FN	AD

CONTROL VALVE

 DATA SHEET NO.
 0102-IDS-6089A

 SHEET NO.
 1 of 3

 DATE
 18-Apr-23

 REV.
 1

 PREPARED BY
 WAS

 CHECKED BY
 SJA

 APPROVED BY
 SJA

ENAR PETROTECH		APPROVED BY SJA											
	SERVICES (PVT.) LTD. OWNER: OIL & GAS DEVELOPMENT COMPANY LIMITED (OGDCL) PROJECT: GAS PLANT FACILITY PROJECT												
1	1 Tag Number			200-LCV-01			200-PCV-03			200-LCV-02			
2		Service	Test Separator to Produced Water Tank			Test Separator to Production Separator			Test Separator to Condensate Tank				
3	H	Line No.		2"-PW-EA4-2060	1		6"-RG-EA4-1078	*		2"-PL-EA4-2062			
4	E	Piping Class		EA4			EA4			EA4			
5	EN	Pipe Size UP / Pipe Size Down		2"/2"			6"/6"			2"/2"			
6	0	Pipe Schedule UP / Pipe Schedule Down	2 / 2 XXS				160		XXS				
7		P&ID No.		0102-PB-2157			0102-PB-2157		0102-PB-2157				
8		Fluid							0102110-2107				
9		State		Liquid		Gas			Condensate				
10		Condition	MIN Operating MAX			MIN Operating MAX			MIN Operating MAX				
11		Elow Pate (lb/br)	1136	1963	2200	6835	14240	14525	192	408	450		
12		Inlet Press at Elow (psig)	200	1255	1255	200	1255	1255	200	1255	1255		
12		Dr. et Flow (psi)	150	1200	1200	5	5	5	150	1200	1200		
14	ş	Temperature (°E)	150	1200-90	1200	5	120 - 90	5	150	120 - 90	1200		
14	0	Vanour Pressure (priz)	36.00			-				146.60			
15		Critical Pressure (psig)		3192		655.0				422			
10	ģ	Critical Pressure (psig)		705.1		115.2			422				
17	B	Shut off Program (prig)		705.1			-115.2			534			
10	RVI	Cos Compressibility Easter					0.879		-				
20	SE	Density Mixture at STR kg/m2		1014		0.879			826				
20	ES.	Density Mixture at STF Kg/iii5		996		-			803				
21	ğ	Density Eig. at Oper. Conditions kg/m3		-			0.810		805				
22	Ξ	Viscosity (aP) Cas / Liquid			0.61	0.015	0.810		1.02				
23		Viscosity (cr) Gas / Liquid	0		1	0.015		0	0		1		
24		Vapour/Equili (Plaching etc.)	0		1	1		0	0		1		
25		Flow type (Choked/Flashing etc.)		Vas			Vas			Vec			
20		Sour Service (Tes / No)	1.15	Tes	18.03	1 594	Tes	17.94	1 131	168	183.6		
27		CP/CV MW	0.195 (VTC)	0.125 (VTC)	0.140 (VTC)	56 688 (VTC)	49.008 (VTC)	50.426 (VTC)	0.051 (VTC)	0.030 (VTC)	0.033 (VTC)		
28		Calculated CV Max./Oper./Min.	0.195 (VIC) 0.125 (VIC) 0.140 (VIC)		J0.000 (VIC)	" (VTA) /900#/P	50.420 (VIC)	0.051 (VIC)	(VTA) /000#/P	0.055 (VIC)			
29		Valve Body Size / Kating	1° (VIA)/900#/RIJ			4 (V1A)/900#/K1J 3/TA			VTA				
30			VIA Clabe / Single Bert			VIA Clabe / Single Best			Globe / Single Port				
31		valve Type / Port	216 SS compliant			216 SS complicat			316 SS compliant				
32			316 SS compliant			A-105N Carbon Steel			A-105N Carbon Steel				
33	~	Body Material	A-105N Carbon Steel			A-105N Carbon Steel			VTA / Flanged 9001 b. (ASME B16 5) BTI				
34	8	END Connection (Inlet/Outlet)	VIA / Flang	T-flag / VTA	2 B10.3) KIJ	Teflon / VTA			VIA / Flang	T-fl-n / VTA	E B10.3) KIJ		
35	8	Valve Stem Packing	Ea	ual Paraantaga / V	ΤA	Equal Percentage / VTA			Equal Percentage / VTA				
30		Control Characteristic / Rangeability	Eq	ale ss / ale ss	IA				316 SS / 316 SS				
37		Plug / Seat Material Note- /		Close		0pen				Close			
20				NSI Class IV / 85	DB	ANSI Class IV / 85 DB			41	JSI Class IV / 85	DB		
40		Leakage Rate (Class to ANSI/FCI 70-2) Note-5		Vas	DB	Yes			Yes				
40		Actuator Turo		Spring Diaphrage		Spring Diaphragm			Spring Diaphragm				
41	ĕ	Actuator Type			1				VTA / VTA				
42	ATC	Air Supply Program / Available Air Supply		20 Psig / 100 Psig		20 Psig / 100 Psig			20 Psig / 100 Psig				
43	R	Failure Action		Eail Close	•	Eail Open			Fail Close				
44	A(Valve Duty (On/Off or Throttle)		Throttle			Throttle		Throttle				
46		Type / Tag No	Pn	eumatic / 200-J Y	-01	Pneumatic / 200-PY-03			Pneumatic / 200-LY-02				
47		Enclosure Protection / Material	IP65 / Cast Aluminum			IP65 / Cast Aluminum			IP65 / Cast Aluminum				
48		Input Signal Range / Output Signal	20 Psig / 3-15 Psig			20 Psig / 3-15 Psig			20 Psig / 3-15 Psig				
49	IER	Air Supply Pressure / Air Connection	20 Fsig / 3-13 Fsig 20 Psig / VTA			20 Psig / VTA			20 Psig / VTA				
50	Į0	Air Regulator / Manufacturer	Yes to be fitted on Valve / VTA			Yes to be fitted on Valve / VTA			Yes to be fitted on Valve / VTA				
51	LISO	Gauges	Supply & Output			Supply & Output			Supply & Output				
52	Z	Hand wheel / Solenoid Valve/ Limit Switch		Not Required		Not Required			Not Required				
53		Electrical Classification	N/A			N/A			N/A				
54		Connection	½" NPT			1/2" NPT			1/2" NPT				
55	NOT	ES: *VTC = Vendor To Confirm / VTA = Vendor To Advise	1										
	Vendor to check selection/sizing and materials of value and actuator and to return one completed conv to nurchaser with quotation												
	2. Vendor shall provide SS Tag attached with SS Screws or SS Wire Tag shall contain Tag No. & Model No.												
\vdash	3-	venuor snan provide 55 rag attached with 55 Serews or 55 wire. Tag snan contain Tag No. & Model No. Noise level shall not be above 85DB at 1 meter distance. Supplier shall provide noise solution for value baving noise level above 85DB											
	з- Л	Vendor to calculate and verify the body size and value Cy. The	trim may be varie	d as per sizing cor	dition								
<u> </u>	4-	All material shall conform to NACE MD 0175 / ISO 10155 /	ann may ue varie	a as per sizing con	KIRIUII.								
<u> </u>	5-	All material shall conform to NACE MR-01/5 / ISO 15156. (Latest Edition)											
<u> </u>	0-	b- Approval for Electrical / nazaroous Area Classification shall be from CENELEC, ATEX, Factory Mutual (FM), IEC of Canadian Standards Association (CSA).											
\vdash	/- FOR HASHING SERVICE HATU HACE UTIIN INAUERIAI SHAIL DE USEU.												
	8-	8- It is preterred to select all the valves with minimum opening of 20% and maximum opening of 80%. To achieve the mentioned percentage opening body size should be revised without considering our mentioned body size in the datasheet.											
	9-	9- Flange construction shall be in accordance with ASME B16.5.											
	1												

									DATA SHEET N	O. 010	02-IDS-6089A	
ENAR PETROTECH SERVICE (PVT.) LTD.									SHEET NO. 2 c		f 3	
								DATE	18-	-Apr-23		
					CONTRO		£		REV.	1		
								PREPARED BY	WA	AS .		
								CHECKED BY SJA		Δ		
			OWNER: OIL & GAS DEVELOPMENT CC			OMPANY LIMI	TED (OGDCL)		MITROVED DI	537	1	
			PROJECT:	PROJECT: GAS PLANT FACILITY PROJECT								
1 Tag Number				1001-LCV-01			1001-LCV-02			1001-PCV	/-01	
2		Service	Three	Phase Separator (1	001-V1)	Three	Phase Separator (1)	001-V1)	Three I	Phase Separat	or (1001-V1)	
3	Н	Line No.		2"-PL-AA2-1082	2		2"-PL-AA2-1083		2"-PL-AB2-1084			
4	E.	Pining Class		AA2			AA2		AB2			
5	N.	Pine Size LID / Pine Size Down		2"/2"		2"/2"			2"/2"			
5	G	Pipe Size OP / Pipe Size Down		2 /2		2"/2"			80			
6		Pipe Schedule UP / Pipe Schedule Down	-	80		80				80		
7		P&ID No.		0102-PB-2135		0102-PB-2135				0102-PB-2	135	
8		Fluid		Produced Water		Condensate				Off Gas	5	
9		State		Liquid		Liquid			Gas			
10		Condition	MIN	Operating	MAX	MIN	Operating	MAX	MIN	Operatir	ng MAX	
11		Flow Rate (lb/hr)	1355	3390	13720	225	570	2529	12	28	113	
12		Inlet Press at Flow (psig)	40	40	40	40	40	40	40	40	40	
13		Dp at Flow (psi)	25	25	25	15	15	15	25	25	25	
14	SZ	Temperature (°F)		112	1		112			112		
15	2	Vapour Pressure (pcia)		3 50			38.00					
15	10	Civil 1 Proceeding		3200			210			746		
10	ð	Critical Pressure (psig)		3200			310		746			
17	ĕ	Critical Temperature (°F)		705			/95		-87			
18	Ĭ	Shut-off Pressure (psig)		-			-		-			
19	SER	Gas Compressibility Factor		-			-		0.99			
20	SS	Specific Gravity Mixture at STP		-			-		-			
21	D.	Specific Gravity Liq. at Oper. Conditions		1			0.795			-		
22	Ă	Specific Gravity Gas at Std. Conditions		-			-		0.7047			
23		Viscosity (cP) Gas / Liquid	-		0.6	0.0118		1.658	0.012		-	
24		Vapour/Liquid (Fraction)	-		1	0		1	1		0	
25		Flow type (Choked/Flashing etc.)				Flashing		- <u> </u>				
26		Sour Service (Ves / No)		Yes		Yes		Yes				
27		CP/CV MW	1 57		18	1 168		169.1	1 29		20.41	
27			0.542 (VTC)	1.255 (VTC)	5 486 (VTC)	(VTC)	(VTC)	(VTC)	0.110 (VTC)	0.277 (1/7	20.41 FC) 1.118 (VTC)	
28		Calculated CV Max./Oper./Min.	0.542 (VIC)	1" 1.555 (VIC)	5.480 (VIC)	(VIC)	(VIC)	(VIC)	0.119 (VIC)	1" VTA/150	1.118 (VIC)	
29		valve Body Size / Rating		1 VIA/150#/Kr			1 VIA/150#/KF		1 V 174/150#/KF			
30		Selected CV	-	VIA		V1A Globe / Single Port 316 SS compliant A-105N Carbon Steel VTA / Flanged 150Lb. (ASME B16.5) RF Teflon / VTA Equal Percentage / VTA 316 SS / 316 SS Close			VIA Clake / Single Dert			
31		Valve Type / Port		Globe / Single Po	rt				Globe / Single Port			
32		Trim / Bearing Material		316 SS complian	t				316 SS compliant			
33		Body Material		A-105N Carbon St	eel				A-105N Carbon Steel			
34	ΔX	END Connection (Inlet/Outlet)	VTA / Flai	nged 150Lb. (ASM	IE B16.5) RF				VTA / Flanged 150Lb. (ASME B16.5) RF			
35	B	Valve Stem Packing		Teflon / VTA					Teflon / VTA			
36		Control Characteristic / Range ability	E	qual Percentage / V	/TA				Equal Percentage / VTA			
37		Plug / Seat Material Note-7		316 SS / 316 SS					316 SS / 316 SS			
38		Fail (Open / Close)		Close					Close			
39		Leakage Rate (Class to ANSI/FCI 70-2) Note-3	ANSI Class IV / 85 DB			ANSI Class IV / 85 DB			ANSI Class IV / 85 DB			
40		Comply to NACE Standard Note-5		No		No			No			
41		Actuator Type		Spring Dianhraon	n		Spring Dianhraon	1	Spring Diaphragm			
42	ĕ	Actuator Size / Air Connection Size		VTA / VTA	-	VTA / VTA			VTA / VTA			
42	ATC	Air Supply Pressure / Available Air Supply		20 Psig / 100	a	20 Peig / 100 peig			20 Psig / 100 psig			
4.5	PL:	Failure Action		Eail Close	Þ		Eail Close	,	20 Psig / 100 psig			
44	ΨC	r anne Aetion		Throut			Throttl-		Throttle			
45		varve Duty (On/OII or Throttle)	0	Inrottie	001 1 2 01	C	i nrottie	000 LV 02	0	i nrottle		
46		Type / Tag No.	Smart Ele	ectro-Pneumatic / 1	1001-LY-01	Smart Electro-Pneumatic / 1000-LY-02			Smart Electro-Pneumatic / 1001-PY-01			
47		Enclosure Protection / Material	1	1P05 / Cast Alumin	um	I	Po5 / Cast Alumin	ım	IP65 / Cast Aluminum			
48	Ħ	Input Signal Range / Output Signal	HA	ART 4-20mA at 24	VDC	HA	КГ 4-20mA at 24	VDC	HART 4-20mA at 24 VDC			
49	N	Air Supply Pressure / Air Connection		20 Psig / VTA		20 Psig / VTA Yes to be fitted on Valve / VTA Supply & Output			20 Psig / VTA			
50	Ĕ	Air Regulator / Manufacturer	Yes t	o be fitted on Valve	e / VTA				Yes to be fitted on Valve / VTA			
51	SO	Gauges		Supply & Output	t				Supply & Output			
52	-	Hand wheel / Solenoid Valve/ Limit Switch	Not Required			Not Required			Not Required			
53		Electrical Classification	EExd IIC T4			EExd IIC T4			EExd IIC T4			
54		Connection	M20 x 1.5			M20 x 1.5			M20 x 1.5			
55	NOT	ES: *VTC = Vendor To Confirm / VTA = Vendor To Advise	n I I I I I I I I I I I I I I I I I I I									
\vdash	1-	Vendor to check selection/sizing and materials of valve and ac	tuator and to retu	rn one completed o	opy to purchaser w	ith quotation.						
\vdash	2	Vendor shall provide SS Tag attached with SS Coraws or SS W	Vire Tag shall cor	ntain Tag No. & M.	odel No	4						
\vdash	2-	vendor snall provide SS 1 ag attached with SS Screws or SS Wire. Tag shall contain 1 ag No. & Model No.										
\vdash	3-	- Noise level shall not be above 85DB at 1 meter distance. Supplier shall provide noise solution for valve having noise level above 85DB.										
	4-	4- Vendor to calculate and verify the body size and valve Cv. The trim may be varied as per sizing condition.										
	5-	- All material shall conform to NACE MR-0175 / ISO 15156. (Latest Edition)										
LĪ	6-	6- Approval for Electrical / Hazardous Area Classification shall be from CENELEC, ATEX, Factory Mutual (FM), IEC or Canadian Standards Association (CSA).										
	7-	7. For flashing service hard face trim material shall be used.										
	0	e It is preferred to select all the valves with minimum opening of 20% and maximum opening of 80%. To achieve the mentioned percentage opening body size should be revised without considering our mentioned body size in the										
LI	8-	datasheet.										
	9-	Flange construction shall be in accordance with ASME B16.5.										

ENAR						DATA SHEET NO.	0102-IDS-6089A			
					SHEET NO.	3 of 3				
					DATE	18-Apr-23				
				(REV.	1				
					PREPARED BY	WAS				
						CHECKED BY	SJA			
ENAR PETROTECH							APPROVED BY	SJA		
		SERVICE (PVT.) LTD.	OWNER:	OWNER: OIL & GAS DEVELOPMENT COMPANY LIMITED (OGDCL)						
-			PROJECT:	GAS PLANT FA	CILITT PROJE					
1		Tag Number		1002-LC V-01						
2		Service	Fuel Gas	s Knockout Drum (1001-V1)					
3	T	Line No.		2"-PL-AA2-1084						
4		Piping Class		AA2						
5	GE	Pipe Size UP / Pipe Size Down		2"/2"						
6	-	Pipe Schedule UP / Pipe Schedule Down		80						
7		P&ID No.		0102-PB-2139						
				Candonasta						
8		Fluid		Condensate						
9		State		Liquid						
10		Condition	MIN	Operating	MAX					
11		Flow Rate (lb/hr)	6.25	15	32					
12		Inlet Press at Flow (psig)	85	90	120					
13		Dp at Flow (psi)	35	50	80					
14	NS	Temperature (°F)		112	•					
15	0H	Vapour Pressure (nsia)		85.00			1			
14	DL	Critical Pressure (point)		320						
10	l g	Critical Flessure (psig)		920						
17	CE C	Critical Temperature (°F)		020		4				
18	M	Shut-off Pressure (psig)		-						
19	SER	Gas Compressibility Factor		-						
20	SS	Specific Gravity Mixture at STP		-						
21	E	Specific Gravity Liq. at Oper. Conditions		0.82						
22	RC	Specific Gravity Gas at Std. Conditions		-						
23		Viscosity (cP) Gas / Liquid			1.628					
24		Vapour/Liquid (Fraction)	0		1					
25		Elementer (Chalad/Elementer etc.)	~	Flashing	-					
25				Var						
26		Sour Service (Yes / No)		res						
27		CP/CV MW	1.036		132					
28		Calculated Cv Max./Oper./Min.	(VTC)	(VTC)	(VTC)					
29		Valve Body Size / Rating		1" VTA/150#/RF						
30		Selected Cv		VTA						
31		Valve Type / Port		Globe / Single Por	rt					
32		Trim / Bearing Material		316 SS compliant	t					
33		Body Material		A-105N Carbon Ste	eel					
34	Y	END Connection (Inlet/Outlet)	VTA / Flar	ged 150Lb (ASM	E B16 5) RE					
25	8	V-lue Star Decking	V1717 1 m	Toflon / VTA	<i>E B</i> 10.5) R					
35	B		F		7T A					
36		Control Characteristic / Range ability	E	qual Percentage / v	TA					
37		Plug / Seat Material Note-7		316 SS / 316 SS						
38		Fail (Open / Close)	Close							
39		Leakage Rate (Class to ANSI/FCI 70-2) Note-3 ANSI Class IV / 85 DB								
40		Comply to NACE Standard Note-5	Yes							
41		Actuator Type	Spring Diaphragm							
42	OR	Actuator Size / Air Connection Size		VTA / VTA						
43	DAT	Air Supply Pressure / Available Air Supply		20 Psig / 100 psig	ļ					
44	CL	Failure Action	1	Fail Close						
45	V	Valve Duty (On/Off or Throttle)		Throttle			1			
14	-	Type / Tag No	Smart Fla	ctro-Pneumatic / 1	002-LY-01					
40		Enclosura Drotaction / Motorial	T	P65 / Cast Alumi-		1	+			
4/				DT 4 20m A + 2 1	VDC					
48	R	input Signal Kange / Output Signal	HA	20 D	VDC		+			
49	INC	Air Supply Pressure / Air Connection		20 Psig / ¼" NPT						
50	Ĕ	Air Regulator / Manufacturer	Yes to	b be fitted on Valve	e / VTA					
51	SO ^C	Gauges		Supply & Output						
52	-	Hand wheel / Solenoid Valve/ Limit Switch	Not Required EExd IIC T4 M20 x 1.5							
53		Electrical Classification								
54		Connection								
55	NOT	ES: *VTC = Vendor To Confirm / VTA = Vendor To Advise	onfirm / VTA = Vendor To Advise							
	1-	Vendor to check selection/sizing and materials of valve and actuator and to return one completed copy to purchaser with quotation								
-	2	Vorder shall provide SE Tag attended with SE Common or SE Wire. Tag shall contain Tag No. & Model No.								
<u> </u>	2-	Vendor shall provide SS Tag attached with SS Screws or SS Wire. Tag shall contain Tag No. & Model No.								
<u> </u>	3-	- Noise level shall not be above 85DB at 1 meter distance. Supplier shall provide noise solution for valve having noise level above 85DB.								
	4-	- Vendor to calculate and verify the body size and valve Cv. The trim may be varied as per sizing condition.								
L	5-	All material shall conform to NACE MR-0175 / ISO 15156. (Latest Edition)								
	6-	6- Approval for Electrical / Hazardous Area Classification shall be from CENELEC, ATEX, Factory Mutual (FM), IEC or Canadian Standards Association (CSA).								
	7-	For flashing service hard face trim material shall be used.								
<u> </u>		It is preferred to select all the valves with minimum opening of	f 20% and maxim	um opening of 80%	To achieve the n	nentioned nercentage opening body size should be revi	ised without considering our	mentioned body size in the		
1	8-	8. In protection to state and the further with minimum optiming of 20% and maximum optiming of 00%. To achieve the inclusioned percentage optiming outy size should be revised without considering out mentioned body size in the databaset.								
-	0	Elange construction shall be in accordance with ASME R16.5								
	プー	 Hange construction shall be in accordance with ASME B16.5. 								