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- NOTES:
1. All tubings shall be 6mm OD or 12mm OD, and seamless unless otherwise stated.
 2. Drain at atmospheric pressure.
 3. *Gas cylinders shown in this drawings are not in EMERSON scope of supply.

SAMPLE TAKE-OFF

Tag: 09F-AI-O2
Process Service: Flue Gas from FCC Regenerator
Phase: Gas
Pressure: Normal 1.6 - Max 2.0 kg/cm² (g)
Temperature: Max 780° C
Ambient Temperature: -20° + 50° C

Sample Conditions		
Tag No.	09F-AI-O2	
Component	CO2 = 14 + 17 %vol	SO2 = 0.08+0.13
	CO = 0 + 3000 ppm	(2400+3900 mg/Nm3)*
	O2 = 2 + 3 %vol	SO3 = 0.003+0.004
	H2O = 8 + 9 %vol	(94+140 mg/Nm3)*
	N2 = 70 + 72 %vol	* At 0°C and 0 barg

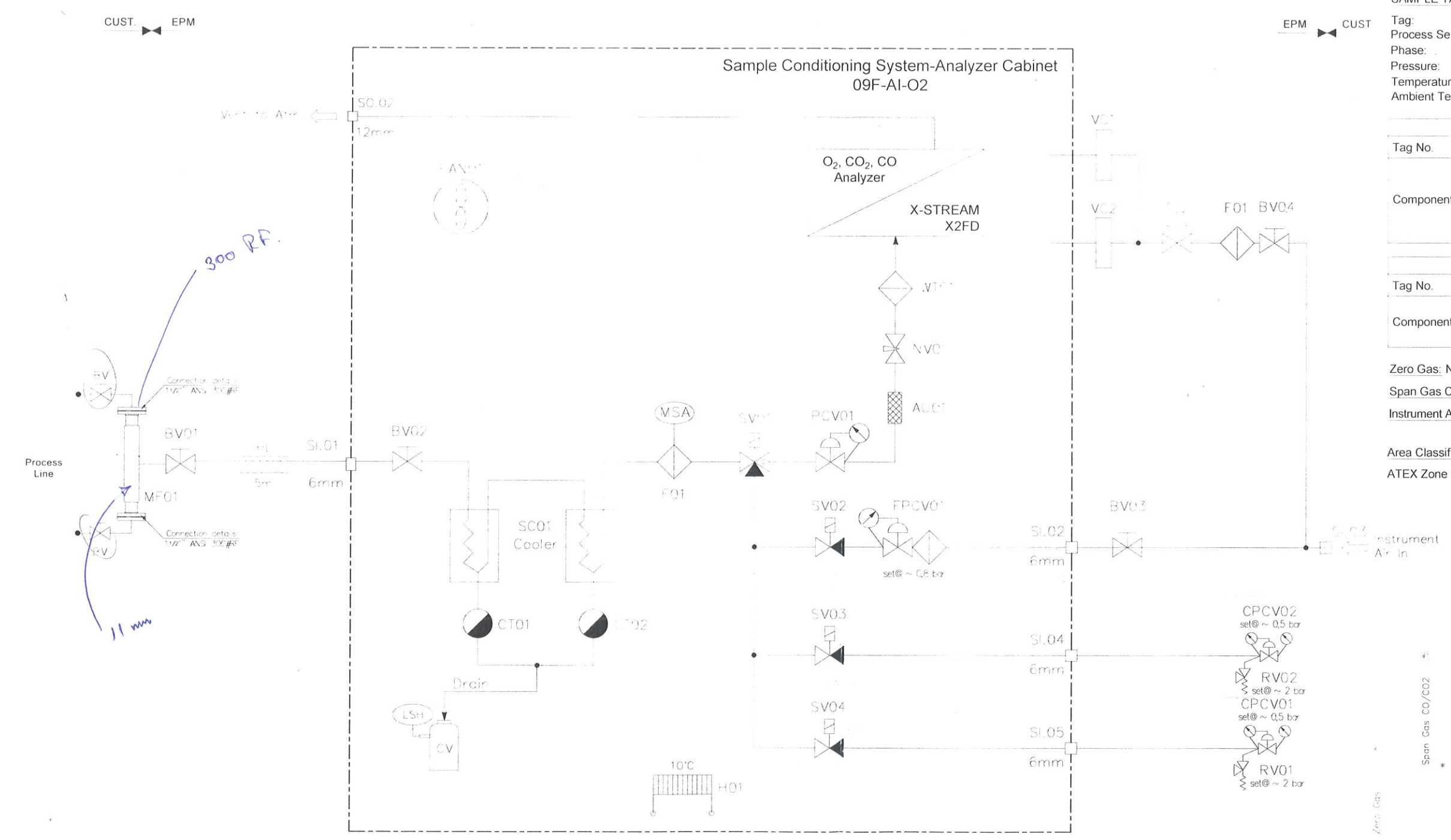
Process Gas Analyzer		
Tag No.	09F-AI-O2	
Component	CO2 = 0 - 18 %	
	CO = 0 - 3000 ppm	
	O2 = 0 - 5%	

Zero Gas: N2
Span Gas CO/CO2: 15% CO₂/2500 ppm CO/N₂ balance
Instrument Air: Span gas O₂

Area Classification of Location:
ATEX Zone 2, IIB+H2 T3

Span Gas CO/CO2

Zero Gas



Tag NO.	Description	Connection Size
SI.01	Sample IN	HL Bulkhead Entry - 6mm
SI.02	Instrument Air IN (in cabinet)	6mm Bulkhead Union
SI.03	Instrument Air IN	6mm Bulkhead Union
SI.04	Span Gas IN	6mm Bulkhead Union
SI.05	Zero Gas IN	6mm Bulkhead Union
SO.02	Vent to Atm.	12mm Bulkhead Union

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REV.	DATE	NAME	NAME	NAME	DESCRIPTION	SCALE	%
	PREPARED/CHANGED		CHECKED	APPROVED		REVISION	00

PETROTEL LUKOIL SA
Sistem CO, CO2, O2 in FCC
Customer Reference: Poz 63 RT 2016

Analyzing system for CO, CO2 and O2
Flow Diagram - 09F-AI-O2
EMERSON Drawing No.
3237 - 344 - 1001