



P.E. No.: N/S Yr. Blt.: 2006
 OIP# 603FB001 Manway: YES
 Serial No.: H-06-274 Size: 1524 X 3962mm
 P.R.N. Ⓐ 570539 Service: SWEET
 C.R.N.: K6154.12 PWHT: NO
 Code/Div.: N/S RT: N/S
 Para: N/S Insulated: N/S
 C. Stamp: N/S N.B. No: N/S
 Manufacturer: HEATEC

Design & Materials Data

HEAD	SHELL
Material: <u>N/S</u>	Material: <u>N/S</u>
Nom.: <u>N/S</u>	Nom.: <u>N/S</u>
C.A.: <u>N/S</u>	C.A.: <u>N/S</u>
BOOT HEAD	BOOT SHELL
Material: _____	Material: _____
Nom.: _____	Nom.: _____
C.A.: _____	C.A.: _____
CHANNEL HEAD	CHANNEL SHELL
Material: _____	Material: _____
Nom.: _____	Nom.: _____
C.A.: _____	C.A.: _____
MWSP Shell Side: <u>1034 KPA</u>	@ Temp.: <u>343°C</u>
MWSP Tube Side: _____	@ Temp.: _____

CLIENT
TAQA NORTH

FACILITY
CHINCHAGA GAS PLANT
C-032-H/094-H-08

ITEM
HEATER BOILER

Comments: _____

TAQA North

Unit: N-603

FACILITY:	CHINCHAGA GAS PLANT	MANUFACTURER:	HEATEC
LSD:	C-032-H/094-H-08	DESIGN PRESSURE:	1379 kPa / 200 psi
ITEM DESC.:	A570539 - HEATER BOILER	DESIGN TEMP.:	343 C / 649 F
EQUIP / OIP#:	603FB001	RECOMMENDED NEXT INSP. DATE:	04/2013
PROV. REG. #:	A570539	RECOMMENDED RETIREMENT DATE:	11/2936
SERIAL #:	H-06-274	REM. LIFE (from last survey 04/2008):	928.60 yrs.
CRN.:	K6154.12	TOTAL CAUTION / ACTION TML:	0

Item # (131)

TML No.: 2 TOP SH E-W 300

DATE BUILT: 01/2006

AVERAGE THICKNESS MEASURED: 7.25 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 7.20 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Last Survey Date mm/yyyy	Last Survey Date mm/yyyy	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/ Caution Required Item	
2.01	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.20	0.000	0.000	04/2013	05/4008	NO	*
2.02	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.30	0.000	0.000	04/2013	05/4008	NO	*
2.03	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.20	0.000	0.000	04/2013	05/4008	NO	*
2.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.20	0.000	0.000	04/2013	05/4008	NO	*
2.05	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.30	0.000	0.000	04/2013	05/4008	NO	*
2.06	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.30	0.000	0.000	04/2013	05/4008	NO	*

TML No.: 4 MID SH T-B 300

DATE BUILT: 01/2006

AVERAGE THICKNESS MEASURED: 7.04 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 6.90 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Last Survey Date mm/yyyy	Last Survey Date mm/yyyy	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/ Caution Required Item	
4.01	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.00	0.000	0.000	04/2013	05/4008	NO	*
4.02	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.00	0.000	0.000	04/2013	05/4008	NO	*
4.03	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.10	0.000	0.000	04/2013	05/4008	NO	*
4.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.20	0.000	0.000	04/2013	05/4008	NO	*
4.05	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.10	0.000	0.000	04/2013	05/4008	NO	*
4.06	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.00	0.000	0.000	04/2013	05/4008	NO	*
4.07	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.10	0.000	0.000	04/2013	05/4008	NO	*
4.08	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.10	0.000	0.000	04/2013	05/4008	NO	*
4.09	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.00	0.000	0.000	04/2013	05/4008	NO	*
4.10	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.00	0.000	0.000	04/2013	05/4008	NO	*
4.11	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	7.00	0.000	0.000	04/2013	05/4008	NO	*
4.12	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	6.90	0.000	0.000	04/2013	05/4008	NO	*

(*) and GREEN Represent 25% of the TMLs, which have the earliest retirement dates.

BLUE (Caution TML) Corrosion Rate greater than 0.250mm/yr. or TML Remaining Life is less than 1.00 year.

RED (Action TML) TML with negative life.

If Baseline Survey Thickness Measurement was not taken at the time of Manufacture, then Nominal Thickness is used as Baseline Thickness.

TAQA North

Unit: N-603

FACILITY:	CHINCHAGA GAS PLANT	MANUFACTURER:	HEATEC
LSD:	C-032-H/094-H-08	DESIGN PRESSURE:	1379 kPa / 200 psi
ITEM DESC.:	A570539 - HEATER BOILER	DESIGN TEMP.:	343 C / 649 F
EQUIP / OIP#:	603FB001	RECOMMENDED NEXT INSP. DATE:	04/2013
PROV. REG. #:	A570539	RECOMMENDED RETIREMENT DATE:	11/2936
SERIAL #:	H-06-274	REM. LIFE (from last survey 04/2008):	928.60 yrs.
CRN.:	K6154.12	TOTAL CAUTION / ACTION TML:	0

Item # (131)

TML No.: 6 BTM SH E-W 300

DATE BUILT: 01/2006

AVERAGE THICKNESS MEASURED: 6.83 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 6.70 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Last Survey Date mm/yyyy	Last Survey Date mm/yyyy	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/ Caution Required Item	
6.01	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	6.70	0.000	0.000	04/2013	05/4008	NO	*
6.02	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	6.90	0.000	0.000	04/2013	05/4008	NO	*
6.03	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	6.90	0.000	0.000	04/2013	05/4008	NO	*
6.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	6.80	0.000	0.000	04/2013	05/4008	NO	*
6.05	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	6.90	0.000	0.000	04/2013	05/4008	NO	*
6.06	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	6.80	0.000	0.000	04/2013	05/4008	NO	*

TML No.: 8 NOZ 2"CIRC 300

DATE BUILT: 01/2006

AVERAGE THICKNESS MEASURED: 5.88 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 5.80 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Last Survey Date mm/yyyy	Last Survey Date mm/yyyy	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/ Caution Required Item	
8.01	5.50	0.00	5.50	01/2006	5.50	N/A	N/A	04/2008	5.90	0.000	0.000	04/2013	08/2141	NO	*
8.02	5.50	0.00	5.50	01/2006	5.50	N/A	N/A	04/2008	5.80	0.000	0.000	04/2013	04/2108	NO	*
8.03	5.50	0.00	5.50	01/2006	5.50	N/A	N/A	04/2008	5.90	0.000	0.000	04/2013	08/2141	NO	*
8.04	5.50	0.00	5.50	01/2006	5.50	N/A	N/A	04/2008	5.90	0.000	0.000	04/2013	08/2141	NO	*

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RED (Action TML) TML with negative life.

If Baseline Survey Thickness Measurement was not taken at the time of Manufacture, then Nominal Thickness is used as Baseline Thickness.