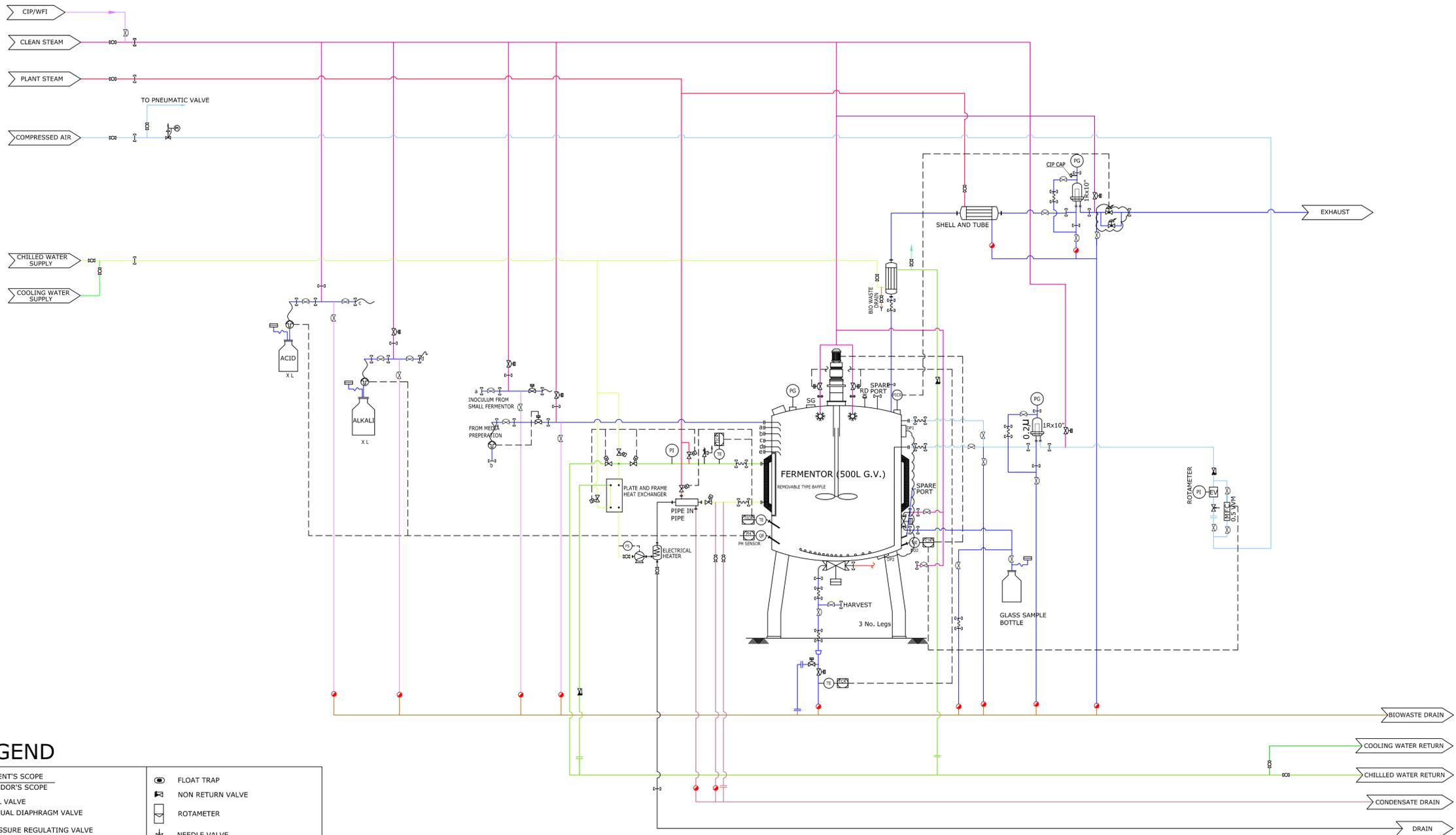


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LEGEND

	CLIENT'S SCOPE		FLOAT TRAP
	VENDOR'S SCOPE		NON RETURN VALVE
	BALL VALVE		ROTAMETER
	MANUAL DIAPHRAGM VALVE		NEEDLE VALVE
	PRESSURE REGULATING VALVE		RUPTURE DISK
	TRI CLOVER CLAMP		BACK PRESSURE CONTROL VALVE
	MICRON FILTER		PRESSURE INDICATOR
	DIAPHRAGM PRESSURE GAUGE		FLOW SWITCH
	STEAM TRAP		CIRCULATION PUMP
	ANGLE SEAT VALVE		DIFFERENTIAL PRESSURE SENSOR PORT
	PNEUMATIC DIAPHRAGM VALVE		LIGHT GLASS
	TEMP. INDICATOR CONTROLLER RECORDER		SIGHT GLASS
	TEMP. ELEMENT		SPRAY BALL
	PERISTALTIC PUMP		BUTTERFLY BALL
	FLEXIBLE HOSE		BACK PRESSURE CONTROL VALVE
	PNEUMATIC FLUSH BOTTOM VALVE		
	PNEUMATIC SAMPLING VALVE		
	BOURDON PRESSURE GAUGE		
	PRESSURE RELIEF VALVE		

	CHWR SUPPLY
	CHWR RETURN
	COOLING WATER SUPPLY
	COOLING WATER RETURN
	COMPRESSED AIR
	CLEAN STEAM
	PLANT STEAM
	CIP
	EXHAUST GAS
	NITROGEN
	BIOWASTE DRAIN
	DRAIN
	CONDENSATE DRAIN

WORKING VOLUME	350 - 400L
GROSS VOLUME	500L
QUANTITY	2 Nos.
MOC- PRODUCT CONTACT	SS316L
MOC- PRODUCT NON CONTACT	SS304
JACKET	HOLLOW TYPE
INSULATION	MINERAL WOOL
LEGS	3 NOS
BAFFLES	REMOVABLE TYPE
AGITATION	TOP MOUNTED AGITATOR

NOTE : THIS P&ID IS ONLY FOR INFORMATION. ACTUAL P&ID HAVE TO BE PROVIDED BY THE VENDOR

Rev.	Date	Changed	Checked	Kind of revision	No. of Prints	Date	Issued To
Client:							
Site Address : REVIVAL OF DPT VACCINE MANUFACTURING FACILITY, PII, COONOOR				Project No.: 110831		nne pharmaplan® NNE Pharmaplan India Limited	
				Location: COONOOR		#14, Achiah Shetty Layout, Bangalore - 560 080., INDIA.	
Description: FERMENTOR (500L GROSS VOLUME) PERTUSSIS BLOCK							
Drawn	Date	Name					
Checked	18.05.2012	SAPL					
Approved	18.05.2012	NWSG					
Scale- NTS	Units : mm	Size : A3					
Drawing no.: NPI/110831/EQR(PID)/P-FER 01-02							Rev. 00