

الملحق رقم ١٢
CHEHABIYE STATION PT.2



COLLECTOR 3 (DOUARA MAIN SUCTION LINE)	
BTV DN300 PNNA	1
GBC DN300 PN10	1
Y STAINER DN300 PNNA	1
BTV DN300 PN10	1
BTV DN250 PN10	3
EM FLOWMETER DN250 PN10	1

COLLECTOR 7 (DOUARA MAIN DISCHARGE LINE)	
SURGE TANK 2500L	1
PRG	1
CHV DN200 PNNA	1
GTV DN100 PNNA	1
PRT	1
PRG 60 BAR	2
GTV DN4 PN250	1
GTV DN2.5 PN250	1
ARV	2
GTV DN50 PN40	1
GBC DN100 PNNA	1
BTV DN100 PNNA	1
BTV DN300 PNNA	1
GBC DN300 PNNA	1

COLLECTOR 2 (KAFRA MAIN SUCTION LINE)	
BTV DN250 PN10	2
GBC DN250 PN10	1
Y STRAINER DN250 PN16	1

COLLECTOR 6(KAFRA MAIN DISCHARGE LINE)	
ARV	3
GTV DN40 PN16	2
PRT	1
PRG 10 BAR	1
GTV DN4 PN250	1
BTV DN250 PNNA	4
EM FLOWMETER DN250 PN10	1
GBC DN250 PNNA	1

COLLECTOR 5 (JABAL AMEL MAIN DISCHARGE LINE)	
ARV	2
GTV DN40 PN16	2
PRT	1
PRG 25 BAR	1
GTV DN4 PN250	1
BTV DN200 PN16	3
EM FLOWMETER DN200 PN25	1
PRS	1
GTV DN2.5 PN250	1
GBC DN250 PNNA	1
BTV DN250 PN16	1

COLLECTOR 4 (MAJADEL MAIN DISCHARGE LINE)	
PRT	1
PRG 16 BAR	1
GTV DN4 PN250	1
BTV DN100 PN16	4
EM FLOWMETER DN100 PN16	1
GBC DN100 PN16	1

COLLECTOR 1 (JABAL AMEL & MAJADEL MAIN SUCTION LINE)	
BTV DN250 PNNA	1
GBC DN250 PN10	2
BTV DN250 PN10	2
Y STRAINER DN250 PN16	1



الجمهورية اللبنانية
وزارة الطاقة والمياه
مؤسسة مياه لبنان الجنوبي



القطار في محطة سحبية

CHEHABYE STATION PT.1

الموضوع: التجهيزات و المعدات الأساسية الخاصة لمحطة السحبية بعد كدوقاتا.

DOUBA PUMPS				KAFRA PUMPS				JABAL AMEL PUMPS				MAJADEL PUMPS			
TOTAL 3 PUMPS IDENTICAL		TOTAL 3 PUMPS IDENTICAL		TOTAL 3 PUMPS IDENTICAL		TOTAL 3 PUMPS IDENTICAL		TOTAL 3 PUMPS IDENTICAL		TOTAL 3 PUMPS IDENTICAL		TOTAL 2 PUMPS IDENTICAL		TOTAL 2 PUMPS IDENTICAL	
INLET		INLET		INLET		INLET		INLET		INLET		INLET		INLET	
BTV DN200 PNNA	3	BTV DN200 PN10	3	BTV DN150 PN10	2	BTV DN150 PN10	2	BTV DN150 PN10	2	BTV DN150 PN10	2	BTV DN150 PN10	2	BTV DN150 PN10	2
GBC DN150 PN16	2	GBC DN200 PN10	3	GBC DN150 PNNA	2	GBC DN150 PNNA	2	GBC DN150 PNNA	2	GBC DN150 PN10	2	T STRAINER DN150 PN16	1	GBC DN150 PN10	2
PRS -0 3.5 BAR	3	PRS 2.5 BAR	3	PRS 2.5 BAR	2	PRS 2.5 BAR	2	PRS 2.5 BAR	2	PRS 2.5 BAR	2	PRS 2.5 BAR	2	PRS 2.5 BAR	2
FLU R DN200 PN16	3	GTV DN4 PN250	3	GTV DN4 PN250	2	GTV DN4 PN250	2	GTV DN4 PN250	2	GTV DN4 PN250	2	PRS 2.5 BAR	2	GTV DN4 PN250	2
PRS 2.5 BAR	3	FLU DN200 PN16	3	FLU DN200 PN16	2	FLU R DN150 PN16	2	FLU R DN150 PN16	2	FLU R DN150 PN16	2	GTV DN4 PN250	2	FLU R DN150 PN16	2
GTV DN4 PN250	3	PRS -0 3.5 BAR	3	PRS -0 3.5 BAR	2	PRS -0 3.5 BAR	2	PRS -0 3.5 BAR	2	PRS -0 3.5 BAR	2	PRS -0 3.5 BAR	2	PRS -0 3.5 BAR	2
OUTLET		OUTLET		OUTLET		OUTLET		OUTLET		OUTLET		OUTLET		OUTLET	
PRS 60 BAR	3	FLU R DN150 PN16	3	FLU R DN150 PN16	2	PRS 7.70 BAR	2	PRS 7.70 BAR	2	PRS 7.70 BAR	2	FLU DN100 PN16	1	PRS 7.70 BAR	2
GTV DN4 PN250	3	PRS 7.70 BAR	3	PRS 7.70 BAR	3	PRS 10 BAR	2	PRS 10 BAR	2	PRS 10 BAR	2	PRS 10 BAR	2	GTV DN4 PN250	2
PRS 7.70 BAR	3	PRS 10 BAR	3	PRS 10 BAR	3	GTV DN4 PN250	2	GTV DN4 PN250	2	GTV DN4 PN250	2	PRS 7.70 BAR	2	PRS 7.70 BAR	2
CHV DN150 PNNA	3	GTV DN4 PN250	3	GTV DN4 PN250	3	CHV DN150 PNNA	2	CHV DN150 PNNA	2	CHV DN150 PNNA	2	CHV DN150 PN16	1	CHV DN150 PN16	2
FLS	3	CHV DN150 PN10	3	CHV DN150 PN10	3	FLS	2	FLS	2	FLS	2	GBC DN100 PN16	1	GBC DN100 PN16	2
GBC DN150 PNNA	3	FLS	3	FLS	3	GBC DN150 PNNA	2	GBC DN150 PNNA	2	GBC DN150 PNNA	2	FLS	1	FLS	2
BTV DN150 PNNA	3	GBC DN150 PN10	3	GBC DN150 PN10	3	BTV DN150 PN10	2	BTV DN150 PN10	2	BTV DN150 PN10	2	BTV DN100 PN16	1	BTV DN100 PN16	2

NOTE:

BTV: BUTTERFLY VALVE, BLV: BALL VALVE, GTV: GATE VALVE, GLV: GLOBE VALVE, ARV: AIR RELEASE VALVE, CHV: CHECK VALVE, PRG: PRESSURE GAUGE, PRS: PRESSURE SWITCH, PRT: PRESSURE TRANSMITTER, FLS: FLOW SWITCH, GBC: DISMANTLING JOINT, FLU: FLEXIBLE JOINT



الموضوع: التجهيزات و المعدات الاساسية العائدة لمحطة فخر الدين بعد كشوفاتنا.

اعداد: م. محمد سعدية

FAKHREDDINE STATION

ANTI WATER HAMMER	
GTV DN200 PNNA	1
SWING CHV DN200 PNNA	1

CHLORINATION BP1 SYSTEM	
INLET TO PUMP	
BLV DN25 PN16	1
PRG 12 BAR	1
PUMP AND MOTOR	
PUMP FRUNDFOS TYPE CR5-9 A-A-A-E-HQBE Q:5.8 m3/H H:47.7 m	1
MOTOR GRUNDFOS MG90SB2-24FT115-H3	1
OUTLET FROM PUMP	
PRG 12 BAR	1
CL INJECTOR ALLDOS EICHLER GmbH S45-12	1
SPRING CHV DN25 PN16	1
BLV DN25 PN16	1
ROOM 2	
GAS FLOWMETER GRUNDFOS VGA-117	1
CL CYLINDER	1
VACUUM REGULATOR GRUNDFOS C111	1
PRESSURE GUAGE 16 BAR	1

ROJOM COLLECTOR (HOR. BOOSTERS ROOM)	
GTV DN200 PNNA	2
GTV DN300 PNNA	1
GTV DN200 PN25	1
BLV DN15 PNNA	1
BLV DN15 PN125	1
GBC DN200 PNNA	1
CIVIL DEFENCE LINE	
GTV DN50 PN20	1
M FLOWMETER DN50 PNNA	1
SWING CHV DN50 PN16	1
BRANCH FROM OUTLET HB 4	
SWING CHV DN100 PNNA	1
GBC DN100 PNNA	1
GTV DN150 PN16	1



CHLORINATION BP2 SYSTEM	
INLET TO PUMP	
FLOWSWITCH KOBOLD PSP-11258R25R1	1
BLV DN25 PN16	1
PRG 10 BAR	1
PUMP AND MOTOR	
PUMP DPV2-130 Q:0.6 L/S H:94.9 m 1.5KW 2850 RPM	1
MOTOR 2 HP 1.5 KW 2750 RPM	1
OUTLET FROM PUMP	
PRG 16 BAR	1
STRAINER DN25 PNNA	1
GAS INJECTOR GRUNDFOS 0.5 KG/H	1
SPRING CHV DN25 PN16	1
BLV DN25 PN16	1
UNUSED EQUIPMENT	
SWITCHOVER UNIT ALLDOS 189-010-1000	1
SWITCHOVER UNIT GRUNDFOS 96681741	1
GAS FLOWMETER GRUNDFOS C113 GECO	1
GAS LEAK DETECTOR PORTACEL SERIES 65 DETEC	1

SUB. BOOSTER 1	
INLET	
GTV DN150 PN10	1
FLS	1
PRT 0,5 BAR	1
BLV DN15 PNNA	1
ON VESSEL	
ARV DN25 PNNA	1
BLV DN25 PN25	1

SUB. BOOSTER 2	
INLET	
BTV DN200 PNNA	1
OUTLET	
PRG 25 BAR	1
PRS 8,28 BAR	1
BLV DN15 PNNA	1
BLV DN15 PN50	1
DUAL PLATE CHV DN150 PN25	1



SUB. BOOSTER 3	
INLET	
BTV DN200 PNNA	1
OUTLET	
PRG 25 BAR	1
PRS 8,28 BAR	1
BLV DN15 PNNA	2
BLV DN15 PN50	1
DUAL PLATE CHV DN150 PN25	1
GTV DN50 PN16	1
BLV DN50 PNNA	1
BTV DN150 PNNA	1

SUB. BOOSTER 4	
INLET	
BTV DN250 PN16	1
FLS	1
OUTLET	
PRS 8,28 BAR	1
PRG 40 BAR	1
BLV DN15 PNNA	1
ARV DN50 PN40	1
BLV DN50 PN32	1
EM FLOWMETER DN200 PNNA	1
DUAL PLATE CHV DN200 PN25	1
BTV DN200 PN25	1

SUB. BOOSTER 5	
INLET	
BTV DN250 PN16	1
FLS	1
OUTLET	
PRS 8,28 BAR	1
PRG 25 BAR	1
BLV DN15 PNNA	1
BLV DN50 PN32	1
EM FLOWMETER DN200 PNNA	1
DUAL PLATE CHV DN200 PN25	1
BTV DN200 PN25	1



HORIZONTAL BOOSTER 1	
INLET	
GTV DN200 PNNA	1
PRS	1
PUMP AND MOTOR	
PUMP NO INFO	1
MOTOR DUTCHI NL DM1 315L2 160 RPM	1
OUTLET	
PRG 25 BAR	1
BLV DN15 PN50	1
SWING CHV DN150 PNNA	1
GTV DN150 PNNA	1

HORIZONTAL BOOSTER 2	
INLET	
GTV DN200 PNNA	1
PRS	1
RUBBER FLJ DN150 PNNA	1
PUMP AND MOTOR	
PUMP NO INFO	1
MOTOR ABB 160 KW 2981 RPM	1
OUTLET	
PRG 25 BAR	1
BLV DN15 PN50	1
RUBBER FLJ DN100 PN16	1
PRS 2,20 BAR	1
SWING CHV DN150 PNNA	1
GTV DN150 PNNA	1

HORIZONTAL BOOSTER 3	
INLET	
GTV DN150 PNNA	1
PRS	1
PUMP AND MOTOR	
PUMP NO INFO	1
MOTOR VEM 75 KW 2965 RPM	1
OUTLET	
PRG 25 BAR	1
BLV DN15 PN50	1
PRS	1
SWING CHV DN100 PNNA	1
GTV DN100 PNNA	1



HORIZONTAL BOOSTER 4	
INLET	
GTV DN150 PNNA	1
PRS	1
RUBBER FLJ DN125 PNNA	1
PUMP AND MOTOR	
PUMP NO INFO	1
MOTOR DNLEROY SOMER 2974 RPM 110 KW PN2	1
OUTLET	
PRG 25 BAR	1
BLV DN15 PN50	1
RUBBER FLJ DN80 PN16	1
PRS 6.5,30 BAR	1

OUTLETS HB4	
KFAR JOOZ STANDBY	
GTV DN150 PN16	1
M FLOWMETER DN150 PNNA	1
BLV DN15 PN40	1
BLV DN50 PNNA	1
INTO ROJOM LINE	
GTV DN100 PNNA	1

CIVIL DEFENCE LINE (VALVES ROOM)	
BLV DN80 PN25	1
GTV DN50 PNNA	1
GTV DN80 PN20	1

ROJOM LINE (VALVES ROOM)	
GTV DN200 PNNA	1
GTV DN300 PNNA	2
GTV DN400 PNNA	1
BRANCHS TO CHLORINATION SYSTEMS	
BLV DN25 PNNA	3

NABEE EL TASSE LINE	
GTV DN200 PN16	1
GBC DN200 PNNA	1
BLV DN40 PN25	1



KFAR JOOZ - ROJOM LINE	
BLV DN15 PN30	1
BTV DN150 PNNA	1
GTV DN150 PN25	1
GBC DN150 PN25	1
GTV DN150 PN16	2
BLV DN20 PN40	1
GTV DN150 PNNA	1
GTV DN125 PN16	1
SWING CHV DN125 PN16	1
BLV DN40 PN35	1
PRG 40 BAR	1
PRS 8,28 BAR	1
BLV DN15 PN21	1
BLV DN15 PN25	1
M FLOWMETER DN150 PN16	1
GTV DN15 PNNA	1
BLV DN15 PN40	1
SWING CHV DN150 PN16	1
PISTON CHV DN150 PN16	1
STRAINER DN150 PN16	1

WELL 1	
WELLHEAD	
SWING CHV DN150 PNNA	1
BLV DN15 PN50	1
INSIDE STATION	
DUAL PLATE CHV DN150 PN16	1
M FLOWMETER DN150 PN16	1
GBC DN150 PN16	1
PRG 6 BAR	1
BLV DN15 PN40	1
BTV DN150 PN16	1
BLV DN15 PNNA	1
GTV DN150 PN10	2

WELL 2	
WELLHEAD	
SWING CHV DN150 PN16	1
INSIDE STATION	
DUAL PLATE DN150 PN16	1
M FLOWMETER DN150 PN16	1
GBC DN150 PN16	1
GTV DN150 PN10	2
FLS	1
BLV DN15 PN40	1
BTV DN150 PN16	1
BLV DN15 PNNA	1



WELL 3	
WELL HEAD	
SWING CHV DN150 PN16	1
ARV DN50 PN25	1
INSIDE STATION	
DUAL PLATE DN150 PN16	1
M FLOWMETER DN150 PN16	1
GBC DN150 PN16	1
GTV DN150 PN10	2
BLV DN15 PNNA	1
BTV DN150 PN16	1

WELL 4	
OUTSIDE STATION	
SWING CHV DN150 PN16	1
ARV DN50 PN25	1
PRG 40 BAR	1
GTV DN150 PN16	1
BTV DN50 PNNA	1
INSIDE STATION	
DUAL PLATE DN150 PN16	1
M FLOWMETER DN150 PN16	1
GBC DN150 PN16	1
GTV DN150 PN10	2
BLV DN15 PN40	1
BTV DN150 PN16	1
PRG 10 BAR	1
BLV DN15 PNNA	1

WELL 5	
OUTSIDE STATION	
PRG 16 BAR	1
GTV DN150 PN10	2
ARV DN25 PN16	1
GTV DN150 PN16	1
SWING CHV DN150 PN16	1
BLV DN15 PN50	1
INSIDE STATION	
DUAL PLATE DN150 PN16	1
M FLOWMETER DN150 PN16	1
GBC DN150 PN16	1



GTV DN150 PN10	2
BLV DN15 PN32	1
BLV DN15 PNNA	1

WELL 6	
OUTSIDE STATION	
ARV DN65 PN40	1
BTV DN65 PN16	1
GTV DN150 PN16	2
GTV DN25 PN16	1
GTV DN150 PN10	1
PRG 16 BAR	1
PRS 0,10 BAR	1
SWING CHV DN150 PN10	1
BLV DN15 PNNA	2
INSIDE STATION	
DUAL PLATE DN150 PN16	1
M FLOWMETER DN150 PN16	1
GBC DN150 PN16	1
GTV DN150 PN10	2
FLS	1
BLV DN15 PN32	1
BLV DN15 PNNA	1

WELL 7	
OUTSIDE STATION	
PRG 25 BAR	1
ARV DN100 PN10	1
BTV DN100 PN16	1
M FLOWMETER DN125 PN25	1
SWING CHV DN125 PN16	1
GLV DN125 PN16	1
GBC DN150 PN16	1



BTV DN125 PN16	2
GBC DN125 PN16	1
INSIDE STATION	
M FLOWMETER DN125 PNNA	1
GBV DN125 PNNA	1
BLV DN15 PNNA	1

WELL 8	
OUTSIDE STATION	
PRG 25 BAR	1
ARV DN100 PN16	1
BTV DN100 PN16	1
PRS 5,16 BAR	1
M FLOWMETER DN125 PN25	1
SWING CHV DN125 PN16	1
GLV DN125 PN16	1
GBC DN125 PN16	2
BTV DN125 PN16	2
BLV DN15 PNNA	1
INSIDE STATION	
M FLOWMETER DN125 PNNA	1
GBV DN125 PNNA	1
BLV DN15 PNNA	1

NOTE:

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الموضوع: التجهيزات و المعدات الاساسية العائدة لمحطة تلة الرجم بعد كشوفاتنا.

اعداد: م. محمد سعدية

ROJOM STATION

AL BAYAD LINE	
GTV DN300 PN16	1
GTV DN200 PNNA	1
GBC DN125 PNNA	2
GTV DN125 PNNA	1
M FLOWMETER DN200 PN16	1
M FLOWMETER DN125 PN16	1

OVERFLOW LINE	
GTV DN300 PNNA	1
GTV DN150 PNNA	1
GTV DN250 PNNA	3

TOULINE LINE	
GTV DN150 PN16	1
GBC DN150 PNNA	1

6" LINE	
GTV DN150 PN40	1
M FLOWMETER DN150 PNNA	1

AL KFOUR LINE	
GTV DN150 PNNA	1
GTV DN250 PNNA	1
BTV DN125 PN16	1
M FLOWMETER DN125 PNNA	1
ARV DN15 PNNA	1



AL DWEIR LINE		
BTV DN250 PN16		1
BTV DN250 PNNA		1
M FLOWMETER DN250 PN16		1

AL BAYAD FLOWMETERS LINE		
BTV DN200 PN16		1

ZEBDINE LINE		
GTV DN80 PN16		1
M FLOWMETER DN80 PN16		1

AL MACHAA LINE		
BTV DN100 PN16		1
GTV DN150 PNNA		1
M FLOWMETER DN100 PNNA		1

WATER HAMMER		
GTV DN150 PNNA		1
SWING CHV DN150 PNNA		1

AL MAYTAM LINE		
PRG DN25 BAR PN		1
BLV DN15 PNNA		1
RUBBER FLJ DN200 PNNA		1
BTV DN200 PNNA		1
M FLOWMETER DN200 PNNA		1
ARV DN200 PNNA		2

RESERVOIR CONNECTIONS		
GTV DN400 PNNA		2

TANK WASHOUT		
GTV DN150 PNNA		2



HB6	
PUMP	1
MOTOR	1
GTV DN200 PN8	1
GTV DN150 PN25	1
PRG 25 BAR	1
PRS 10,25 BAR	2
SWING CHV DN150 PNNA	1

HB5	
PUMP	1
MOTOR	1
GTV DN300 PN16	1
GTV DN200 PN20	1
PRG 15 BAR	1
PRS 10,25 BAR	1
DUAL PLATE CHV DN200 PN8	1
GBC DN300 PN10	1

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 PRESSURE SWITCH; PRT: PRESSURE TRANSMITTER; FLS: FLOW SWITCH; GBC:
 DISMANTLING JOINT; FLJ: FLEXIBLE JOINT



اعداد: م. محمد سعدية

الموضوع: التجهيزات و المعدات الاساسية العائدة لمحطة ابل السقي بعد كشوفاتنا.

EBLI SAKI STATION

ANTI WATER HAMMER	
-	
GTV DN250 PN40	1
SWING CHV DN250 PNNA	1
GBC DN250 PN40	1
DRAIN	
GTV DN150 PN40	1

BOOSTER 3	
INLET	
GBC DN450 PNNA	1
BTV DN450 PNNA	1
FLS	1
PRT 0,25 BAR	1
BLV DN15 PNNA	1
ON VESSEL	
BLV DN50 PNNA	1
OUTLET	
PRG 40 BAR	1
BLV DN15 PN50	1
PRS 12,50 BAR	1
BLV DN15 PNNA	1
EM FLOWMETER DN200 PNNA	1
GBC DN200 PNNA	1
SWING CHV DN200 PNNA	1
GTV DN200 PNNA	1

BOOSTER 2	
INLET	
GBC DN450 PNNA	1
BTV DN450 PNNA	1
FLS	1
PRT 0,25 BAR	1
BLV DN15 PNNA	1
ON VESSEL	
BLV DN50 PNNA	1
OUTLET	
PRG 40 BAR	1
BLV DN15 PN50	1
BLV DN15 PN64	1
BLV DN15 PNNA	1
EM FLOWMETER DN200 PNNA	1
GBC DN200 PNNA	1
SWING CHV DN200 PNNA	1
GTV DN200 PNNA	1

BOOSTER 1	
INLET	
GBC DN450 PNNA	1
BTV DN450 PNNA	1
FLS	1
PRT 0,25 BAR	1
BLV DN15 PNNA	1
ON VESSEL	
BLV DN50 PNNA	1
OUTLET	
PRG 40 BAR	1
BLV DN15 PN50	1
BLV DN15 PNNA	1
EM FLOWMETER DN200 PNNA	1
GBC DN200 PNNA	1
SWING CHV DN200 PNNA	1
GTV DN200 PNNA	1



PIPES STACK FROM WELLS COLLECTOR FEEDING TANK	
M FLOWMETER DN200 PNNA	4

CHLORINATION SYSTEM	
INLET TO PUMP	
BLV DN25 PNNA	1
SWING CHV DN25 PNNA	1
GTV DN20 PNNA	1
PRG 16 BAR	1
OUTLET FROM PUMP	
PMP NO INFO	1
PMP	
FLS KOBOLD	1
PRG 10 BAR	1
TO INJECTOR	
GAS CYLINDER 20 KG	1
VACUUM REGULATOR ALLDOS C111	1
PRG 16 BAR	1
CL FLOWMETER GRUNDFOS VGA 113	1
CL INJECTOR NO INFO	1

BLAT LINE	
GTV DN300 PN40	1
GBC DN300 PN40	1

KHYIM LINE	
GTV DN300 PN40	1
GBC DN300 PN40	1

MARJEYOUN LINE	
GTV DN250 PN40	1
GBC DN250 PN40	1

CANCELED LINE 1	
GTV DN250 PN40	1
GBC DN250 PN40	1

CANCELED LINE 2	
GTV DN300 PN40	1

DEBIN LINE	
GTV DN300 PN40	1

STANDBY BOOSTERS 1,2,&3	
GBC DN450 PNNA	3
BTV DN450 PNNA	3

DISTRIBUTION PIPE	
GBC DN300 PNNA	1
GTV DN300 PNNA	1
BLV DN25 PN16	1
BLV DN15 PNNA	1
GTV DN15 PNNA	1

WELL 1	
BLV DN50 PNNA	1
SWING CHV DN150 PN16	1
GTV DN150 PN16	1
EM FLOWMETER DN150 PN16	1
DRAIN	
GTV DN150 PN16	1

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MARJ KHOUKH STATION



اعداد: م. محمد سعدية

الموضوع: التجهيزات و المعدات الاساسية العائدة لمحطة مرج الخوخ بعد كشوفاتنا.

WELL 1	
BTV DN150 PN16	1
GLV DN150 PN16	1
GBC DN150 PN16	2
ARV DN80 PN40	1
GTV DN80 PN16	1
BLV DN15 PNNA	3
PRG 16 BAR	1
BLV DN25 PN25	1
DUAL PLATE CHV DN150 PN16	1
GTV DN150 PN16	1
GTV DN100 PN20	1
GBC DN100 PN16	1
GTV DN100 PN16	1
INLET TO CHLORINATION	
BLV DN25 PNNA	1
Y STRAINER DN25 PN20	1

WELL 2	
ARV DN80 PN40	1
GTV DN80 PN16	1
PRT 0,16 BAR	1
BLV DN15 PNNA	3
PRG 16 BAR	1
EM FLOWMETER DN150 PN16	1
DUAL PLATE CHV DN150 PN16	1
GBC DN150 PN16	2
GLV DN150 PN16	1
BTV DN150 PN16	1
GBC DN100 PN16	1
GTV DN100 PN16	1
OUTLET FROM CHLORINATION	
SWING CHV DN25 PNNA	1
BLV DN25 PNNA	1
INLET TO CHLORINATION	
GTV DN25 PNNA	1
Y STRAINER DN25 PN20	1

WELL 3	
ARV DN80 PN40	1
GTV DN80 PN16	1
PRG 16 BAR	1
BLV DN15 PNNA	3
PRT 0,16 BAR	1
EM FLOWMETER DN150 PN16	1
DUAL PLATE CHV DN150 PN16	1
GBC DN150 PN16	2
GLV DN150 PN16	1
BTV DN150 PN16	1
OUTLET FROM CHLORINATION	
SWING CHV DN32 PNNA	1
GTV DN25 PNNA	1
INLET FROM CHLORINATION	
GTV DN25 PNNA	1
Y STRAINER DN25 PN20	1

TO ADD:

GBC DN100 PN16
GTV DN100 PN16



BOOSTER 1 SET 1 AND 2 (KHYEM)	
PRT 0,16 BAR	2
BLV DN15 PNNA	6
ARV DN25 PN16	2
BLV DN25 PNNA	2
ARV DN65 PN40	2
GTV DN65 PN40	2
PRG 25 BAR	2
PRT 0,40 BAR	2
DUAL PLATE CHV DN200 PN40	2
GTV DN200 PN40	2
COMMON OUTLET PIPE	
BLV DN15 PN64	1
BLV DN15 PNNA	1
EM FLOWMETER DN200 PN40	1
GTV DN200 PN40	1

BOOSTER 2 SET 1 AND 2 (MARJEYOON)	
PRT 0,16 BAR	2
BLV DN15 PNNA	6
ARV DN25 PN16	2
BLV DN25 PNNA	2
ARV DN65 PN40	2
GTV DN65 PN40	2
PRG 25 BAR	2
PRT 0,40 BAR	2
DUAL PLATE CHV DN200 PN40	2
GTV DN200 PN40	2
COMMON OUTLET PIPE	
BLV DN15 PN64	1
BLV DN15 PNNA	1
EM FLOWMETER DN200 PN40	1
GTV DN200 PN40	1

BOOSTER 3 SET 1 AND 2 (KLAYYAA)	
PRT 0,16 BAR	2
BLV DN15 PNNA	6
ARV DN25 PN16	2
BLV DN25 PNNA	2
ARV DN65 PN40	2
GTV DN65 PN40	2
PRG 25 BAR	2
PRT 0,40 BAR	2
DUAL PLATE CHV DN200 PN40	2
GTV DN200 PN40	2
COMMON OUTLET PIPE	
BLV DN15 PN64	1
BLV DN15 PNNA	1
EM FLOWMETER DN200 PN40	1
GTV DN200 PN40	1

ANTI WATER HAMMER (KHYEM)	
GTV DN150 PN40	2
DUAL PLATE CHV DN150 PN40	1
PRG 40 BAR	1
BLV DN15 PN69	1
BLV DN15 PNNA	2
PRT 0,40 BAR	1
PRS 8,28 BAR	1
SELONOID VALVE DN15 ACL TYPE 52E	1

PIPELINE KHYIM UNDERGROUND	
GTV DN200 PN25	1
BLV DN15 PNNA	1
GBC DN200 PNNA	1
SWING CHV DN200 PNNA	1
GTV DN200 PN40	1
BLV DN32 PNNA	2



ANTI WATER HAMMER (MARJEYOON)	
GTV DN150 PN40	2
DUAL PLATE CHV DN150 PN40	1
PRG 40 BAR	1
BLV DN15 PN69	1
BLV DN15 PNNA	2
PRT 0,40 BAR	1
PRS 8,28 BAR	1
SELONOID VALVE DN15 ACL TYPE 52E	1

ANTI WATER HAMMER (KLAYYAA)	
GTV DN150 PN40	2
DUAL PLATE CHV DN150 PN40	1
PRG 40 BAR	1
BLV DN15 PN69	1
BLV DN15 PNNA	2
PRT 0,40 BAR	1
PRS 8,28 BAR	1
SELONOID VALVE DN15 ACL TYPE 52E	1

CHLORINATION SYSTEM WELL 2	
INLET TO PUMP	
PRG 25 BAR	1
FLS	1
PUMP GRUNDFOS MG90 LB2-24FT115B 2750/2740 RPM 1.5 KW	1
OUTLET FROM PUMP	
SWING CHV DN25 PN25	1
PRG 16 BAR	1
GAS INJECTOR	1
BALL VALVE DN25 PNNA	1
CLR FLOWMETER GRUNDFOS VGA 113	1
ROOM 2	
CL GAS CYLINDER 20 KG	1
VACUUM REGULATOR GRUNDFOS VGA 111	1
SWITCHOVER UNIT GRUNDFOS	1

CHLORINATION SYSTEM WELL 3	
INLET TO PUMP	
PRG 25 BAR	1
FLS	1
PUMP GRUNDFOS MG90SB2-24FT115-H3 2890/2910 RPM 1.5 KW	1
OUTLET FROM PUMP	
STRAINER DN25 PN25	1
GAS INJECTOR	1
BALL VALVE DN15 PNNA	1
CLR FLOWMETER GRUNDFOS VGA 113	1
ROOM 2	
CL GAS CYLINDER 20 KG	2
VACUUM REGULATOR GRUNDFOS VGA 111	2
SWITCHOVER UNIT GRUNDFOS	1

CHLORINATION SYSTEM WELL 1	
INLET TO PUMP	
FLS	1
PUMP GRUNDFOS MG90LB2-24FT115-B 2750/2740 RPM 1.5 KW	1
OUTLET FROM PUMP	
SWING CHV DN25 PN25	1
GAS INJECTOR	1
BALL VALVE DN25 PNNA	1
CLR FLOWMETER GRUNDFOS VGA 113	1
ROOM 2	
CL GAS CYLINDER 20 KG	2
VACUUM REGULATOR GRUNDFOS VGA 111	2
SWITCHOVER UNIT ALLDOS	1

NOTE:

BTV: BUTTERFLY VALVE; BLV: BALL VALVE; GTV: GATE VALVE; GLV: GLOBE VALVE; ARV: AIR RELEASE VALVE; CHV: CHECK VALVE; PRG: PRESSURE GAUGE; PRS: PRESSURE SWITCH; PRT: PRESSURE TRANSMITTER; FLS: FLOW SWITCH; GBC: DISMANTLING JOINT; FLJ: FLEXIBLE JOINT



NABEE HASBANI STATION

اعداد: م. محمد سعدية

الموضوع: التجهيزات و المعدات الاساسية العائدة لمحطة نبع الحاصباني بعد كشوفاتنا.

CATCHMENT 2 TO RESERVOIR	
BOOSTER MOTOR SIEMENS 5.5 KW 1455 RPM-PUMP LANDINI SD150	1
BLV DN25 PNNA	1
BLV DN15 PNNA	1
EM FLOWMETER DN125 PN16	1

CATCHMENT 1 TO RESERVOIR	
BTV DN200 PN16	1
EM FLOWMETER DN200 PN16	1
GBC DN200 PN16	1
GTV DN200 PN16	1

SUB. BOOSTER 1	
PRT 0,25 BAR	1
BLV DN15 PNNA	1
ARV DN25 PN16	1
BLV DN25 PN20	1
DUAL PLATE CHV DN200 PN64	1
ARV DN80 PN40	1
BTV DN50 PN40	1
PRG 60 BAR	1
BLV DN15 PN64	1
BLV DN15 PN40	1
BTV DN200 PN56	1

SUB. BOOSTER 2	
PRT 0,25 BAR	1
BLV DN15 PNNA	1
ARV DN25 PN16	1
BLV DN25 PN20	1
DUAL PLATE CHV (DISMANTLED) DN200 PN64	1
PRS 12,60 BAR	1
BLV DN15 PN40	1
BTV DN200 PN64	1

SUB. BOOSTER 3	
PRT 0,25 BAR	1
BLV DN15 PNNA	1
ARV DN25 PN16	1
BLV DN25 PN20	1
DUAL PLATE CHV DN200 PN64	1
PRS 12,60 BAR	1
ARV DN80 PN40	1
BTV DN50 PN40	1
PRG 60 BAR	1
BLV DN15 PN40	1
BTV DN200 PN64	1

BOOSTER US MOTORS 1	
SURFACE BOOSTER PUMP FLOWWAY Q 270 RPM 2900 -MOTOR 150 HP 2930 RPM	1
SWING CHV DN400 PNNA DN150	1
BLV DN15 PNNA	1
PRG 60 BAR	1
MOTORIZED GTV DN150 PN63	1



BOOSTER US MOTORS 3	
SURFACE BOOSTER PUMP FLOWWAY Q 270 RPM 2900 -MOTOR 150 HP 2930 RPM	1
SWING CHV DN200 PNNA DN150	1
BLV DN15 PNNA	1
PRG 60 BAR	1
MOTORIZED GTV DN150 PN63	1

BOOSTER US MOTORS 2 (OUT OF SERVICE)	
SURFACE BOOSTER PUMP FLOWWAY Q 270 RPM 2900 -MOTOR 150 HP 2930 RPM	1
SWING CHV DN200 PNNA DN150	1
BLV DN15 PNNA	1
PRG 60 BAR	1
PRG 60 BAR	1
MOTORIZED GTV DN150 PN63	1

CHLORINATION SYSTEM	
INLET FROM US MOTOR 1	
BLV DN25 PN40	2
STRAINER DN25 PN16	1
SWING CHV DN25 PN25	1
BRANCH 1 TO RESERVOIR	
SELOINOID VALVE DN15	1
PRG 16 BAR	1
GAS INJECTOR	1
BRANCH 2 TO UTILITY WATER TANK	
BLV DN15 PN50	1
SELOINOID VALVE DN15	1
ROOM 2	
CHLOIRNE GAS CYLINDER 1 20 KG	2
VACUUM REGULATOR HYDRO INSTRUMENTS 501	2
SWITCHOVER UNIT HYDRO INSTRUMENTS SP-100	1
CHLORINE FLOWMETER HYDRO INSTRUMENTS RM-401	1

BOOSTERS OUTLET COLLECTOR TO HASBAYA BRANCH	
EM FLOWMETER DN200 PN16 (OUT OF SERVICE)	1
GTV DN200 PN68	1
GTV DN100 PNNA (DRAIN)	1

BOOSTERS OUTLET COLLECTOR TO WATER HAMMER BRANCH	
GTV DN150 PNNA	1
SWING CHV DN150 PNNA	1
GTV DN50 PNNA (DRAIN)	1

NOTE:

BTV: BUTTERFLY VALVE; BLV: BALL VALVE; GTV: GATE VALVE; GLV: GLOBE VALVE; ARV: AIR RELEASE VALVE; CHV: CEHCK VALVE; PRG: PRESSURE GAUGE; PRS: PRESSURE SWITCH; PRT: PRESSURE TRANSMITTER; FLS: FLOW SWITCH; GBC: DISMANTLING JOINT; FLJ: FLEXIBLE JOINT



الموضوع: التجهيزات و المعدات الاساسية العائدة لمحطة نبع الطاسة بعد كشوفاتنا.

اعداد: م. محمد سعدية

NABEE TASSE STATION 2022

WELL 1	
RUBBER FLJ DN100 PN16	1
DUAL PLATE CHV DN100 PN16	1
BTV DN100 PN16	1

WELL 2	
PRG 16 BAR	1
RUBBER FLJ DN100 PN16	1
DUAL PLATE CHV DN100 PN16	1
BTV DN100 PN16	1
DRAIN	
GTV DN80 PN16	1

WELL 3	
RUBBER FLJ DN100 PN16	1
DUAL PLATE CHV DN100 PN16	1
BTV DN100 PN16	1

WELL 4	
RUBBER FLJ DN100 PN16	1
DUAL PLATE CHV DN100 PN16	1
BTV DN100 PN16	1
PRG 16 BAR	1
GTV DN15 PNNA	1
DRAIN	
GTV DN100 PN16	1

WELL 5	
SWING CHV DN125 PN16	1
M FLOWMETER DN100 PN16	1
PRG 16 BAR	1
BLV DN15 PN50	1
BTV DN100 PN16	1



CHLORINATION SYSTEM IKLIM	
INLET TO PUMP	
STRAINER DN25 PN20	1
PRG 16 BAR	1
PUMP GRUNDFOS CR5-9-A-A-A-E-HQBE	1
OUTLET FROM PUMP	
INJECTOR NO INFO	1
PRG 12 BAR	1
TO INJECTOR	
CL FLOWMETER GRUNDFOS C113 GECO	1
GAS CYLINDER	1
VACUUM REGULATOR VGA 111	1
PRG 16 BAR	1

CHLORINATION SYSTEM NABATIEH	
INLET TO PUMP	
STRAINER DN25 PN20	1
PUMP GRUNDFOS CR5-9-A-A-A-E-HQBE	1
OUTLET FROM PUMP	
INJECTOR ALLDOS 2.0 KG/H	1
STRAINER DN25 PN16	1
TO INJECTOR	
CL FLOWMETER GRUNDFOS C113 GECO	1
GAS CYLINDER	1
VACUUM REGULATOR C 111	1
PRG 16 BAR	1

CHLORINATION SYSTEM	
OUT 1	
BLV DN25 PNNA	1
PRESSURE REDUCER DN25 PN48/14	1
PRG 6 BAR	1
SELOINOID VALVE MUT MOD.SF 25-2	1
INJECTOR ALLDOS 0.5 KG/H	1
OUT 2	
BLV DN25 PNNA	1
PRESSURE REDUCER DN25 PN48/14	1
PRG 6 BAR	1
SELOINOID VALVE MUT MOD.SF 25-2	1
INJECTOR ALLDOS 0.5 KG/H	1
OUT 3	
BLV DN25 PNNA	1
PRESSURE REDUCER DN25 PN48/14	1
PRG 6 BAR	1
SELOINOID VALVE MUT MOD.SF 25-2	1
INJECTOR ALLDOS 0.5 KG/H	1
OUT 4	
BLV DN25 PNNA	1
PRESSURE REDUCER DN25 PN48/14	1
PRG 6 BAR	1



SELONOID VALVE MUT MOD.SF 25-2	1
INJECTOR ALLDOS 0.5 KG/H	1
ROOM 2	
GAS CYLINDER	1
VACUUM REGULATOR CONTROL MATRIK ABW M2	1
INLET 1	
BLV DN25 PNNA	1
STRAINER DN25 PN20	1
SWING CHV DN25 PN25	1
INLET 2	
BLV DN25 PNNA	1
STRAINER DN25 PN20	1
SWING CHV DN25 PN25	1

SUB. BOOSTER LOUYZI	
INLET	
GTV DN150 PN16	1
RUBBER FLJ DN150 PN16	1
OUTLET	
PRS 25,150 BAR	1
GTV DN100 PN40	1
DUAL PLATE CHV DN100 PN40	1
BTV DN100 PN40	1

SUB. BOOSTER STANDBY	
INLET	
GTV DN150 PN16	1
RUBBER FLJ DN150 PN16	1
BLV DN15 PNNA	1
OUTLET	
PRS 25,150 BAR	1
DUAL PLATE CHV DN100 PN40	1
BRANCH	
GTV DN150 PN16	1

SUB. BOOSTER JARJOUO	
INLET	
GTV DN150 PN16	1
RUBBER FLJ DN150 PN16	1
OUTLET	
PRS 25,150 BAR	1
PRG 60 BAR	1
DUAL PLATE CHV DN100 PN40	1
GTV DN100 PN40	1
BTV DN100 PN40	1

SECONDARY PIPES	
P1	
GTV DN80 PN16	1
P2	



GTV DN80 PN16	1
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KFAR ROUMMAN - YOSIF BEIK LINE	
GBC DN200 PN16	5
GTV DN200 PN16	2
ARV DN32 PN16	1
BLV DN32 PN16	2
BRANCH TO COLLECTOR NABATIEH	
GTV DN150 PN16	1

IKLIM LINE	
GTV DN400 PN16	2
GBC DN400 PN16	4
ARV DN32 PN16	1
BLV DN32 PN16	1
M FLOWMETER DN400 PN16	1
BRANCH TO COLLECTOR NABATIEH	
GTV DN150 PN16	1
CHLORINATION PIPES	
STRAINER DN25 PN20	1
BLV DN15 PN64	1
BLV DN25 PNNA	1

NABATIEH LINE	
GBC DN450 PN16	1
GTV DN400 PN16	1
ARV DN50 PN16	1
GTV DN50 PN16	1
GBC DN400 PN16	1

OLD WELL WASHOUT LINE	
GTV DN150 PN16	2

QTY: 1

CANCELED LINE	
GTV DN400 PN16	1
GBC DN400 PN16	2
ENDING	
FLS	1
GTV DN25 PNNA	3
BLV DN25 PN25	1



الجمهورية اللبنانية
وزارة الطاقة والمياه
مؤسسة مياه لبنان الجنوبي



الموضوع: التجهيزات و المعدات الاساسية العائدة لمحطة رأس العين بعد كشوفاتنا.

اعداد: م. محمد سعدية

RAS AIN STATION

BUS 2 INLET UNDERGROUND	
R FLJ DN150 PN16	1
BTV DN150 PN16	1

BUS 1 INLET UNDERGROUND	
R FLJ DN150 PN16	1
BTV DN150 PN16	1
FLS	1
BLV DN15 PN16	1

SEDQINE 2 INLET UNDERGROUND	
GTV DN250 PN16	1
PRG 16 BAR	1
PRS -0.2,8 BAR	1

SEDQINE 1 INLET UNDERGROUND	
GTV DN250 PN16	1
PRG 16 BAR	1
PRS -0.2,8 BAR	1
BLV DN15 PN16	1

HANAWI 3 INLET UNDERGROUND	
GTV DN250 PN16	1
PRG 16 BAR	1
FLS	1
BLV DN15 PN16	1
PRS -0.2,8 BAR	1
PRT 0,16 BAR	1

HANAWI 2 INLET UNDERGROUND	
RUBBER FLJ DN250 PN16	1
BTV DN250 PN16	1
FLS	1



HANAWI 1 INLET UNDERGROUND	
RUBBER FLJ DN250 PN16	1
BTV DN250 PN16	1
FLS	1
PRG 16 BAR	1
PRS -0.2,8 BAR	1
BLV DN15 PN16	1

HANAWI OUTLETS COLLECTOR UNDERGROUND	
PRT 0,40 BAR	1
PRG 40 BAR	1
BLV DN15 PN16	1
INSERTION FLOWMETER DN40 PN63	1
BRANCH TO DRAIN AND COMMON AWH BUSS	
GTV DN100 PN64	1
BRANCH TO AWH HANAWI	
GTV DN200 PN40	1

BUSS OUTLETS COLLECTOR UNDERGROUND	
GTV DN80 PN16	1
PRG 16 BAR	1
PRT 0,16 BAR	1
BLV DN15 PN16	1
INSERTION FLOWMETER DN40 PN25	1
PRT 0,40 BAR	1
EM FLOWMETER DN200 PN16	1
GTV DN200 PN16	1

SEDQINE OUTLETS COLLECTOR UNDERGROUND	
PRG 60 BAR	1
PRT NA	1
BLV DN15 PN16	1
INSERTION FLOWMETER DN40 PN63	1
GBC DN250 PN16	1
BRANCH TO SEDQINE AWH	
GTV DN200 PN64	1
BRANCH TO DRAIN AND COMMON AWH BUSS	
GTV DN100 PN64	1



ANTI WATER HAMMER BUS	
GTV DN100 PN16	1
GTV DN150 PN16	1
SWING CHV DN150 PN16	1
DRAIN	
GTV DN50 PN16	1

COLLECTOR INLETS TO BUSS HANAWI SEDQINE BOOSTERS	
DRAIN	
GTV DN100 PN40	1
BETWEEN BUSS 1 AND SEDQINE 2 INLETS	
PRT 0,25 BAR	1
BLV DN15 PN16	2
PRT 0,1 BAR	1
ALONG THE CURB	
BTV DN200 PN16	1
GBC DN200 PN16	1
DUAL PLATE CHV DN200 PN16	1



SPRING BOOSTERS	
OUTLET 1	
PRG 16 BAR	1
PRT 0,25 BAR	1
BLV DN15 PN16	2
ARV DN80 PN25	1
BTV DN80 PN16	1
STRAINER DN200 PN16	1
DUAL PLATE CHV DN200 PN16	1
GBC DN200 PN16	1
BTV DN200 PN16	1
OUTLET 2	
PRG 16 BAR	1
PRT 0,25 BAR	1
BLV DN15 PN16	2
ARV DN80 PN25	1
BTV DN80 PN16	1
STRAINER DN200 PN16	1
DUAL PLATE CHV DN200 PN16	1
GBC DN200 PN16	1
BTV DN200 PN16	1
OUTLET 3	
PRG 16 BAR	1
BLV DN15 PN16	2
ARV DN80 PN25	1
BTV DN80 PN16	1
STRAINER DN200 PN16	1
DUAL PLATE CHV DN200 PN16	1
GBC DN200 PN16	1
BTV DN200 PN16	1
COLLECTOR	
BTV DN200 PN16	3
BRANCHES FROM COLLECTOR	
DUAL PLATE CHV DN200 PN16	1
GBC DN200 PN16	1
BTV DN200 PN16	1
PRG 10 BAR	1
BLV DN25 PN16	1

BUS 2 INLET UNDERGROUND	
R FLJ DN150 PN16	1
BTV DN150 PN16	1

BUS 1 INLET UNDERGROUND	
R FLJ DN150 PN16	1
BTV DN150 PN16	1
FLS	1
BLV DN15 PN16	1



SEDQINE 2 INLET UNDERGROUND	
GTV DN250 PN16	1
PRG 16 BAR	1
PRS -0.2,8 BAR	1

SEDQINE 1 INLET UNDERGROUND	
GTV DN250 PN16	1
PRG 16 BAR	1
PRS -0.2,8 BAR	1
BLV DN15 PN16	1

HANAWI 3 INLET UNDERGROUND	
GTV DN250 PN16	1
PRG 16 BAR	1
FLS	1
BLV DN15 PN16	1
PRS -0.2,8 BAR	1
PRT 0,16 BAR	1

HANAWI 2 INLET UNDERGROUND	
RUBBER FLJ DN250 PN16	1
BTV DN250 PN16	1
FLS	1

HANAWI 1 INLET UNDERGROUND	
RUBBER FLJ DN250 PN16	1
BTV DN250 PN16	1
FLS	1
PRG 16 BAR	1
PRS -0.2,8 BAR	1
BLV DN15 PN16	1

HANAWI OUTLETS COLLECTOR UNDERGROUND	
PRT 0,40 BAR	1
PRG 40 BAR	1
BLV DN15 PN16	1
INSERTION FLOWMETER DN40 PN63	1
BRANCH TO DRAIN AND COMMON AWH BUSS	
GTV DN100 PN64	1
BRANCH TO AWH HANAWI	
GTV DN200 PN40	1



BUSS OUTLETS COLLECTOR UNDERGROUND	
GTV DN80 PN16	1
PRG 16 BAR	1
PRT 0,16 BAR	1
BLV DN15 PN16	1
INSERTION FLOWMETER DN40 PN25	1
PRT 0,40 BAR	1
EM FLOWMETER DN200 PN16	1
GTV DN200 PN16	1

SEDQINE OUTLETS COLLECTOR UNDERGROUND	
PRG 60 BAR	1
PRT NA	1
BLV DN15 PN16	1
INSERTION FLOWMETER DN40 PN63	1
GBC DN250 PN16	1
BRANCH TO SEDQINE AWH	
GTV DN200 PN64	1
BRANCH TO DRAIN AND COMMON AWH BUSS	
GTV DN100 PN64	1

ANTI WATER HAMMER BUS	
GTV DN100 PN16	1
GTV DN150 PN16	1
SWING CHV DN150 PN16	1
DRAIN	
GTV DN50 PN16	1

COLLECTOR INLETS TO BUSS HANAWI SEDQINE BOOSTERS	
DRAIN	
GTV DN100 PN40	1
BETWEEN BUSS 1 AND SEDQINE 2 INLETS	
PRT 0,25 BAR	1
BLV DN15 PN16	2
PRT 0,1 BAR	1
ALONG THE CURB	
BTV DN200 PN16	1
GBC DN200 PN16	1
DUAL PLATE CHV DN200 PN16	1

MANSOORI INLET COLLECTOR	
M FLOWMETER DN200 PN16	1
BTV DN200 PN16	1
GBC DN200 PN16	1
DUAL PLATE CHV DN200 PN16	1



SPRING BOOSTERS	
OUTLET 1	
PRG 16 BAR	1
PRT 0,25 BAR	1
BLV DN15 PN16	2
ARV DN80 PN25	1
BTV DN80 PN16	1
STRAINER DN200 PN16	1
DUAL PLATE CHV DN200 PN16	1
GBC DN200 PN16	1
BTV DN200 PN16	1
OUTLET 2	
PRG 16 BAR	1
PRT 0,25 BAR	1
BLV DN15 PN16	2
ARV DN80 PN25	1
BTV DN80 PN16	1
STRAINER DN200 PN16	1
DUAL PLATE CHV DN200 PN16	1
GBC DN200 PN16	1
BTV DN200 PN16	1
OUTLET 3	
PRG 16 BAR	1
BLV DN15 PN16	2
ARV DN80 PN25	1
BTV DN80 PN16	1
STRAINER DN200 PN16	1
DUAL PLATE CHV DN200 PN16	1
GBC DN200 PN16	1
BTV DN200 PN16	1
COLLECTOR	
BTV DN200 PN16	3
BRANCHES FROM COLLECTOR	
DUAL PLATE CHV DN200 PN16	1
GBC DN200 PN16	1
BTV DN200 PN16	1
PRG 10 BAR	1
BLV DN25 PN16	1

EL BASS BOOSTER 1	
RUBBER FLJ DN200 PN16	1
PRS 5,16 BAR	1
PRG 16 BAR	1
CHV DN200 PN16	1
BTV DN200 PN16	1



EL BASS BOOSTER 2	
RUBBER FLJ DN200 PN16	1
PRS 5,16 BAR	1
PRG 16 BAR	1
CHV DN200 PN16	1
BTV DN200 PN16	1

SEDQINE BOOSTER 3	
BLV DN15 PNNA	1
SPRING FLJ DN150 PNNA	1
PRS 12,50 BAR	1
BLV DN15 PN40	2
DUAL PLATE CHV DN150 PN64	1
PRG 100 BAR	1
BTV DN150 PN64	1

MANSOORI PUMP 1	
	INLET
GTV DN150 PN16	1
FLS	1
RUBBER FLJ DN125 PN16	1
	OUTLET
PRT 0,60 BAR	1
SWING CHV DN150 PN64	1
GLV DN150 PN64	1
GBC DN150 PNNA	1

OUTLET COLLECTOR MANSOORI PUMPS	
ARV DN50 PNNA	1
GTV DN50 PN64	1
PRT 0,60 BAR	1
PRG 60 BAR	1
BLV DN15 PNNA	1



HANAWAII BOOSTER 1		
PRG 25 BAR	1	ANINI
PRT 0,25 BAR	1	ANINI
BLV DN15 PNNA	1	ANINI
BLV DN10 PN15	1	ANINI
BLV DN20 PNNA	1	ANINI
SPRING FLJ DN200 PNNA	1	
PRS 12,50 BAR	1	
BLV DN15 PN40	2	
PRG 60 BAR	1	
CHV DN200 PN25	1	
BTV DN200 PN40	1	

HANAWAII BOOSTER 3		
PRG 25 BAR	1	BTW
BLV DN20 PNNA	1	BTW
PRT 0,25 BAR	1	BTW
PRS 2.5,28 BAR	1	BTW
PRG 60 BAR	1	
BLV DN20 PNNA	3	
PRS 40,80 BAR	1	
PRS	1	
DUAL PLATE CHV DN200 PN40	1	
SWING CHV DN200 PN40	1	
PRT 0,60 BAR	1	
MOTORIZED BTV DN200 PN64	1	

CLEANING BOOSTER 1		
		INLET
BLV DN20 PNNA	2	
		OUTLET
RUBBER FLJ DN200 PNNA	1	
DUAL PLATE CHV DN250 PNNA	1	
GTV DN250 PN10	1	

COLLECTOR CLEANING PUMPS 1 & 2		
PRG 6 BAR	1	
BLV DN15 PNNA	1	
INSERTION FLOWMETER	1	



PUMP 1 FILTRATION ROOM	
BTV DN200 PN25	1
PRG 25 BAR	1
DUAL PALTE CHECK VALVE DN200 PN16	1
PRS -0.2 to 8 BAR	1
RUBBER FLJ DNDN200 PNNA	1

SEDIMENTATION SYSTEM 1 UPWARD	
MOTORIZED BTV DN100 PNNA	2
GTV DN100 PN16	2

FILTRATION POND 1 UNDERGROUND	
BTV DN200 PN16	2
GTV DN100 PN10	1

FILTRATION POND 5 UNDERGROUND	
BTV DN200 PN16	2
GTV DN100 PN10	1

SEDIMENTATION STACK 1 UNDERGROUND	
GTV DN100 PN10	3
PINCH VALVE DN100 PNPNA	3

VACUUM PUMP	
RUBBER FLJ DN80 PNNA	4
MOTOR 3 HP	1

SERVICE WATER SYSTEM	
BTV DN50 PN16	2
PRG 25 BAR	1
PRS 5,16 BAR	1
BLV DN20 PNNA	1
BTV DN55 PN16	2
CHV DN55 PNNA	2
RUBBER FLJ DN80 PNNA	2
BTV DN80 PN16	2
TANK V: 1000 L	1



SEDQINE BOOSTER 4	
BLV DN15 PNNA	1
SPRING FLJ DN150 PNNA	1
PRS 12,50 BAR	1
BLV DN15 PN40	2
DUAL PLATE CHV DN150 PN64	1
PRG 100 BAR	1
BTV DN150 PN64	1

MANSOORI PUMP 2		
GTV DN150 PN16	1	INLET
FLS	1	
RUBBER FLJ DN125 PN16	1	
PRT 0,60 BAR	1	OUTLET
SWING CHV DN150 PN64	1	
GLV DN150 PN64	1	
GBC DN150 PNNA	1	

HANAWAI BOOSTER 2		
BLV DN20 PNNA	2	ANINI
SPRING FLJ DN200 PNNA	1	
PRS 12,50 BAR	1	
BLV DN15 PN40	2	
PRG 60 BAR	1	
CHV DN200 PN25	1	
BTV DN200 PN40	1	

SEDQINE BOOSTER 1		
PRG 25 BAR	1	BTW
BLV DN20 PNNA	1	BTW
PRT 0,25 BAR	1	BTW
PRS	2	
PRG 60 BAR	1	
BLV DN20 PNNA	3	
PRS 40,80 BAR	1	
DUAL PLATE CHV DN200 PN40	1	
SWING CHV DN200 PN40	1	
PRT 0,60 BAR	1	
MOTORIZED BTV DN200 PN64	1	



CLEANING BOOSTER 2	
	INLET
BLV DN20 PNNA	2
	OUTLET
RUBBER FLJ DN200 PNNA	1
DUAL PLATE CHV DN250 PNNA	1
GTV DN250 PN10	1
PRG 6 BAR	1
BLV DN15 PNNA	1

PUMP 2 FILTRATION ROOM	
BTV DN200 PN25	1
PRG 25 BAR	1
DUAL PALTE CHECK VALVE DN200 PN16	1
PRS -0.2 to 8 BAR	1
RUBBER FLJ DNDN200 PNNA	1

SEDIMENTATION SYSTEM 2 UPWARD	
MOTORIZED BTV DN100 PNNA	2
GTV DN100 PN16	2
BLV DN25 PNNA	1

FILTRATION POND 2 UNDERGROUND	
BTV DN200 PN16	2
GTV DN100 PN10	1

FILTRATION POND 6 UNDERGROUND	
BTV DN200 PN16	2
GTV DN100 PN10	1

SEDIMENTATION STACK 2 UNDERGROUND	
GTV DN100 PN10	3
PINCH VALVE DN100 PNPNA	3

AIR COMPRESSOR	
BLV DN20 PNNA	3
BLV DN15 PNNA	1
PRS 0.6 to 10 BAR	1
AIR PUMP 10 BAR - 60 m3/h	1
MOTOR 10 HP	1



SEDQINE BOOSTER 5	
BLV DN10 PN20	1
SPRING FLJ DN150 PNNA	1
PRS 12,50 BAR	1
BLV DN15 PN40	2
DUAL PLATE CHV DN150 PN64	1
PRG 100 BAR	1
BTV DN150 PN64	1

MANSOORI PUMP 3	
	INLET
GTV DN150 PN16	1
FLS	1
RUBBER FLJ DN125 PN16	1
	OUTLET
PRT 0,60 BAR	1
SWING CHV DN150 PN64	1
MOTORIZED GLV DN150 PN64	1
GBC DN150 PNNA	1

SEDQINE BOOSTER 2	
PRG 25 BAR	1 BTW
BLV DN20 PNNA	1 BTW
PRT 0,25 BAR	1 BTW
PRS	1
PRG	1
GTV DN20 PNNA	1
PRG 60 BAR	1
BLV DN20 PNNA	1
PRS 40,80 BAR	1
DUAL PLATE CHV DN200 PN40	1
SWING CHV DN200 PN40	1
MOTORIZED BTV DN200 PN64	1

COMPRESSOR 1	
BTV DN125 PNNA	1

COMPRESSOR 2	
BTV DN125 PNNA	1



COLLECTOR CLEANING PUMPS 1 & 2	
MOTORIZED BTV DN125 PNNA	1
PRG 1 BAR	1
BLV DN8 PNNA	1
MOTORIZED BTV DN100 PN16	8

PUMP 3 FILTRATION ROOM	
BTV DN200 PN25	1
PRG 25 BAR	1
DUAL PALTE CHECK VALVE DN200 PN16	1
PRS -0.2 to 8 BAR	1
RUBBER FLJ DNDN200 PNNA	1

FILTRATION POND 3 UNDERGROUND	
BTV DN200 PN16	2
GTV DN100 PN10	1

FILTRATION POND 7 UNDERGROUND	
BTV DN200 PN16	2
GTV DN100 PN10	1

CHLORINATION SYSTEM	
ROOM 1	
BLV DN25 PNNA	1
PRG 16 BAR	1
SWING CHV DN25 PN25	1
PUMP DPV 2-100 1.5K W 0.6 L/S	1
ROOM 2	
GAS CYLINDER	1
PRG 16 BAR	1
VACUUM REGULATOR GRUNDFOS VGA 111	1
GAS CYLINDER W3T232435	1
PRG 12 BAR	1
VACUUM REGULATOR EVOQUA W3T232435	1
CL FLOWMETER GRUNDFOS C 113 GECO	1
CHLORINE INJECTOR 1 KG/H	1

NOTE:

BTV: BUTTERFLY VALVE; BLV: BALL VALVE; GTV: GATE VALVE; GLV: GLOBE VALVE; ARV: AIR RELEASE VALVE; CHV: CEHCK VALVE; PRG: PRESSURE GAUGE; PRS: PRESSURE SWITCH; PRT: PRESSURE TRANSMITTER; FLS: FLOW SWITCH; GBC: DISMANTLING JOINT; FLJ: FLEXIBLE JOINT