

Understanding the Analysis Report

This report is the heart of your Analysts program. Understanding and using the information it provides is the key to effective oil analysis. The back of the report contains a basic guide to the tests performed and their meaning. Contact your Analysts representative for further assistance.

➔ REFERENCE INFORMATION

This section lists the specific reference data on file for the vehicle and its systems. It includes the system you sampled (engine, transmission, etc.), makes, models, and the oil type currently in use. It also documents the “worksite”- the physical location (city / state, user, area within a plant) of the system you sampled.

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MAIL STATION STS300
PHOENIX, AZ 85072-2025

STATUS WAS
NORMAL ON 02-Jun-08

UNIT I.D.: KYRENE UNIT 7 BOP
COMPONENT: STEAM TURBINE
COMP. REF. NO.: 100432332
P. O. / REF. NO.: BPO#000144264

WORKSITE	UNIT MANUFACTURER	OIL TYPE
		CHEVRON GST ISO 32
COMPONENT TYPE	COMPONENT MANUFACTURER AND MODEL	COMPONENT SERIAL NUMBER
STEAM TURBINE	GENERAL ELECTRIC -	

MAINTENANCE RECOMMENDATIONS FOR LAB NO. 7255 Reported On: From: SALT RIVER PROJECT - KYRENE GEN STATION - TMP02, PHOENIX, AZ
ANALYSIS INDICATES CONDITIONS REQUIRING CLOSE MONITORING. CHANGE the oil filter: the oil is still serviceable. RESAMPLE at the next scheduled interval.

EVAL ID	SPECTROCHEMICAL ANALYSIS IN PARTS PER MILLION BY WEIGHT																				SAMPLE DRAWN	
	LAB NO.	Iron	Chromium	Nickel	Aluminum	Lead	Copper	Ti	Silver	Thallium	Strontium	Barium	Calcium	Phosphorus	Magnesium	Zinc	Vanadium	Molybdenum	Antimony	Mercury		
127	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<1 31-Mar-08
5403	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<1 07-Apr-08
5283	<1	<1	<1	<1	1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	2 14-Apr-08
293	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<1 21-Apr-08
6032	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<1 28-Apr-08
7255	<1	<1	<1	1	<1	1	<1	1	<1	1	2	<1	<1	<1	12	<1	<1	<1	<1	<1	<30	<1 02-Jun-08

SAMPLE INFORMATION			PHYSICAL TEST RESULTS								ISO CODE	
LAB NO.	MI/HR Unit	MI/HR Oil	WATER PPM	VIS CS 40°C	TAN	PARTICLE 2-5u	PARTICLE 5-15u	PARTICLE >15-25u	PARTICLE >25-50u	PARTICLE >50-100u	PARTICLE >100u	(+ 2-5u)
127			73	31.4	0.06	57000	22800	2900	800	100	0	17/15/12
5403			34	31.0	0.06	72963	110300	9433	2187	70	0	18/17/14
5283			67	31.0	0.06	400233	420604	17960	1993	340	110	20/19/15
293			66	31.0	0.06	691510	772910	47403	10300	1100	90	21/20/16
6032			<u>411</u>	31.6	0.06	2190390	9529023	3076030	898954	8440	253	24/24/22
7255			48	31.2	0.06	951573	567387	11020	2993	200	0	21/20/14

UNDERLINED FIGURES INDICATE SIGNIFICANT VALUES. MAINTENANCE THAT MAY BE REQUIRED IS INDICATED ABOVE. UNDER MAINTENANCE RECOMMENDATIONS AND SHOULD BE PERFORMED BY A QUALIFIED MECHANIC. PLEASE ADVISE US OF ANY MAINTENANCE PERFORMED ON THIS UNIT. ACCURACY OF RECOMMENDATIONS IS DEPENDENT ON REPRESENTATIVE SAMPLE AND COMPLETE, CORRECT DATA ON BOTH THE UNIT AND SAMPLE. THIS REPORT IS NOT AN ENDORSEMENT OR RECOMMENDATION OF ANY PRODUCT OR SYSTEM. ORIGINAL REPORTS MAINTAINED IN ANALYSTS, INC. DATA FILES. FOR LEGEND AND EXPLANATION OF PHYSICAL TESTS PLEASE SEE: http://www.analysts.com/legend.pdf. NOTE: 1. ALL SAMPLES DRAWN ACCORDING TO OUR NOT provided, displayed data is processed data. 2. TEST NOT RECORDED. COPYRIGHT © 1990 ANALYSTS, INC. FORM NO. 8265-A-0900

Within 48 hours of receipt at the laboratory, your routine analysis will be complete. ASTM or other non-routine tests may require additional time. Depending on the severity of the results, you may receive a phone call, fax, or electronic copy of your report. Hardcopies may also be mailed to you.

Regular servicing is just one part of maintenance. Analysts Inc.’s oil analysis uses scientific tests and our in-depth knowledge of systems and oils to give you the advice you need to keep your systems in top condition!

Analysts knows how important trouble-free equipment operation is to you. We are fully committed to helping you maintain it.

➔ UNIT INFORMATION

This section lists the unit, tag, asset or other permanent ID’s and descriptions of the sampling point. We record this ID from the information provided to us on the Sample Processing Form. The overall status of the sample is listed here for easy reference, along with the date the sample was taken. In addition, a unique Component Reference Number is assigned to each sampling point. Refer to this number when inquiring about your report.

➔ RECOMMENDATIONS

The laboratory makes a series of recommendations on every sample processed. These recommendations are made in layman’s language and include:

- A statement of component condition based on the analysis results
- An assessment of possible sources / causes of abnormal conditions if any are detected
- Corrective actions or investigations appropriate to the conditions found
- Resample recommendations for the next sample

“Feedback” from the customer is also recorded here. This information is transcribed from written data in the “Comments” section of the information form, or other direct contact with the customer.

➔ SPECTROCHEMICAL ANALYSIS

This is a measurement in PPM (parts per million) of the major elements studied to determine system serviceability. These 21 elements are broken down into three main categories: **wear metals, contaminants, and oil additives**. The most recent analysis and up to 5 previous tests are recorded for easy trending. Values which exceed “normal” limits are underlined. The overall severity of the results is evaluated by previous trend and current level. Our assessment of this severity appears as the first line of the recommendation and also as a quick status code at the top of the report.

➔ PHYSICAL TEST RESULTS

Changes in the physical properties of the lubricant are determined and evaluated. Values outside acceptable limits are underlined. These changes and the presence of contaminants have a direct bearing on the optimum performance of your oil. The current analysis and the 5 previous physical test results for each sample are recorded in this section for easy trending.

➔ SAMPLE INFORMATION

This is background information provided by the customer on each sample submitted for testing, including:

- “MI/HR UNIT”—total time on the sampled component since new or major overhaul, usually the odometer reading
- “MI/HR OIL”— total run time on the oil since last change
- “OIL ADD”— quantity of makeup oil added since last oil change

The lab-assigned sample number is also recorded here.