



CAT.:	RELATÓRIO	Nº DOC.:	RL-4000-962-TOC-002
INSTALAÇÃO:	TRECHO SUL	FOLHA	28 de 54
TÍTULO DO DOCUMENTO:	SIMULAÇÃO TERMO-HIDRÁULICA – ECOMP SIDERÓPOLIS		

VES-10140	Block Valve	94.88	94.88	27.34	44.18	44.18	0.6000	34.00
VES-10150	Block Valve	90.98	90.98	27.34	40.85	40.85	0.6000	34.00
VES-10160	Block Valve	86.64	86.64	27.34	37.70	37.70	0.6000	34.00
VES-10170	Block Valve	82.39	82.39	27.34	35.12	35.12	0.6000	34.00
VES-10190	Block Valve	94.98	94.98	27.24	44.32	44.32	0.6000	34.00
VES-10200	Block Valve	90.12	90.12	27.24	40.20	40.20	0.6000	34.00
VES-10280	Block Valve	93.02	93.02	26.47	42.36	42.36	0.6000	34.00
VES-10290	Block Valve	87.74	87.74	26.47	37.97	37.97	0.6000	34.00
VES-10300	Block Valve	83.46	83.46	26.47	35.19	35.19	0.6000	34.00
VES-10320	Block Valve	93.70	93.70	26.37	42.93	42.93	0.6000	34.00
VES-10330	Block Valve	89.35	89.35	26.37	38.97	38.97	0.6000	34.00
VES-10340	Block Valve	86.06	86.06	26.37	36.59	36.59	0.6000	34.00
VES-10350	Block Valve	82.43	82.43	26.37	34.31	34.31	0.6000	34.00
VES-10400	Block Valve	94.51	94.51	26.26	43.04	43.04	0.6000	34.00
VES-10420	Block Valve	85.72	85.72	26.26	35.36	35.36	0.6000	34.00
VES-10430	Block Valve	81.77	81.77	26.26	32.76	32.76	0.6000	34.00
VES-10450	Block Valve	94.19	94.19	26.16	42.85	42.85	0.6000	34.00
VES-10460	Block Valve	88.94	88.94	26.16	38.02	38.02	0.6000	34.00
VES-10470	Block Valve	84.48	84.48	26.06	34.56	34.56	0.6000	34.00
VES-10540	Block Valve	94.82	94.82	25.97	43.47	43.47	0.6000	34.00
VES-10550	Block Valve	90.64	90.64	25.97	39.21	39.21	0.6000	34.00
VES-10560	Block Valve	84.67	84.67	25.97	34.55	34.55	0.6000	34.00
VES-10580	Block Valve	94.59	94.59	25.87	43.31	43.31	0.6000	34.00
VES-10590	Block Valve	91.07	91.07	25.87	39.67	39.67	0.6000	34.00
VES-10610	Block Valve	80.49	80.49	25.62	31.90	31.90	0.6000	34.00
VES-10660	Block Valve	94.34	94.34	25.32	42.82	42.82	0.6000	34.00
VES-10670	Block Valve	92.46	92.46	25.32	40.21	40.21	0.6000	34.00
VES-10680	Block Valve	88.78	88.78	24.02	36.64	36.64	0.6000	34.00
VES-10690	Block Valve	86.52	86.52	23.52	34.49	34.49	0.6000	34.00
VE40040	Block Valve	82.95	82.95	6.74	30.82	30.82	0.6000	34.00
VE40050	Block Valve	82.20	82.20	6.22	29.59	29.59	0.6000	34.00
VE40060	Block Valve	82.21	82.21	6.19	29.03	29.03	0.6000	34.00
VE40070	Block Valve	81.12	81.12	6.19	27.75	27.75	0.6000	34.00
VE40080	Block Valve	80.78	80.78	5.09	27.15	27.15	0.6000	34.00
VE40090	Block Valve	79.64	79.64	4.97	23.78	23.78	0.6000	34.00
VE40100	Block Valve	78.93	78.93	4.87	24.39	24.39	0.6000	34.00
VE40110	Block Valve	78.71	78.71	4.87	25.21	25.21	0.6000	34.00
VE40120	Block Valve	77.72	77.72	4.87	25.34	25.34	0.6000	34.00
VE40130	Block Valve	76.57	76.57	4.87	25.52	25.52	0.6000	34.00
VE40170	Block Valve	76.07	76.07	4.87	25.89	25.89	0.6000	34.00
VE40140	Block Valve	74.29	74.29	4.87	25.13	25.13	0.6000	34.00
VE40150	Block Valve	73.40	73.40	4.87	25.22	25.22	0.6000	34.00
VE40200	Block Valve	72.15	72.15	4.87	24.96	24.96	0.6000	34.00
VE40210	Block Valve	72.04	72.04	4.87	25.78	25.78	0.6000	34.00
VE40220	Block Valve	72.02	72.02	4.87	25.99	25.99	0.6000	34.00
VE40230	Block Valve	71.53	71.53	4.87	26.12	26.12	0.6000	34.00
VE40240	Block Valve	69.28	69.28	4.87	24.61	24.61	0.6000	34.00
VE40250	Block Valve	68.07	68.07	4.87	25.02	25.02	0.6000	34.00
VE40260	Block Valve	66.73	66.73	4.87	25.00	25.00	0.6000	34.00
VE40270	Block Valve	66.37	66.37	3.67	25.50	25.50	0.6000	34.00
VE60040	Block Valve	65.60	65.60	3.67	25.48	25.48	0.6000	34.00
VE60050	Block Valve	64.23	64.23	3.67	25.44	25.44	0.6000	34.00

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VE60060	Block Valve	63.75	63.75	3.67	25.84	25.84	0.6000	34.00
VE60070	Block Valve	66.77	66.77	3.67	28.31	28.31	0.6000	34.00
VE60080	Block Valve	65.45	65.45	3.42	26.64	26.64	0.6000	34.00
VE60090	Block Valve	64.12	64.12	3.10	25.90	25.90	0.6000	34.00
VE60100	Block Valve	62.43	62.43	3.10	25.24	25.24	0.6000	34.00
VE60110	Block Valve	62.04	62.04	2.94	26.55	26.55	0.6000	34.00
VE60120	Block Valve	61.30	61.30	2.94	26.22	26.22	0.6000	34.00
VE60270	Block Valve	60.94	60.94	2.90	26.02	26.02	0.6000	34.00
VE60320	Block Valve	60.00	60.00	2.72	26.27	26.27	0.6000	34.00
VE60190	Block Valve	72.72	72.72	2.62	31.99	31.99	0.6000	34.00
VE60200	Block Valve	68.42	68.42	2.62	26.30	26.30	0.6000	34.00
VE60210	Block Valve	69.63	69.63	2.62	27.12	27.12	0.6000	34.00
VE60220	Block Valve	69.66	69.66	2.62	26.74	26.74	0.6000	34.00
VE60230	Block Valve	68.85	68.85	2.53	26.30	26.30	0.6000	34.00
VE60240	Block Valve	66.21	66.21	2.53	24.54	24.54	0.6000	34.00
VE60250	Block Valve	67.67	67.67	2.53	26.76	26.76	0.6000	34.00
VE60290	Block Valve	59.11	59.11	2.72	26.13	26.13	0.6000	34.00
VE80020	Block Valve	65.62	65.62	2.07	26.07	26.07	0.6000	34.00
VE80030	Block Valve	63.96	63.96	2.07	25.74	25.74	0.6000	34.00
VE80040	Block Valve	57.65	57.65	2.07	21.41	21.41	0.6000	34.00
VE80050	Block Valve	56.72	56.72	2.07	24.51	24.51	0.6000	34.00
VE80060	Block Valve	55.90	55.90	2.07	25.15	25.15	0.6000	34.00
VE80070	Block Valve	54.32	54.32	1.94	25.31	25.31	0.6000	34.00
VE80080	Block Valve	52.97	52.97	1.94	25.67	25.67	0.6000	34.00
VE80090	Block Valve	54.77	54.77	1.94	27.26	27.26	0.6000	34.00
VE80100	Block Valve	53.73	53.73	1.94	26.32	26.32	0.6000	34.00
VE80110	Block Valve	52.34	52.34	1.94	25.48	25.48	0.6000	34.00
VE90050	Block Valve	72.30	72.30	7.98	27.14	27.14	0.6000	34.00
VE90060	Block Valve	71.26	71.26	7.98	26.60	26.60	0.6000	34.00
VE90070	Block Valve	69.45	69.45	7.40	25.72	25.72	0.6000	34.00
VE90080	Block Valve	67.63	67.63	7.40	25.17	25.17	0.6000	34.00
VE90090	Block Valve	66.85	66.85	7.40	25.22	25.22	0.6000	34.00
VE90100	Block Valve	65.31	65.31	7.40	24.66	24.66	0.6000	34.00
VE90110	Block Valve	64.19	64.19	7.40	25.30	25.30	0.6000	34.00
VE90120	Block Valve	63.23	63.23	6.70	25.42	25.42	0.6000	34.00
VE90130	Block Valve	62.17	62.17	6.70	25.08	25.08	0.6000	34.00
VEFRONT-BLKV-1	Block Valve	87.77	87.77	27.56	40.88	40.88	0.6000	34.00
VES-10040	Block Valve	83.06	83.06	27.56	37.88	37.88	0.6000	34.00
VES-10210	Block Valve	85.31	85.31	27.24	36.81	36.81	0.6000	34.00
VES-10410	Block Valve	90.83	90.83	26.26	39.43	39.43	0.6000	34.00
VES-10600	Block Valve	86.45	86.45	25.87	35.93	35.93	0.6000	34.00
VES-90040	Block Valve	74.16	74.16	9.78	28.59	28.59	0.6000	34.00
VE60140	Block Valve	74.65	74.65	2.71	48.00	48.00	0.6000	34.00
R1-UP-RESI-1	Resistance	77.73	77.48	27.86	35.24	35.16	0.6000	34.00
R2-UP-RESI-1	Resistance	79.06	78.82	27.78	35.72	35.64	0.6000	34.00
R3-UP-RESI-1	Resistance	79.22	78.97	27.71	35.98	35.90	0.6000	34.00
R4-UP-RESI-1	Resistance	78.98	78.74	27.63	35.61	35.53	0.6000	34.00
R5-UP-RESI-1	Resistance	79.34	78.98	27.56	35.83	35.71	0.6000	34.00
R6-UP-RESI-1	Resistance	77.41	77.06	27.45	32.45	32.33	0.6000	34.00
R7-UP-RESI-1	Resistance	78.66	78.29	27.34	33.15	33.02	0.6000	34.00
R8-UP	Resistance	78.81	78.43	26.57	32.88	32.75	0.6000	34.00
R9-UP-RESI-1	Resistance	78.94	78.55	26.47	32.76	32.63	0.6000	34.00

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R10UP-RESI-1	Resistance	78.97	78.58	26.37	32.56	32.43	0.6000	34.00
R11UP-RESI-1	Resistance	77.92	77.46	26.26	30.60	30.43	0.6000	34.00
R12UP-RESI-1	Resistance	80.11	79.65	26.06	31.83	31.67	0.6000	34.00
R13UP-RESI-1	Resistance	80.05	79.59	25.97	31.71	31.55	0.6000	34.00
R14UP-RESI-1	Resistance	77.84	77.39	25.62	30.34	30.18	0.6000	34.00
R15UP	Resistance	66.37	66.10	3.67	25.50	25.39	0.6000	34.00
R16UP-RESI-1	Resistance	59.11	58.81	2.72	26.13	26.00	0.6000	34.00
RG70-REGU-1	Bypass	66.10	66.10	3.67	25.39	25.39	0.6000	34.00
RG70A-REGU-1	Max PD	83.45	75.00	9.78	32.15	29.16	0.6000	34.00
COOLER1	Resistance	99.84	99.57	27.78	55.27	51.70	0.6000	34.00
COOLER2	Resistance	99.84	99.57	27.71	54.39	51.70	0.6000	34.00
COOLER3	Resistance	99.84	99.57	27.63	54.51	51.70	0.6000	34.00
COOLER4	Resistance	99.84	99.56	27.56	54.37	51.70	0.6000	34.00
COOLER5	Resistance	99.84	98.65	27.45	58.23	48.00	0.6000	34.00
COOLER6	Resistance	99.84	98.65	27.34	57.08	48.00	0.6000	34.00
COOLER7	Resistance	99.84	98.66	27.24	56.27	48.00	0.6000	34.00
COOLER8	Resistance	99.84	98.61	26.47	55.82	48.00	0.6000	34.00
COOLER9	Resistance	99.84	98.62	26.37	55.54	48.00	0.6000	34.00
COOLER10	Resistance	99.84	98.62	26.26	55.30	48.00	0.6000	34.00
COOLER11	Resistance	99.84	98.42	26.16	54.59	48.00	0.6000	34.00
COOLER12	Resistance	99.84	98.44	25.97	53.21	48.00	0.6000	34.00
COOLER13	Resistance	99.84	98.42	25.87	53.15	48.00	0.6000	34.00
COOLER14	Resistance	99.84	98.46	25.52	54.41	48.00	0.6000	34.00
COOLER15	Bypass	66.10	66.10	3.67	25.39	25.39	0.6000	34.00
COOLER16	Resistance	75.00	74.65	2.71	48.83	48.00	0.6000	34.00
IZOZOG	Max PD	77.48	99.84	27.78	35.16	55.27	0.6000	34.00
CHIQUITOS	Max PD	78.82	99.84	27.71	35.64	54.39	0.6000	34.00
ROBORE	Max PD	78.97	99.84	27.63	35.90	54.51	0.6000	34.00
YACUSES	Max PD	78.74	99.84	27.56	35.53	54.37	0.6000	34.00

Cmprs	Actual Head	Flow	Speed	Adiab Effic	Dschrg Temp	Power Required	Power Available
ID	(N.M/KG)	(M3/H)	(RPM)	(PERCNT)	(DEG C)	(HP)	(HP)
IZOZOG	33031.80	13861.65		85.00	55.27	12363.44	38757.64
CHIQUITOS	30750.52	13599.59		85.00	54.39	11478.98	38629.12
ROBORE	30524.53	13553.28		85.00	54.51	11364.54	39186.04
YACUSES	30870.20	13534.97		85.00	54.37	11462.55	39550.18

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* External Regulator Hydraulic Report ----- Time = 0.000 (HRS) *

:: External Regulator Flow Balance Report ::

	Mass Units (TONN/H)	Volumetric Units (MMM3/D)
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Total input flow	839.384	27.860
Total output flow	839.396	27.860
Network flow balance	-0.012	0.000

:: External Regulator Hydraulic Summary Report ::

External Regulator ID	Mode of Control	Pressure KG/CM2G	Flow (MMM3/D)	Temperature (DEG C)	Specific Gravity	Heating Value (MJ/M3)
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INPUT	Max Pres	99.49	-27.860	51.70	0.6000	34.00
CORUMBA	Max Flow	83.06	0.000	37.88	0.6000	34.00
CAMPO_GRANDE	Max Flow	78.81	0.670	32.88	0.6000	34.00
TRÊS_LAGOAS	Max Flow	90.83	0.000	39.43	0.6000	34.00
BILAC	Max Flow	86.93	0.100	36.33	0.6000	34.00
BOA_ESPERANÇA_DO_SUL	Max Flow	86.45	0.250	35.93	0.6000	34.00
SÃO_CARLOS	Max Flow	96.55	0.200	45.80	0.6000	34.00
RIO_CLARO	Max Flow	91.10	1.300	38.73	0.6000	34.00
LIMEIRA	Max Flow	88.65	0.500	36.43	0.6000	34.00
AMERICANA	Max Flow	86.06	0.650	34.14	0.6000	34.00
REPLAN	Max Flow	83.45	0.950	32.15	0.6000	34.00
EE_SUMARE	Max Flow	82.71	0.520	30.27	0.6000	34.00
EE_CAMPINAS	Max Flow	81.99	0.030	29.00	0.6000	34.00
ITU	Max Flow	80.78	1.000	27.15	0.6000	34.00
ARAÇOIABA_DA_SERRA	Max Flow	78.93	0.100	24.39	0.6000	34.00
ARAUCÁRIA_CIC	Max Flow	66.42	0.900	25.48	0.6000	34.00
REPAR	Max Flow	66.37	0.300	25.50	0.6000	34.00
JOINVILLE	Max Flow	65.45	0.250	26.64	0.6000	34.00
GUARAMIRIM	Max Flow	64.12	0.320	25.90	0.6000	34.00
GASPAR	Max Flow	62.04	0.160	26.55	0.6000	34.00
BRUSQUE	Max Flow	61.30	0.040	26.27	0.6000	34.00
TIJUCAS	Max Flow	60.00	0.180	26.27	0.6000	34.00
SAO_P_ALCÂNTARA	Max Flow	73.11	0.090	39.18	0.6000	34.00
TUBARAO	Max Flow	68.85	0.090	26.30	0.6000	34.00
URUSSANGA	Max Flow	67.05	0.270	26.21	0.6000	34.00

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NOVA_VENEZA	Max Flow	66.31	0.190	26.41	0.6000	34.00
VARZEA_DO_CEDRO	Max Flow	54.32	0.130	25.31	0.6000	34.00
ARARICÁ	Max Flow	54.05	0.000	26.58	0.6000	34.00
CACHOEIRINHA	Max Flow	52.19	0.190	25.96	0.6000	34.00
REFAP	Max Flow	52.09	0.250	26.05	0.6000	34.00
CANOAS	Max Flow	52.09	0.750	26.05	0.6000	34.00
JAGUARIUNA	Max Flow	74.16	1.800	28.59	0.6000	34.00
ITATIBA	Max Flow	69.60	0.580	25.66	0.6000	34.00
GUARAREMA	Max Flow	63.27	0.700	25.35	0.6000	34.00
EMED_GUARAREMA	Max Flow	62.13	6.700	25.34	0.6000	34.00
INDAÍATUBA	Max Flow	81.12	0.100	27.75	0.6000	34.00
ARAUCÁRIA_UTE	Max Flow	66.37	0.000	25.50	0.6000	34.00
CANOAS_UTE	Max Flow	52.09	0.750	26.05	0.6000	34.00
PORTO_FELIZ	Max Flow	79.81	0.120	26.33	0.6000	34.00
CAMPO_LARGO	Max Flow	66.73	0.000	25.00	0.6000	34.00
GEMINI	Max Flow	83.34	0.100	31.88	0.6000	34.00
EMED_CAMPINAS_RIO	Max Flow	83.45	5.300	32.15	0.6000	34.00
IGREJINHA	Max Flow	54.05	0.000	26.52	0.6000	34.00
CAMP_RIO2	Max Flow	83.45	0.000	32.15	0.6000	34.00
C1-FUEL	Max Flow	77.48	0.080	35.16	0.6000	34.00
C2-FUEL	Max Flow	78.82	0.074	35.64	0.6000	34.00
C3-FUEL	Max Flow	78.97	0.073	35.90	0.6000	34.00
C4-FUEL	Max Flow	78.74	0.074	35.53	0.6000	34.00
C5-FUEL	Max Flow	78.98	0.106	35.71	0.6000	34.00
C6-FUEL	Max Flow	77.06	0.110	32.33	0.6000	34.00
C7-FUEL	Max Flow	78.29	0.107	33.02	0.6000	34.00
C8-FUEL	Max Flow	78.43	0.098	32.75	0.6000	34.00
C9-FUEL	Max Flow	78.55	0.103	32.63	0.6000	34.00
C10-FUEL	Max Flow	78.58	0.103	32.43	0.6000	34.00
C11-FUEL	Max Flow	77.46	0.104	30.43	0.6000	34.00
C12-FUEL	Max Flow	79.65	0.093	31.67	0.6000	34.00
C13-FUEL	Max Flow	79.59	0.099	31.55	0.6000	34.00
C14-FUEL	Max Flow	77.39	0.101	30.18	0.6000	34.00
C15-FUEL	Max Flow	66.10	0.000	25.39	0.6000	34.00
C16-FUEL	Max Flow	58.81	0.006	26.00	0.6000	34.00

* Station Hydraulic Summary Report ----- Time = 0.000 (HRS) *

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| Station ID: C5 Bank ID: CORUMBÁ Current Mode: Max PD

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Member ID	Type	Operating Status	Upstream	Dnstream	Flow	Power	Speed
			Pressure KG/CM2G	Pressure KG/CM2G	(MMM3/D)	Required (HP)	(RPM)
U5A	Cmp	Bank Control	78.98	99.84	13.73	5978.1	6388.47
U5B	Cmp	Bank Control	78.98	99.84	13.73	5978.1	6388.47

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| Station ID: C6 Bank ID: MIRANDA Current Mode: Max PD
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Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U6A	Cmp	Bank Control	77.06	99.84	13.67	6450.6	6590.71
U6B	Cmp	Bank Control	77.06	99.84	13.67	6450.6	6590.71

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| Station ID: C7 Bank ID: ANASTÁCIO Current Mode: Max PD
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Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U7A	Cmp	Bank Control	78.29	99.84	13.62	6053.9	6413.62
U7B	Cmp	Bank Control	78.29	99.84	13.62	6053.9	6413.62

=====
| Station ID: C8 Bank ID: C GRANDE Current Mode: Max PD
=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U8A	Cmp	Bank Control	78.43	99.84	6.62	2915.0	9572.30
U8B	Cmp	Bank Control	78.43	99.84	6.62	2915.0	9572.30
U8C	Cmp	Bank Control	78.43	99.84	6.62	2915.0	9572.30
U8D	Cmp	Bank Control	78.43	99.84	6.62	2915.0	9572.30

=====
| Station ID: C9 Bank ID: RIBAS Current Mode: Max PD
=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U9A	Cmp	Bank Control	78.55	99.84	13.18	5751.2	6299.51
U9B	Cmp	Bank Control	78.55	99.84	13.18	5751.2	6299.51

Handwritten signature and initials



CAT.:	RELATÓRIO	Nº DOC.:	RL-4000-962-TOC-002
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=====
| Station ID: C10 Bank ID: T LAGOAS Current Mode: Max PD
=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U10A	Cmp	Bank Control	78.58	99.84	13.13	5711.5	6282.86
U10B	Cmp	Bank Control	78.58	99.84	13.13	5711.5	6282.86

=====
| Station ID: C11 Bank ID: MIRANDÓPOLIS Current Mode: Max PD
=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U11A	Cmp	Bank Control	77.46	99.84	13.08	5960.5	6397.23
U11B	Cmp	Bank Control	77.46	99.84	13.08	5960.5	6397.23

=====
| Station ID: C12 Bank ID: PENÁPOLIS Current Mode: Max PD
=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U12A	Cmp	Bank Control	79.65	99.84	6.49	2650.7	9207.82
U12B	Cmp	Bank Control	79.65	99.84	6.49	2650.7	9207.82
U12C	Cmp	Bank Control	79.65	99.84	6.49	2650.7	9207.82
U12D	Cmp	Bank Control	79.65	99.84	6.49	2650.7	9207.82

=====
| Station ID: C13 Bank ID: IACANGA Current Mode: Max PD
=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U13A	Cmp	Bank Control	79.59	99.84	12.93	5298.4	6084.37
U13B	Cmp	Bank Control	79.59	99.84	12.93	5298.4	6084.37

Handwritten signature and initials



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=====

| Station ID: C14 Bank ID: SÃO CARLOS Current Mode: Max PD

=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U14A	Cmp	Bank Control	77.39	99.84	12.76	5815.0	6354.35
U14B	Cmp	Bank Control	77.39	99.84	12.76	5815.0	6354.35

=====

| Station ID: C15 Bank ID: ARUACÁRIA Current Mode: BY-PASS

=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U15A	Cmp	Closed	(Not Operating)				
U15B	Cmp	Closed	(Not Operating)				
U15C	Cmp	Closed	(Not Operating)				
U15D	Cmp	Closed	(Not Operating)				

=====

| Station ID: C16 Bank ID: BIGUAÇU Current Mode: Max PD

=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U16A	Cmp	Bank Control	58.81	75.00	1.36	479.4	952.71
U16B	Cmp	Bank Control	58.81	75.00	1.36	479.4	952.71
U16C	Cmp	Closed	(Not Operating)				
U16D	Cmp	Closed	(Not Operating)				

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* Node Mass Balance Error Report ----- Time = 0.000 (HRS) *

Threshold Level = 0.0000 (MMM3/D)
No Mass Balance Errors above Threshold

:::
:: Pressure/Flow Violation Reports ::
:::

ALL XREGS FALL WITHIN PRESSURE BOUNDS
ALL EQUIPMENT FALL WITHIN PRESSURE BOUNDS
ALL BANKS FALL WITHIN PRESSURE BOUNDS
ALL INTERNAL LEG KNOTS FALL WITHIN PRESSURE BOUNDS

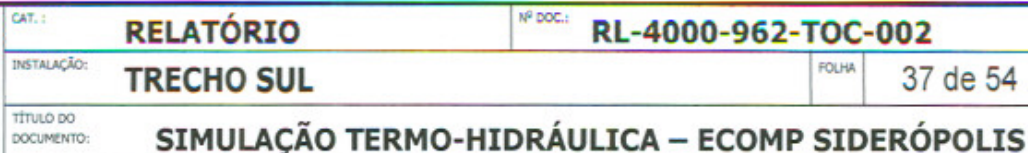
:::
:: Setpoint/Constraint Violation Reports ::
:::

ALL XREGS COMPLY WITH MONITORED CONSTRAINTS
ALL EQUIPMENT COMPLY WITH MONITORED CONSTRAINTS
ALL BANKS COMPLY WITH MONITORED CONSTRAINTS

TRANSIENT GAS NETWORK MODEL (TGNET)
RELEASE 7.4 LEVEL 00 06-JUNE-200

STEADY-STATE MODULE

Juliana + P.



* MODELO SIDERÓPOLIS - JUNHO 2006 *

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* * * * *
*
* Default Initial Values Selected:
*
* Pressure ..... 95.458
* Flow ..... 0.752
* Temperature ..... 27.113
* Specific Gravity ..... 0.600
* Heating Value ..... 34.000
* CO2 percent ..... 1.350
*
* * * * *

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*                                     Problem Size Report
*
*-----
*                                     Number      Maximum
*                                     Used        Allowed
*-----
* External Regulators                61          5000
* Equipment Devices                  186          3000
* Drivers/Turbines                    7           500
* Legs                              309         10000
* Nodes                             477         20000
* Knots                            3663         30000
* Stations                          12           500
* Banks                             12          1000
* Groups                           12          1000
* Plants                             0            10
* Compressor Perf Types              7           500
* Driver/Turb Perf Types             4           500
* Cylinder Types                     2           500
* Fluids                             1           100
* Qualities                         6            26

```

for the + B.



CAT.:	RELATÓRIO	Nº DOC.:	RL-4000-962-TOC-002
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* Steady State Convergence Summary *

Iteration Number	Tolerance Requested	Hydraulic Adjustment	Greatest Temperature Adjustment	Greatest Composition Adjustment	Greatest Associate Device
0	0.0010000	1.2944E+02	0.0000000	0.0000000	FLUX N13M
1	0.0010000	65.2605591	0.0000000	0.0000000	FLUX N13M
2	0.0010000	12.4869823	0.0000000	0.0000000	FLUX N13M
3	0.0010000	0.9677563	0.0000000	0.0000000	FLUX N13M
4	0.0010000	0.0302253	0.0000000	0.0000000	Node CANOA
DPMX increased to 9764.8604					
5	0.0010000	0.0008376	0.0000000	0.0000000	Node CANOA

Mode Changes					
6	Equip	RG70-REGU-1	FROM: Max PD	TO: Bypass	
6	Equip	SIDERÓPOLIS	FROM: PD/PU Ratio	TO: Max PD	
6	Membr	U15D	FROM: Bank Control	TO: Closed	

6	0.0010000	0.3121571	0.0000000	0.0000000	Node CANOA
7	0.0010000	0.0228282	0.0000000	0.0000000	Node CANOA
8	0.0010000	0.0015291	0.0000000	0.0000000	Node CANOA
DPMX increased to 19529.721					
9	0.0010000	0.0000059	0.0004982	0.0000000	TNODE N13M
10	0.0010000	2.0616560	0.0004982	0.0000000	FLUX RG
11	0.0010000	0.0072219	0.0008081	0.0000000	Xreg C1-FUEL
DPMX increased to 39059.441					
12	0.0010000	0.0636063	0.0008081	0.0000000	FLUX VE10UP
13	0.0010000	0.0008369	0.0002246	0.0000000	Xreg C1-FUEL
14	0.0010000	0.0054798	0.0000646	0.0000000	Xreg INPUT
DPMX increased to 48824.281					
15	0.0010000	0.0003260	0.0001639	0.0000000	Xreg C1-FUEL
16	0.0010000	0.0010757	0.0000711	0.0000000	Xreg INPUT
17	0.0010000	0.0000153	0.0000026	0.0000000	FLUX VE9DN

* MODELO SIDERÓPOLIS - JUNHO 2006 *

* Reference Conditions Report *

Reference Pressure = 0.00 KG/CM2G
Reference Temperature = 20.00 (DEG C)

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* Leg Hydraulic Summary Report ----- Time = 0.000 (HRS) *

Leg ID	Pressure KG/CM2G		Flow (MMM3D)		Line Pack (KPM3)	Temperature (DEG C)	
	Head	Tail	Head	Tail		Head	Tail
-----	-----	-----	-----	-----	-----	-----	-----
0A	99.49	98.93	28.477	28.477	1.618.141	51.70	51.11
0B	98.93	98.29	28.477	28.477	1.670.672	51.11	50.49
0C	98.29	96.84	28.477	28.477	4.133.264	50.49	49.04
0D	96.84	94.58	28.477	28.477	6.413.901	49.04	46.92
0E	94.58	89.73	28.477	28.477	13.467.308	46.92	42.93
0F	89.73	86.29	28.477	28.477	8.831.969	42.93	40.54
0G	86.29	81.07	28.477	28.477	12.272.173	40.53	37.41
0H	81.07	76.57	28.477	28.477	9.527.518	37.41	35.13
1A	99.55	94.75	28.390	28.390	14.192.637	51.70	46.89
1B	94.75	89.52	28.390	28.390	14.198.071	46.89	42.63
1C	89.52	84.57	28.390	28.390	12.452.008	42.63	39.29
1D	84.57	78.01	28.390	28.390	13.935.370	39.29	35.63
2A	99.56	94.74	28.310	28.310	13.442.888	51.70	46.95
2B	94.74	90.53	28.310	28.310	12.367.286	46.95	43.38
2C	90.53	86.41	28.310	28.310	8.588.300	43.38	40.46
2D	86.41	82.26	28.310	28.310	12.764.031	40.46	38.04
2E	82.26	78.11	28.310	28.310	9.717.026	38.04	35.88
3A	99.55	94.69	28.231	28.231	14.941.400	51.70	46.74
3B	94.69	89.39	28.231	28.231	14.909.873	46.74	42.39
3C	89.39	83.93	28.231	28.231	13.797.993	42.39	38.75
3D	83.93	82.60	28.231	28.231	3.113.556	38.75	37.97
3E	82.60	81.70	28.231	28.231	2.161.882	37.97	37.49
3F	81.70	77.89	28.231	28.231	8.487.415	37.49	35.52
4A	99.55	97.07	28.150	28.150	7.624.297	51.70	49.04
4B	97.07	91.83	28.150	28.150	14.936.936	49.04	44.29
4C	91.83	87.22	28.150	28.150	11.310.793	44.29	40.88
4D	87.22	82.25	28.150	28.150	12.651.377	40.88	37.84
4E	82.24	78.32	28.150	28.150	8.391.179	37.84	35.74
5A	98.59	96.67	28.040	28.040	6.242.212	48.00	46.01
5B	96.67	91.22	28.040	28.040	15.603.853	46.01	41.29
5C	91.22	87.72	28.040	28.040	9.325.422	41.29	38.74
5D	87.71	82.19	28.040	28.040	13.427.592	38.74	35.33
5E	82.19	76.28	28.040	28.040	12.958.684	35.33	32.33
6A	98.60	94.67	27.926	27.926	11.479.449	48.00	44.20
6B	94.67	90.59	27.926	27.926	10.873.661	44.20	40.86
6C	90.59	86.08	27.926	27.926	10.147.496	40.86	37.69
6D	86.08	81.57	27.926	27.926	12.173.782	37.69	35.07
6E	81.57	77.63	27.926	27.926	8.987.252	35.07	33.05
7A	98.61	96.12	27.816	27.816	5.474.354	48.00	45.74
7B	96.12	95.84	27.816	27.816	2.790.268	45.74	45.26
7C	95.84	94.78	27.816	27.816	2.430.049	45.26	44.33
7D	94.77	89.71	27.816	27.816	13.248.644	44.33	40.21
7E	89.71	88.90	27.816	27.816	3.413.413	40.21	39.59

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7F	88.90	85.98	27.816	27.816	5.830.827	39.59	37.59
7G	85.98	84.66	27.816	27.816	4.272.184	37.59	36.78
7H	84.66	77.91	27.816	27.816	12.195.780	36.78	32.80
8A	98.55	92.74	27.045	27.045	16.354.233	48.00	42.38
8B	92.74	91.20	27.045	27.045	6.549.146	42.38	40.95
8C	91.20	89.22	27.045	27.045	3.350.062	40.95	39.48
8D	89.22	89.20	27.045	27.045	2.848.238	39.48	39.39
8E	89.20	87.20	27.045	27.045	3.247.742	39.39	37.98
8F	87.20	82.63	27.045	27.045	14.981.401	37.98	35.15
8G	82.63	77.83	27.045	27.045	12.401.023	35.15	32.66
9A	98.56	98.80	26.938	26.938	1.414.398	48.00	47.92
9B	98.80	93.46	26.938	26.938	12.851.359	47.92	42.95
9C	93.46	92.47	26.938	26.938	5.892.266	42.95	41.85
9D	92.47	88.86	26.938	26.938	9.856.437	41.85	38.98
9E	88.86	85.37	26.938	26.938	11.246.204	38.98	36.57
9F	85.37	81.58	26.938	26.938	8.835.962	36.57	34.26
9G	81.58	77.88	26.938	26.938	10.089.406	34.26	32.46
10A	98.56	94.26	26.831	26.831	14.364.330	48.00	43.07
10B	94.26	91.97	26.831	26.831	5.398.817	43.07	41.01
10C	91.97	90.40	26.831	26.831	6.823.521	41.01	39.46
10D	90.40	88.92	26.831	26.831	4.926.279	39.46	38.20
10E	88.92	85.05	26.831	26.831	9.816.761	38.20	35.36
10F	85.05	80.91	26.831	26.831	9.740.649	35.36	32.72
10G	80.91	76.85	26.831	26.831	9.368.564	32.72	30.51
11A	98.36	93.93	26.724	26.724	14.942.415	48.00	42.88
11B	93.93	89.76	26.724	26.724	12.038.058	42.88	39.07
11C	89.76	88.45	26.724	26.724	2.930.528	39.07	38.04
11D	88.45	86.30	26.724	26.724	8.509.645	38.04	36.33
11E	86.30	83.74	26.624	26.624	5.841.436	36.33	34.55
11F	83.74	81.29	26.624	26.624	6.865.568	34.55	33.03
11G	81.29	80.89	26.624	26.624	986.753	33.03	32.80
11H	80.89	79.14	26.624	26.624	3.954.269	32.80	31.77
12A	98.38	96.53	26.526	26.526	4.719.934	48.00	45.98
12B	96.53	94.59	26.526	26.526	8.319.196	45.98	43.50
12C	94.59	90.21	26.526	26.526	14.157.605	43.50	39.24
12D	90.21	87.16	26.526	26.526	7.080.206	39.24	36.85
12E	87.16	86.96	26.526	26.526	2.578.452	36.85	36.66
12F	86.96	85.51	26.526	26.526	3.021.577	36.66	35.61
12G	85.51	83.95	26.526	26.526	4.264.168	35.61	34.54
12H	83.95	79.06	26.526	26.526	13.414.056	34.54	31.65
13A	98.36	98.30	26.424	26.424	1.901.399	48.00	47.60
13B	98.30	96.73	26.424	26.424	2.365.638	47.60	46.18
13C	96.73	94.35	26.424	26.424	8.792.914	46.18	43.34
13D	94.35	90.67	26.424	26.424	12.015.835	43.34	39.70
13E	90.67	89.42	26.424	26.424	3.215.732	39.70	38.65
13F	89.42	88.50	26.424	26.424	1.176.475	38.65	37.97
13G	88.50	87.20	26.424	26.424	3.773.747	37.97	36.94
13H	87.20	86.65	26.424	26.424	1.156.609	36.94	36.54
13I	86.65	85.84	26.424	26.424	1.395.718	36.54	35.94
13J	85.84	85.85	26.424	26.424	1.803.307	35.94	35.94
13K	85.85	79.64	26.174	26.174	13.869.252	35.94	31.85
13L	79.64	78.66	26.174	26.174	1.562.403	31.85	31.23

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13M	78.66	79.29	26.174	26.174	1.125.711	31.23	31.81
13N	79.29	77.47	26.174	26.174	2.150.463	31.81	30.61
13O	77.47	76.87	26.174	26.174	1.047.712	30.61	30.27
14A	98.40	97.64	26.070	26.070	1.443.661	48.00	47.24
14B	97.64	96.43	26.070	26.070	3.561.113	47.24	45.82
14C	96.43	96.94	25.870	25.870	2.054.632	45.82	45.78
14D	96.94	94.10	25.870	25.870	7.131.590	45.78	42.86
14E	94.09	94.11	25.870	25.870	2.028.186	42.86	42.60
14F	94.11	94.20	25.870	25.870	2.694.727	42.60	42.32
14G	94.20	92.59	25.870	25.870	4.983.737	42.32	40.71
14H	92.59	92.06	25.870	25.870	1.262.323	40.71	40.25
14I	92.06	91.61	25.870	25.870	2.441.674	40.25	39.73
14J	91.61	91.31	25.870	25.870	1.416.785	39.73	39.42
14K	91.31	90.61	25.870	25.870	2.555.567	39.42	38.76
14L	90.61	88.05	24.570	24.570	4.351.786	38.76	36.72
14M	88.05	88.19	24.570	24.570	2.760.929	36.72	36.67
14N	88.19	88.03	24.570	24.570	1.902.077	36.67	36.46
14O	88.03	86.39	24.070	24.070	6.750.061	36.46	35.01
14P	86.39	85.85	24.070	24.070	924.873	35.01	34.61
14Q	85.85	85.75	24.070	24.070	1.539.653	34.61	34.50
14R	85.75	85.28	24.070	24.070	931.475	34.50	34.15
14S	85.28	83.77	23.420	23.420	5.032.442	34.15	32.99
14T	83.77	82.89	23.420	23.420	2.302.184	32.99	32.37
14U	82.89	82.54	23.420	23.420	1.150.240	32.37	32.13
14AA	82.41	81.94	7.290	7.290	2.185.915	31.87	30.85
14AA1	81.94	81.65	7.290	7.290	1.290.529	30.85	30.32
14BA	81.65	81.11	6.770	6.770	1.139.043	30.32	29.66
14CA	81.11	80.83	6.770	6.770	2.001.505	29.66	29.08
14DA	80.83	81.02	6.740	6.740	643.024	29.08	29.11
14EA	81.02	79.82	6.740	6.740	3.520.647	29.11	27.82
14FA	79.82	79.28	6.640	6.640	5.830.355	27.82	27.18
14GA	79.28	78.21	5.640	5.640	3.997.188	27.18	26.34
14HA	77.99	78.08	5.520	5.520	2.550.772	23.99	24.64
14IA	78.08	77.16	5.520	5.520	2.253.606	24.64	24.42
14JA	77.16	76.78	5.420	5.420	5.417.276	24.42	25.13
14KA	76.78	75.84	5.420	5.420	1.990.776	25.13	24.75
14LA	75.84	75.65	5.420	5.420	3.062.455	24.75	25.15
14MA	75.65	75.63	5.420	5.420	499.362	25.15	25.21
14NA	75.63	75.56	5.420	5.420	1.368.942	25.21	25.35
14OA	75.56	73.99	5.420	5.420	3.801.115	25.35	24.76
14PA	73.99	74.26	5.420	5.420	2.210.957	24.76	25.37
14QA	74.26	73.34	5.420	5.420	5.070.829	25.37	25.35
14RA	73.34	73.52	5.420	5.420	1.949.672	25.35	25.74
14AS	73.52	71.62	5.420	5.420	5.114.898	25.74	24.97
14TA	71.62	71.25	5.420	5.420	971.228	24.97	24.86
14UA	71.25	71.45	5.420	5.420	483.756	24.86	25.13
14VA	71.45	70.71	5.420	5.420	629.026	25.13	24.65
14WA	70.71	71.38	5.420	5.420	1.905.897	24.65	25.56
14XA	71.38	70.56	5.420	5.420	1.029.173	25.56	25.05
14YA	70.56	70.71	5.420	5.420	1.602.762	25.05	25.45
14ZA	70.71	70.28	5.420	5.420	433.122	25.45	25.16
14BB	70.28	69.00	5.420	5.420	879.067	25.16	24.27

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CAT.:	RELATÓRIO	Nº DOC.:	RL-4000-962-TOC-002
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14CB	69.00	69.66	5.420	5.420	743.684	24.27	25.03
14DB	69.66	69.18	5.420	5.420	721.872	25.03	24.78
14EB	69.18	68.79	5.420	5.420	6.244.183	24.78	25.60
14FB	68.79	70.36	5.420	5.420	783.246	25.60	27.01
14GB	70.36	69.44	5.420	5.420	458.544	27.01	26.21
14HB	69.44	70.60	5.420	5.420	459.113	26.21	27.22
14IB	70.60	68.06	5.420	5.420	2.928.003	27.22	25.23
14JB	68.06	68.48	5.420	5.420	1.668.709	25.23	25.85
14KB	68.48	68.94	5.420	5.420	1.460.548	25.85	26.37
14LB	68.94	66.85	5.420	5.420	595.489	26.37	24.62
14MB	66.85	68.42	5.420	5.420	4.610.441	24.62	26.64
14NB	68.42	67.64	5.420	5.420	679.057	26.64	25.99
14OB	67.64	68.43	5.420	5.420	755.241	25.99	26.73
14PB	68.43	68.72	5.420	5.420	1.280.644	26.73	26.97
14QB	68.72	66.55	5.420	5.420	1.963.159	26.97	25.22
14RB	66.55	67.38	5.420	5.420	753.272	25.22	26.08
14SB	67.38	65.20	5.420	5.420	1.783.204	26.08	24.47
14TB	65.20	66.29	5.420	5.420	719.842	24.47	25.64
14UB	66.29	64.74	5.420	5.420	2.560.061	25.64	24.80
14VB	64.74	63.02	5.420	5.420	2.518.850	24.80	24.04
14WB	63.02	63.69	5.420	5.420	435.689	24.04	24.82
14XB	63.69	62.53	5.420	5.420	2.107.986	24.82	24.40
14YB	62.53	62.17	5.420	5.420	2.107.233	24.40	24.77
14ZB	62.17	61.63	5.420	5.420	3.573.292	24.77	25.25
14ZB1	61.63	61.57	4.520	4.520	396.458	25.25	25.28
15A	72.67	72.51	4.213	4.213	357.285	41.62	40.47
15B	72.51	72.38	4.213	4.213	972.774	40.47	37.99
15C	72.38	72.01	4.213	4.213	472.457	37.99	36.71
15D	72.01	70.31	4.213	4.213	3.982.826	36.71	30.50
15E	70.31	69.61	4.213	4.213	1.635.757	30.50	29.06
15F	69.61	69.67	4.213	4.213	1.123.800	29.06	28.72
15G	69.67	72.80	4.213	4.213	3.670.038	28.72	29.82
15H	72.80	71.22	4.213	4.213	4.025.893	29.82	27.43
15I	71.22	70.77	3.963	3.963	1.254.089	27.43	26.98
15J	70.77	69.94	3.963	3.963	2.306.084	26.98	26.38
15K	69.94	69.73	3.963	3.963	482.830	26.38	26.26
15L	69.73	69.59	3.963	3.963	393.426	26.26	26.19
15M	69.59	69.50	3.643	3.643	450.900	26.19	26.17
15N	69.50	67.59	3.643	3.643	3.228.425	26.17	25.27
15O	67.59	67.53	3.643	3.643	1.035.807	25.27	25.53
15P	67.53	66.48	3.643	3.643	1.188.462	25.53	25.01
15Q	66.48	65.22	3.643	3.643	433.436	25.01	24.08
15R	65.22	65.97	3.643	3.643	287.752	24.08	24.93
15S	65.97	65.27	3.643	3.643	567.951	24.93	24.57
15T	65.27	66.94	3.643	3.643	997.791	24.57	26.40
15U	66.94	66.52	3.483	3.483	573.967	26.40	26.09
15V	66.52	65.61	3.483	3.483	532.488	26.09	25.39
15W	65.61	66.01	3.483	3.483	1.416.632	25.39	26.09
15X	66.01	65.98	3.483	3.483	703.529	26.09	26.16
15Z	65.98	65.53	3.443	3.443	1.115.857	26.16	25.93

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15AA	65.53	63.40	3.443	3.443	576.842	25.93	24.18
15BA	63.40	64.95	3.443	3.443	629.880	24.18	25.91
15CA	64.95	63.33	3.443	3.443	573.014	25.91	24.60
15DA	63.33	64.47	3.443	3.443	598.359	24.60	25.91
15EA	64.47	63.89	3.443	3.443	530.150	25.91	25.50
15FA	63.89	64.29	3.443	3.443	1.071.833	25.50	26.13
15GA	64.29	62.70	3.263	3.263	2.729.930	26.13	25.33
15HA	62.70	63.25	3.263	3.263	874.141	25.33	26.08
15IA	63.25	63.11	3.263	3.263	310.870	26.08	26.00
16A	62.70	60.97	3.263	3.263	1.166.718	25.83	24.87
16A1	60.97	60.20	3.173	3.173	360.363	24.87	24.41
16B	60.20	61.03	3.173	3.173	930.461	24.41	25.89
16C	61.03	58.51	3.173	3.173	469.426	25.89	23.74
16D	58.51	59.93	3.173	3.173	299.718	23.74	25.47
16E	59.93	57.29	3.173	3.173	521.774	25.47	23.29
16F	57.29	57.79	3.173	3.173	201.207	23.29	24.09
16G	57.79	56.49	3.173	3.173	199.829	24.09	22.99
16H	56.49	58.12	3.173	3.173	459.545	22.99	25.26
16I	58.12	56.13	3.173	3.173	516.869	25.26	23.70
16J	56.13	56.98	3.173	3.173	196.790	23.70	24.85
16K	56.98	55.75	3.173	3.173	196.030	24.85	23.75
16L	55.75	56.44	3.173	3.173	195.050	23.75	24.74
16M	56.44	55.04	3.173	3.173	193.855	24.74	23.46
16N	55.04	55.20	3.173	3.173	220.643	23.46	23.95
16O	55.20	55.10	3.173	3.173	411.757	23.95	24.38
16P	55.10	55.59	3.173	3.173	478.835	24.38	25.40
16Q	55.59	54.39	3.173	3.173	826.387	25.40	24.84
16R	54.39	54.82	3.173	3.173	818.531	24.84	26.00
16S	54.82	54.71	3.173	3.173	426.904	26.00	26.14
16T	54.71	53.86	3.173	3.173	1.509.389	26.14	26.07
16U	53.86	53.87	3.173	3.173	498.517	26.07	26.36
16V	53.87	53.53	3.173	3.173	294.381	26.36	26.14
16W	53.53	53.02	3.173	3.173	191.838	26.14	25.69
16X	53.02	53.22	3.173	3.173	291.387	25.69	26.13
16Y	53.22	51.76	3.173	3.173	603.295	26.13	24.97
16Z	51.76	52.30	3.173	3.173	205.251	24.97	25.82
16AA	52.30	52.05	3.173	3.173	294.819	25.82	25.76
16BA	52.05	51.91	3.173	3.173	184.308	25.76	25.76
16CA	51.91	51.77	3.173	3.173	221.786	25.76	25.78
16DA	51.77	50.44	3.083	3.083	210.319	25.78	24.43
16EA	50.44	49.99	3.083	3.083	195.800	24.43	24.19
16FA	49.99	49.39	3.083	3.083	333.108	24.19	24.00
16GA	49.39	49.65	3.083	3.083	611.029	24.00	25.21
16HA	49.65	48.26	3.083	3.083	410.662	25.21	24.09
16IA	48.26	49.42	3.083	3.083	525.157	24.09	26.20
16KA	49.42	48.77	3.083	3.083	317.416	26.20	25.67
16LA	48.77	48.24	2.813	2.813	187.469	25.67	25.20
16MA	48.24	47.69	2.813	2.813	204.537	25.20	24.76
16NA	47.69	47.41	2.813	2.813	532.503	24.76	25.13

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17A	69.65	69.79	2.800	2.800	189.213	48.00	46.53
17B	69.79	69.19	2.800	2.800	181.394	46.53	44.60
17B1	69.19	69.61	2.800	2.800	576.508	44.60	41.30
17C	69.61	68.44	2.610	2.610	1.450.170	41.30	34.00
17D	68.44	66.95	2.610	2.610	672.547	34.00	31.15
17E	66.95	66.56	2.610	2.610	968.781	31.15	29.53
17F	66.56	65.19	2.610	2.610	179.821	29.53	28.15
17G	65.19	66.11	2.610	2.610	215.335	28.15	28.88
17H	66.11	65.51	2.610	2.610	458.095	28.88	28.10
17I	65.51	59.18	2.610	2.610	819.056	28.10	22.82
17J	59.18	59.04	2.610	2.610	1.683.680	22.82	25.29
17K	59.04	57.33	2.610	2.610	696.354	25.29	24.43
17L	57.33	56.96	2.610	2.610	494.881	24.43	24.78
17M	56.96	56.80	2.610	2.610	268.930	24.78	25.00
17N	56.80	56.94	2.610	2.610	257.011	25.00	25.46
17O	56.94	55.87	2.610	2.610	409.256	25.46	24.84
17P	55.87	55.21	2.610	2.610	1.138.055	24.84	25.58
17Q	55.21	53.67	2.610	2.610	705.167	25.58	24.85
17R	53.67	53.24	2.610	2.610	301.375	24.85	24.88
17S	53.24	50.99	2.480	2.480	1.982.193	24.88	25.30
17T	50.99	50.72	2.480	2.480	149.151	25.30	25.22
17U	50.72	52.89	2.480	2.480	612.681	25.22	28.16
17V	52.89	51.16	2.480	2.480	314.636	28.16	26.24
17W	51.16	52.30	2.480	2.480	187.803	26.24	27.68
17X	52.30	50.42	2.480	2.480	414.710	27.68	25.73
17Y	50.42	50.67	2.480	2.480	201.306	25.73	26.28
17Z	50.67	50.96	2.480	2.480	557.334	26.28	27.04
17AA	50.96	50.00	2.480	2.480	176.251	27.04	26.02
17BA	50.00	49.96	2.480	2.480	537.736	26.02	26.52
17CA	49.96	49.60	2.480	2.480	280.871	26.52	26.34
17DA	49.60	49.03	2.480	2.480	362.162	26.34	26.06
17EA	49.03	48.29	2.480	2.480	398.034	26.06	25.69
17FA	48.29	46.87	2.480	2.480	294.797	25.69	24.47
17GA	46.87	47.12	2.480	2.480	126.637	24.47	25.10
17HA	47.12	46.77	2.480	2.480	265.178	25.10	25.19
17IA	46.77	46.40	2.480	2.480	412.784	25.19	25.52
17JA	46.40	46.03	2.290	2.290	335.432	25.52	25.62
18A	75.00	74.50	9.780	9.780	923.460	29.46	29.11
18A1	74.50	74.16	9.780	9.780	528.531	29.11	28.86
18B	74.16	73.86	7.980	7.980	699.509	28.86	28.59
18C	73.86	72.81	7.980	7.980	2.298.851	28.59	27.74
18D	72.81	72.30	7.980	7.980	620.348	27.74	27.35
18E	72.30	71.71	7.980	7.980	1.638.239	27.35	27.01
18F	71.71	71.26	7.980	7.980	1.242.150	27.01	26.77
18G	71.26	69.60	7.980	7.980	2.607.848	26.77	25.79
18H	69.60	69.45	7.400	7.400	911.665	25.79	25.84
18I	69.45	67.62	7.400	7.400	4.559.382	25.84	25.25
18J	67.62	66.84	7.400	7.400	2.689.316	25.25	25.28
18K	66.84	66.21	7.400	7.400	1.622.705	25.28	25.14

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18L	66.21	64.91	7.400	7.400	704.614	25.14	24.19
18M	64.91	65.31	7.400	7.400	412.146	24.19	24.71
18N	65.31	64.87	7.400	7.400	744.674	24.71	24.56
18O	64.87	64.68	7.400	7.400	632.553	24.56	24.61
18P	64.68	64.08	7.400	7.400	490.988	24.61	24.23
18Q	64.08	64.18	7.400	7.400	2.859.394	24.23	25.33
18Q1	64.18	63.26	7.400	7.400	3.010.226	25.33	25.37
18R	63.26	63.22	6.700	6.700	413.942	25.37	25.45
18S	63.22	62.77	6.700	6.700	432.058	25.45	25.13
18T	62.77	62.99	6.700	6.700	555.275	25.13	25.50
18U	62.99	62.16	6.700	6.700	1.391.114	25.50	25.09
18V	62.16	62.13	6.700	6.700	975.803	25.09	25.35
14GAA	78.21	77.99	5.520	5.520	1.480.642	26.34	23.99
14AAA	82.54	82.41	7.390	7.390	496.997	32.13	31.87

* Equipment Hydraulic Report ----- Time = 0.000 (HRS) *

:: Equipment Hydraulic Summary Report ::

Equipment ID	Mode of Control	Pressure KG/CM2G		Flow (MMM3/D)	Temperature (DEG C)		Spc Grv	Heating Value (MJ/M3)
		Up	Down		Up	Down		
VE1	Block Valve	94.58	94.58	28.48	46.92	46.92	0.6000	34.00
VE2	Block Valve	89.73	89.73	28.48	42.93	42.93	0.6000	34.00
VE3	Block Valve	86.29	86.29	28.48	40.54	40.53	0.6000	34.00
VE4	Block Valve	81.07	81.07	28.48	37.41	37.41	0.6000	34.00
VE5	Block Valve	94.75	94.75	28.39	46.89	46.89	0.6000	34.00
VE6	Block Valve	89.52	89.52	28.39	42.63	42.63	0.6000	34.00
VE7	Block Valve	84.57	84.57	28.39	39.29	39.29	0.6000	34.00
VE8	Block Valve	94.74	94.74	28.31	46.95	46.95	0.6000	34.00
VE9	Block Valve	90.53	90.53	28.31	43.38	43.38	0.6000	34.00
VE10	Block Valve	86.41	86.41	28.31	40.46	40.46	0.6000	34.00
VE11	Block Valve	82.26	82.26	28.31	38.04	38.04	0.6000	34.00
VE12	Block Valve	94.69	94.69	28.23	46.74	46.74	0.6000	34.00
VE13	Block Valve	89.39	89.39	28.23	42.39	42.39	0.6000	34.00
VE14	Block Valve	83.93	83.93	28.23	38.75	38.75	0.6000	34.00
VE15	Block Valve	97.07	97.07	28.15	49.04	49.04	0.6000	34.00
VE16	Block Valve	91.83	91.83	28.15	44.29	44.29	0.6000	34.00
VES-10060	Block Valve	96.67	96.67	28.04	46.01	46.01	0.6000	34.00
VES-10070	Block Valve	91.22	91.22	28.04	41.29	41.29	0.6000	34.00
VES-10080	Block Valve	87.72	87.71	28.04	38.74	38.74	0.6000	34.00
VES-10090	Block Valve	82.19	82.19	28.04	35.33	35.33	0.6000	34.00
VES-10140	Block Valve	94.67	94.67	27.93	44.20	44.20	0.6000	34.00

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VES-10150	Block Valve	90.59	90.59	27.93	40.86	40.86	0.6000	34.00
VES-10160	Block Valve	86.08	86.08	27.93	37.69	37.69	0.6000	34.00
VES-10170	Block Valve	81.57	81.57	27.93	35.07	35.07	0.6000	34.00
VES-10190	Block Valve	94.78	94.77	27.82	44.33	44.33	0.6000	34.00
VES-10200	Block Valve	89.71	89.71	27.82	40.21	40.21	0.6000	34.00
VES-10280	Block Valve	92.74	92.74	27.04	42.38	42.38	0.6000	34.00
VES-10290	Block Valve	87.20	87.20	27.04	37.98	37.98	0.6000	34.00
VES-10300	Block Valve	82.63	82.63	27.04	35.15	35.15	0.6000	34.00
VES-10320	Block Valve	93.46	93.46	26.94	42.95	42.95	0.6000	34.00
VES-10330	Block Valve	88.86	88.86	26.94	38.98	38.98	0.6000	34.00
VES-10340	Block Valve	85.37	85.37	26.94	36.57	36.57	0.6000	34.00
VES-10350	Block Valve	81.58	81.58	26.94	34.26	34.26	0.6000	34.00
VES-10400	Block Valve	94.26	94.26	26.83	43.07	43.07	0.6000	34.00
VES-10420	Block Valve	85.05	85.05	26.83	35.36	35.36	0.6000	34.00
VES-10430	Block Valve	80.91	80.91	26.83	32.72	32.72	0.6000	34.00
VES-10450	Block Valve	93.93	93.93	26.72	42.88	42.88	0.6000	34.00
VES-10460	Block Valve	88.45	88.45	26.72	38.04	38.04	0.6000	34.00
VES-10470	Block Valve	83.74	83.74	26.62	34.55	34.55	0.6000	34.00
VES-10540	Block Valve	94.59	94.59	26.53	43.50	43.50	0.6000	34.00
VES-10550	Block Valve	90.21	90.21	26.53	39.24	39.24	0.6000	34.00
VES-10560	Block Valve	83.95	83.95	26.53	34.54	34.54	0.6000	34.00
VES-10580	Block Valve	94.35	94.35	26.42	43.34	43.34	0.6000	34.00
VES-10590	Block Valve	90.67	90.67	26.42	39.70	39.70	0.6000	34.00
VES-10610	Block Valve	79.64	79.64	26.17	31.85	31.85	0.6000	34.00
VES-10660	Block Valve	94.10	94.09	25.87	42.86	42.86	0.6000	34.00
VES-10670	Block Valve	92.06	92.06	25.87	40.25	40.25	0.6000	34.00
VES-10680	Block Valve	88.19	88.19	24.57	36.67	36.67	0.6000	34.00
VES-10690	Block Valve	85.75	85.75	24.07	34.50	34.50	0.6000	34.00
VE40040	Block Valve	81.94	81.94	7.29	30.85	30.85	0.6000	34.00
VE40050	Block Valve	81.11	81.11	6.77	29.66	29.66	0.6000	34.00
VE40060	Block Valve	81.02	81.02	6.74	29.11	29.11	0.6000	34.00
VE40070	Block Valve	79.82	79.82	6.74	27.82	27.82	0.6000	34.00
VE40080	Block Valve	79.28	79.28	5.64	27.18	27.18	0.6000	34.00
VE40090	Block Valve	77.99	77.99	5.52	23.99	23.99	0.6000	34.00
VE40100	Block Valve	77.16	77.16	5.42	24.42	24.42	0.6000	34.00
VE40110	Block Valve	76.78	76.78	5.42	25.13	25.13	0.6000	34.00
VE40120	Block Valve	75.63	75.63	5.42	25.21	25.21	0.6000	34.00
VE40130	Block Valve	74.26	74.26	5.42	25.37	25.37	0.6000	34.00
VE40170	Block Valve	73.52	73.52	5.42	25.74	25.74	0.6000	34.00
VE40140	Block Valve	71.62	71.62	5.42	24.97	24.97	0.6000	34.00
VE40150	Block Valve	70.56	70.56	5.42	25.05	25.05	0.6000	34.00
VE40200	Block Valve	69.18	69.18	5.42	24.78	24.78	0.6000	34.00
VE40210	Block Valve	68.79	68.79	5.42	25.60	25.60	0.6000	34.00
VE40220	Block Valve	68.48	68.48	5.42	25.85	25.85	0.6000	34.00
VE40230	Block Valve	67.64	67.64	5.42	25.99	25.99	0.6000	34.00
VE40240	Block Valve	65.20	65.20	5.42	24.47	24.47	0.6000	34.00
VE40250	Block Valve	63.69	63.69	5.42	24.82	24.82	0.6000	34.00
VE40260	Block Valve	62.17	62.17	5.42	24.77	24.77	0.6000	34.00
VE40270	Block Valve	61.57	61.57	4.22	25.28	25.28	0.6000	34.00
VE60040	Block Valve	72.01	72.01	4.21	36.71	36.71	0.6000	34.00
VE60050	Block Valve	70.31	70.31	4.21	30.50	30.50	0.6000	34.00
VE60060	Block Valve	69.67	69.67	4.21	28.72	28.72	0.6000	34.00

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VE60070	Block Valve	72.80	72.80	4.21	29.82	29.82	0.6000	34.00
VE60080	Block Valve	71.22	71.22	3.96	27.43	27.43	0.6000	34.00
VE60090	Block Valve	69.59	69.59	3.64	26.19	26.19	0.6000	34.00
VE60100	Block Valve	67.59	67.59	3.64	25.27	25.27	0.6000	34.00
VE60110	Block Valve	66.94	66.94	3.48	26.40	26.40	0.6000	34.00
VE60120	Block Valve	66.01	66.01	3.48	26.09	26.09	0.6000	34.00
VE60270	Block Valve	65.53	65.53	3.44	25.93	25.93	0.6000	34.00
VE60320	Block Valve	64.29	64.29	3.26	26.13	26.13	0.6000	34.00
VE60190	Block Valve	59.93	59.93	3.17	25.47	25.47	0.6000	34.00
VE60200	Block Valve	55.20	55.20	3.17	23.95	23.95	0.6000	34.00
VE60210	Block Valve	54.71	54.71	3.17	26.14	26.14	0.6000	34.00
VE60220	Block Valve	53.53	53.53	3.17	26.14	26.14	0.6000	34.00
VE60230	Block Valve	51.77	51.77	3.08	25.78	25.78	0.6000	34.00
VE60240	Block Valve	49.39	49.39	3.08	24.00	24.00	0.6000	34.00
VE60250	Block Valve	49.42	49.42	3.08	26.20	26.20	0.6000	34.00
VE60290	Block Valve	63.11	63.11	3.26	26.00	26.00	0.6000	34.00
VE80020	Block Valve	68.44	68.44	2.61	34.00	34.00	0.6000	34.00
VE80030	Block Valve	66.11	66.11	2.61	28.88	28.88	0.6000	34.00
VE80040	Block Valve	59.18	59.18	2.61	22.82	22.82	0.6000	34.00
VE80050	Block Valve	57.33	57.33	2.61	24.43	24.43	0.6000	34.00
VE80060	Block Valve	55.87	55.87	2.61	24.84	24.84	0.6000	34.00
VE80070	Block Valve	53.24	53.24	2.48	24.88	24.88	0.6000	34.00
VE80080	Block Valve	50.72	50.72	2.48	25.22	25.22	0.6000	34.00
VE80090	Block Valve	50.96	50.96	2.48	27.04	27.04	0.6000	34.00
VE80100	Block Valve	49.03	49.03	2.48	26.06	26.06	0.6000	34.00
VE80110	Block Valve	47.12	47.12	2.48	25.10	25.10	0.6000	34.00
VE90050	Block Valve	72.30	72.30	7.98	27.35	27.35	0.6000	34.00
VE90060	Block Valve	71.26	71.26	7.98	26.77	26.77	0.6000	34.00
VE90070	Block Valve	69.45	69.45	7.40	25.84	25.84	0.6000	34.00
VE90080	Block Valve	67.62	67.62	7.40	25.25	25.25	0.6000	34.00
VE90090	Block Valve	66.84	66.84	7.40	25.28	25.28	0.6000	34.00
VE90100	Block Valve	65.31	65.31	7.40	24.71	24.71	0.6000	34.00
VE90110	Block Valve	64.18	64.18	7.40	25.33	25.33	0.6000	34.00
VE90120	Block Valve	63.22	63.22	6.70	25.45	25.45	0.6000	34.00
VE90130	Block Valve	62.16	62.16	6.70	25.09	25.09	0.6000	34.00
VEFRONT-BLKV-1	Block Valve	87.22	87.22	28.15	40.88	40.88	0.6000	34.00
VES-10040	Block Valve	82.25	82.24	28.15	37.84	37.84	0.6000	34.00
VES-10210	Block Valve	84.66	84.66	27.82	36.78	36.78	0.6000	34.00
VES-10410	Block Valve	90.40	90.40	26.83	39.46	39.46	0.6000	34.00
VES-10600	Block Valve	85.85	85.85	26.42	35.94	35.94	0.6000	34.00
VES-90040	Block Valve	74.16	74.16	9.78	28.86	28.86	0.6000	34.00
VE60140	Block Valve	62.70	62.70	3.26	25.83	25.83	0.6000	34.00
R1-UP-RESI-1	Resistance	76.57	76.31	28.48	35.13	35.04	0.6000	34.00
R2-UP-RESI-1	Resistance	78.01	77.76	28.39	35.63	35.54	0.6000	34.00
R3-UP-RESI-1	Resistance	78.11	77.85	28.31	35.88	35.79	0.6000	34.00
R4-UP-RESI-1	Resistance	77.89	77.64	28.23	35.52	35.43	0.6000	34.00
R5-UP-RESI-1	Resistance	78.32	77.94	28.15	35.74	35.61	0.6000	34.00
R6-UP-RESI-1	Resistance	76.28	75.90	28.04	32.33	32.20	0.6000	34.00
R7-UP-RESI-1	Resistance	77.63	77.24	27.93	33.05	32.91	0.6000	34.00
R8-UP	Resistance	77.91	77.50	27.15	32.80	32.66	0.6000	34.00
R9-UP-RESI-1	Resistance	77.83	77.42	27.04	32.66	32.51	0.6000	34.00
R10UP-RESI-1	Resistance	77.88	77.47	26.94	32.46	32.32	0.6000	34.00



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R11UP-RESI-1	Resistance	76.85	76.36	26.83	30.51	30.33	0.6000	34.00
R12UP-RESI-1	Resistance	79.14	78.65	26.62	31.77	31.60	0.6000	34.00
R13UP-RESI-1	Resistance	79.06	78.57	26.53	31.65	31.48	0.6000	34.00
R14UP-RESI-1	Resistance	76.87	76.39	26.17	30.27	30.09	0.6000	34.00
R15UP	Resistance	61.57	61.18	4.22	25.28	25.12	0.6000	34.00
R16UP-RESI-1	Resistance	63.11	62.70	3.26	26.00	25.83	0.6000	34.00
RG70-REGU-1	Bypass	72.67	72.67	4.21	41.62	41.62	0.6000	34.00
RG70A-REGU-1	Max PD	82.54	75.00	9.78	32.13	29.46	0.6000	34.00
COOLER1	Resistance	99.84	99.55	28.39	56.38	51.70	0.6000	34.00
COOLER2	Resistance	99.84	99.56	28.31	55.39	51.70	0.6000	34.00
COOLER3	Resistance	99.84	99.55	28.23	55.55	51.70	0.6000	34.00
COOLER4	Resistance	99.84	99.55	28.15	55.40	51.70	0.6000	34.00
COOLER5	Resistance	99.84	98.59	28.04	59.43	48.00	0.6000	34.00
COOLER6	Resistance	99.84	98.60	27.93	58.40	48.00	0.6000	34.00
COOLER7	Resistance	99.84	98.61	27.82	57.46	48.00	0.6000	34.00
COOLER8	Resistance	99.84	98.55	27.04	56.87	48.00	0.6000	34.00
COOLER9	Resistance	99.84	98.56	26.94	56.82	48.00	0.6000	34.00
COOLER10	Resistance	99.84	98.56	26.83	56.56	48.00	0.6000	34.00
COOLER11	Resistance	99.84	98.36	26.72	55.86	48.00	0.6000	34.00
COOLER12	Resistance	99.84	98.38	26.53	54.35	48.00	0.6000	34.00
COOLER13	Resistance	99.84	98.36	26.42	54.31	48.00	0.6000	34.00
COOLER14	Resistance	99.84	98.40	26.07	55.57	48.00	0.6000	34.00
COOLER15	Resistance	73.00	72.67	4.21	41.62	41.62	0.6000	34.00
COOLER16	Bypass	62.70	62.70	3.26	25.83	25.83	0.6000	34.00
COOLERSIDER	Resistance	70.00	69.65	2.80	57.33	48.00	0.6000	34.00
IZOZOG	Max PD	76.31	99.84	28.39	35.04	56.38	0.6000	34.00
CHIQUITOS	Max PD	77.76	99.84	28.31	35.54	55.39	0.6000	34.00
ROBORE	Max PD	77.85	99.84	28.23	35.79	55.55	0.6000	34.00
YACUSES	Max PD	77.64	99.84	28.15	35.43	55.40	0.6000	34.00
SIDERÓPOLIS	Max PD	47.41	70.00	2.80	25.13	57.33	0.6000	34.00

Cmprs ID	Actual Head (N.M/KG)	Flow (M3/H)	Speed (RPM)	Adiab Effic (PERCNT)	Dschrg Temp (DEG C)	Power Required (HP)	Power Available (HP)
IZOZOG	35118.61	14397.79		85.00	56.38	13433.25	38757.64
CHIQUITOS	32605.91	14099.43		85.00	55.39	12436.93	38629.12
ROBORE	32475.04	14059.05		85.00	55.55	12352.20	39186.04
YACUSES	32795.68	14035.24		85.00	55.40	12438.76	39550.18
SIDERÓPOLIS	51365.66	2277.95		80.00	57.33	2058.90	4863.29

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RELATÓRIO

Nº DOC.:

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* External Regulator Hydraulic Report ----- Time = 0.000 (HRS) *

:: External Regulator Flow Balance Report ::

	Mass Units (TONN/H)	Volumetric Units (MMM3/D)
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Total input flow	857.980	28.477
Total output flow	857.980	28.477
Network flow balance	0.000	0.000

:: External Regulator Hydraulic Summary Report ::

External Regulator ID	Mode of Control	Pressure KG/CM2G	Flow (MMM3/D)	Temperature (DEG C)	Specific Gravity	Heating Value (MJ/M3)
-----	-----	-----	-----	-----	-----	-----
INPUT	Max Pres	99.49	-28.477	51.70	0.6000	34.00
CORUMBA	Max Flow	82.24	0.000	37.84	0.6000	34.00
CAMPO_GRANDE	Max Flow	77.91	0.670	32.80	0.6000	34.00
TRÊS_LAGOAS	Max Flow	90.40	0.000	39.46	0.6000	34.00
BILAC	Max Flow	86.30	0.100	36.33	0.6000	34.00
BOA_ESPERANÇA_DO_SUL	Max Flow	85.85	0.250	35.94	0.6000	34.00
SÃO_CARLOS	Max Flow	96.43	0.200	45.82	0.6000	34.00
RIO_CLARO	Max Flow	90.61	1.300	38.76	0.6000	34.00
LIMEIRA	Max Flow	88.03	0.500	36.46	0.6000	34.00
AMERICANA	Max Flow	85.28	0.650	34.15	0.6000	34.00
REPLAN	Max Flow	82.54	0.950	32.13	0.6000	34.00
EE_SUMARE	Max Flow	81.65	0.520	30.32	0.6000	34.00
EE_CAMPINAS	Max Flow	80.83	0.030	29.08	0.6000	34.00
ITU	Max Flow	79.28	1.000	27.18	0.6000	34.00
ARAÇOIABA_DA_SERRA	Max Flow	77.16	0.100	24.42	0.6000	34.00
ARAUCÁRIA_CIC	Max Flow	61.63	0.900	25.25	0.6000	34.00
REPAR	Max Flow	61.57	0.300	25.28	0.6000	34.00
JOINVILLE	Max Flow	71.22	0.250	27.43	0.6000	34.00
GUARAMIRIM	Max Flow	69.59	0.320	26.19	0.6000	34.00
GASPAR	Max Flow	66.94	0.160	26.40	0.6000	34.00
BRUSQUE	Max Flow	65.98	0.040	26.16	0.6000	34.00
TIJUCAS	Max Flow	64.29	0.180	26.13	0.6000	34.00



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SAO_P_ALCANTARA	Max Flow	60.97	0.090	24.87	0.6000	34.00
TUBARAO	Max Flow	51.77	0.090	25.78	0.6000	34.00
URUSSANGA	Max Flow	48.77	0.270	25.67	0.6000	34.00
NOVA_VENEZA	Max Flow	69.61	0.190	41.30	0.6000	34.00
VARZEA_DO_CEDRO	Max Flow	53.24	0.130	24.88	0.6000	34.00
ARARICÁ	Max Flow	49.60	0.000	26.34	0.6000	34.00
CACHOEIRINHA	Max Flow	46.40	0.190	25.52	0.6000	34.00
REFAP	Max Flow	46.03	0.440	25.62	0.6000	34.00
CANOAS	Max Flow	46.03	0.750	25.62	0.6000	34.00
JAGUARIUNA	Max Flow	74.16	1.800	28.86	0.6000	34.00
ITATIBA	Max Flow	69.60	0.580	25.79	0.6000	34.00
GUARAREMA	Max Flow	63.26	0.700	25.37	0.6000	34.00
EMED_GUARAREMA	Max Flow	62.13	6.700	25.35	0.6000	34.00
INDAIATUBA	Max Flow	79.82	0.100	27.82	0.6000	34.00
ARAUCÁRIA_UTE	Max Flow	61.57	0.000	25.28	0.6000	34.00
CANOAS_UTE	Max Flow	46.03	1.100	25.62	0.6000	34.00
PORTO_FELIZ	Max Flow	78.21	0.120	26.34	0.6000	34.00
CAMPO_LARGO	Max Flow	62.17	0.000	24.77	0.6000	34.00
GEMINI	Max Flow	82.41	0.100	31.87	0.6000	34.00
EMED_CAMPINAS_RIO	Max Flow	82.54	5.300	32.13	0.6000	34.00
IGREJINHA	Max Flow	50.67	0.000	26.28	0.6000	34.00
CAMP_RIO2	Max Flow	82.54	0.000	32.13	0.6000	34.00
C1-FUEL	Max Flow	76.31	0.087	35.04	0.6000	34.00
C2-FUEL	Max Flow	77.76	0.080	35.54	0.6000	34.00
C3-FUEL	Max Flow	77.85	0.080	35.79	0.6000	34.00
C4-FUEL	Max Flow	77.64	0.080	35.43	0.6000	34.00
C5-FUEL	Max Flow	77.94	0.110	35.61	0.6000	34.00
C6-FUEL	Max Flow	75.90	0.114	32.20	0.6000	34.00
C7-FUEL	Max Flow	77.24	0.110	32.91	0.6000	34.00
C8-FUEL	Max Flow	77.50	0.101	32.66	0.6000	34.00
C9-FUEL	Max Flow	77.42	0.107	32.51	0.6000	34.00
C10-FUEL	Max Flow	77.47	0.107	32.32	0.6000	34.00
C11-FUEL	Max Flow	76.36	0.108	30.33	0.6000	34.00
C12-FUEL	Max Flow	78.65	0.097	31.60	0.6000	34.00
C13-FUEL	Max Flow	78.57	0.102	31.48	0.6000	34.00
C14-FUEL	Max Flow	76.39	0.104	30.09	0.6000	34.00
C15-FUEL	Max Flow	61.18	0.007	25.12	0.6000	34.00
C16-FUEL	Max Flow	62.70	0.000	25.83	0.6000	34.00
SIDER_FUEL	Max Flow	47.41	0.013	25.13	0.6000	34.00

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* Station Hydraulic Summary Report ----- Time = 0.000 (HRS) *

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Station ID:	C5	Bank ID:	CORUMBÁ	Current Mode:	Max PD
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Member			Upstream	Dnstream	Flow	Power	Speed
ID	Type	Operating	Pressure	Pressure	(MMM3/D)	Required	(RPM)
		Status	KG/CM2G	KG/CM2G		(HP)	
U5A	Cmp	Bank Control	77.94	99.84	14.02	6459.1	6590.43
U5B	Cmp	Bank Control	77.94	99.84	14.02	6459.1	6590.43

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Station ID:	C6	Bank ID:	MIRANDA	Current Mode:	Max PD
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Member			Upstream	Dnstream	Flow	Power	Speed
ID	Type	Operating	Pressure	Pressure	(MMM3/D)	Required	(RPM)
		Status	KG/CM2G	KG/CM2G		(HP)	
U6A	Cmp	Bank Control	75.90	99.84	13.96	6982.0	6805.95
U6B	Cmp	Bank Control	75.90	99.84	13.96	6982.0	6805.95

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Station ID:	C7	Bank ID:	ANASTÁCIO	Current Mode:	Max PD
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Member			Upstream	Dnstream	Flow	Power	Speed
ID	Type	Operating	Pressure	Pressure	(MMM3/D)	Required	(RPM)
		Status	KG/CM2G	KG/CM2G		(HP)	
U7A	Cmp	Bank Control	77.24	99.84	13.91	6534.0	6613.73
U7B	Cmp	Bank Control	77.24	99.84	13.91	6534.0	6613.73

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CAT.:

RELATÓRIO

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| Station ID: C8 Bank ID: C GRANDE Current Mode: Max PD

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Member ID	Type	Operating Status	Upstream	Dnstream	Flow	Power Required	Speed
			Pressure KG/CM2G	Pressure KG/CM2G	(MMM3/D)	(HP)	(RPM)
U8A	Cmp	Bank Control	77.50	99.84	6.76	3135.3	9838.98
U8B	Cmp	Bank Control	77.50	99.84	6.76	3135.3	9838.98
U8C	Cmp	Bank Control	77.50	99.84	6.76	3135.3	9838.98
U8D	Cmp	Bank Control	77.50	99.84	6.76	3135.3	9838.98

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| Station ID: C9 Bank ID: RIBAS Current Mode: Max PD

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Member ID	Type	Operating Status	Upstream	Dnstream	Flow	Power Required	Speed
			Pressure KG/CM2G	Pressure KG/CM2G	(MMM3/D)	(HP)	(RPM)
U9A	Cmp	Bank Control	77.42	99.84	13.47	6237.0	6509.30
U9B	Cmp	Bank Control	77.42	99.84	13.47	6237.0	6509.30

=====

| Station ID: C10 Bank ID: T LAGOAS Current Mode: Max PD

=====

Member ID	Type	Operating Status	Upstream	Dnstream	Flow	Power Required	Speed
			Pressure KG/CM2G	Pressure KG/CM2G	(MMM3/D)	(HP)	(RPM)
U10A	Cmp	Bank Control	77.47	99.84	13.42	6188.3	6489.51
U10B	Cmp	Bank Control	77.47	99.84	13.42	6188.3	6489.51

=====

| Station ID: C11 Bank ID: MIRANDÓPOLIS Current Mode: Max PD

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Member ID	Type	Operating Status	Upstream	Dnstream	Flow	Power Required	Speed
			Pressure KG/CM2G	Pressure KG/CM2G	(MMM3/D)	(HP)	(RPM)
U11A	Cmp	Bank Control	76.36	99.84	13.36	6439.4	6599.84
U11B	Cmp	Bank Control	76.36	99.84	13.36	6439.4	6599.84



CAT.:	RELATÓRIO	Nº DOG.:	RL-4000-962-TOC-002
INSTALAÇÃO:	TRECHO SUL	FOLHA	53 de 54
TÍTULO DO DOCUMENTO:	SIMULAÇÃO TERMO-HIDRÁULICA – ECOMP SIDERÓPOLIS		

=====

| Station ID: C12 Bank ID: PENÁPOLIS Current Mode: Max PD

=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U12A	Cmp	Bank Control	78.65	99.84	6.63	2868.8	9489.69
U12B	Cmp	Bank Control	78.65	99.84	6.63	2868.8	9489.69
U12C	Cmp	Bank Control	78.65	99.84	6.63	2868.8	9489.69
U12D	Cmp	Bank Control	78.65	99.84	6.63	2868.8	9489.69

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| Station ID: C13 Bank ID: IACANGA Current Mode: Max PD

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Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U13A	Cmp	Bank Control	78.57	99.84	13.21	5723.1	6275.40
U13B	Cmp	Bank Control	78.57	99.84	13.21	5723.1	6275.40

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| Station ID: C14 Bank ID: SÃO CARLOS Current Mode: Max PD

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Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U14A	Cmp	Bank Control	76.39	99.84	13.04	6251.8	6540.93
U14B	Cmp	Bank Control	76.39	99.84	13.04	6251.8	6540.93

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| Station ID: C15 Bank ID: ARUACÁRIA Current Mode: BY-PASS

=====

Member ID	Type	Operating Status	Upstream Pressure KG/CM2G	Dnstream Pressure KG/CM2G	Flow (MMM3/D)	Power Required (HP)	Speed (RPM)
U15A	Cmp	Bank Control	61.18	73.00	1.40	355.1	713.25
U15B	Cmp	Bank Control	61.18	73.00	1.40	355.1	713.25
U15C	Cmp	Bank Control	61.18	73.00	1.40	355.1	713.25
U15D	Cmp	Closed	(Not Operating)				



CAT.:	RELATÓRIO	Nº DOC.:	RL-4000-962-TOC-002
INSTALAÇÃO:	TRECHO SUL	FOLHA	54 de 54
TÍTULO DO DOCUMENTO:	SIMULAÇÃO TERMO-HIDRÁULICA – ECOMP SIDERÓPOLIS		

=====

| Station ID: C16 Bank ID: BIGUAÇU Current Mode: Max PD

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Member			Upstream	Dnstream	Flow	Power	
ID	Type	Operating	Pressure	Pressure	(MMM3/D)	Required	Speed
		Status	KG/CM2G	KG/CM2G		(HP)	(RPM)
U16A	Cmp	(Not Operating)					
U16B	Cmp	(Not Operating)					
U16C	Cmp	(Not Operating)					

* Node Mass Balance Error Report ----- Time = 0.000 (HRS) *

Threshold Level = 0.0000 (MMM3/D)

No Mass Balance Errors above Threshold

:: Pressure/Flow Violation Reports ::

ALL XREGS FALL WITHIN PRESSURE BOUNDS

ALL EQUIPMENT FALL WITHIN PRESSURE BOUNDS

ALL BANKS FALL WITHIN PRESSURE BOUNDS

ALL INTERNAL LEG KNOTS FALL WITHIN PRESSURE BOUNDS

:: Setpoint/Constraint Violation Reports ::

ALL XREGS COMPLY WITH MONITORED CONSTRAINTS

ALL EQUIPMENT COMPLY WITH MONITORED CONSTRAINTS

ALL BANKS COMPLY WITH MONITORED CONSTRAINTS

TRANSIENT GAS NETWORK MODEL (TGNET)

RELEASE 7.4 LEVEL 00 06-JUNE-200

STEADY-STATE MODULE

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