressor Oil	Cost	Quinplex Synthetic Food Grade Oil	Cost
Oil cost for 5 oil changes	\$2,250	Oil cost for flush and initial fill	\$408
Separator elements	\$1,590	Separator elements	\$0
Filter element	\$630	Filter element	\$0
Total	\$4,470	Total	\$408

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COMPANY INFORMATION
EMERALD PERFORMANCE MATERIALS



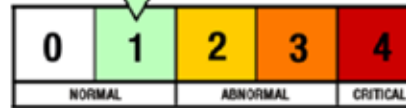
UNIT ID
COMPRESSOR #2
SECOND ID

UNIT TYPE
ROTARY SCREW COMPRESSOR
APPLICATION
PLANT/INDUSTRIAL

ACCOUNT NUMBER 59300005560025
DATE SAMPLED 07/10/09
DATE RECEIVED 07/15/09
DATE COMPLETED 07/16/09

TRACKING #
MANUFACTURER/MODEL INGERSOLL RAND SSR-UP6-30-15
LUBE MFR LUBRICATION ENGINEERS
LUBE TYPE - GRADE 4046 QUINPLEX Syn FG Oil ISO 46
MICRON RATING 10
FILTER TYPE FULLFLOW _ BYPASS
SUMP CAPACITY 3.00
HYD SYSTEM PRESSURE 0
FLUID ADDED

OVERALL SEVERITY OF REPORT
based on comments, not individual flags



LAB # 402360 **LOCATION** S **ANALYST** EAD

FLUID ANALYSIS REPORT - 800-537-7683

COMMENTS Data flagged for observation only; Viscosity is SLIGHTLY HIGH; Flagged additive levels are lower than expected for the lubricant that is identified. (This does not imply that the lubricant does not meet proper API, SAE or ISO classifications.); Lubricant change acknowledged;

SAMP #	WEAR METALS - PPM							CONTAMINANT METALS - PPM				MULTI-SOURCE METALS - PPM						ADDITIVE METALS - PPM						
	IRON	CHROMIUM	NICKEL	ALUMINUM	COPPER	LEAD	TIN	CADMIUM	SILVER	VANADIUM	SILICON	SODIUM	POTASSIUM	TITANIUM	MOLYBDENUM	ANTIMONY	MANGANESE	LITHIUM	BORON	MAGNESIUM	CALCIUM	BARIUM	PHOSPHORUS	ZINC
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	5
2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	147	29
3	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	1	4	0	103	31

SAMP #	DATE SAMPLED	UNIT TIME	LUBE TIME	LUB E CHG	FIL T ER CHG	FUE L GC	S O O L Vol.	W A T E R Hot Plate	V I S 40C CS	V I S 100C CS	T A N Total Acid	T B N Total Base	I-R O X I D A	I-R N I T R A	ISO C O D E	4 M I C R O N	6 M I C R O N	10 M I C R O N	14 M I C R O N	21 M I C R O N	38 M I C R O N	70 M I C R O N	100 M I C R O N
1	04/03/07	7964	300	N	U		<.1	47.3		0.22													
2	02/05/08	9964	2000	N	U		<.1	49.6															
3	07/10/09	14964	5000	Y	U		<.1	51.7		0.24													

SAMP #	1	2	3
1			
2			
3			

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Missing lube or unit time limits the evaluation. No warranty is expressed or implied.

Thank you to Tim McMurtry, maintenance manager, and to Mike Carter, LE lubrication consultant (pictured), for providing the information used in this report.



Based on actual user experience. Individual results may vary. Not intended to supersede manufacturer specifications.

SIC 2819
L170781 12-09