

# **DIP** **Multiphase Flow Meter**

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**RTS**   
SERVICES INC.



# What DIP can measure

## Main



Gas flow rate



Oil flow rate



Water flow rate

## Additional



Flow velocity



GVF



Watercut



Density



Liquid viscosity  
(developing)



Sand rate  
(developing)



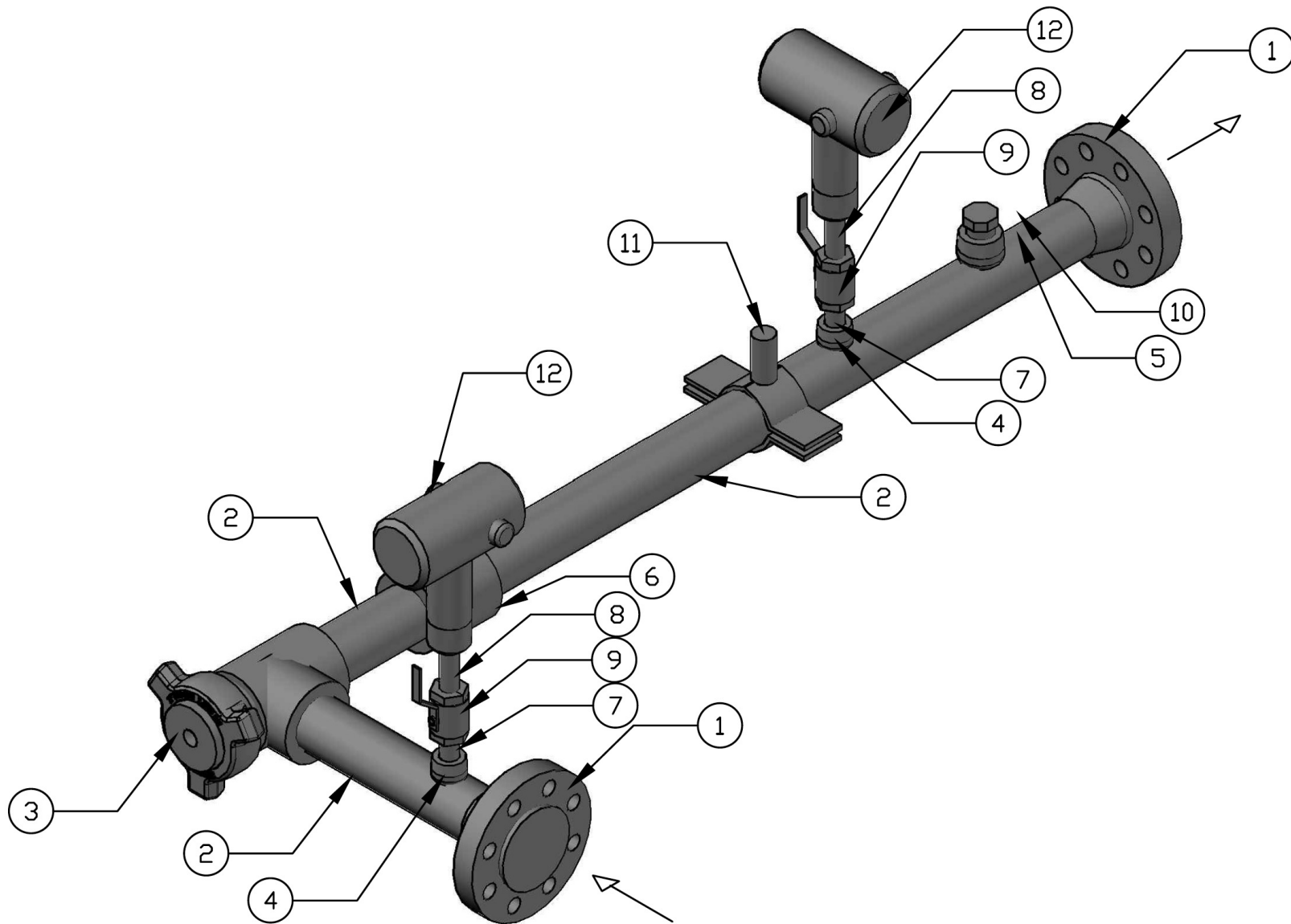
DIP Flow  
Computer

DIP Flow  
Sensor Spools





# DIP Flow Sensor Spool



# Method of measurement

Sampling  
Analysis Data



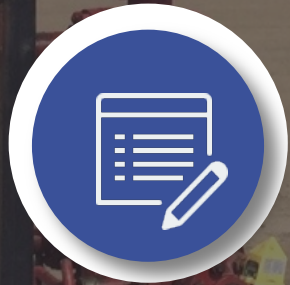
Measurement of pipeline  
vibration



Measurement of  
temperature



Enter the initial  
densities and gas  
composition



Measurement of  
pressure and dP



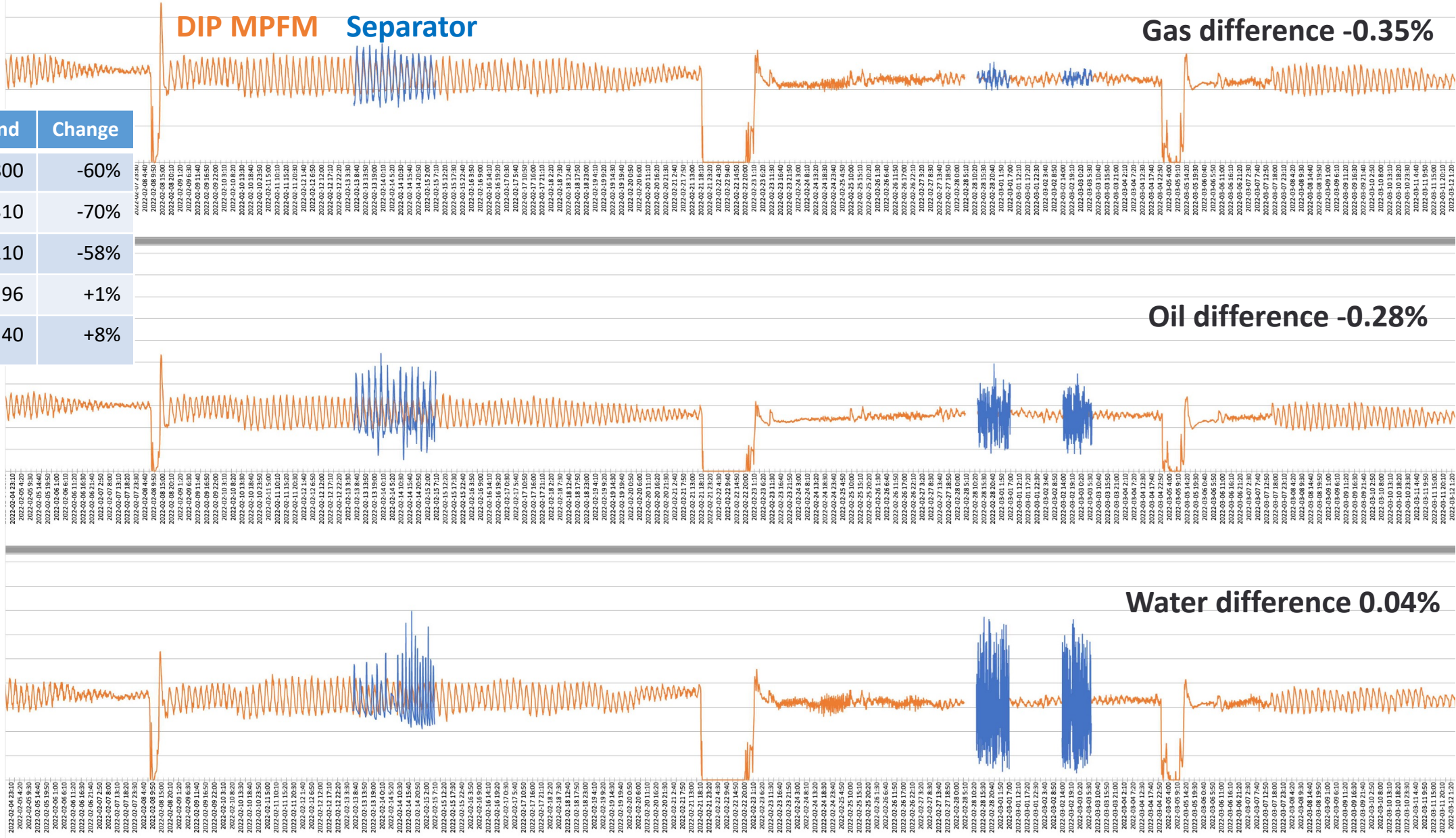
Measured  
values





# Flow rates comparison during 4 months well test (part)

	Start	End	Change
Gas, scf/day	2000	800	-60%
Oil, bbl/day	1050	310	-70%
Water, bbl/day	500	210	-58%
GVF, %	95	96	+1%
Watercut, %	32	40	+8%





# Limitations

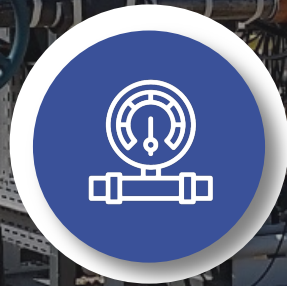
Flow velocity at  
least 1.5 m/s



Can require in-situ  
calibration



Gauge pressure  
more than 10 psi







PETROLEUM  
TECHNOLOGY

**RTS**   
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## Questions?

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