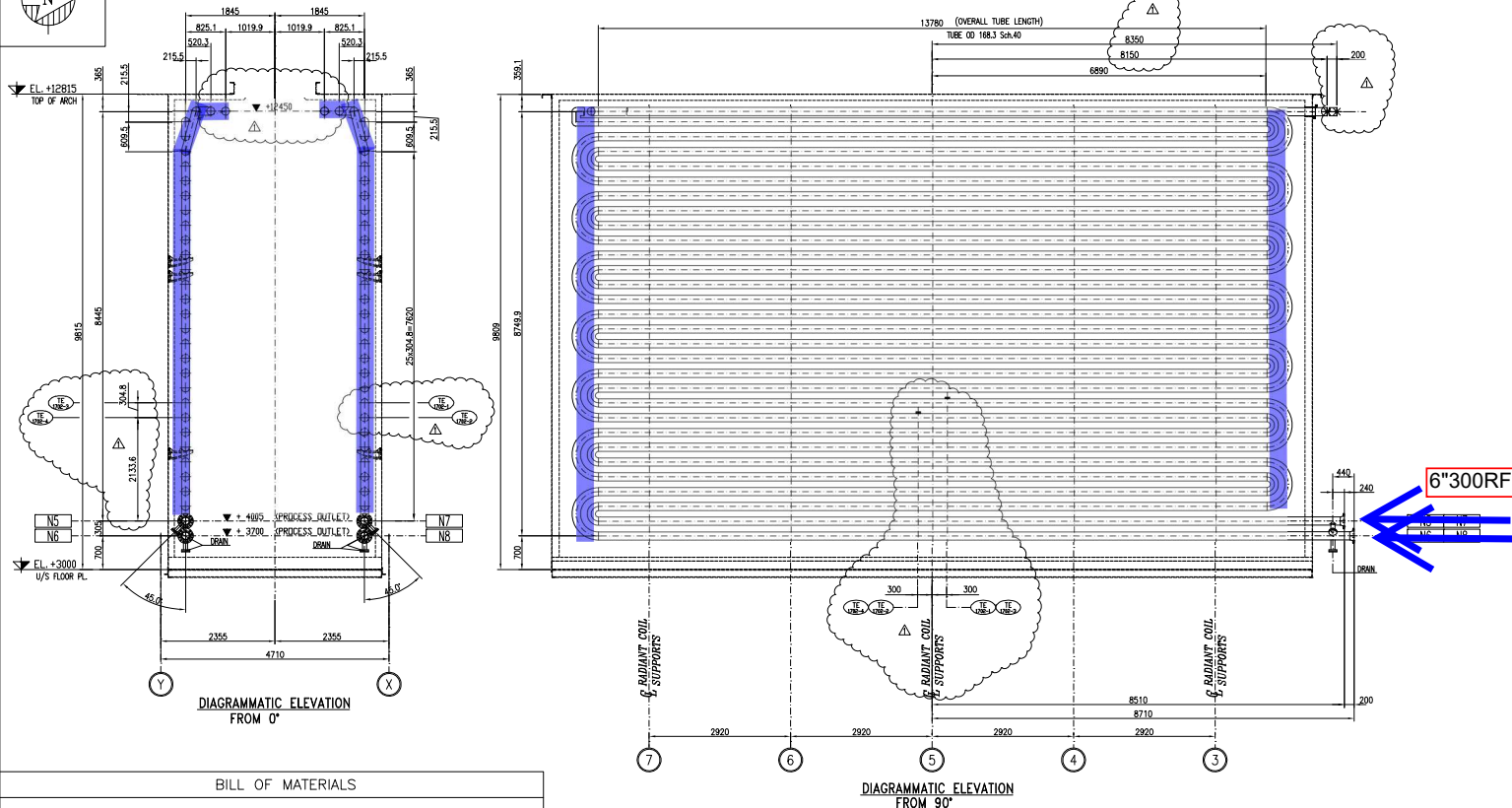




BILL OF MATERIALS

(100 SERIES)			PIPES									
REV.	ITEM	QTY	DESCRIPTION	NO. [n]	THK [mm]	THK [IN]	AW [mm]	LENGTH [m]	EXTRA LENGTH [m]	TOTAL LENGTH [m]	MATERIAL ASTM / ASME	NOTES
	R-100	2	SEAMLESS PIPE	6	108.3	7.11	AW	15241	100	15341	A312 / P345	NOTE 2-10
	R-101	2	SEAMLESS PIPE	6	108.3	7.11	AW	15001	100	15101	A312 / P345	NOTE 10
	R-1020	1	SEAMLESS PIPE	6	108.3	7.11	AW	13781	100	13881	A312 / P345	NOTE 10
	R-1028	16	SEAMLESS PIPE	6	108.3	7.11	AW	13780	100	13880	A312 / P345	NOTE 10
	R-1029	16	SEAMLESS PIPE	6	108.3	7.11	AW	13780	100	13880	A312 / P345	NOTE 10
	R-1030	16	SEAMLESS PIPE	6	108.3	7.11	AW	13780	100	13880	A312 / P345	NOTE 10
	R-104	26	SEAMLESS PIPE	6	108.3	7.11	AW	14500	100	14600	A312 / P345	NOTE 2-10
	R-105	2	SEAMLESS PIPE	6	108.3	7.11	AW	15401	100	15501	A312 / P345	NOTE 2-10
	R-106	2	SEAMLESS PIPE	6	108.3	7.11	AW	15401	100	15501	A312 / P345	NOTE 2-10

[illegible][illegible]

(600 SERIES)		STUD BOLTS					
REV.	ITEM	QTY	DESCRIPTION	Ø [in]	LENGTH [mm]	MATERIAL ASTM/ASME	NOTES
0	R-600	32	STUD BOLT	5/8	100	A193 GR. B8C	
0	R-601	64	NUT	5/8		A194 GR.8C	

(700 SERIES)				GASKETS					
REV.	ITEM	QTY	DESCRIPTION	ND [in]	RATING [psi]	END	TYPE	MATERIAL ASTM / ASME	NOTES
0	R-700	4	SPIRAL W. GASKET	2	300	RF		SS316 GRAPHITE	

WELDING TABLE OF PRESSURE PARTS			
DESCRIPTION	ASTM MATERIAL	S.W.	F.W.
PIPE NO 6" with PIPES/ELBOWS	A312 TP304/A303 TP304	168	16
PIPE NO 6" with PIPES/FLANGES	A312 TP304/A182 TP304H	8	-
LIN FLANGE NO 2" with PIPE NO 6"	A182 347H/A312 TP304	4	-

REFERENCE DRAWING

[illegible]

FABRICATION AND WELDING DATA			RADIANT CELLS	
TUBE MATERIALS			A312 TP304 (SEE NOTE 10)	
DESIGN CODE			API STD 530 7th Ed.	
RUPTURE STRENGTH			MINIMUM	
DESIGN PRESSURE			Bar (g)	18
TEMPERATURE ALLOWANCE			"C	15
CORROSION ALLOWANCE			mm	3
HYDROSTATIC TEST PRESSURE			Kpa-g	27
POST WELD HEAT TREATMENT			YES	
PERCENT OF WELD FULLY RADIOGRAPHED			100% OF 100%	
DESIGN TUBE METAL TEMPERATURE Min/Max			"C	-36 / 550
PMI			YES - 100%	
FLUID			NEUTRAL STABLE HYDROGENATE	
WEIGHT	EMPTY	Kg	28554	
	FULL OF WATER	Kg	47271	
	VOLUME	m ³	12.9	

GENERAL NOTES

- 1) ALL WELDINGS MUST BE PERFORMED AT SHOP UNLESS WHERE INDICATED F.W.
- 2) F.W. = WELDING FIELD
- 3) ALL PIPES INDICATED WITH FLAG MUST HAVE 100 MM OF EXTRA LENGTH FOR ADJUSTMENT IN FIELD
- 4) ALL DIMENSIONS ARE IN MILLIMETER
- 5) ALL PREFABRICATED SECTIONS OF PIPES MUST BE HYDRO TESTED
- 6) AFTER HYDRO TEST THE COILS SHALL BE DRAINED AND DRYED
- 6) FINISHED GRADE LEVEL +0.00
- 7) S.W. = SHOP WELDING
- 8) PLEASE INSTALL THE BLIND FLANGES COMPLETE WITH GILD BOLTS AND GASKETS AT THE END OF EACH PROCESS LINE BEFORE SHIPPING (TEMPORARY BLIND FLANGES)
- 9) HYDRO TESTING SHALL BE DONE AFTER FINAL WELDING OF SUB ASSEMBLIES OF COILS AT SHOP. FURTHER HYDRO TEST AT SITE BY THE AFTER COILS BEING SUBSIED TESTING
- 10) ALL COIL PARTS AND WELDED JOINTS SHALL BE SUBJECT TO NANO TEST IN ACCORDANCE WITH EN 10204

- FOR DEVELOPMENT PASSES N5-N7 SEE Sh. 2/3
- FOR DEVELOPMENT PASSES N6-N8 SEE Sh. 3/3

1	05-08-2022	ISSUE AFTER CLIENT COMMENTS	C.C.			
0	05-08-2022	ISSUED FOR COMMENTS	C.C.			
REV.Nr.	DATE	DESCRIPTION	PREP.	CHECK.	REV.	APPR.

Client:		
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Clients:



Project: Replacement of Fired Heater KR-102
at KT-1/1 Vacuum Gasoil
Hydrotreatment Unit

Job No.:	Client Ref.
8242	OLP 01952

Object: GENERAL ARRANGEMENT
RADIANT COIL

Plant:	Scale:
KT1/1 VGH 11/01	1:50

Document: SE-T-8242-DA-TF-002

Sheet:	File Name:	Rev.: 1
1 / 3	8242_ODATF002	Date: 05-08-202