GUJARAT GAS

HYDROTEST PROCEDURE

FOR

NATURAL GAS INDUSTRIAL METERING SKID

Document No.: GGL/TS/HT/IMS/001,REV-00

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1 INTRODUCTION :

This document defines procedure for Hydrostatic test to be carried out Industrial Metering skid (IMS).

2 SCOPE :

All the filter/Valves/equipment / instrument/ items/spools shall be hydrostatic tested as per approved QAP.

3 REFERENCE DOCUMENTS :

A) FOR _____ SCMH (As per PO)

Design Documents of Skid		**DOCUMENT No.**
1	P & ID	
2	GA Drawing	
3	Base frame and Foundation Drawing	
4	Canopy Drawing	
5	Painting datasheet	
Datasheet / Drawing of Equipments:		
8	Cartridge Filter	

B) COMMON DOCUMENTS :

Design Documents of Skid		**DOCUMENT No.**
1	Quality assurance plan - Mechanical Items	
2	Quality assurance plan–Instrumentation Equipment	
3	Material Test certificate, Radiography test report, Hydro-test certificate	
Datasheet / Drawing of Equipments:		
4	Pressure Gauge	
5	Differential Pressure Gauge	
7	Ball Valves	
8	Check Valves	
9	Globe Valve	

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4 HYDROSTATIC TEST :

4.1 Flanged end valves:

1. All the flanged end valves shall be pre hydro tested at vendor's place.
2. Before assembly of these valves to skid, these valves are again hydro tested in Vendor shop floor and the same gets witnessed & certified by TPIA.
3. For 300# valves, hydrostatic test pressure shall be – 73.5 Barg.
4. For 150# valves, hydrostatic test pressure shall be – 28.5 Barg.
5. Duration for hydrostatic test procedure shall be 2 minutes for valve sizes up to 4 " & 5 minutes for valves sizes 6" & above, as per API 598/API 6D.

4.2 Pup end or screwed end valves:

1. All pup end (welded) and screwed end valves shall be hydro tested along with pipe spools hydro testing.
2. The hydro testing procedure of pipe spools shall be as mentioned in below pipe spool section.

4.3 Pipe spools:

1. Hydrostatic Test is carried out on each pipe spool during stage inspection of the skid. This inspection is witnessed by TPIA.
2. Hydro test is done by pressurizing each pipe spool using water.
3. For 300# piping, hydro test is done at minimum: 73.5 Barg; for 150# piping, hydro test is done at minimum – 28.5 Barg.
4. Total duration of hydro test is 240 minutes.
5. Line pressure & line temperature are recorded initially, after every 30 minutes & at the end of hydro test.
6. During holding period, there shall not be any pressure drop noticed.
7. At the end of hydro test, Test certificate is signed by both TPIA & Vendor representatives.
8. After completion of hydro static test, piping shall be thoroughly drained & cleaned.

4.4 Filters:

1. Hydro test pressure for filter shall be as given below–.
   For 300# valves, hydrostatic test pressure shall be – 73.5 Barg.
   For 150# valves, hydrostatic test pressure shall be – 28.5 Barg.
2.
3. Total duration of hydro test for filter shall be 240 minutes.

5 TEST CERTIFICATES:

Upon completion of the tests mentioned in this document, Test Certificate should be filled with the results and signed/stamped by representatives of all the parties-VENDOR and TPI/Client

TEST CERTIFICATE

HYDROTEST TEST

Project NATURAL GAS FILTRATION & PRESSURE REDUCTION SKID.

Customer M/S. GUJARAT GAS LTD.

PO. NO.

System No. --

No pressure loss/drop shall be observed after accounting for temperature variation.

_____	_____	_____
Vendor	TPIA	Customer
Representative		Representative
DATE:		