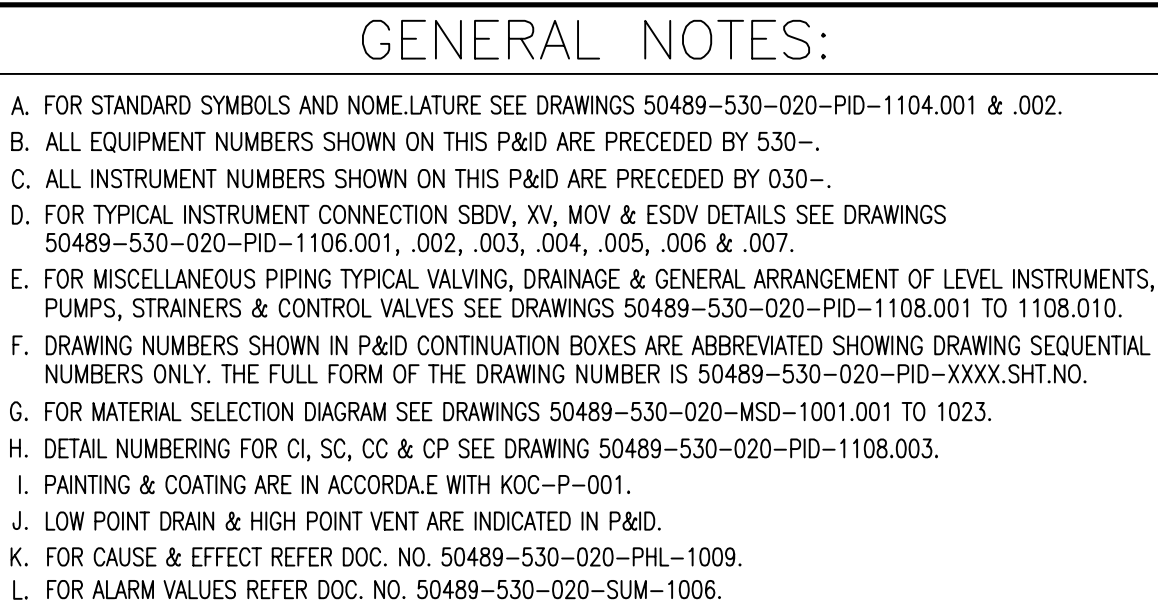


CHEMICAL INJECTION SKID



1. AUTOMATIC VARIABLE PUMP STROKE ADJUSTMENT IS THROUGH DCS.
2. LOW LOW LIQUID LEVEL IN D-044 STOPS BIOCID E B INJECTION PUMPS G-044D/E/F/G.
3. FLUSHING CONNECTIONS.
4. EYEWASH AND SAFETY SHOWERS ARE PROVIDED IN THE CHEMICAL INJECTION SKID AREA.
5. PROVIDE CORIOLIS FLOW MEASUREMENT AND FACILITY FOR LOCAL CALIBRATION.
6. BIOCID E A & BIOCID E B TO BE STORED BELOW 60°C. ALL PIPEWORK TO BE INSULATED TO PROTECT THE FLOW FROM HEAT BUILD UP DUE TO SOLAR RADIATION.
7. DELETED.
8. BATCH CONTROL – THE QUANTITY OF DOSING FLUID IS DETERMINED BY OPERATOR AND INPUT INTO TOTALISER. PUMP STOPS WHEN BATCH VOLUME IS ACHIEVED.
9. BIOCID A & BIOCID B TO BE ADDED ALTERNATIVELY BY WEEKLY SHOCK DOSING FOR 4 HRS.
(A) SHOCK DOSING TO DESALTER WASH WATER TANK BASED ON NORMAL DOSING RATE 400 PPM: 106 LITERS AND BASED ON MAXIMUM DOSING RATE 600PPM: 159 LITERS.
- (B) SHOCK DOSING TO FIRE WATER TANK STORAGE TANK BASED ON NORMAL DOSING RATE 400 PPM: 6209 LITERS & BASED ON MAXIMUM DOSING RATE 600PPM: 9314 LITERS.
10. DELETED.
11. PROVIDE INDICATION FOR PUMP STROKE IN DCS.
12. (A) LOW POINT DRAIN IS PROVIDED AS APPROPRIATE.
(B) DELETED.
13. PUMP Suction BALL VALVE & CALIBRATION POT BALL VALVE ARE LOCATED ADJACENT TO ONE ANOTHER FOR MEASURING THE FLOW.
14. DEVIATION ALARMS ARE CONFIGURED IN THE DCS TO ALARM IF ACTUAL FLOW DIFFERS FROM SET BY 10%.
15. DELETED
16. PUMPS ARE PROVIDED WITH DIAPHRAGM SHOCK DETURBE ALARM (PAHH).
17. PAHH STOPS BIOCID E B SHOCK DOSING PUMP
18. DIRECT MOUNTING TO THE PUMP HEAD FOR DETECTING RUPTURE OF DIAPHRAGM.
19. MINIMUM STROKE OF 10% IS PROVIDED FOR ALL CHEMICAL INJECTION PUMP.

ZO	ISSUED FOR AS-BUILT	BAK/CHS	AKG	SRA	DER	18.08.18
O1	ISSUED FOR CONSTRUCTION	BAK/CHS	AKG	SRA	DER	21.12.16
O	ISSUED FOR CONSTRUCTION	HSH/CHS	AKG	SRA	RAK	06.06.16
D	ISSUED INCORPORATED CLIENT COMMENTS	HSH/CHS	AKG	SRA	RAK	07.04.16
C	ISSUED INCORPORATED CLIENT COMMENTS	JSI/ABY	AKG	SRA	RAK	30.10.15
OC	ISSUED INCORPORATED CLIENT COMMENTS	BAK/ABY	AKG	SRA	RAK	04.06.15
B	ISSUED INCORPORATED CLIENT COMMENTS	BAK/BSA	AKG	SRA	RAK	23.02.15
A	ISSUED FOR APPROVAL	PK/ABY	AKG	SRA	RAK	12.12.14
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE
				APPR.		


CONTRACTOR REVISION

KUWAIT OIL CO.
K. S. C.



شركة نفط الكويت
ش.م.ك.

إيسس فيلدس نفط الكويت العامة المحدودة
 A Subsidiary of Kuwait Petroleum Corporation

CONTRACTOR DETAILS:-	
	LARSEN & TOUBRO LIMITED FARIDABAD
PROJECT TITLE:-	
NEW GATHERING CENTRE GC-30 IN NORTH KUWAIT	

DOCUMENT TITLE:--				
PIPING & INSTRUMENTATION DIAGRAM CHEMICAL INJECTION SKID #3 -BIOCIDE B (SHOCK DOSING) (G-044D/E/F/G)				
PROJECT NO.		DRAWING NO.		
EF1902	CONTRACTOR DRG. NO.	REV.	KOC DRG. NO.	REV.
	50489-530-020-PID-1196.008	Z0		
	SHEET NO. 8 OF 8		SHEET NO.	
	COMPANY DRG. NO.	REV.		
	EF1902-530-DCO-PID-0196.008	A1		
	SHEET NO.			