TITLE										ITEM/TAG No.		DOCUMENT No.	
	- CESS DATASHI	EET - BOOS	TER COMPRI	ESSOR PA	CKAG	E (DAUGHT	ER STATI	ON)		REFER BAS	SIS-33	16017-P-	DS-0107
	JECT DESCRIP					(		···,		PROJECT No.		SHEET	REVISION
CONS	STRUCTION OF	CITY GAS STA	ATION CUM C	NG MOTHE	R STA	TIONS & DAU	IGHTER B	OOSTER ST	ATIONS	KIP-160	17	1 OF 4	В
EPC	M CONSULTAN	Т					CLIENT	CONTRACT	NO	REQUISITION N	No.	SPECIFICATION N	lo.
KAVI	N							-		-		-	-
CLIE	NT NAME			REV No.	BY	DATE	CKD	DATE	APP	DATE	DESCRI	PTION	
	AVARI GAS PRI	IVATE LIMITI	FD	A	SS	14-Oct-16	NK/TKV	14-Oct-16	MRM/BSK	14-Oct-16		FOR REVIEW	
-	NT'S REF:			B	SS	23-Nov-16		23-Nov-16		23-Nov-16		FOR APPROVAL	
OLIL	IVI O ILLI .				-00	201101 10	INITIO	20 1407 10	WIKWADOK	20110110	ICCOLD	TORTAL	
OBIG	SINATOR	ORIG. DATE	:										
SS	SINATOR	12-Oct-16											
1	T	12-001-10	'										
2	1						<u>DESI</u>	<u>GN BAS</u>	<u>is</u>				
3	1												
4	GENERAL:												
5	]												
6	Godavari Ga	as Private I	_imited (GC	SPL) is a	Joint	Venture of	Andhra	Pradesh (	Gas Distrib	oution Corpora	ation Lim	nited (APGDC) a	and Hindustan
7			,	,						•		uding CNG Stati	
8												o be installed at	
10												stricts. The suction	
11												ine natural gas s	supply from
12	pipeline and	the compr	essed natu	ıral gas (0	CNG)	will be dis	pensed i	in vehicles	by the dis	spensers insta	lled by (	GGPL.	
13	1												
14										ssor capable	of taking	suction from ga	s lines
15	when availal	ble within tl	he range of	f 19 to 26	kg/c	m <sup>2</sup> g withou	ıt major ı	modificatio	ns.				
16													
_	FEED GAS	CONDITIO	NS:										
18			diti	f-ll									
19	Feed gas pr	ocess cond	altions are a	as follows	,								
	Pressure		19-210	kg/cm <sup>2</sup> g	1	Note-14							
	Temperature	е	39	°C	,	11010 11							
23	Flowrate		250	SCMH									
24	1												
25	]												
	STANDARD		S										
	1. PNGRB s												
	2. Published		;										
	3. Indian sta 4. Oil India S		ctorate (OI	SD)									
	5. API-11P,	,	`	,									
	6. Internation				STM	, API, SA,	NACE, I	SO, DIN, E	EN, etc				
33	1		•	•			,	, ,	•				
34	]												
	SCOPE OF	SUPPLY F	OR EACH	COMPR	ESS	OR PACKA	GE:						
36	1	_											
37	1. Each com	•	-		•					.,,			
38	1 .								d for all au	xiliary system	S		
39	i. ::		heat excha					e gas.					
40			ank) Priorit nnecting oi					compress	or nackas	۵			
42											ountina	the instruments	. Block and
43	·'*·	•	es to be pr			-				•	. Juning	oou amonto	. 2.00K and
44	٧.										shutdow	vns, thermocoup	les, RTDs
45	1		erfacing to			) i = 0	5		,	J .,,		,	, -
46	vi.		al discharg	•									
47			supports w										
48	viii.										etc. as re	equired for vario	us auxiliary
49			e. frame lul										
50												ectors in the enc	losure.
51										ves and contr	oı syster	ms	
52	xi.	Inlet and c	outlet manu	ial and au	itoma	atic isolatin	g valves	tor mainte	enance & e	emergency.			
53	2 11711 1717	2											
-	2. UTILITIES		hie our r	ovicion f	r Inc	trumont cl	if rocui	rod with co	o olootrio -	notor driven =	r comn-	occor with a aut	ably sized
55 56												essor with a suit otection, single p	
57	prevente	-	Compre	0001 111011	,ı 3110	Julu DC 410	, v squii	ioi caye II	iotoi staitt	i naving over	ioau pit	λιουτιστί, sirigie μ	11430
58			ot available	as utility	and ·	the packan	e shall h	e provide	d with self	sufficient cool	ing wate	er system for Co	mpressor.
59			nake up tan					,			J ./ C. C	-, -, -, -, -, -, -, -, -, -, -, -, -, -	1,
60	<u> </u>												
						IIII.	KA	/IN <sup>™</sup>					

TITLE		DATASHE	EET - BOOSTER COMPRES	SOR PACE	(AGE (D	AUGHTER ST	ATION)			ITEM/TAG No.	IS-33	DOCUMENT No	DS-0107
_		DESCRIP			- (		,			PROJECT No.		SHEET	REVISION
CONS	STRU	CTION OF	CITY GAS STATION CUM (	CNG MOTH	IER STA	TIONS & DAU	GHTER BO	OSTER STATI	ONS	KIP-1601	7	2 OF 4	В
EPCN	1 CO1	NSULTAN	Г				CLIENT CC	NTRACT NO		REQUISITION I	No.	SPECIFICATION	N No.
KAVII	N							-		-			-
CLIEN	NT NA	AME		REV No.	BY	DATE	CKD	DATE	APP	DATE	DESC	CRIPTION	
GODA	AVAR	I GAS PRI	IVATE LIMITED	A	SS	14-Oct-16	NK/TKV	14-Oct-16	MRM/BSK	14-Oct-16	ISSUE	ED FOR REVIEW	
CLIEN	NT'S F	REF:		B	SS	23-Nov-16	NK/TKV	23-Nov-16	MRM/BSK	23-Nov-16	ISSUE	ED FOR APPROV	/AL
-				$\overline{}$									
ORIG	INAT	OR	ORIG. DATE										
ss			12-Oct-16	$\overline{}$									
1			I.			1	DESIGN	BASIS					
2							DESIGN	DASIS					
3	c).	CO <sub>2</sub> FL	OODING SYSTEM:										
4		The pag	ckage shall be protected	d by auto	matica	Illy operated	CO <sub>2</sub> floo	ding system	designed as	per NFPA-12,	which	h should have	
5		minimur	m following features: -										
6		i).	Gas Detection by insta	allation of	hydro	carbon gas	detector (	IR type) and	d transmitter w	ith adjustable	alarm	n levels (0-100	)%)
7			with preset of 10%, 20	% and 5	o%. Pa	ckage shou	ıld have a	t least 2 nos	s. gas detecto	rs.			
8		ii).	Installation of flame de			•			•		hould	have at least	
9			2 nos. flame detectors										
10		iii).	CO <sub>2</sub> flooding system s				_				-		per
11			compressor enclosure arrangement and conr										ene.
13			Cylinder Rules, 2004.										
14			philosophy shall be su										
15			For this the vendor sha	all provid	e suita	ble device s	such as pr	essure swit	ch (intrinsicall	y safe type) to	dete	ct the failure of	f main
16			Cylinders failure. One			-	-			cylinder from	remo	ote control roo	m.
17			Pull down lever on cyli										
18 19	3.		omer interface connecti ted in nozzles with isola										
20			ted in nozzies with isolo ted through high pressi							pariei ouliei i	COITIE	cuon) shan be	
21	4.		s (i.e. Relief valve, dista							t skid edae ou	ıtside '	the enclosure	and
22			to safe height of 2.5m a										
23	5.		ns from different proces				e and pac	king shall b	e manifolded	and terminate	d as s	single point for	
24			er interface duly flanged										
25	6.		package shall be comp										
26 27			em, control panel safety oply shall include all inte										
28		be by ai		5100111100	mig pir	omig/tabilig/	Jabico. Oc	Joining Syston	ii siidii be oi e	nooca on care t	уро. с	Juli Hate coom	gonan
29	7.		npressor package cont	rol systei	m shall	be designe	d for unat	tended safe	operation in	automatic mo	de and	d shall unload,	start,
30		load, sto	op safely. The compres	sor shall	start ir	auto in cas	se high ba	nk storage	pressure falls	below 210 kg	/cm <sup>2</sup> g	and stop once	e the
31		pressur	e in all three banks of s	torage c	ascade	reaches 25	55 kg/cm <sup>2</sup>	g.					
32	8.	The Var	riable Suction Compres	sor shall	be sui	table for co	ntinuous o	peration on	variable sucti	on pressure f	rom 2	10 kg/cm <sup>2</sup> g to	
33			m <sup>2</sup> g, supplied through	LCV mou	unted C	CNG storage	e cascade	/ On line Su	pply of natura	I gas through	pipelii	ne and discha	rge
34		•	e of 255 kg/cm <sup>2</sup> g.										
35	9.		npressor shall be desig						sor capable of	taking suction	n from	n gas lines whe	en
36	10		e within the range of 19 evel shall not exceed 75						CUITA				
37			npressor shall be desig					-		0 ka/cm²a ⊔		ar decianing fo	r the
39	11.		g of gas at inlet of com					iany <del>e</del> Ul Z II	o ky/oni y to i	o ky/ciii y. H	OWEVE	i ucaigning 10	า แเฮ
40	12.		essor Vendor to provide					nt for Boost	ter compresso	r package.			
41			essor package shall be	provided	with fo	llowing inst	ruments:		•				
42		a).	All tripping shall be wit										
43		b).	Temperature indicator							otogo diseb-	rac L	iah 0 ma-1	hank
44		c). d).	Pressure indication: 2r Coolant: Temp & pr in							stage discha	ıge, n	ıgrı & medium	vank.
46		и). e).	Hour meter.	aicatiOH (	A SVVIIC	ii ana t <del>e</del> mp	iuicatiUl	and world					
47		f).	One no. Pressure Swit	tch/Trans	mitter	shall be ins	talled in th	ne inlet line t	to compressor	٠.			
48		g).	One no. Coriolis mass	flow me	ter with	integral loc	al display	with transm	nitter shall be i	nstalled for m			
49		-	e supplier is responsibl		ide full	process de	sign to me	eet performa	ance as specif	fied in the data	ashee	t.	
50	15.	Process	s design deliverables to	include:									
51		,	ess design calculations										
52		b) P&Id											
53		,	age battery limit connec										
54	4.0		se & Effect, Control sett										
55 56			rols shall be handled by							remove liquid	dron	late down to	
57	17.		essor suction scrubbers ons or below.	onan De	iiiieu V	viiii vaile pa	ion iiiist ei	ııııııaı01. Va	an <del>e</del> pack stidli	remove liquit	a urop	icis aomii io	
58	18.		r to select suitable inlet	device for	or the o	compressor	suction so	crubbers.					
59													
60													
1													

TITLE								ITEM/TAG No.		DOCUMENT N	lo.	
PROCESS DATASI	IEET - BOOSTER COMPRES	SOR PACE	KAGE ([	AUGHTER ST	TATION)			REFER BAS	IS-33	16017-I	P-DS-0107	
PROJECT DESCRI	PTION							PROJECT No.		SHEET	REVISION	
CONSTRUCTION O	F CITY GAS STATION CUM	CNG MOTI	HER ST	ATIONS & DAI	UGHTER BO	OSTER STAT	TONS	KIP-1601	7	3 OF 4	В	
EPCM CONSULTAI	IT				CLIENT CO	ONTRACT NO		REQUISITION I	No.	SPECIFICATION	ON No.	
KAVIN						-		-			-	
CLIENT NAME		REV No.	BY	DATE	CKD	DATE	APP	DATE	DESCRIPTION			
GODAVARI GAS P	RIVATE LIMITED	A	SS	14-Oct-16	NK/TKV	14-Oct-16	MRM/BSK	14-Oct-16	ISSUE	D FOR REVIEW	V	
CLIENT'S REF:		B	SS	23-Nov-16	NK/TKV	23-Nov-16	MRM/BSK	23-Nov-16	ISSUE	D FOR APPRO	VAL	
-												
ORIGINATOR	ORIG. DATE											
ss	12-Oct-16											
1						. – . – . –						
2					DESIGN	I BASIS						
3 19. Suppli	er shall provide complet	e filled in	datas	heet in API	618 forma	at for compr	essors.					
	quid carry over in the ga							JS Gal / MMS	CF (13	3.4 Litres / M	MSCM).	
5 21. Design	code applicable shall b	e ASME	and A	PI 618. Sup	plier to pr	ovide deviat	tions if any.		`		,	
6 22. Suppli	er shall ensure that the	maximun	n predi	cted discha	rge tempe	rature shall	be within the	API requirem	ent.			
	discharge temperature											
	AWP of the cylinder sha				• .			•	-			
	otor rating shall not be 1											
	ons. In addition the maj	or rating	snall n	ot be less th	nan 105%	of the power	er requirea (in	cluding power	trans	mission loss	es)	
<del></del>	relief conditions. mpressor system shall	ho docia	nad ta	nrovent air	ingroce in	the eyetem	during startu	o operation a	nd chi	itdown Noc	neenry	
	nentation shall be provid		neu to	prevent an	iligiess ili	ine system	during startu	p, operation a	iiu siit	aldown. Nece	555ai y	
<del></del>	erial used in the packag		e flam	e retardant								
	valves shall be provided					nter stages	ofcompresso	r with setting a	as per	cl.7.20.4 of	API-11P	
	V. venting as per cl. 7.2											
	ency shut down (ESD)							designed and	incor	porated to iso	olate	
18 casca	les storage from dispen	sers, sto	p com	oressor isola	ate the co	mpressor si	uction and cut	off power sup	ply or	n activation c	of ESD	
19 switch	This ESD switch shall	have to b	e man	ually reset t	o restart t	he compres	ssor package	again. To isola	ate dis	spensers acti	uators of	
	nsers may be used.											
	piping/ tubing, valves,							through final of	discha	rge from the	compressor	
	nterface) shall be SS-31				•	,	•					
	ompressor Package sha	all trip if a	ny of t	he enclosur	e is opene	ed while the	machine is ru	ınnıng.				
24 32. Design 25 i) Pipir		ASME/A	VNICI D	24.2								
	sure Vessel: -			III, DIV 1								
	Cooler -	Preferal		•								
	) Booster Compressor I				oe 6020 a	nd 7020 acc	cordinaly.					
29 34. Tag se	quence number shall be	e 6000-80	000 foi	Three (3) 1	Гwo (2) Во	oster Comp	oressor Packa	ige.				
30				, ,	, ,	•						
31												
32												
33												
34												
35												
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59 60												
00												
1					N KAVIN™							

ROJ	ECT DESCRIPTION	T - BOOSTER COMP ON TY GAS STATION C					STER STATION	· · · · · · · · · · · · · · · · · · ·	REFER BAS PROJECT No. KIP-1601	SIS-33	DOCUMENT 16017- SHEET 4 OF 4	P-DS-0107 REVISION
	CONSULTANT	IT GAS STATION C	OW CNG WO	INEK SIA	TIONS & DAU	CLIENT CON		3	REQUISITION		SPECIFICAT	_
AVII						CLILIVI COI	•		-	140.	OI LOII IOATI	-
	IT NAME		REV No.	BY	DATE	CKD	DATE	APP	DATE	DESC	RIPTION	
	VARI GAS PRIVA	TE LIMITED	A	SS	14-Oct-16	NK/TKV	14-Oct-16	MRM/BSK	14-Oct-16		D FOR REVIE	EW
	IT'S REF:		B	SS	23-Nov-16	NK/TKV	23-Nov-16	MRM/BSK	23-Nov-16	ISSUE	ED FOR APPR	OVAL
RIG	INATOR	ORIG. DATE										
s		12-Oct-16										
1	Service	:	GAS					Equipment Tag	1 No.	-		
2	Configuration	:	1 x100%					Running		1	Spare :	
3	Compressor Type	e :	Non-Lubri	icating type	e, Variable suc.	Pressure Rec	ciprocating	Driver Type	:	Electr	ical Motor Drive	en
	Design Margin	:	-					Capacity Contr			natic (VTA)	
	Process Data	<u> </u>		Compresso	or			No of Stages		VTA		
	Design Cases Gas Handled	:	Compress	and Matura	l Gas (CNG)			No Required Design Code		2 ΔPI 6:	18, API-11P Se	acond Edition
8	Class/Zone				vision 1, Gas G	roup D. Group	IIA. IIB	Design Code		ALTO	10, 711-111 00	Scoria Laitio
9	CASE-1				,	/						
10	Parameters			Units		Booster Cor	npressor Packa	age			Re	marks
11	Volume Flow			SCMH		250.00	, i done	J-				
12	Mass Flow			kg/hr		182.03					Note-13	
13	Inlet Conditions											
4	Suction Pressure			kg/cm²g		19-210					Note-14	
15	Suction Temperate	ıre		°C		39.00					Note-13	
	Molecular Weight			kg/kmol kg/m <sup>3</sup>		17.25 33.04					Note-13 Note-13	
18	Mass Density Specific heat ratio			ny/III		1.429					Note-13	
_	Compressibility fac	ctor				0.9121					Note-13	
20	Discharge Condi		Ц									
21	Discharge Pressu			kg/cm²g		255.00					Note-4,5	
	Discharge Temper	ature		°C		55.00	-	-			Note-1,6	
	Mass Density			kg/m <sup>3</sup>		181.7 (VTC)					Note-13	
24 25	Compressibility fac			0/.		0.8719 (VTC	)				Note-13	
(نے	Polytropic Efficiend	Jy		%		Note-7					1	
_	Duty			kW							Note-8.9	
26	Duty Total Power			kW kW		22 VTA					Note-8,9	
26 27	Total Power	Mole %				22					Note-8,9	
26 27 28	•		onents			22 VTA	Case - Gas	Nov	mal Casa		Note-8,9	
26 27 28 29	Total Power  Compositions in		onents			VTA  Design Composi	ition Range	Nor	mal Case		Note-8,9	
26 27 28 29 30 31	Total Power  Compositions in  Methane		onents			Design Composi	ition Range - 99.0	Nor	95.21		Note-8,9	
26 27 28 29 30 31	Total Power  Compositions in  Methane  Ethane		onents			Design Composi 82.0 7.5	ition Range - 99.0 - 0.9	Nor	95.21 1.82		Note-8,9	
26 27 28 29 30 31 32 33	Total Power  Compositions in  Methane		onents			Design Composi 82.0 7.5	ition Range - 99.0	Nor	95.21		Note-8,9	
26 27 28 29 30 31 32 33 34	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane		onents			Design Composi 82.0 7.5 3.5 0.75	ition Range 1 – 99.0 5 – 0.9 5 – 0.0 5 – 0.0	Nor	95.21 1.82 0.57 0.20 0.13		Note-8,9	
26 27 28 29 30 31 32 33 34 35 36	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane		onents			Design (Composi 82.0 7.5 3.5 0.74 0.14	ition Range 1 – 99.0 5 – 0.9 6 – 0.0 6 – 0.0 6 – 0.0 6 – 0.0	Nor	95.21 1.82 0.57 0.20 0.13 0.06		Note-8,9	
26 27 28 29 30 31 32 33 34 35 36 37	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane n-Pentane		onents			Design (Composi 82.0 7.5 3.5 0.7 9.1 0.1 9.1 0.1 1.1 0.1 0	ition Range 1 – 99.0 5 – 0.9 6 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0	Nor	95.21 1.82 0.57 0.20 0.13 0.06 0.05		Note-8,9	
26 27 28 29 30 31 32 33 34 35 36 37	Total Power  Compositions in  Methane  Ethane  Propane i-Butane n-Butane i-Pentane n-Pentane Hexane		onents			22 VTA  Design (Composite State Stat	ition Range 1 – 99.0 1 – 0.9 1 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0	Nor	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21		Note-8,9	
26 27 28 29 30 31 32 33 34 35 36 37 38	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane n-Pentane		onents			22 VTA  Design Composi  82.0 7.5 3.5 0.79 0.79 0.11 0.11 0.22	ition Range 1 – 99.0 5 – 0.9 6 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0	Nor	95.21 1.82 0.57 0.20 0.13 0.06 0.05		Note-8,9	
26 27 28 29 30 31 32 33 34 35 36 37 38 39	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane n-Pentane Hexane Carbondioxide		onents			22 VTA  Design Composi  82.0  7.5  3.5  0.7  0.7  0.1  0.1  4.9	ition Range 1 – 99.0 1 – 0.9 1 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 6 – 0.0	Nor	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21		Note-8,9	
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane n-Pentane Hexane Carbondioxide Nitrogen		onents			22 VTA  Design Composi  82.0  7.5  3.5  0.7  0.7  0.1  0.1  4.9	ition Range 1 – 99.0 1 – 0.9 1 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 6 – 0.0 6 – 0.0 6 – 0.0	Nor	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29		Note-8,9	
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane n-Pentane hexane Carbondioxide Nitrogen H2S		onents			22 VTA  Design Composi  82.0  7.5  3.5  0.7  0.7  0.1  0.1  4.9	ition Range 1 – 99.0 1 – 0.9 1 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 6 – 0.0 6 – 0.0 6 – 0.0	Nor	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29		Note-8,9	
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	Total Power  Compositions in  Methane  Ethane  Propane  i-Butane  n-Butane  i-Pentane  n-Pentane  Hexane  Carbondioxide  Nitrogen		onents			22 VTA  Design Composi  82.0  7.5  3.5  0.7  0.7  0.1  0.1  4.9	ition Range 1 – 99.0 1 – 0.9 1 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 5 – 0.0 6 – 0.0 6 – 0.0 6 – 0.0	Nor	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29		Note-8,9	
26 27 28 29 30 31 32 33 34 35 36 37 38 40 41 42 43 44 45	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane n-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:			kW	package outl	22 VTA  Design (Composite Section 1)	ition Range 1 - 99.0 5 - 0.9 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 6 - 0.0 7 - 0.0 8 - 0.0 9 - 0.0 9 - 0.0 9 - 0.0		95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm	emper		e provided
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane n-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given	Compo	poster comp	kW	ackage outl	22 VTA  Design (Composite Section 1)	ition Range 1 - 99.0 5 - 0.9 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 6 - 0.0 7 - 0.0 8 - 0.0 9 - 0.0 9 - 0.0 9 - 0.0		95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm	emper		e provided
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane h-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by ven 2. Compi	temperature is bodor in their compressor vendor to o	poster compressor data:	oressor psheet.	ssor ratio.	22 VTA  Design Composite 12 (Composite 12 (	tition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 1 - 0.0 3 - 0.0 1 ppm	er compresso	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm		ature will be	e provided
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by ven 2. Compi	temperature is bodor in their compressor vendor to descript vendor share the compressor vendor vendo	poster compressor data: confirm the all ensure th	oressor psheet.	ssor ratio.	22 VTA  Design (Composite State Stat	tition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 1 - 0.0 3 - 0.0 1 ppm	er compresso	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm		ature will be	e provided
26 27 28 29 80 83 33 33 33 33 33 33 40 41 41 42 43 44 45 46 47 48 49 50	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by ven 2. Compi	temperature is bo dor in their comp essor vendor to o ressor vendor sha	poster compressor data: confirm the all ensure the conding disc	oressor psheet. compresse suitabicharge te	ssor ratio. ility of the memperature(	22 VTA  Design (Composite State Stat	tition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 6 - 0.0 1 - 0.0	er compresso	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm		ature will be	provided
26 27 28 29 80 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 51	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by ven 2. Compi 3. Compi tempe 4. The di	temperature is bo dor in their comp essor vendor to essor vendor sha eratures & corresp scharge pressure	poster compressor data: confirm the call ensure the ponding discertification in the conding discertification in the condinate	oressor psheet. compresse suitabicharge tes the disc	ssor ratio. ility of the memperature(	22 VTA  Design (Composite State Stat	tition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 6 - 0.0 1 - 0.0	er compresso	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm		ature will be	e provided
26 27 28 29 30 31 32 33 34 35 36 37 38 39 41 41 42 43 44 45 46 47 48 49 40 40 40 40 40 40 40 40 40 40	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane n-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by comp 2. Compi 3. Compi tempe 4. The di 5. The di 6. The di	temperature is be dor in their compressor vendor to dessor vendor sharatures & correspondence of the control of	poster compressor data: confirm the conding discerning	pressor presso	ssor ratio. ility of the m emperature( charge press to be provide s to be prov	22 VTA  Design (Composite Section 1)	tition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 1 - 0.0 3 - 0.0 1 - 0.0	er compresso	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm		ature will be	e provided
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane n-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by ven 2. Compi 3. Compi 4. The di 5. The di 6. The di 7. Polytro	temperature is be dor in their compressor vendor to dessor vendor share the correspondence of the condition	poster compressor data: confirm the lail ensure the provided is at each staure at	oressor psheet. compressive suitable the disc the disc ge has to stage had by com	ssor ratio. ility of the memperature( charge press to be provide s to be proven pressor ver	22 VTA  Design (Composite Section 1)	ition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 6 - 0.0 1	er compresso or the Booster stages of con	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm	for 39	ature will be	e provided
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26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 56 56 56 56 56 56 56 56 56 5	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane n-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by ven 2. Compi 3. Compi tempe 4. The di 5. The di 6. The di 7. Polytro 8. The co	temperature is bo dor in their compressor vendor to cressor vendor sharatures & correspondered by correspondered by correspondered by compressor duty provided by comprovided by compressor duty provided by compressor duty provi	poster compressor datase confirm the conding discording	oressor psheet. compresse suitabicharge tes the discage has to stage had d by come duty redor.	ssor ratio. ility of the memperature( charge press to be provide s to be prov rpressor ver equired to co	22 VTA  Design (Composite State Stat	ition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 6 - 0.0 1	er compresso or the Booster stages of con	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm	for 39	ature will be	e provided
26 27 28 29 30 31 32 33 34 35 36 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane n-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by ven 2. Compi 3. Compi tempe 4. The di 5. The di 6. The di 7. Polytro 8. The co will be 9. The gi	temperature is bo dor in their compressor vendor to cressor vendor sharatures & correspondered by correspondered by correspondered by compressor duty provided by compressor duty is the Ab	poster compressor datase confirm the all ensure the ponding disceptorized at each standard	oressor psheet. compresse suitabicharge tes the discage has to stage has done duty redor.	ssor ratio. ility of the memperature( charge press to be provide pressor ver equired to co	22 VTA  Design (Composite State Stat	tition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 1 - 0.0 2 - 0.0 3 - 0.0 3 - 0.0 4 ppm  ture. Howeve  consturction for three sor. 6 dor. 6 gas to 255 in the series of th	er compresso or the Booster stages of con	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm	for 39	ature will be	e provided
28 27 28 30 31 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by ven 2. Compr 3. Compr tempe 4. The di 6. The di 7. Polytro 8. The co will be 9. The gi 10. Vendo	temperature is bodor in their compressor vendor to cressor vendor sharatures & corresponder some control of the	poster compressor data: confirm the all ensure the conding disc at each state at each state at each in the pressor venosorbed pover a margin on	oressor p sheet. compresse suitabilicharge tes the discage has t stage has t d by com e duty re dor. ver of the the flow	ssor ratio. ility of the m emperature( charge press to be provide s to be provide pressor ver equired to co	Design Composite State of Compos	tition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 1 - 0.0 2 - 0.0 3 - 0.0 3 - 0.0 4 ppm  ture. Howeve  consturction for three sor. 6 dor. 6 gas to 255 in the series of th	er compresso or the Booster stages of con	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm	for 39	ature will be	e provided
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 55 56 57 58 59 59	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane n-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by ven 2. Compr 3. Compr tempe 4. The di 5. The di 6. The di 7. Polytro 8. The cy will be 9. The gi 10. Vendo 11. Desigr	temperature is bo dor in their compressor vendor to cressor vendor sharatures & correspondered by correspondered by correspondered by compressor duty provided by compressor duty is the Ab	poster compressor data: confirm the all ensure the conding disce at each staure at each staure at each store ovided is the pressor venosorbed poven for margin on pressors shall be pressored by the pressor shall be pressored by the pressored	oressor psheet. compresse suitabicharge tes the discage has to stage has down or the discount of the flow all be mir	ssor ratio. ility of the memperature( charge presso be provide s to be provide pressor ver equired to co e compressor rate to designimum 30 ye	Design Composite State of Compos	ition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 6 - 0.0 6 - 0.0 6 - 0.0 6 - 0.0 6 - 0.0 6 - 0.0 6 - 0.0 6 - 0.0 6 - 0.0 6 - 0.0 6 - 0.0 6 - 0.0 7 - 0.0 8 - 0.0 8 - 0.0 9	er compresso or the Booster stages of con	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm	for 39	ature will be	e provided
26 27 28 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 55 55 56 57 58 60 61	Total Power  Compositions in  Methane Ethane Propane i-Butane n-Butane i-Pentane Hexane Carbondioxide Nitrogen H2S  NOTES:  1. Given by ven 2. Compi 3. Compi tempe 4. The di 5. The di 6. The di 7. Polytro 8. The co will be 9. The gi 10. Vendo 11. Desigr 12. Ambie 13. The gi	temperature is bodor in their complessor vendor to dessor vendor sharatures & corresponding to the complessor duty provided by compressor duty is the Abort to consider 10% in Life of the complet Temperature: ven suction and design of the complete of the	poster compressor data: confirm the all ensure the ponding disce provided is at each staure at each staure at each storovided is the provided is the provided is the pressor ven posorbed pow 6 margin on pressors shall 8 °C MIN discharge pr	oressor psheet. compresse suitabicharge test the discage has to stage has to stage has to stage has the flow all be mir/48 °C Noperties	ssor ratio. ility of the memperature( charge presso be provide s to be provide pressor ver equired to co e compressor rate to designimum 30 ye MAX. is based on	Design Composi 82.0 7.5. 3.5. 0.7! 0.1! 0.2! 4.9 0.00 10 et temperal aterial of cos.). sure at the ded by vendor dided by vendor dided by vendor. compress the ore. yn compress t	tition Range 1 - 99.0 1 - 0.9 1 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 5 - 0.0 6 - 0.0 6 - 0.0 7 - 0.0 7 - 0.0 8 - 0.0 8 - 0.0 9 - 0.0	or the Booster stages of com	95.21 1.82 0.57 0.20 0.13 0.06 0.05 0.21 1.46 0.29 10 ppm	for 39	ature will be	
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