

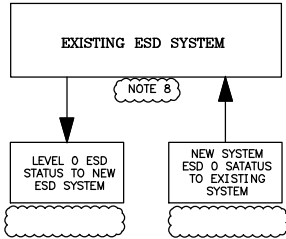
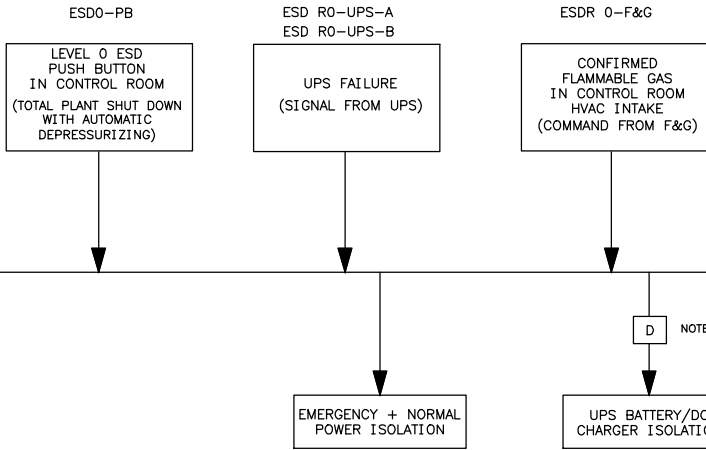
DOCUMENT TITLE:

ESD BLOCK DIAGRAM

NOTES					
LEGEND					
REFERENCE DRAWING			DRG. No.		
*****			*****		
KEY PLAN					
***	*****	** **	*** ****	** **	*** *****
REV.	DESCRIPTION	BY	DATE	BY	DATE
		CHECKED		REV. APPR.	
اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد. THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS					
BINAK OILFIELD DEVELOPMENT' SURFACE FACILITIES GAS COMPRESSOR STATION					
DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.	
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED					
APPROVED FOR CONSTRUCTION			BY:	DATE:	
BUDGET REF.	LOCATION	SIZE CLASS	SERIAL NO.	SHEET	REVISION
00-53-073-9184	F	2 J	708804	07	D03

ESD 0

Total Emergency Shutdown
With Depressurizing



ESDR 1A-F&G

CONFIRMED
FLAMMABLE AND TOXIC
GAS IN FIRE ZONE
(COMMAND FROM F&G)

ESD1A-PB

LEVEL 1A ESD
PUSH BUTTON IN
CONTROL ROOM
(CONSOLE)

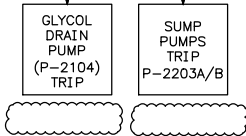
ESD 1A-F&G

CONFIRMED
FIRE
IN FIRE ZONE
(PROCESS)
AREA (COMMAND
FROM F&G)

PALL-2201A,B,C

INSTRUMENT
AIR HEADER
PRESSURE
LOW-LOW
(VOTING 2oo3)

ESD 1A



NOTE 10

START AIR BLOWER

FST-2201

NOTE 7

Open Blow down Valve
of Inlet K.O Drum to
Flare Header

BDV-2110

D

NOTE 7

Open Blow down Valve
of Dehydration Package
to Flare Header

BDV-2151

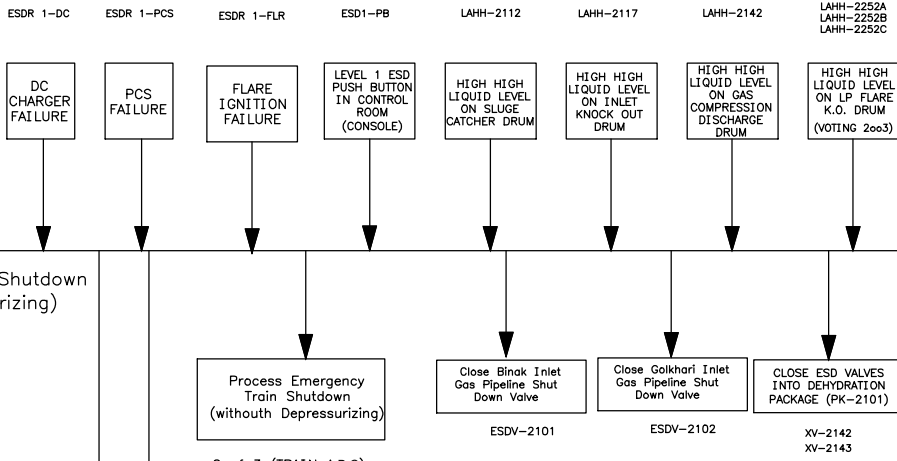
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NOTE 7

Open Blow down Valve
From GAS COMPRESSION
DISCHARGE DRUM to
Flare Header

BDV-2141

ESD 2A,B,C



ESD 1

Process Emergency Shutdown
(without Depressurizing)

ESD 2

ESD 3

NOTES

1. THE UPS SHALL GENERATE AN ALARM BEFORE POWER LOSS TO NOTIFY OPERATOR. THE OPERATOR SHALL TAKE NECESSARY ACTIONS BEFORE LOOSING THE SAFETY SYSTEM FOR SAFE SHUTDOWN AND BLOWDOWN OF PLANT.
2. BLOWDOWN COMMAND SHALL BE GENERATED AFTER PRE-DEFINED TIME (ACCORDING TO ESD PHILOSOPHY) OR IN CASE OF RECEIVING RELATED ESDVs CLOSED STATUS SIGNAL.
3. TO BE CONSIDERED IN F&G CAUSE & EFFECT.
4. ALL ELECTRICAL SOURCES EXCEPT ESSENTIAL POWER SOURCES SHALL BE ISOLATED
5. KEY PROTECTED PUSHBUTTONS SHALL BE PROVIDED FOR BLOWDOWN OF EACH TRAIN BY RECEIVING THE PERMISSION FROM ESD SYSTEM. THE KEY SHALL ACTIVATE STAGE BLOWDOWN VALVES INCLUDING THE TRAINS.
6. FOR DETAILS OF ESD 3 CAUSES AND EFFECTS, REFER TO CAUSE & EFFECT DIAGRAM.
7. ADJUSTABLE DELAY.
8. LEVEL 0 ESD FROM EXISTING ESD SYSTEM SHALL GENERATE AN ALARM AND SHALL NOT HAD ANY EFFECT IN THIS ESD SYSTEM. BECAUSE THE NEW AND EXISTING PARTS ARE SEPARATE AND HAVE ISOLATE INPUT AND OUTPUT LINES.
9. DELETED.
10. FLARE SHALL OPERATE SMOKE FREE UNDER NORMAL OPERATION CONDITION AS WELL AS UNDER EMERGENCY CONDITION SO AIR BLOWER SHALL START FOR BOTH CONDITION.

LEGEND

I.A. Instrument Air
PA/GA Public Address/General Alarm
K.O. Knock-out Drum
H.H. High High
L.L. Low Low
P.B. Push Button
ESDV Emergency Shutdown Valve
BDV Blow-Down Valve

REFERENCE DRAWING

DRG. No.

KEY PLAN

D03	FEB.2025	AFC	M.Aryafar	M.FAKHARIAN	S.PARMAKZADEHPOUR	** **
D02	OCT.2023	AFC	M.Aryafar	M.FAKHARIAN	S.PARMAKZADEHPOUR	** **
D01	DEC.2022	IPA	M.Aryafar	M.FAKHARIAN	M.MEHRSHAD	** **
D00	MAY.2022	IFC	M.Aryafar	M.FAKHARIAN	M.MEHRSHAD	** **
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

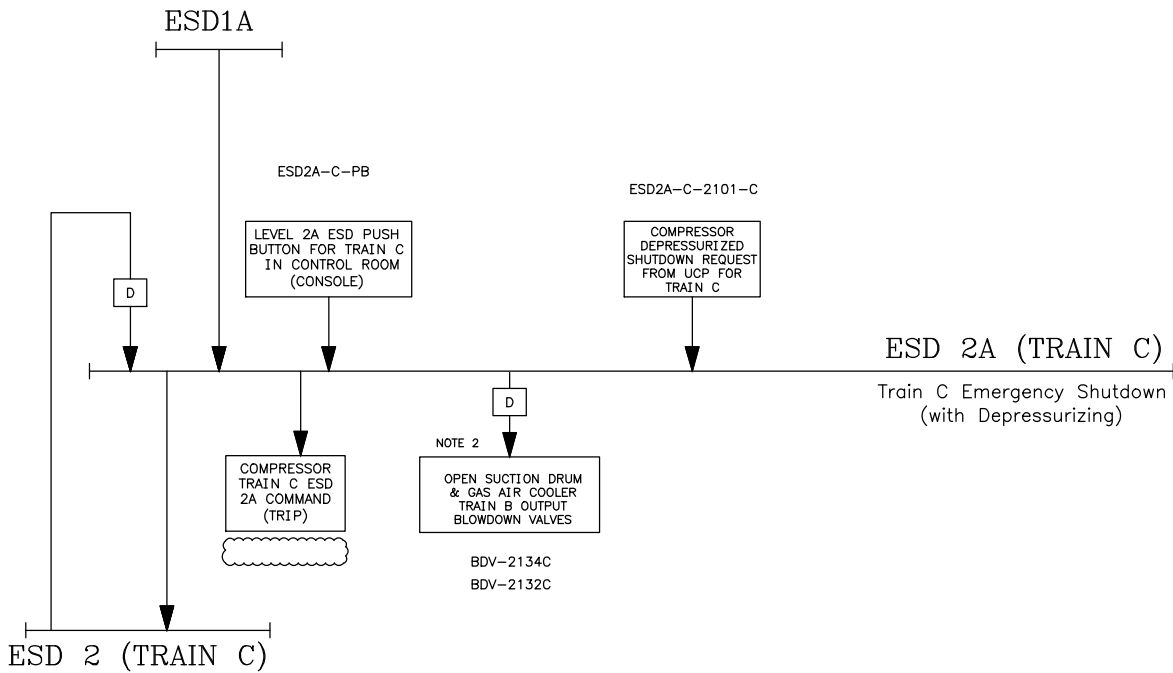
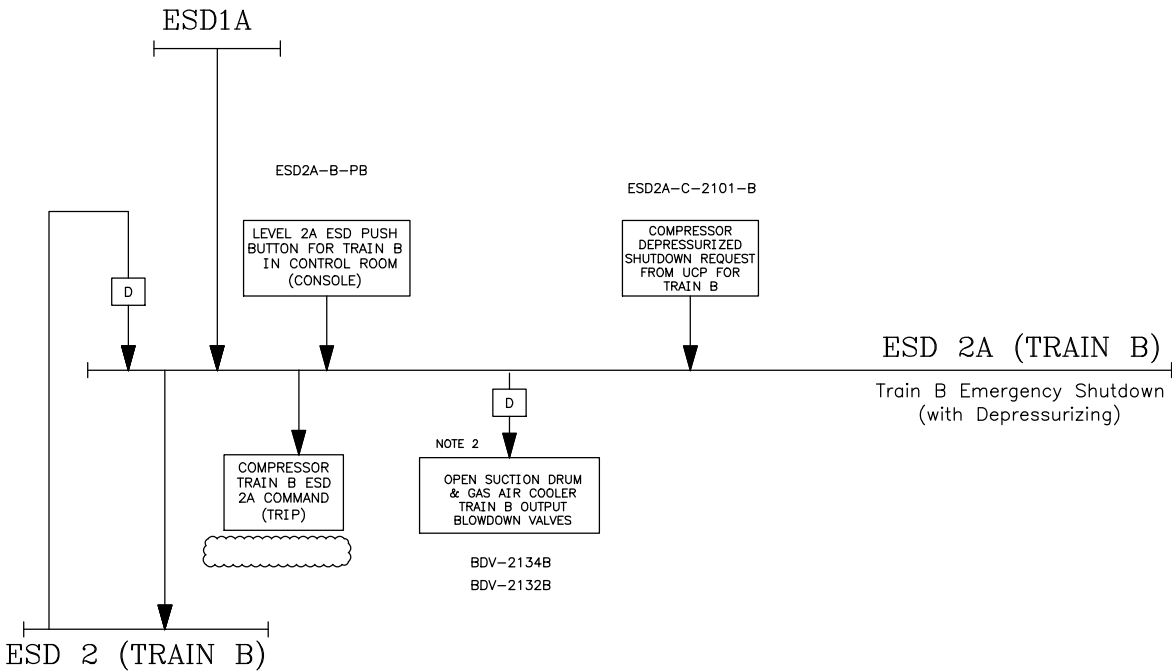
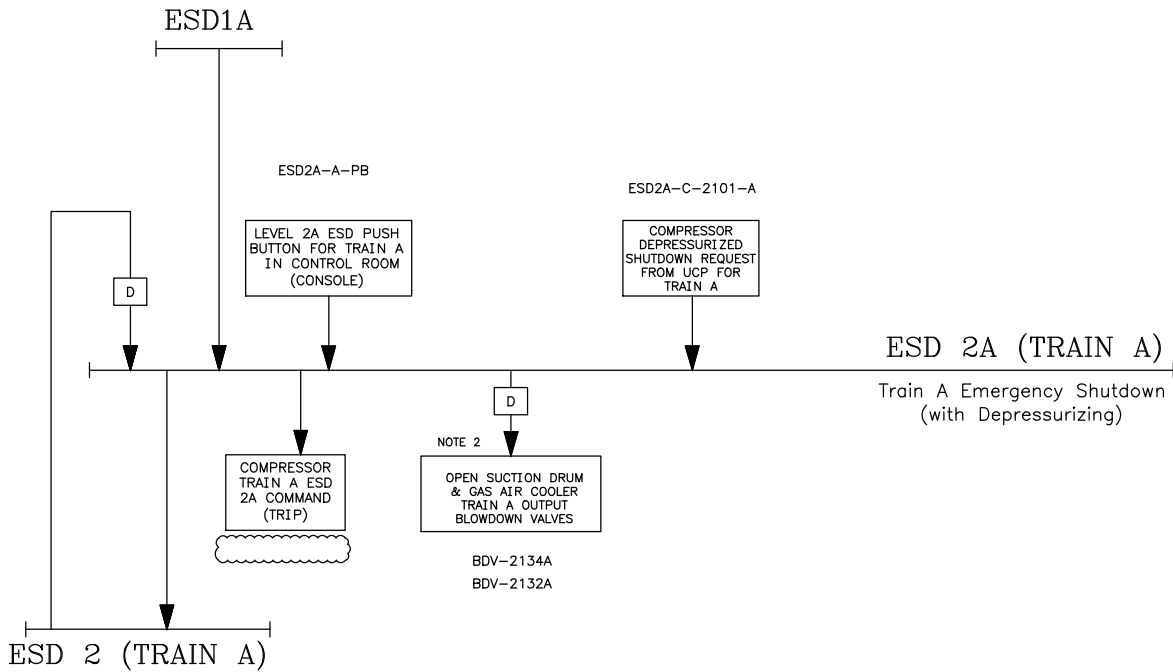
PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY

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SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.
N.T.S	A3	BK-GCS-PEDCO-120-PR-BD-0001	2 OF 7	D03

DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED				
APPROVED FOR CONSTRUCTION		BY:	DATE:	
BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.
00-53-073-9184	F	2	J	708804
				07
				D03



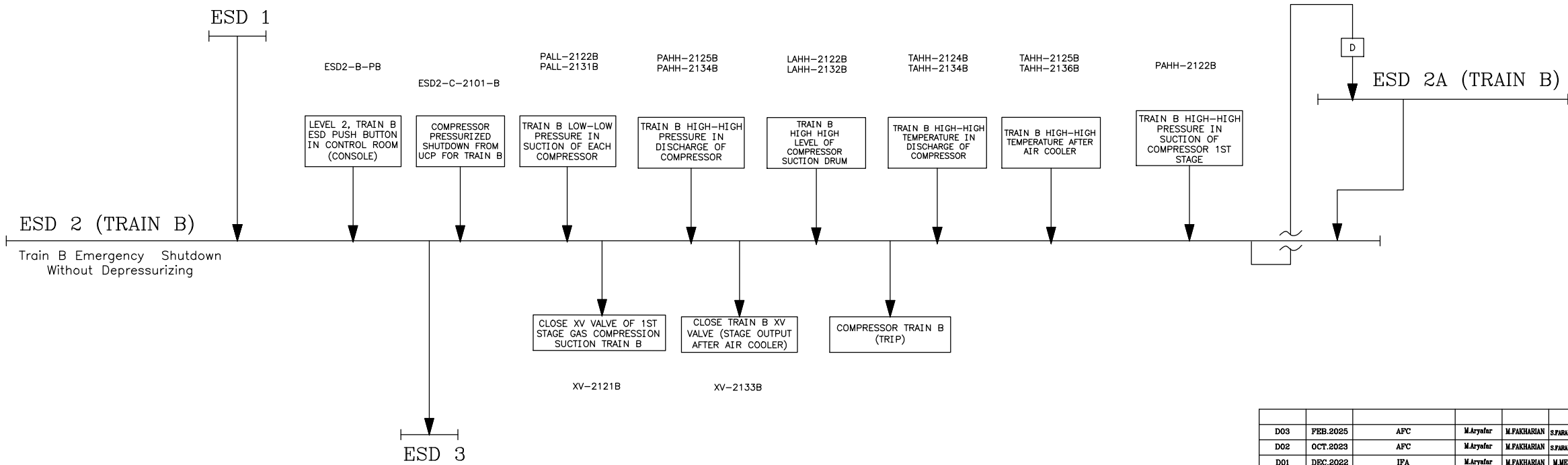
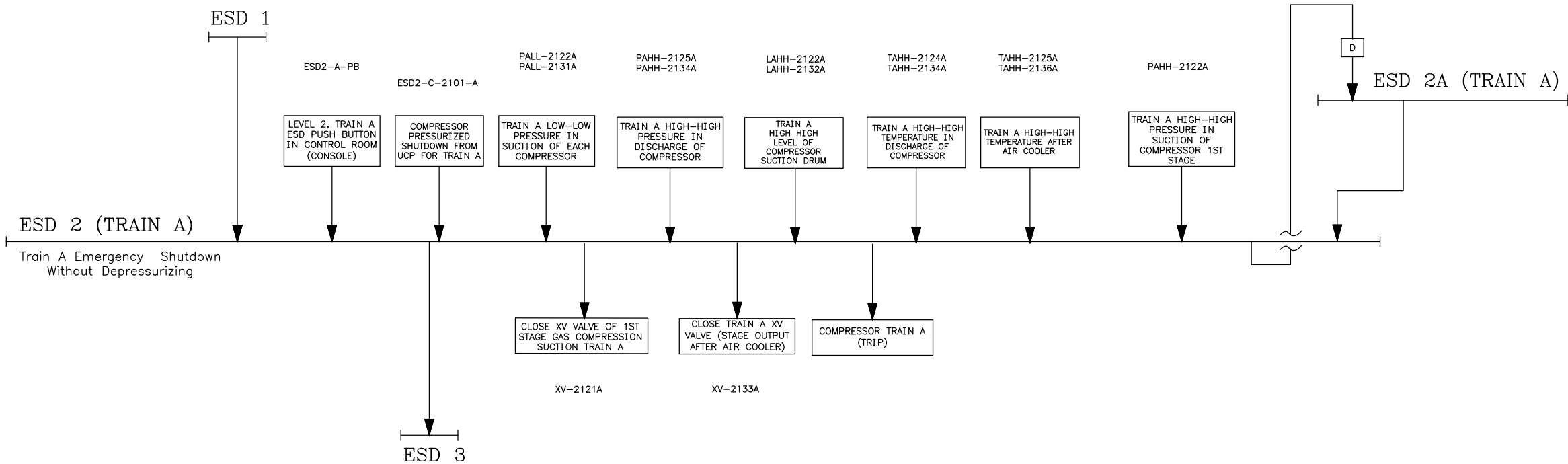
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PA/GA	Public Address/General Alarm
K.O.	Knock-out Drum
H.H.	High High
L.L.	Low Low
P.B.	Push Button
ESDV	Emergency Shutdown Valve
BDV	Blow-Down Valve

REFERENCE DRAWING	DRG. No.
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KEY PLAN

DO3	FEB.2025	AFC	M.Aryafar	M.FAKHARIAN	S.PAHAMAZPOUR	** **							
DO2	OCT.2023	AFC	M.Aryafar	M.FAKHARIAN	S.PAHAMAZPOUR	** **	***	*****	** **	*** ****	** **	*** ****	
DO1	DEC.2022	IPA	M.Aryafar	M.FAKHARIAN	M.MEHRSHAD	** **	REV.	DESCRIPTION	BY	DATE	BY	DATE	
DO0	MAY.2022	IFC	M.Aryafar	M.FAKHARIAN	M.MEHRSHAD	** **			CHECKED		REV. APPR.		
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	اسمل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.						
PROJECT NAME:							THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS						
BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION													
PROJECT NO.: 971020													
EPC CONTRACTOR:			EPD/EPC CONTRACTOR (GC):				BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION						
 HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES			 PETROIRAN DEVELOPMENT COMPANY										
							DATE		SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.	
DRAWING TITLE:							NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED						
ESD BLOCK DIAGRAM							APPROVED FOR CONSTRUCTION						
							BY:		DATE:				
SCALE	SIZE	DRAWING NO.			SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.T.S	A3	BK-GCS-PEDCO-120-PR-BD-0001			3 OF 7	DO3	00-53-073-9184	F	2	J	708804	07	DO3



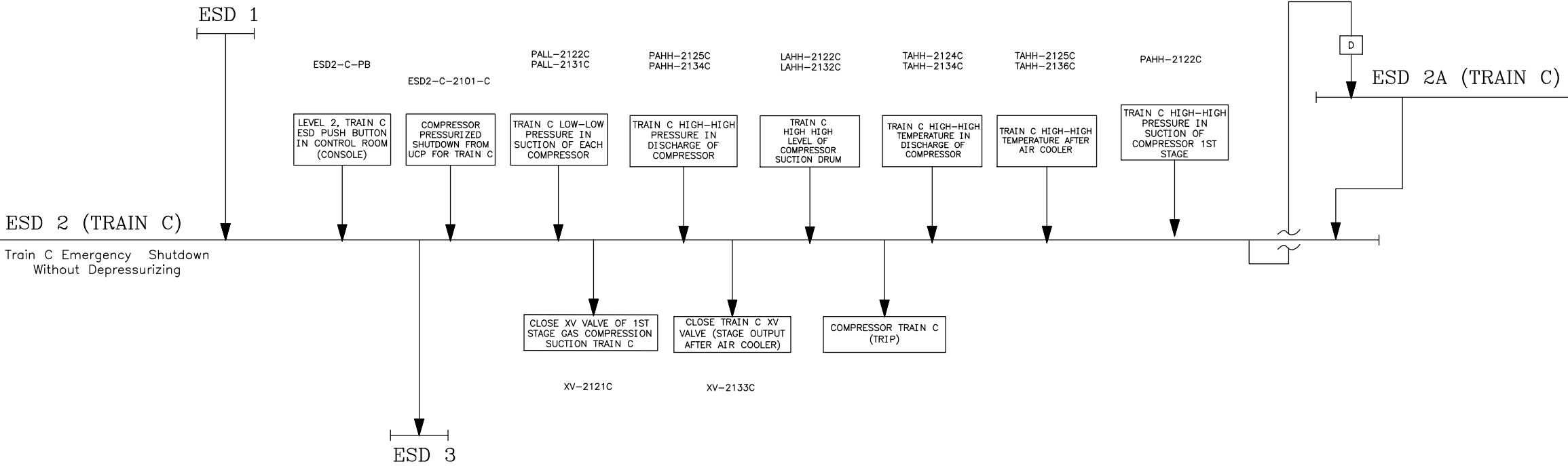
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REFERENCE DRAWING	DRG. No.
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KEY PLAN

DO3	FEB.2025	AFC	M.Aryafar	M.FAKHARIAN	S.PARHAMZADEPOUR	** **									
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REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.								
PROJECT NAME:							BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION				THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS				
PROJECT NO.:							971020								
EPC CONTRACTOR:			EPD/EPC CONTRACTOR (GC):				BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION								
  HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES			 PETROIRAN DEVELOPMENT COMPANY				DATE		SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.			
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ESD BLOCK DIAGRAM							APPROVED FOR CONSTRUCTION		BY:		DATE:				
SCALE	SIZE	DRAWING NO.			SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION		
N.T.S	A3	BK-GCS-PEDCO-120-PR-BD-0001			4 OF 7	D03	00-53-073-9184	F	2	J	708804	07	D03		



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LEGEND

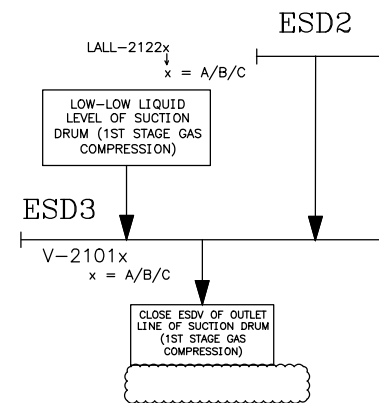
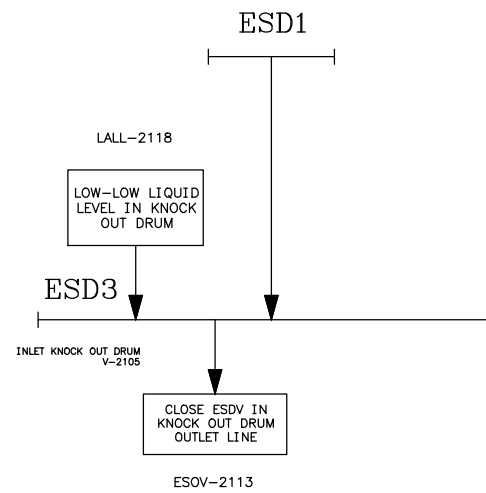
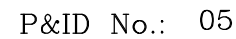
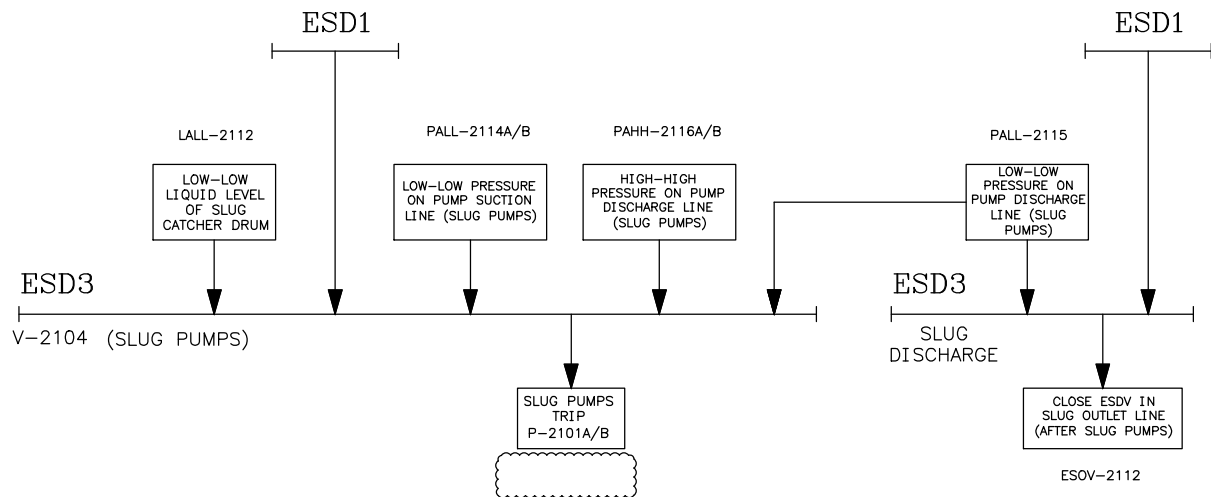
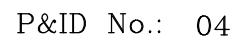
I.A.	Instrument Air
PA/GA	Public Address/General Alarm
K.O.	Knock-out Drum
H.H.	High High
L.L.	Low Low
P.B.	Push Button
ESDV	Emergency Shutdown Valve
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REFERENCE DRAWING	DRG. No.
*****	*****

KEY PLAN

D03	FEB.2025	APC	M.Aryafar	M.FAKHARIAN	S.PARHAMAZPOUR	** **							
D02	OCT.2023	APC	M.Aryafar	M.FAKHARIAN	S.PARHAMAZPOUR	** **	***	*****	** **	*** ****	** **	*** ****	
D01	DEC.2022	IPA	M.Aryafar	M.FAKHARIAN	M.MEHRSHAD	** **	REV.	DESCRIPTION	BY	DATE	BY	DATE	
D00	MAY.2022	IFC	M.Aryafar	M.FAKHARIAN	M.MEHRSHAD	** **			CHECKED		REV. APPR.		
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.						
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BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION													
PROJECT NO.: 971020													
EPC CONTRACTOR:			EPD/EPC CONTRACTOR (GC):				BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION						
 HURGAN ENERGY – DESIGN & INSPECTION COMPANIES			 PETROIRAN DEVELOPMENT COMPANY										
							DATE		SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.	
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ESD BLOCK DIAGRAM							APPROVED FOR CONSTRUCTION		BY:	DATE:			
SCALE	SIZE	DRAWING NO.			SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.T.S	A3	BK-GCS-PEDCO-120-PR-BD-0001			5 OF 7	D03	00-53-073-9184	F	2	J	708804	07	D03

(VENDOR TITLE BLOCK)**



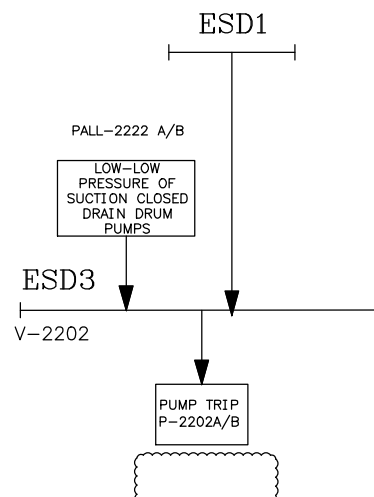
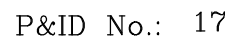
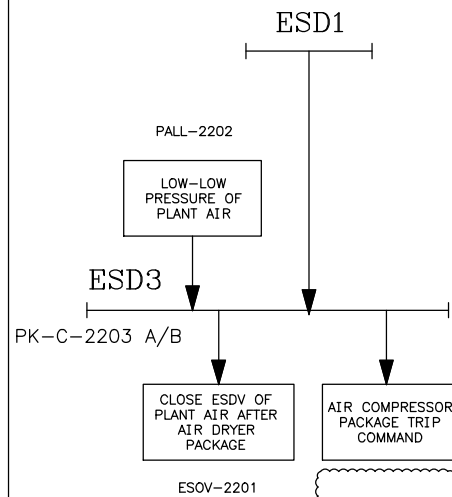
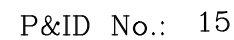
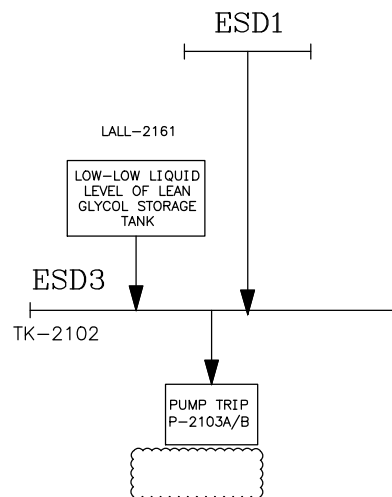
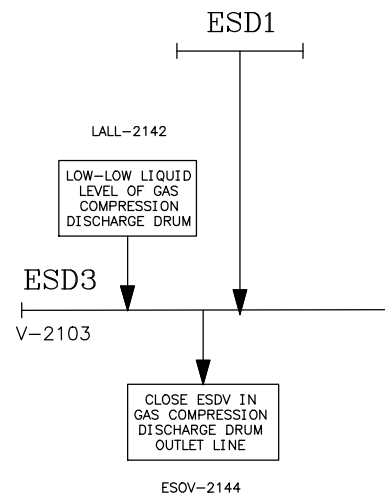
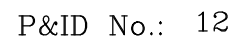
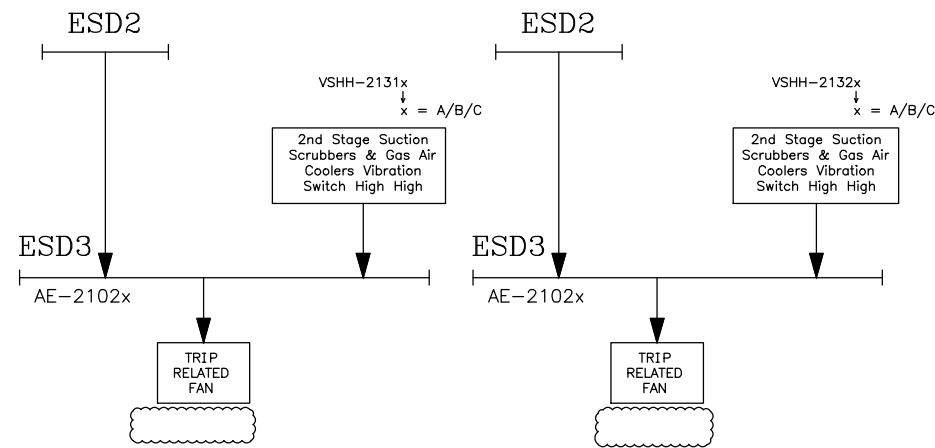
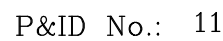
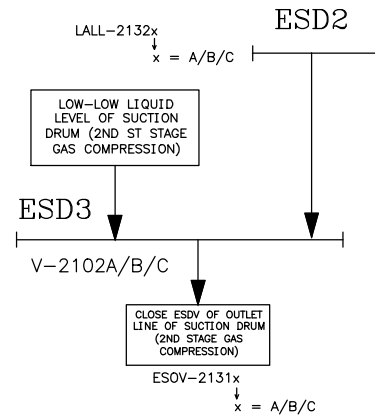
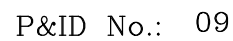
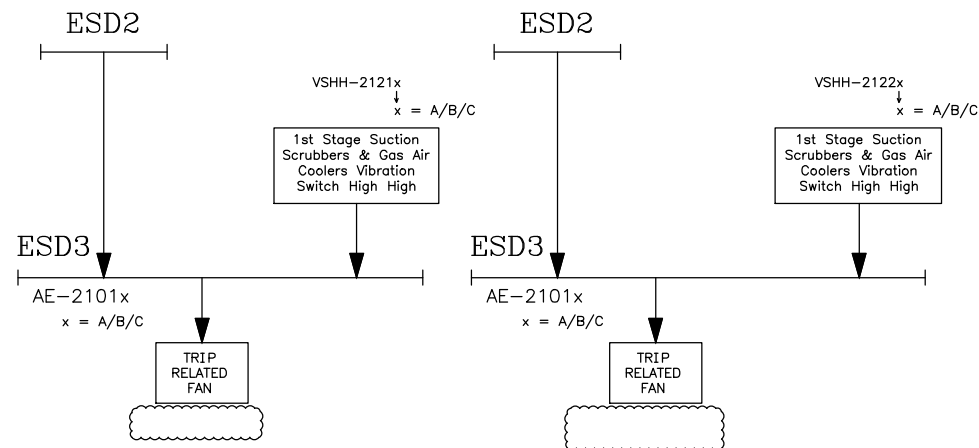
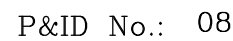
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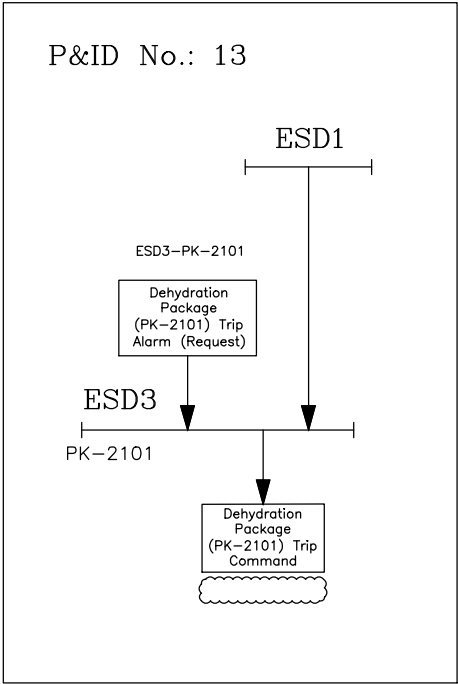
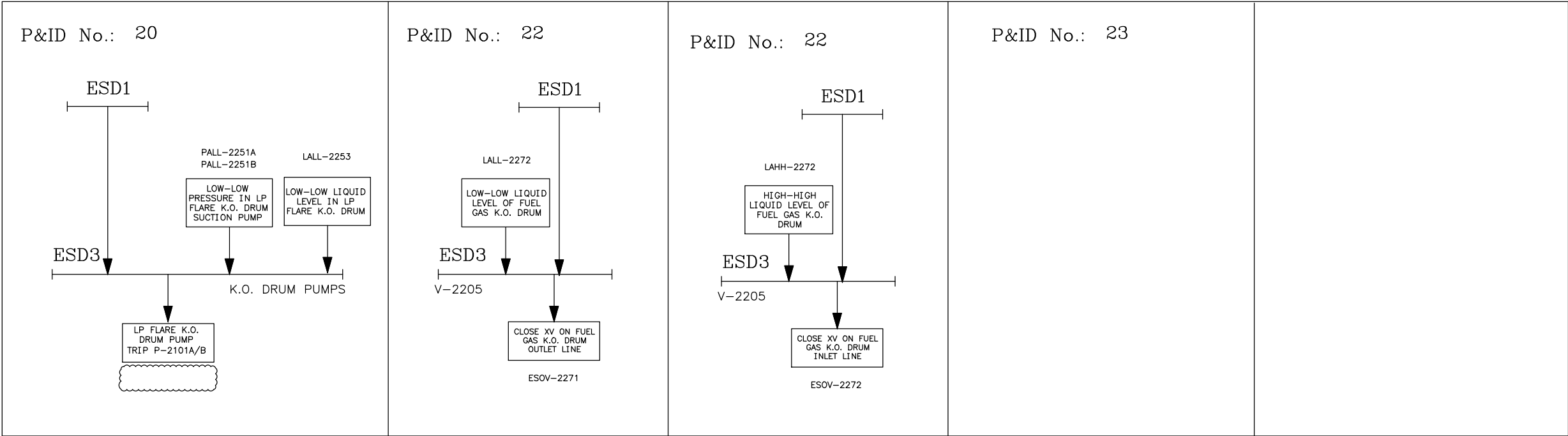
LEGEND

I.A.	Instrument Air
PA/GA	Public Address/General Alarm
K.O.	Knock-out Drum
H.H.	High High
L.L.	Low Low
P.B.	Push Button
ESDV	Emergency Shutdown Valve
BDV	Blow-Down Valve

REFERENCE DRAWING	DRG. No.
*****	*****

KEY PLAN

[illegible]



NOTES					

LEGEND	
I.A. PA/GA K.O. H.H. L.L. P.B. ESDV BDV	Instrument Air Public Address/General Alarm Knock-out Drum High High Low Low Push Button Emergency Shutdown Valve Blow-Down Valve
REFERENCE DRAWING	DRG. No.
*****	*****

KEY PLAN

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D03	FEB.2025	AFC	M.Arysfar	M.FAKHARIAN	S.PARHAMAZPOUR	** **							
D02	OCT.2023	AFC	M.Arysfar	M.FAKHARIAN	S.PARHAMAZPOUR	** **	***	*****	** **	*** ****	** **	*** ****	
D01	DEC.2022	IPA	M.Arysfar	M.FAKHARIAN	M.MEHRSHAD	** **	REV.	DESCRIPTION	BY	DATE	BY	DATE	
D00	MAY.2022	IFC	M.Arysfar	M.FAKHARIAN	M.MEHRSHAD	** **			CHECKED		REV. APPR.		
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	اسم و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.						
PROJECT NAME:							BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION						
PROJECT NO.:							971020						
EPC CONTRACTOR:			EPD/EPC CONTRACTOR (GC):				BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION						
 HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES			 PETROIRAN DEVELOPMENT COMPANY										
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DRAWING TITLE:							NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED						
ESD BLOCK DIAGRAM							APPROVED FOR CONSTRUCTION			BY:		DATE:	
SCALE	SIZE	DRAWING NO.			SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.T.S	A3	BK-GCS-PEDCO-120-PR-BD-0001			7 OF 7	D03	00-53-073-9184	F	2	J	708804	07	D03

(VENDOR TITLE BLOCK)**