

SVD Results Report



Report ID: 181 **Diagnostic Start Time:** 10/4/2023 6:02:41 PM **Diagnostic End Time:** 10/4/2023 6:30:30 PM

Customer: SGS MINERALS

Service Engineer: RENE RODRIGUEZ

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Instrument Configuration

Configuration:

Serial Number:	Turret Type: Automatic
Instrument Model: Varian AA140/240/280	Number Of Lamps: 4
Flame Instrument: True	Mono Type: Automatic
Furnace Instrument: True	Gasbox Type: 'Y' Gas Box
Zeeman Present: False	Auto Burner Adjuster: False
Internal Zeeman: False	Mains Frequency: 50
Internal UltrAA: False	Firmware Version: 2.07
Optics Type: Double Beam	Photomultiplier Type: Normal(900nm)
D2 BG Correction Fitted: True	PWB Version: 33
Boot Block Version:	

EEPROM Data:

Instrument Run Hours: 5041.425	D2 Run Hours: 0.683
Zero Wavelength Offset: -27.383	D2 Serial Number: 0123456789
Mono Correction: -0.120	D2 Install Date: 6/6/2023
Flame Hours: 1398.960	D2 Original Intensity: 493.000
	D2 Last Intensity: 498.000

Frequency:

Averaging Period: 30.0

Datapoint Count: 20

Upper Limit:

51.00

Highest Measured Frequency:

50.00

Average Frequency:

50.00

Lower Limit:

49.00

Lowest Measured Frequency:

50.00

Result: **Passed**

Power Supply:

Averaging Period: 30.0

Datapoint Count: 20

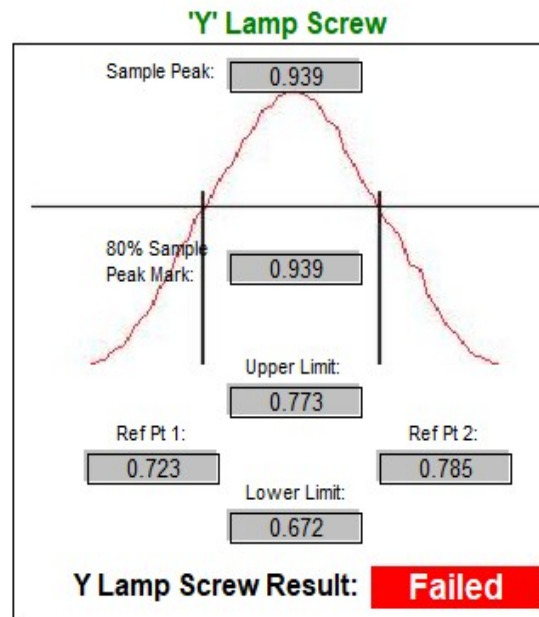
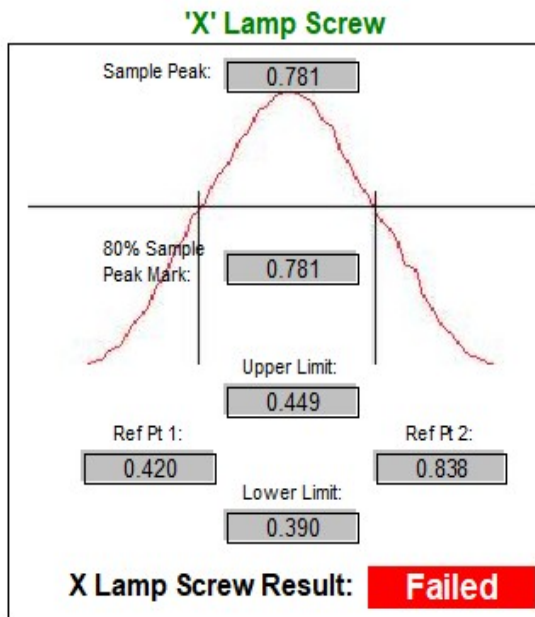
	Lower Limit (V)	Actual (V)	Upper Limit (V)	Result:
12.00 V Rail	10.80	12.10	13.20	Passed
-12.00 V Rail	-13.20	-11.40	-10.80	Passed
5.00 V Rail	4.50	5.20	5.50	Passed
310.00 V Rail	279.00	322.00	341.00	Passed



Beam Balance:

Lamp Type: Copper
Lamp Socket Used: 3

Peak Selected: 324.80
Lamp Alignment: **Performed**



Grating Squareness:

Lamp Element(s): Copper
Lamp Turret Position: 3
Lamp Current(mA): 4.00
Slit Width(nm): 0.5
1st Order Wavelength(nm): 324.80
Lamp Alignment: **Performed**

	Lower Limit (nm)	Actual (nm)	Upper Limit (nm)	Result:
Zero Order	-0.10	0.00	0.10	Passed
First Order	324.45	324.72	325.15	Passed
Second Order	649.23	649.50	649.97	Passed

Wavelength Repeatability:

Lamp Used: Copper	Lamp Current(mA): 4
Peak Used(nm): 324.750	Slit Width(nm): 0.2
Connected to Socket: 3	Slit Height: Normal

Lamp Alignment: **Performed**

Lower Limit(nm) 324.645	324.765 Upper Limit(nm)
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(Approach from Zero Order)

(Approach from end)

Sample 1: 324.705

Sample 2: 324.701

Sample 3: 324.762

Sample 4: 324.701

Sample 5: 324.705

Sample 6: 324.697

Sample 7: 324.709

Sample 8: 324.697

Sample 9: 324.697

Sample 10: 324.697

Mean: 324.708

Standard Deviation: 0.021

Result: **Passed**



Mechanical

Wavelength Drive:

Passed

Slit Drive:

Passed

Turret Drive:

Passed

Auto Burner Adjuster Drive:

Untested

Miscellaneous

Signal Processing Linearity:

Calculate Mode: New Calc Mode

	Lower Limit	Actual	Upper Limit	Result:
S0	114	237	297	Passed
S1	156	164	191	Passed
S2	271	298	332	Passed
S3	474	512	579	Passed
S4	825	927	1008	Passed
S5	1435	1544	1754	Passed
S6	2498	2785	3053	Passed
S7	4347	4770	5313	Passed

Interlocks:

Burner Fitted:	Working	Flame Detect:	Working
N2O Burner Fitted:	Working	GCU Active:	Working
Flame Shield Closed:	Working	Oxidant Pressure:	Working
Gas Control Fitted:	Untested	Oxidant Changeover:	Working
Pressure Release Bung Fitted:	Working	Ignition:	Working
Liquid Trap Fitted:	Working		



Auto Lamp Recognition:

Lamp 1: Uncoded Lamp/Not Connected
Lamp 2: Uncoded Lamp/Not Connected
Lamp 3: 14 - Copper (Cu)
Lamp 4: Uncoded Lamp/Not Connected

Lamp 5: Not Supported
Lamp 6: Not Supported
Lamp 7: Not Supported
Lamp 8: Not Supported

Result: **Passed**

GTA Temperature Monitoring:

Not Performed

Notes:

Signatures:

SGS MINERALS

Date

RENE RODRIGUEZ

Date

