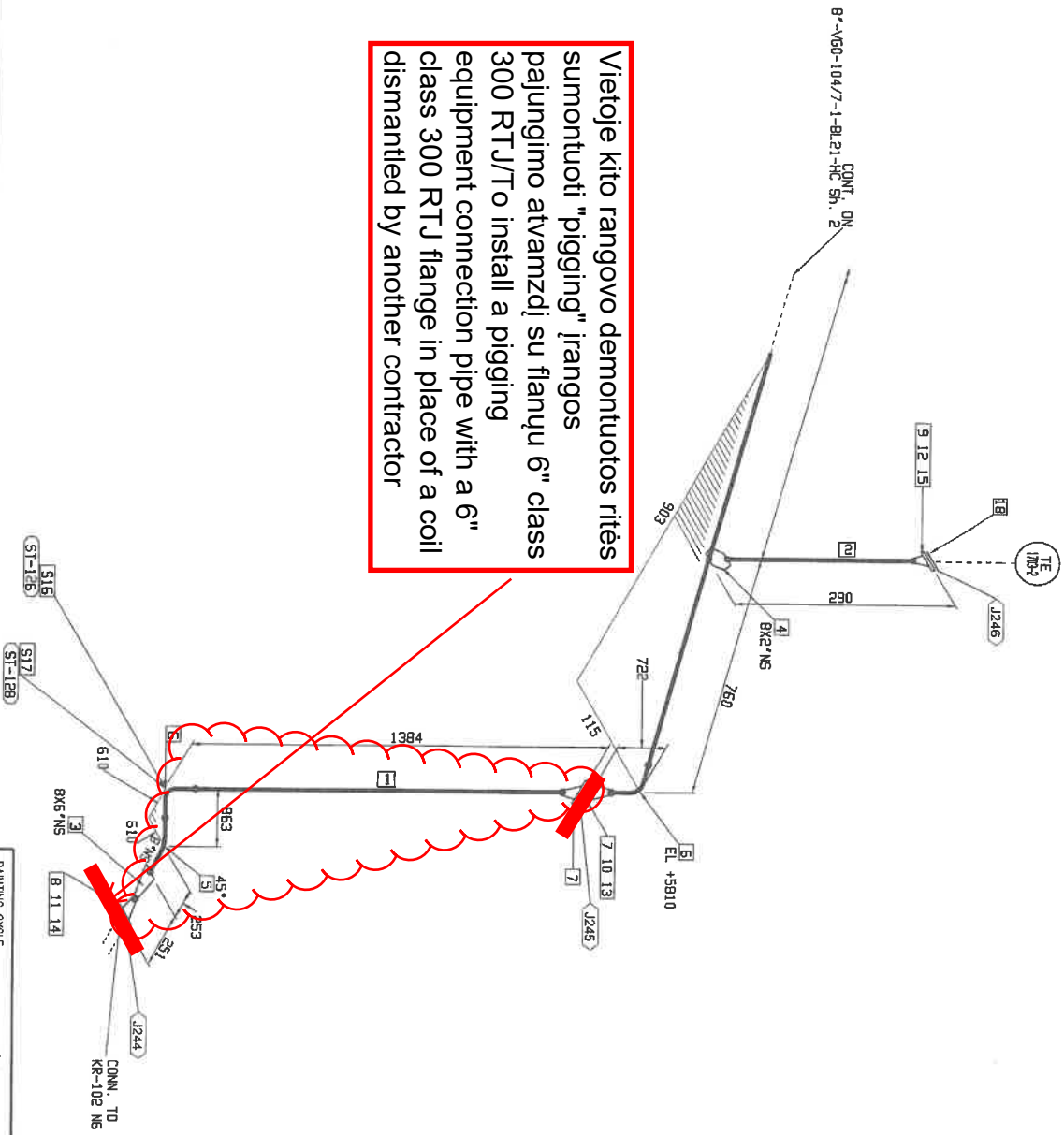




Vietoje kito rangovo demontuotos ritės sumontuoti "pigging" įrangos pajungimo atvamzdį su flanžu 6" class 300 RTJ/T to install a pigging equipment connection pipe with a 6" class 300 RTJ flange in place of a coil dismantled by another contractor



POS	NPS	QTY	COMPONENT DESCRIPTION	WGT 'T (kg)
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FABRICATION MATERIALS

PIPE				
1	8	1.0 M	Pipe BW ASME B36.10 SMLS ASTM A312	40.9
2	2	0.1 M	TP321 Sch. 40S	0.4
FITTINGS				
3	8X6	1	Reducer Concentric ASME B16.9 BW-BW Wt. S. ASTM A403 WP321 Sch. 40S x 40S	5.4
4	8X2	1	Weldolet B16.11 ASTM A182 Gr F321	0.8
5	8	1	Elbow 45° Long Radius 3D ASME B16.9	20.4
6	8	2	Elbow 90° Long Radius 3D ASME B16.9 BW ASTM A403 WP321 Sch. 40S	81.5
FLANGES				
7	8	2	Flange Welding Neck ASME B16.5 BW-FLG 300# ASTM A182 Gr F321 Sch. 40S	62.8
8	6	1	Flange Welding Neck ASME B16.5 BW-FLG 300# ASTM A182 Gr F321 Sch. 40S	20.5
9	2	1	Flange Welding Neck ASME B16.5 BW-FLG 300# ASTM A182 Gr F321 Sch. 40S	3.7
GASKETS				
10	8	1	Gasket Spiral Wound ASME B16.20 300# RF AISI 316/Graphite	1.0
11	6	1	Gasket Spiral Wound ASME B16.20 300# RF AISI 316/Graphite	1.0
12	2	1	Gasket Spiral Wound ASME B16.20 300# RF AISI 316/Graphite	1.0
BOLTS				
13	7/8	12	Stud Bolt +2 Nuts ASME B16.31 2ASME B1.1 ASTM A193 B16ASTM A 194 GR B7 150 mm LG (150 MM LG)	1.1
14	3/4	12	Stud Bolt +2 Nuts ASME B16.31 2ASME B1.1 ASTM A193 B16ASTM A 194 GR B7 135 mm LG (135 MM LG)	1.1
15	5/8	8	Stud Bolt +2 Nuts ASME B16.31 2ASME B1.1 ASTM A193 B16ASTM A 194 GR B7 95 mm LG (95 MM LG)	1.1
SUPPORTS				
16	8	1	ST-126	-
17	8	1	ST-128	-
18	2	1	TE-1703-2	2.0

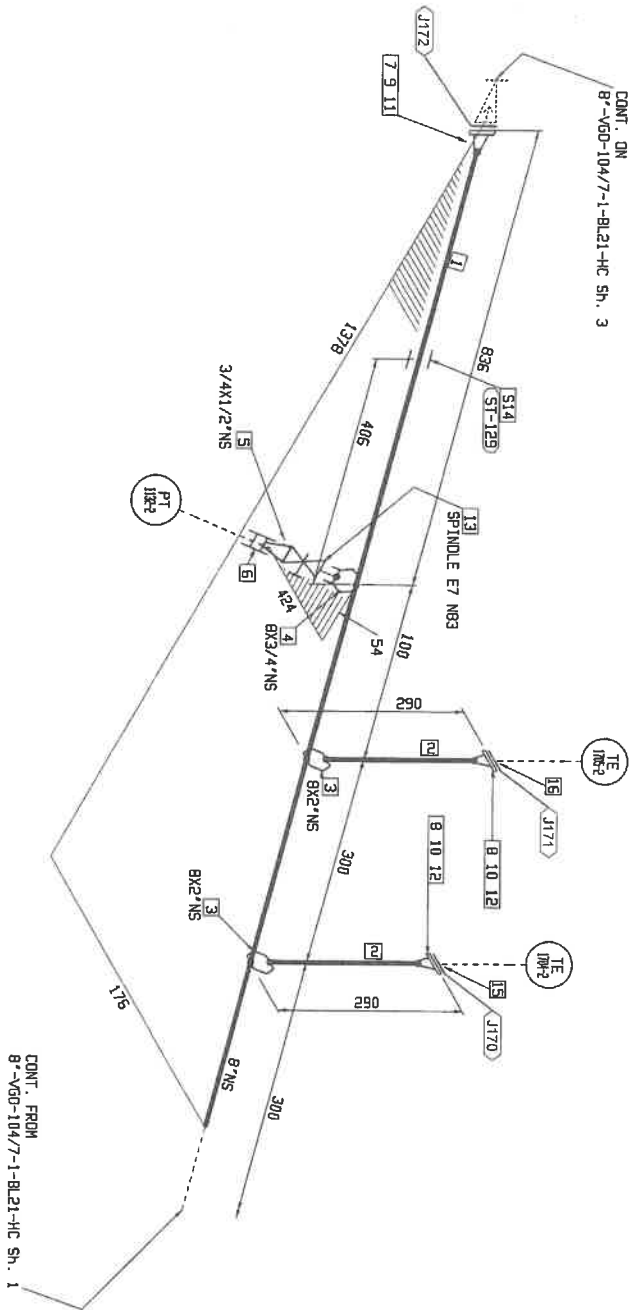
Line N° V-104/7

3	16/12/24	ISSUED FOR AS BUILT	REV. DATE	DESCRIPTION
2	19/04/24	ISSUED FOR CONSTRUCTION - GENERAL REVIEW		
1	18/04/24	ISSUED FOR CONSTRUCTION		
0	17/07/22	ISSUED FOR CONSTRUCTION		

Customer:	Job Number:	Client Ref.:
	SE-6242	OPF 01952

Project Name:	Document Type:	Revision:
Replacement of Fired Heater KR-102 of KT-1/1	ISOMETRIC	1/3

Document Number:	Sheet:	Date:	Rev.:
SE-M-B242-SK-V60-104/7-1	1/3	18/12/2024	3



PIPE	INSULATION	TRACING	N.D.T.	DES. DATA:	TEMP.	U PRESS.	W PRESS.	PAINTING CYCLE:	REFERENCES:
8"-VGO-104/7-1-BL21-HC	180	RV	-	OPER DATA:	420	385	18	NONE	
				TEST:					
				FLUID:	GROUP 1	PHASE I			
				CAT PED:	III				
				HEAT TREATMENT:	NO				

POS	MPS	QTY	COMPONENT DESCRIPTION	WGHT (kg)
FABRICATION MATERIALS				
PIPE				
1	8	1.3 M	Pipe BW ASME B36.10 SMLS ASTM A312	54.2
2	2	0.2 M	TP321 Sch. 40S	0.8
FITTINGS				
3	2		Weldoel B16.11 ASTM A182 Gr. F321	1.5
4	8X3/4	1	Sockel B16.11 3000# ASTM A182 Gr. F321	0.2
5	3/4X1/2	1	Swage Conetric BS 3799 MTH+MTH ASTM A403 WP321 Sch. 160 x 160	0.2
6	1/2	1	Coupling ASME B16.11 FTH 3000# ASTM A182 Gr. F321	0.2
FLANGES				
7	8	1	Flange Welding Neck ASME B16.5 BWFLG 300# ASTM A182 Gr. F321 Sch. 40S	31.3
8	2	2	Flange Welding Neck ASME B16.5 BWFLG 300# ASTM A182 Gr. F321 Sch. 40S	7.3
GASKETS				
9	8	1	Gasket Spiral Wound ASME B16.20 300# RF ASI 316/Graphite	1.0
10	2	2	Gasket Spiral Wound ASME B16.20 300# RF ASI 316/Graphite	2.0
BOLTS				
11	7/8	12	Stud Bolt +2 NMS ASME B18.3.1 ZASME B1.1 ASTM A 193 B18ASTM A 194 GR B7 150 mm LG (150 MM LG)	1.1
12	5/6	16	Stud Bolt +2 NMS ASME B18.3.1 ZASME B1.1 ASTM A 193 B18ASTM A 194 GR B7 95 mm LG (95 MM LG)	2.2
VALVES / IN-LINE ITEMS				
13	3/4	1	Extended Body Valve Gate W/M NIP API 602 / EN ISO 5781 PEKTH 800# ASTM A182 Gr. F321 API TRIM 8 API TRIM 5	1.9
SUPPORTS				
14	8	1	ST-129	-
15	2	1	TE-1704-2	2.0
16	2	1	TE-1705-2	2.0

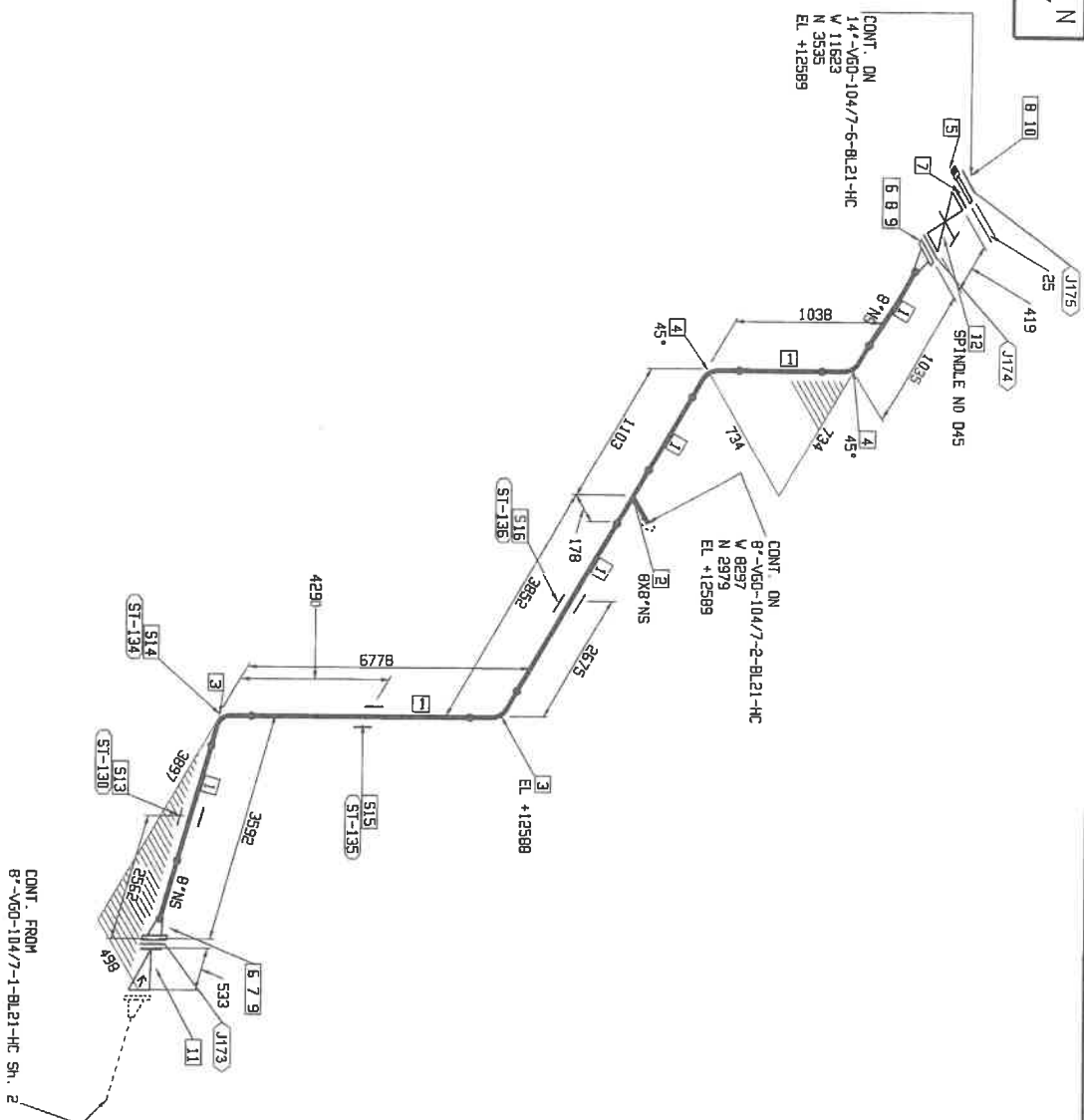
Line N° V-104/7

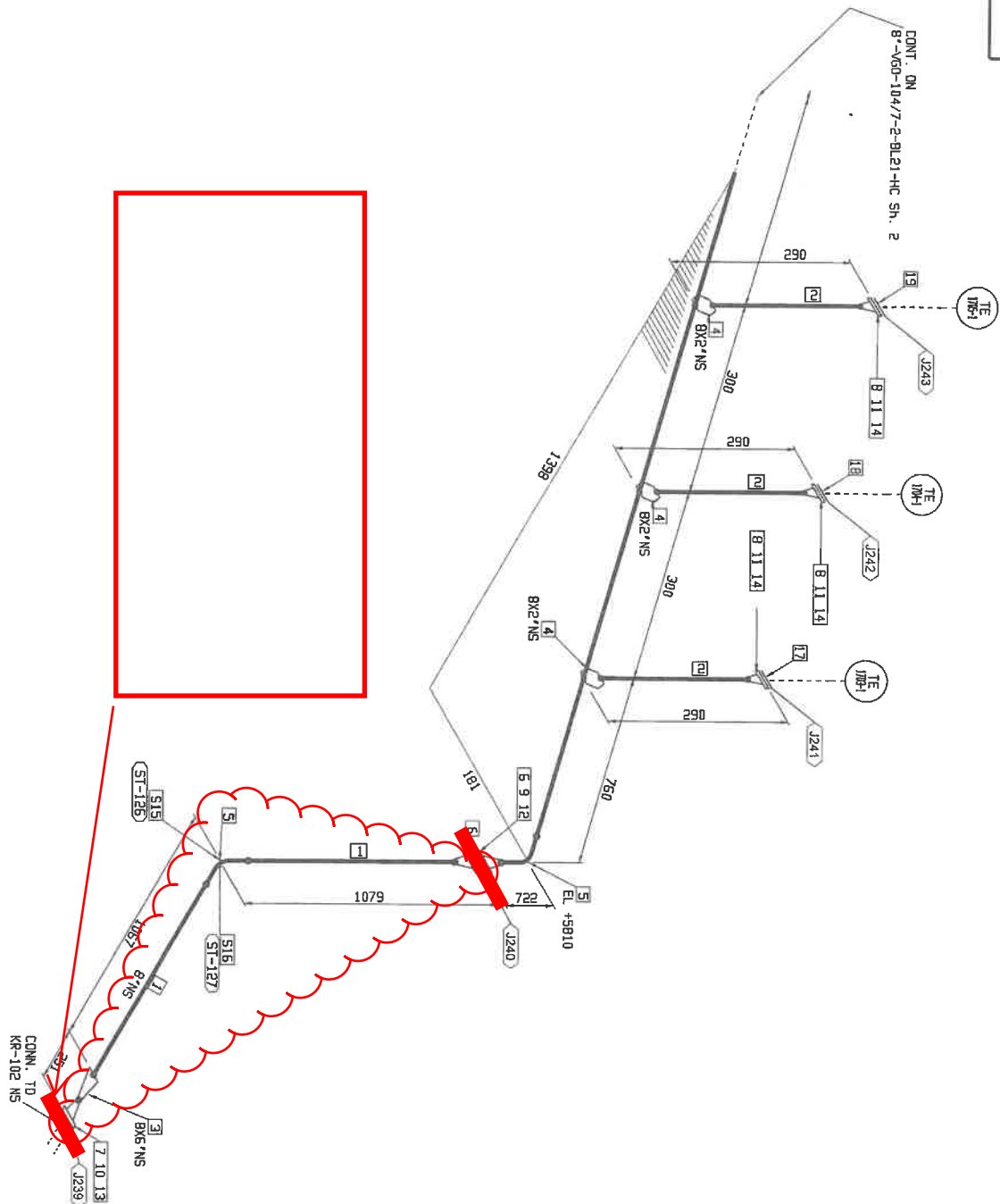
3	18/12/24	ISSUED FOR AS BUILT	18/12/24	18/12/24	18/12/24
2	19/06/21	ISSUED FOR CONSTRUCTION - GENERAL REVIEW	19/06/21	19/06/21	19/06/21
1	10/04/21	ISSUED FOR CONSTRUCTION	10/04/21	10/04/21	10/04/21
0	11/12/21	ISSUED FOR CONSTRUCTION	11/12/21	11/12/21	11/12/21
REV.	DATE	DESCRIPTION	BY	CHKD.	APPROV.



SISTEC
ENGINEERING & CONTRACTING

Project Name:	Replacement of Fired Heater KR-102 at K1-1/1
Client Ref:	SE-0242
Client Ref:	OP. 01952
Plant/Unit:	K1-1/1
File Name:	8"-VGO-104/7-1-BL21-HC
Rev:	2/3
Date:	18/12/2024
Page:	3





POS	NPS	QTY	COMPONENT DESCRIPTION	WGHT (kg)
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FABRICATION MATERIALS

[illegible]

Line N° V-104/7

3	10/1/20	ISSUED FOR A.S. BUILD	DATE	11	DATE	11	DATE	11	DATE
2	10/1/20	ISSUED FOR CONSTRUCTION - GENERAL REVIEW	DATE	11	DATE	11	DATE	11	DATE
1	10/1/20	ISSUED FOR CONSTRUCTION	DATE	11	DATE	11	DATE	11	DATE
0	10/1/20	ISSUED FOR CONSTRUCTION	DATE	11	DATE	11	DATE	11	DATE
REV.	DATE	DESCRIPTION	DATE	DATE	DATE	DATE	DATE	DATE	DATE

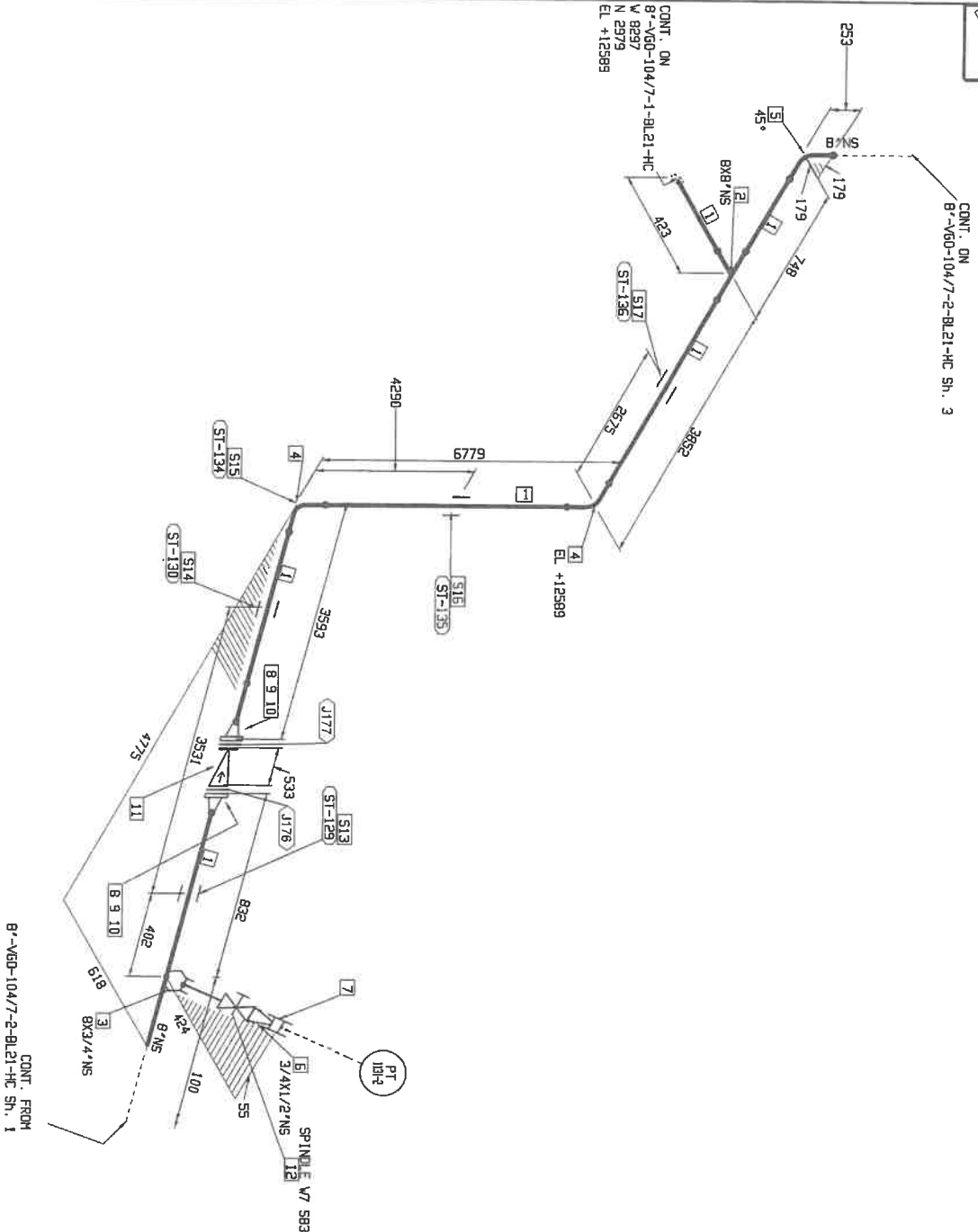
Customer:  **SBSETEC** ENGINEERING & CONTRACTING

Project Name:	Job Number:
Replacement of Fired Heater KR-102 at KT-1/1	SE-8242
Client Ref.:	
OP1 01952	

Point/Unit:	KT-1/1
File Name:	DATA 20000 10000 2 1

Document Name:	Sheet:	Date:	Rev.:
SE-M-8242-SK-M50-104/7-2	1 / 4	18/12/2024	3

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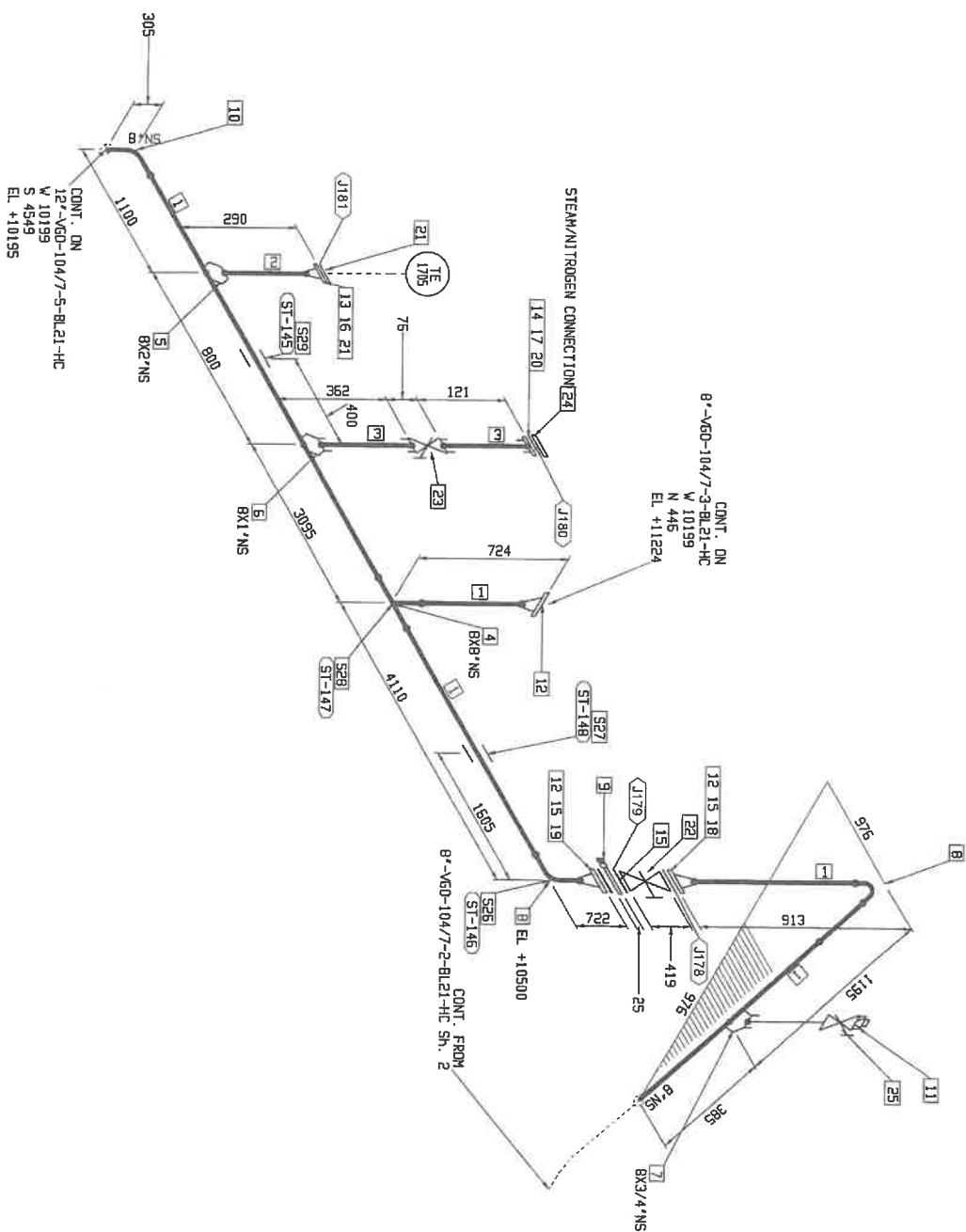


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Line N° V-104/7

POS	NPS	QTY	COMPONENT DESCRIPTION	WGHT (kg)
FABRICATION MATERIALS				
1	8	12.9 M	Pipe BW ASME B36.10 SMLS ASTM A312 TP321 Sch. 40S	541.8
FITTINGS				
2	8X8	1	Tee ASME B16.9 BW.W.S. ASTM A403 WP321 Sch. 40S	17.0
3	8X3/4	1	Socketel B16.11 3000# ASTM A182 Gr. F321	0.2
4	8	2	Elbow 90° Long Radius 3D ASME B16.9 BW ASTM A403 WP321 Sch. 40S	81.5
5	8	1	Elbow 45° Long Radius 3D ASME B16.9 BW ASTM A403 WP321 Sch. 40S	20.4
6	3/4X1/2	1	Swage Concentric SS 3799 NTH-MTH ASTM A403 WP321 Sch. 160 x 160	0.2
7	1/2	1	Coupling ASME B16.11 FTH 3000# ASTM A182 Gr. F321	0.2
FLANGES				
8	8	2	Flange Welding Neck ASME B16.5 B16WLG 300# ASTM A182 Gr. F321 Sch. 40S	62.6
GASKETS				
9	8	2	Gasket Spiral Wound ASME B16.20 300# RF AISI 316/Graphite	2.0
BOLTS				
10	7/8	24	Stud Bolt +2 Nuts ASME B18.31 2A5SME B.1 AS16/ASTM A 194 GR B7 150 mm LG (150 MM LG)	2.2
VALVES / IN-LINE ITEMS				
11	8	1	Valve Check Swing Type API 600 / BS 1869 FLG 300# RF ASTM A351 CF8C API TRIM 5	190.0
12	3/4	1	Extended Body Valve Gate W/ Nth API 602 / EN ISO1561 PEW/TH 800# ASTM A182 Gr. F321 API TRIM 8 API TRIM 5	1.9
SUPPORTS				
13	8	1	ST-129	-
14	8	1	ST-130	-
15	8	1	ST-134	-
16	8	1	ST-135	-
17	8	1	ST-136	-

Customer									
 CONTEC INGENIERIA INGENIERIA Y CONTRATOS									
Project Name: Replacement of Fired Heater KR-102 of KT-1/1 Client Ref.: OPL 01952 Drawn/Unit: KT-1/1									
Document Name: 8\"/>									
Document Type: ISOMETRIC Scale: 2 / 4 Date: 18/12/2024 Rev: 3									
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POS	NPS	QTY	COMPONENT DESCRIPTION	WGHT (kg)
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FABRICATION MATERIALS

1	8	9.3 M	Pipe BW ASME B36.10 SMLS ASTM A312 TP321 Sch. 40S	392.3
2	2	0.1 M	Pipe BW ASME B36.10 SMLS ASTM A312 TP321 Sch. 40S	0.4
3	1	0.4 M	Pipe PE ASME B36.10 SMLS ASTM A312 TP321 Sch. 80S	1.1
FITTINGS				
4	BX8	1	The ASME B16.9 BW Wks. ASTM A403 WP321 Sch. 40S	17.0
5	BX2	1	Weldolet B16.11 ASTM A182 Gr F321 Sch. 40S	0.8
6	BX1	1	Socketolet B16.11 3000# ASTM A182 Gr F321	0.3
7	BX3/4	1	Socketolet B16.11 3000# ASTM A182 Gr F321	0.2
8	8	2	Elbow 90° Long Radius ASME B16.9 BW ASTM A403 WP321 Sch. 40S	81.5
9	8	1	Specialty Blind B16.5 WAFER 300# ASTM A182 Gr F321	17.7
10	8	1	Elbow 90° Long Radius ASME B16.9 BW ASTM A403 WP321 Sch. 40S	20.4
11	3/4	1	Pig Round Head ASME B16.11 WITH ASTM A182 Gr F321	0.2
FLANGES				
12	8	3	Flange Welding Neck ASME B16.5 BWFLG 300# ASTM A182 Gr F321 Sch. 40S	93.9
13	2	1	Flange Welding Neck ASME B16.5 BWFLG 300# ASTM A182 Gr F321 Sch. 40S	3.7
14	1	1	Flange Stockwell ASME B16.5 BWFLG 300# ASTM A182 Gr F321 Sch. 80S	1.4
GASKETS				
15	8	3	Gasket Spiral Wound ASME B16.20 300# RF AISI 316/Graphite	3.0
16	2	1	Gasket Spiral Wound ASME B16.20 300# RF AISI 316/Graphite	1.0
17	1	1	Gasket Spiral Wound ASME B16.20 300# RF AISI 316/Graphite	1.0
BOLTS				
18	7/8	12	Stud Bolt +2 Nuts ASME B18.31 2ASME B1.1 ASTM A193 B76ASTM A194 GR B7 180 mm LG (180 MM LG)	1.1
19	7/8	12	Stud Bolt +2 Nuts ASME B18.31 2ASME B1.1 ASTM A193 B76ASTM A194 GR B7 180 mm LG (180 MM LG)	1.3
20	5/8	4	Stud Bolt + Nuts ASME B18.31 2ASME B1.1 ASTM A193 B76ASTM A194 GR B7 85 mm LG (85 MM LG)	1.1
1	2	1	TE-1705	2.0

Line N° V-104/7

REV.	DATE	DESCRIPTION	BY	CHKD	APP'D	UIC
3	10/17/74	ISSUED FOR AS BUILT	SEIT	PA		
2	08/06/74	ISSUED FOR CONSTRUCTION - GENERAL REVIEW	SEIT	SE		
1	28/04/73	ISSUED FOR CONSTRUCTION	SEIT	SE	ICA	NN
0	31/10/72	ISSUED FOR CONSTRUCTION	SEIT	SE	ICA	NN
			DMV	CHNO	SHROZ	PRO


BSI
 British Standards Institution
 Engineering & Construction

Project Name:	Job Number:
Replacement of Fired Heater KR-102 at KT-1/1	SE-8242
Client Ref:	
QPL 01952	

Plant/Unit	KT-1/1
File Name:	

Document Name: SEC-M-8242-SK-V60-1047-2 Sheet: 3 / 4 Date: 18/12/2024 Rev: 3



POS	NPS	QTY	COMPONENT DESCRIPTION	WGHT (kg)
FABRICATION MATERIALS				
BOLTS				
21	3/8	8	Stud Bolt - 2 Nuts ASME B18.3.1 2/ASME B1.1 ASTM A 193 B7/ASTM A 194 GR.B7 55 mm LG (95 MM LG)	1.1
VALVES / IN-LINE ITEMS				
22	8	1	Valve Gate API 600 / EN ISO1934 FLG 300# RF ASTM A351 CF8C API TRIM 5	245.0
23	1	1	Valve Gate API 602 / EN ISO15761 SW 800# ASTM A422 Q-F221 API TRIM 5	3.8
24	1	1	Flange Blind ASTM B16.5 FLG 300# ASTM A102 GR F321	1.9
25	3/4	1	Extended Body Valve Gate W/INLP API 602 / EN ISO15761 PE-FTH 800# ASTM A182 GR F321 API TRIM 8 API TRIM 5	1.9
SUPPORTS				
26	8	1	ST-146	-
27	8	1	ST-148	-
28	8	1	ST-147	-
29	8	1	ST-145	-

Line N° V-104/7

3	10/12/24	ISSUED FOR AS BUILT	SE-8242	LIBC
2	10/04/23	ISSUED FOR CONSTRUCTION - GENERAL REVIEW	SE-8242	LIBC
1	10/04/23	ISSUED FOR CONSTRUCTION	SE-8242	LIBC
0	01/11/22	ISSUED FOR CONSTRUCTION	SE-8242	LIBC
REV.	DATE	DESCRIPTION	BY	CHKD

Customer:



ENGINEERING & CONTRACTING

Project Name:

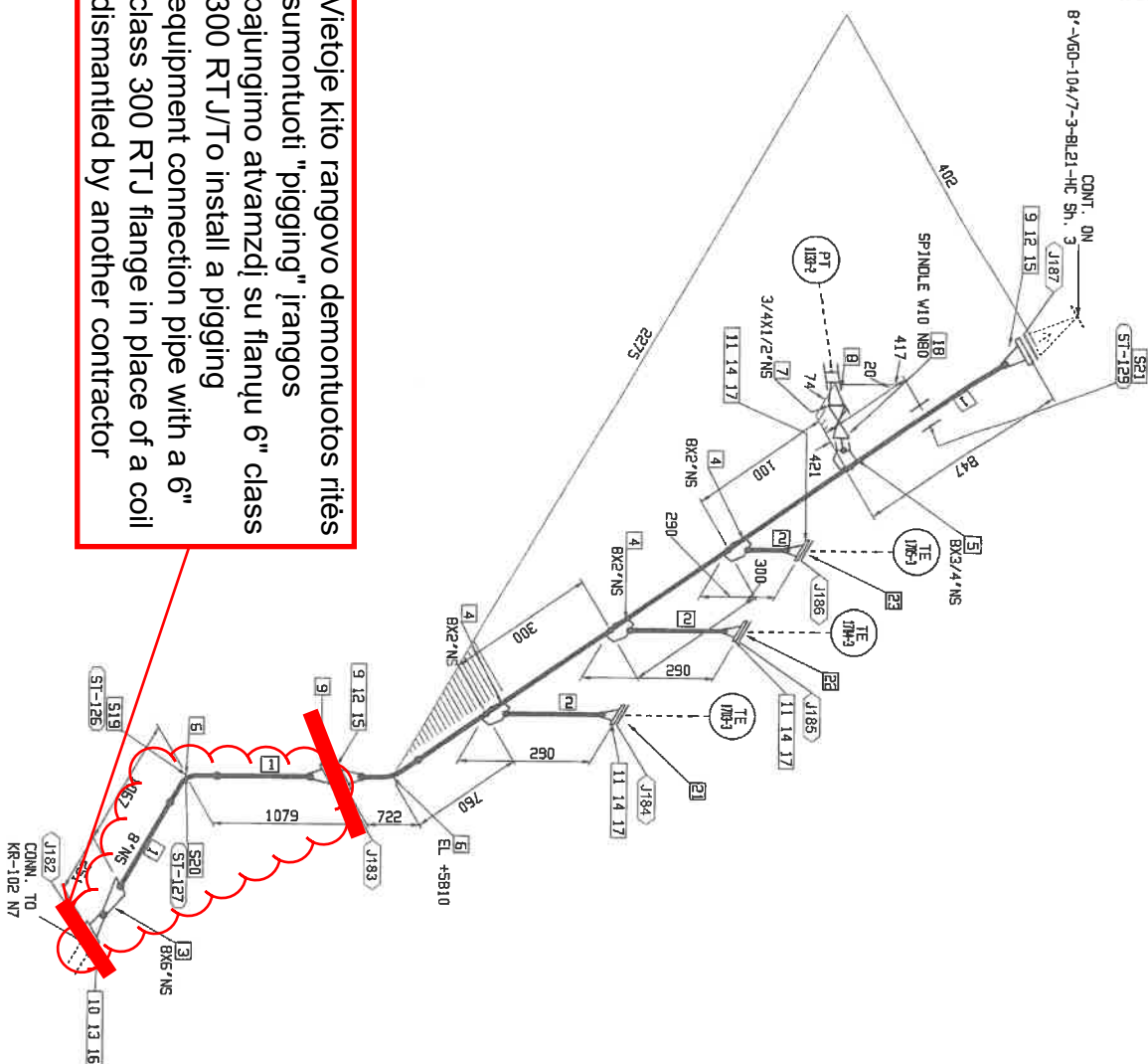
Replacement of Fired Header KR-102 at KT-1/1

Document Types:

ISOMETRIC

B" -VGD-104/7-2-BL21-HC

Document Name	SE-8242-SK-VGD-104/7-2	Sheet	4 / 4
Document Date	18/12/2024	Rev.	3



POS	MPS	QTY	COMPONENT DESCRIPTION	WEIGHT (kg)
FABRICATION MATERIALS				
PIPE				
1	B	2.4 M	Pipe BW ASME B36.10 SMLS ASTM A312	102.0
2	2	0.3 M	TP321 Sch. 40S	1.2
FITTINGS				
3	BX6	1	Reducer Concentric ASME B16.9 BW6-BW	5.4
4	BX2	3	W.S. ASTM A403 WP321 Sch. 40S x 40S	2.2
5	BX3/4	1	Welded B16.11 ASTM A182 Gr-F321	0.2
6	8	2	Socket B16.11 3000# ASTM A182 Gr-F321	0.2
7	3/4X1/2	1	Elbow 90° Long Radius 90 ASME B16.9	0.2
8	1/2	1	W.S. ASTM A403 WP321 Sch. 40S	0.2
FLANGES				
9	8	3	Flange Welding Neck ASME B16.5 BW6-FLG	93.9
10	6	1	300# ASTM A182 Gr-F321 Sch. 40S	20.5
11	2	3	Flange Welding Neck ASME B16.5 BW6-FLG	10.9
12	8	2	300# ASTM A182 Gr-F321 Sch. 40S	2.0
13	6	1	RF AISI 316/Graphite	1.0
14	2	3	RF AISI 316/Graphite	3.0
15	7/8	24	Stud Bolt x2 Nuts ASME B18.3.1 2ASME	2.2
16	3/4	12	Stud Bolt x2 Nuts ASME B18.3.1 2ASME	1.1
17	5/8	24	Stud Bolt x2 Nuts ASME B18.3.1 2ASME	3.3
VALVES / IN-LINE ITEMS				
18	3/4	1	Extended Body Valve Gate W/INP API	1.9
SUPPORTS				
19	8	1	ST-126	-
20	8	1	ST-127	-
21	2	1	TE-1703-3	2.0
22	2	1	TE-1704-3	2.0
23	2	1	TE-1705-3	2.0

Line N° V-104/7

REV.	DATE	DESCRIPTION	BY	CHKD.	APP'D.
1	19/12/2023	ISSUED FOR AS BUILT			
2	19/12/2023	ISSUED FOR CONSTRUCTION - GENERAL REVIEW			
3	19/12/2023	ISSUED FOR CONSTRUCTION			



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ENGINEERING & CONTRACTING

Project Name:	Sub Number:
Replacement of Fired Heater KR-102 of KT-1/1	SE-8242
Document Type:	Client Ref.:
ISOMETRIC	OP. 01952
Plant/Unit:	Plant/Unit:
KT-1/1	KT-1/1
Drawn:	Drawn:
19/12/2024	19/12/2024
3	3

POS	NPS	QTY	COMPONENT DESCRIPTION	WGHT (kg)
FABRICATION MATERIALS				
SUPPLIS				
21	8	1	ST-129	

3	10/12/24	ISSUED FOR AS BUILT	REV	REV	DATE	LIBR
2	09/06/24	ISSUED FOR CONSTRUCTION - GENERAL REVIEW	REVISED	SET	CA	NH
1	08/07/23	ISSUED FOR CONSTRUCTION	REVISED	SET	CA	NH
0	01/11/23	ISSUED FOR CONSTRUCTION	REVISED	SET	ICA	NH
	DATE	DESCRIPTION	REV.	REV.	DATE	LIBR.

Customers

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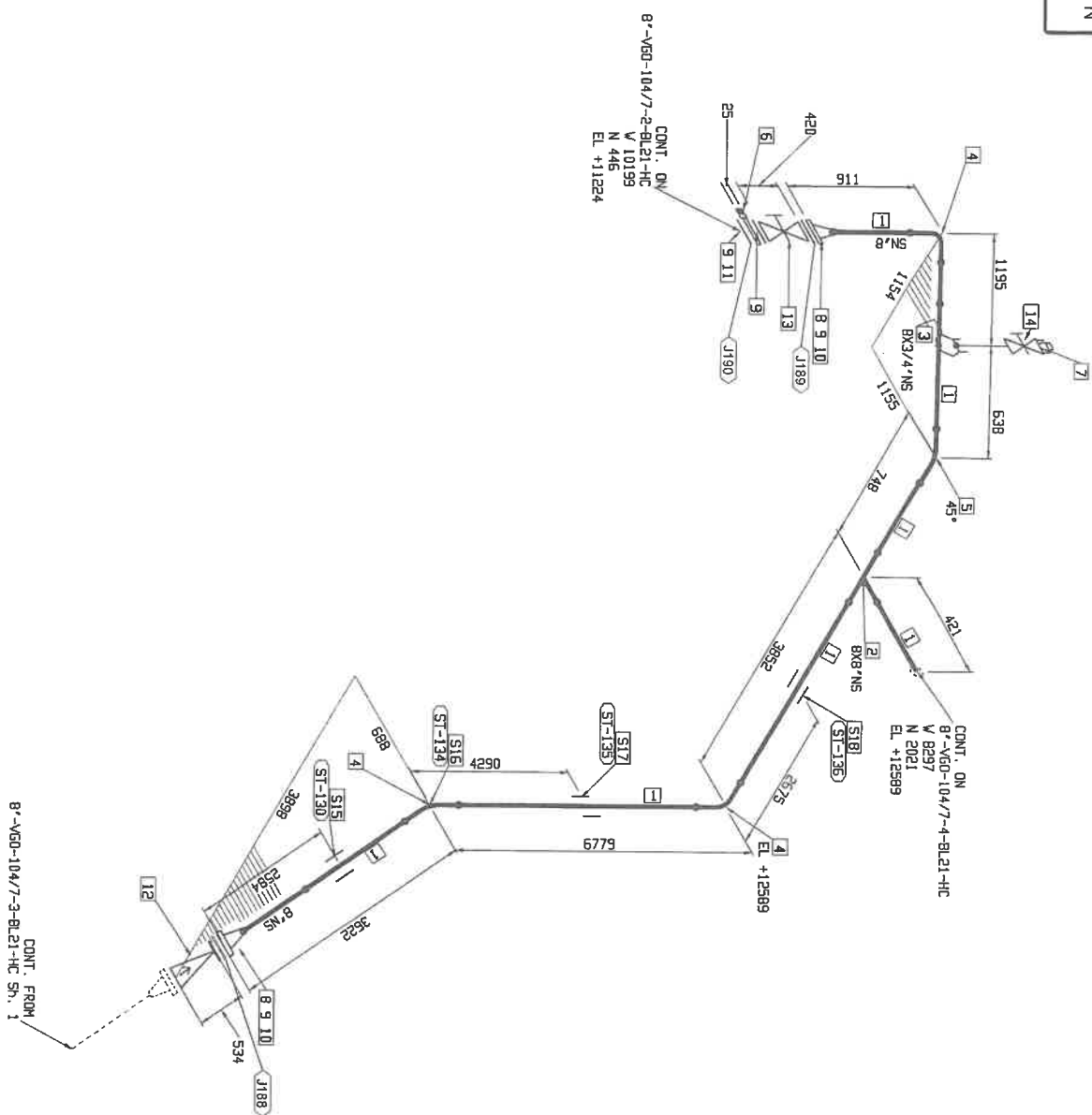
Project Name:	Job Number:
Replacement of Fired Heater KR-102 at KT-1/1	SE-0242
Document Type:	Client Ref.:
	OPL 01952

ISOMETRIC
Plant/Unit:
KT-1/1

Document Name:	8"-V60-104/7-3-BL21-HC	File Name:	8242.35X60.104/7-3_2
Sheet:		Date:	
		Rev.:	

SE-M-8242-SK-VG0-104/7-3

2 / 3	18/12/2024	3
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POS	MFG	QTY	COMPONENT DESCRIPTION	WGHT (kg)
FABRICATION MATERIALS				
PPE				
1	8	13.0 M	Pipe BW ASME E36, 10 SMLS, S ASTM A312 TP321 Sch. 40S	550.9
FITTINGS				
2	8X8	1	Tee ASME B16.9 BW Wk. S, ASTM A403 WP321 Sch. 40S	17.0
3	8X34	1	Scioelid B16.11 300# ASTM A182 Gr. F321	0.2
4	8	3	Elbow 90° Long Radius 3D ASME B16.9 BW ASTM A403 WP321 Sch. 40S	122.2
5	8	1	Elbow 45° Long Radius 3D ASME B16.9 BW ASTM A403 WP321 Sch. 40S	20.4
6	8	1	Spectacle Blind B16.5 WAFER 300# ASTM A182 Gr. F321	17.7
7	34	1	Plug Round Head ASME B16.11 WITH ASTM A182 Gr. F321	0.2
FLANGES				
8	8	2	Flange Welding Neck ASME B16.5 BWFLG 300# ASTM A182 Gr. F321 Sch. 40S	62.6
GASKETS				
9	8	4	Gasket Spiral Wound ASME B16.20 300# RF AISI 316/Grapple	4.0
BOLTS				
10	7/8	24	Stud Bolt +2 Nuts ASME B18.3 2ASME B1.1 ASTM A 193 B16ASTM A 194 GR.BT 150 mm LG (150 MM LG)	2.2
11	7/8	12	Stud Bolt +2 Nuts ASME B18.3 2ASME B1.1 ASTM A 193 B16ASTM A 194 GR.BT 180 mm LG (180 MM LG)	1.3
VALVES / IN-LINE ITEMS				
12	8	1	Valve Check Swing Type API 600 / BS 1868 FLG 300# RF ASTM A351 C8-C API TRM 5	190.0
13	8	1	Valve Gate API 600 / EN ISO10434 FLG 300# RF ASTM A351 C8-C API TRM 5	245.0
14	3/4	1	Extended Body Valve Gate WINDO API 602 / EN ISO5161 PCFTH 800# ASTM A182 Gr. F321 API TRM 6 API TRM 5	1.9
SUPPORTS				
15	8	1	ST-130	-
16	8	1	ST-134	-
17	8	1	ST-135	-
18	8	1	ST-136	-

3	18/11/24	ISSUED FOR AS BUILT	REV. DATE
2	08/09/23	ISSUED FOR CONSTRUCTION - GENERAL REVIEW	REV. DATE
1	28/04/23	ISSUED FOR CONSTRUCTION	REV. DATE
0	30/11/22	ISSUED FOR CONSTRUCTION	REV. DATE
DESCRIPTION			
Customer: Project Name: 			
Job Number: 			
Replication of Fired Heater KR-102 at KT-1/1 Document Type: ISOMETRIC			
File Name: Drawn By: Proj. No:			
Rev. History Rev. No. Rev. Date Rev. Description			
3	18/11/2024	3 / 3	18/11/2024
2	18/11/2024	3 / 3	18/11/2024
1	18/11/2024	3 / 3	18/11/2024
0	18/11/2024	3 / 3	18/11/2024

ENGINEERING & CONTRACTING									
Job Number		Project Name		Drawing Title		Drawing Number		Drawing Date	
SE-8242		Replacement of Fired Header KR-102 of KT-1/1		ISOMETRIC		8" - VG0-104/7-4-BL21-HC		18/12/2024	
Client Ref: OPL 01952		Drawing Type:		Piping/Valve		KT-1/1		Rev: 3	
Scale: 1:1		Sheet: 1 of 2		Drawing Name:		SE-H-8242-SK-VG0-104/7-4		The drawing is the property of ENGINEERING & CONTRACTING and shall not be used for any other purpose without the written permission of the company.	

POS	NPS	QTY	COMPONENT	DESCRIPTION	WGT (LBS)
FABRICATION MATERIALS					
PIPE					
1	8	1.5 M	PIPE BW ASME B36.10 SMLS ASTM A312 TP321 SCH. 40S	62.2	
2	2	0.3 M	PIPE BW ASME B36.10 SMLS ASTM A312 TP321 SCH. 40S	1.2	
FITTINGS					
3	8X6	1	REDUCER CONCENTRIC ASME B16.9 BWX BW W-5, ASTM A403 WP321 SCH. 40S X 40S WELDELEC B16.11 ASTM A182 GR F321 SCH. 40S	5.4	
4	8X2	3	ELBOW 45° LONG RADIUS 3D ASME B16.9 BW ASTM A403 WP321 SCH. 40S	2.2	
5	6	1	ELBOW 90° LONG RADIUS 3D ASME B16.9 BW ASTM A403 WP321 SCH. 40S	20.4	
6	8	2	FLANGES	81.5	
7	8	2	FLANGES	62.6	
8	6	1	FLANGES	20.5	
9	2	3	FLANGES	10.9	
GASKETS					
10	8	1	GASKET SPIRAL WOUND ASME B16.20 300#	1.0	
11	6	1	GASKET SPIRAL WOUND ASME B16.20 300#	1.0	
12	2	3	GASKET SPIRAL WOUND ASME B16.20 300#	3.0	
BOLTS					
13	7/8	12	BOLT 1/2 NUTS ASME B18.3.1 2ASME B1.1 ASTM A193 B16ASTM A 194 GR. B7 150 MM LG (150 MM LG)	1.1	
14	3/4	12	BOLT 1/2 NUTS ASME B18.3.1 2ASME B1.1 ASTM A193 B16ASTM A 194 GR. B7 135 MM LG (135 MM LG)	1.1	
15	5/8	24	BOLT 1/2 NUTS ASME B18.3.1 2ASME B1.1 ASTM A193 B16ASTM A 194 GR. B7 95 MM LG (95 MM LG)	3.3	
SUPPORTS					
16	8	1	ST-126	-	
17	8	1	ST-128	-	
18	2	1	TE-703.4	2.0	
19	2	1	TE-704.4	2.0	
20	2	1	TE-705.4	2.0	

Line N° V-104/7

Document Name: 8"-V60-104/7-4-BL21-HC

Document Number: SE-H-8242-5K-V60-104/7-4

Document Type: ISOMETRIC

File Name: 8242-55N00.104/7-4_1

Date: 18/12/2024

Rev: 3

Project Name: Replacement of Fired Header KR-102 at KT-1/1

Customer: 

Job Number: SE-8242

Client Ref: OFE 01952

Plant/Unit: KT-1/1

REVISIONS

REV.	DATE	DESCRIPTION
0	11/12/24	ISSUED FOR CONSTRUCTION
1	18/12/24	ISSUED FOR CONSTRUCTION

DATE 18/12/24

TIME 14:14

BY [Signature]

CHKD [Signature]

ENGR [Signature]

SBSETEC

ENGINEERING & CONSTRUCTION

Job Number: SE-8242

Client Ref: OFE 01952

Plant/Unit: KT-1/1

Document Name: 8"-V60-104/7-4-BL21-HC

Document Number: SE-H-8242-5K-V60-104/7-4

Document Type: ISOMETRIC

File Name: 8242-55N00.104/7-4_1

Date: 18/12/2024

Rev: 3

Project Name: Replacement of Fired Header KR-102 at KT-1/1

Customer: 

Job Number: SE-8242

Client Ref: OFE 01952

Plant/Unit: KT-1/1

REVISIONS

REV.	DATE	DESCRIPTION
0	11/12/24	ISSUED FOR CONSTRUCTION
1	18/12/24	ISSUED FOR CONSTRUCTION

DATE 18/12/24

TIME 14:14

BY [Signature]

CHKD [Signature]

ENGR [Signature]

SBSETEC

ENGINEERING & CONSTRUCTION

Job Number: SE-8242

Client Ref: OFE 01952

Plant/Unit: KT-1/1

Document Name: 8"-V60-104/7-4-BL21-HC

Document Number: SE-H-8242-5K-V60-104/7-4

Document Type: ISOMETRIC

File Name: 8242-55N00.104/7-4_1

Date: 18/12/2024

Rev: 3

Project Name: Replacement of Fired Header KR-102 at KT-1/1

Customer: 

Job Number: SE-8242

Client Ref: OFE 01952

Plant/Unit: KT-1/1

REVISIONS

REV.	DATE	DESCRIPTION
0	11/12/24	ISSUED FOR CONSTRUCTION
1	18/12/24	ISSUED FOR CONSTRUCTION

DATE 18/12/24

TIME 14:14

BY [Signature]

CHKD [Signature]

ENGR [Signature]

SBSETEC

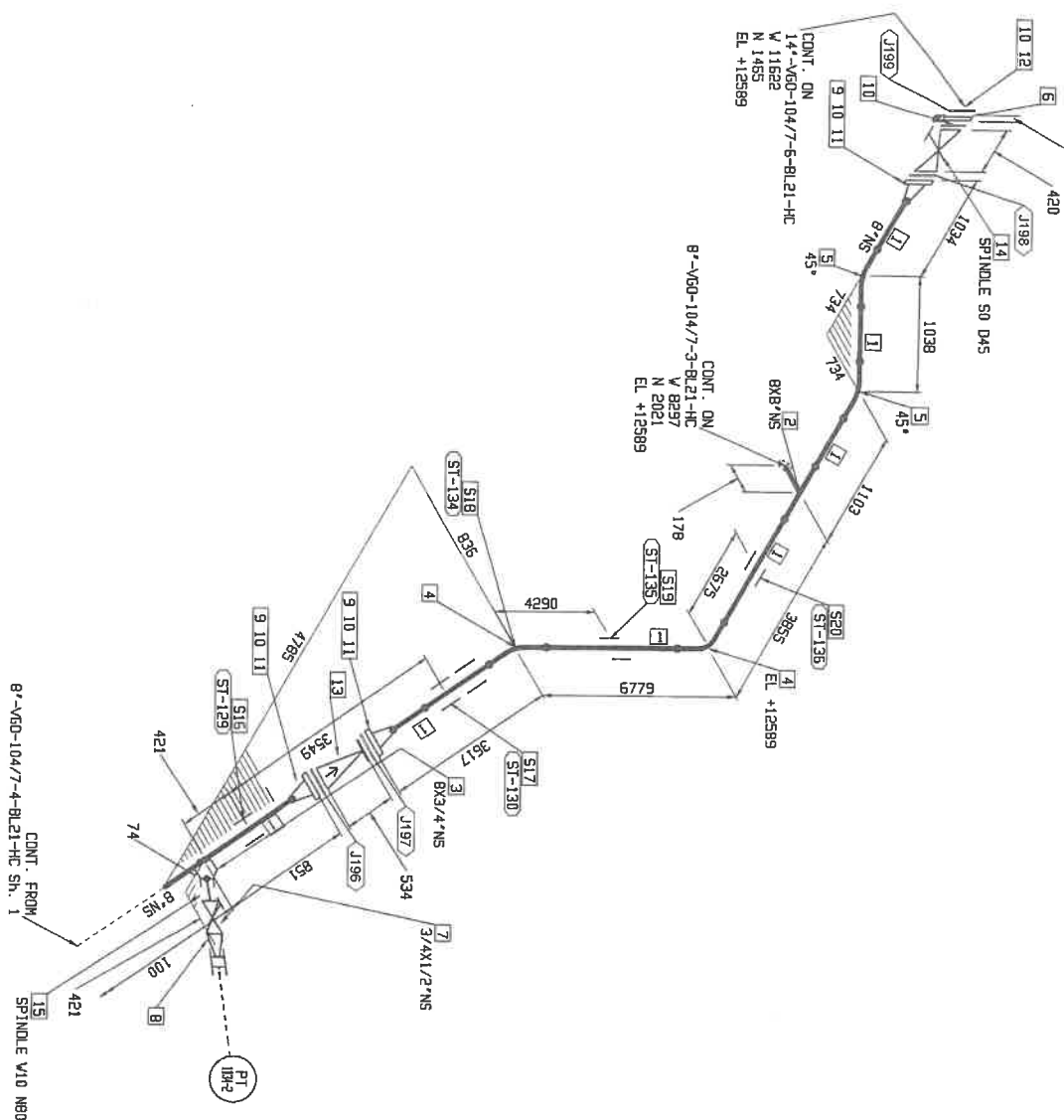
ENGINEERING & CONSTRUCTION

Job Number: SE-8242

Client Ref: OFE 01952

Plant/Unit: KT-1/1

Document Name: 8



POS	NPS	QTY	COMPONENT DESCRIPTION	WGHT (kg)
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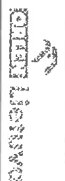
FABRICATION MATERIALS

PIPE	8	14.2 M	Pipe BW/ASME B36.10 SMLS ASTM A312 TP321 Sch. 40S	599.4
FITTINGS	2	8X8	Tee ASME B16.9 BW/ASME ASTM A403 WP321 Sch. 40S	17.0
3	8X3/4	1	Socket B16.11 3000# ASTM A182 Gr. F321	0.2
4	8	2	Elbow 90° Long Radius 3D ASME B16.9 BW ASTM A403 WP321 Sch. 40S	81.5
5	8	2	Elbow 45° Long Radius 3D ASME B16.9 BW ASTM A403 WP321 Sch. 40S	40.8
6	8	1	Spoolable Blind B16.5 WAFER 300# ASTM A182 Gr. F321	17.7
7	3/4X1/2	1	Swage Concentric BS 3799 MTH-MTH ASTM A403 WP321 Sch. 160 X 160	0.2
8	1/2	1	Compling ASME B16.11 FTH 3000# ASTM A182 Gr. F321	0.2
FLANGES	9	8	Flange Welding Neck ASME B16.5 BW/FLG 300# ASTM A182 Gr. F321 Sch. 40S	93.9
GASKETS	10	8	Gasket Spiral Wound ASME B16.20 300# RF AISI 316/Graphite	5.0
BOLTS	11	7/8	Stud Bolt +2 Nuts ASME B18.31 2ASME B1.1 ASTM A 193 B16/ASTM A 194 GR.B7 160 mm LG (160 MM LG)	3.3
12	7/8	12	Stud Bolt +2 Nuts ASME B18.31 2ASME B1.1 ASTM A 193 B16/ASTM A 194 GR.B7 160 mm LG (160 MM LG)	1.3
VALVES / IN-LINE ITEMS	13	8	Valve Check Swing Type API 600 / BS 1868 FLG 300# RF ASTM A351 CF8C API TRIM 5	190.0
14	8	1	Valve Gate API 600 / EN ISO10434 FLG 300# RF ASTM A351 CF8C API TRIM 5	245.0
15	3/4	1	Extended Body Valve Gate W/IMP API 602 / EN ISO1561 PEKTH 800# ASTM A182 Gr. F321 API TRIM 8 API TRIM 5	1.9
SUPPORTS	16	8	ST-129	-
17	8	1	ST-130	-
18	8	1	ST-134	-
19	8	1	ST-135	-
20	8	1	ST-136	-

Line N° V-104/7

3	18/12/24	ISSUED FOR AS BUILT	2	18/12/24	ISSUED FOR CONSTRUCTION - GENERAL REVIEW	3	18/12/24	ISSUED FOR CONSTRUCTION
1	18/12/24	ISSUED FOR CONSTRUCTION	0	18/12/24	ISSUED FOR CONSTRUCTION	0	18/12/24	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION	REV.	DATE	DESCRIPTION	REV.	DATE	DESCRIPTION

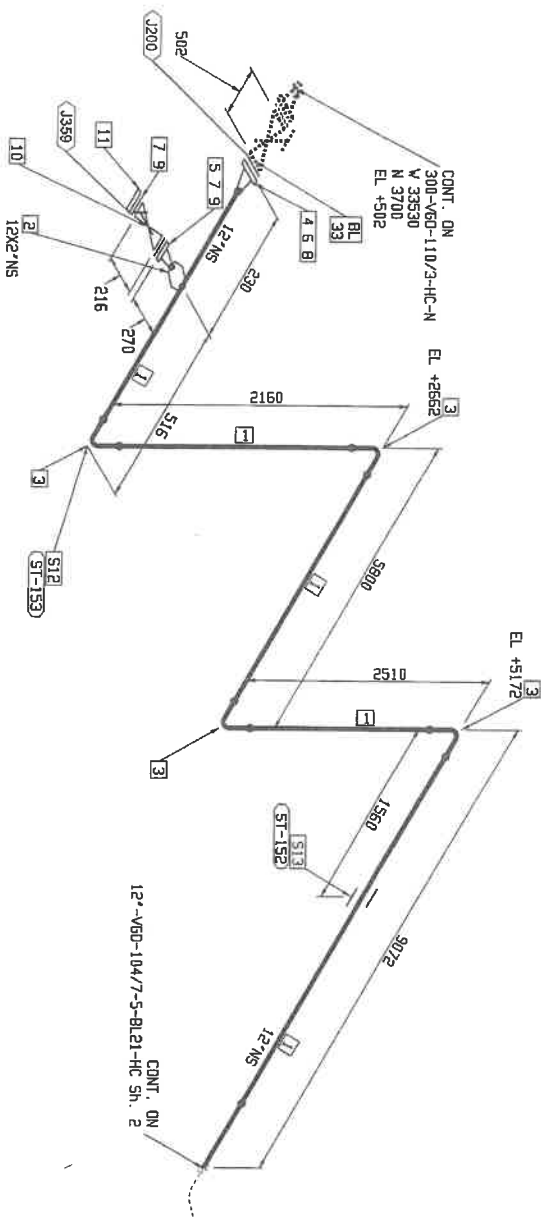
Customer:



SHOSHING & CONSTRUCTION

Project Name:	Replacement of Fired Heater KR-102 of KT-1/1
Client Ref.:	SE-8242
Document Type:	ISOMETRIC
Sheet:	2 / 2
Date:	18/12/2024
Rev.:	3

Document Name:	SE-H-8242-SK-V60-104/7-4
Sheet:	2 / 2
Date:	18/12/2024
Rev.:	3



POS	NPS	QTY	COMPONENT DESCRIPTION	WGHT (kg)
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FABRICATION MATERIALS

PIPE	1	12	16.5 M	Pipe BW ASME B36.10 SMLS ASTM A312 TP321 Sch. 40S	1218.7
FITTINGS	2	12X2	1	Weldoel B16.11 ASTM A182 Gr F321 Sch. 40S	0.8
FLANGES	3	12	4	Elbow 90° Long Radius ASME B16.9 BW ASTM A403 WP321 Sch. 40S	211.9
GASKETS	5	2	1	Flange Welding Neck BWFLG PN40 ASTM A182 Gr F321 Sch. 40S	47.5
BOLTS	8	1,1/8	16	Flange Welding Neck ASME B16.5 BWFLG 300# ASTM A182 Gr F321 Sch. 40S	3.7
VALVES / IN-LINE ITEMS	10	2	1	Gasket Spiral Wound ASME B16.20 300# RF AISI 316/Graphite	0.1
SUPPORTS	12	12	1	Stud Bol +2 Nuts ASME B18.31.2/ASME B1.1 ASTM A193 B16/ASTM A194 GR.B7 180 mm LG (180 MM LG)	2.0
	13	12	1	Stud Bol +2 Nuts ASME B18.31.2/ASME B1.1 ASTM A193 B16/ASTM A194 GR.B7 85 mm LG (85 MM LG)	2.2
				Valve Gate API 600 / EN ISO10434 FLG 300# RF ASTM A351 / CF8C API TR18.5	27.0
				Flange Blind ASTM B16.5 FLG 300# ASTM A182 Gr F321	3.7

Line N° V-104/7

2	18/12/21	ISSUED FOR AS BUILT	1	18/12/21	ISSUED FOR CONSTRUCTION	1	18/12/21	ISSUED FOR CONSTRUCTION	1	18/12/21	ISSUED FOR CONSTRUCTION
REV.	DATE	DESCRIPTION	REV.	DATE	DESCRIPTION	REV.	DATE	DESCRIPTION	REV.	DATE	DESCRIPTION

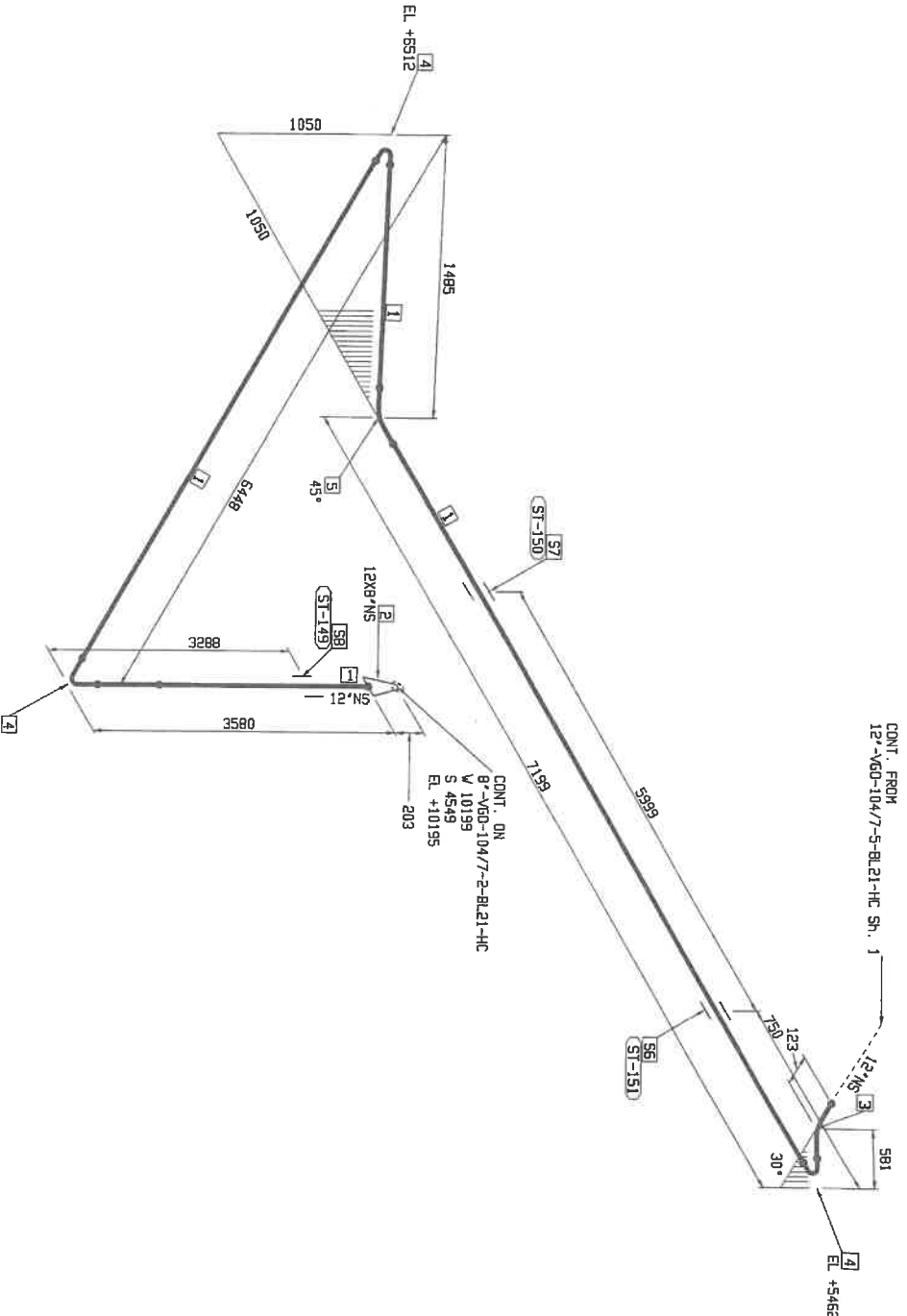
Customer: **SBSETEC** ENGINEERING CONTRACTING

Project Name: Replacement of Fired Heater KR-102 at KT-1/1
 Job Number: SE-8242
 Client Ref: DPL 01652

Document Type: ISOMETRIC
 Title: 12"-V60-104/7-5-BL21-HC
 Rev: 1/2
 Date: 18/12/2024
 Drawn: 2

Document Name: SE-H-8242-SK-V60-104/7-5
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PIPE	INSULATION	TRACING	N.D.T.	DES. DATA:	TEMP.	A30	TEMP.	385	TEMP.	5.5	TEMP.	32	TEMP.	YES	PAINTING CYCLE:	NONE	LEGEND
12"-V60-104/7-5-BL21-HC	180	RY	RY 10	TEST:	FLUID:	GROUP	1	PHASE	L	THICK	YES	111	NO				PARTS LIST NO. P & I SE-H-8242-PI-002 PIPE CONT. BUILT WELD SOCKET WELD SOLDERED JOINT



POS	NPS	QTY	COMPONENT DESCRIPTION	WGHT (kg)
FABRICATION MATERIALS				
PIPE				
1	12	16.0 M	Pipe BW ASME B36.10 SMLS ASTM A312 TP321 Sch. 40S	1176.7
FITTINGS				
2	12X8	1	Reducer Concentric ASME B16.9 BW/BW W/S ASTM A403 WP321 Sch. 40S X 40S	11.7
3	12	1	TRIMMED ELBOW 45° Long Radius ASME B16.9 BW ASTM A403 WP321 Sch. 40S (23.87)	17.7
4	12	3	Elbow 90° Long Radius ASME B16.9 BW ASTM A403 WP321 Sch. 40S	158.9
5	12	1	Elbow 45° Long Radius ASME B16.9 BW ASTM A403 WP321 Sch. 40S	26.6
SUPPORTS				
6	12	1	ST-151	-
7	12	1	ST-150	-
8	12	1	ST-149	-

Line N° V-104/7

2	18/12/24	ISSUED FOR AS BUILT	LIBC
1	28/04/24	ISSUED FOR CONSTRUCTION	LIBC
0	11/11/22	ISSUED FOR CONSTRUCTION	LIBC
REV.	DATE	DESCRIPTION	

Customer		ENGINEERING CONTRACTING	
Project Name		Job Number: SE-8242	
Replacement of Fired Header KR-102 at KT-1/1		Client Ref.: OPL 01952	
Document Type: ISOMETRIC		Plant/Unit: KT-1/1	
12\"/>		Revision: 2	

Document Number: SE-M-8242-SK-V60-104/7-5		Sheet: 2 / 2	
12\"/>		Date: 18/12/2024	
SE-M-8242-SK-V60-104/7-5		Rev: 2	