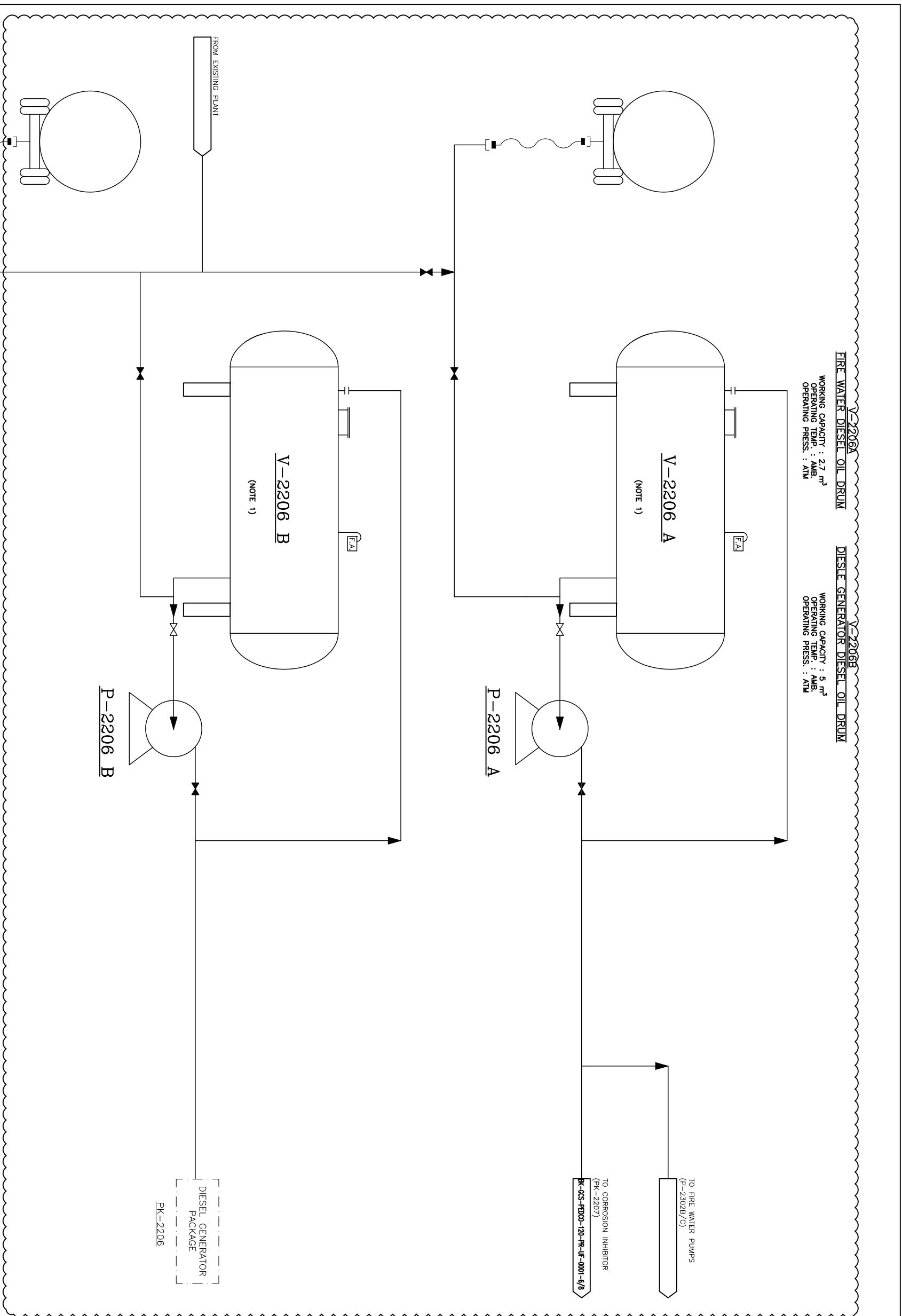


[illegible][illegible]

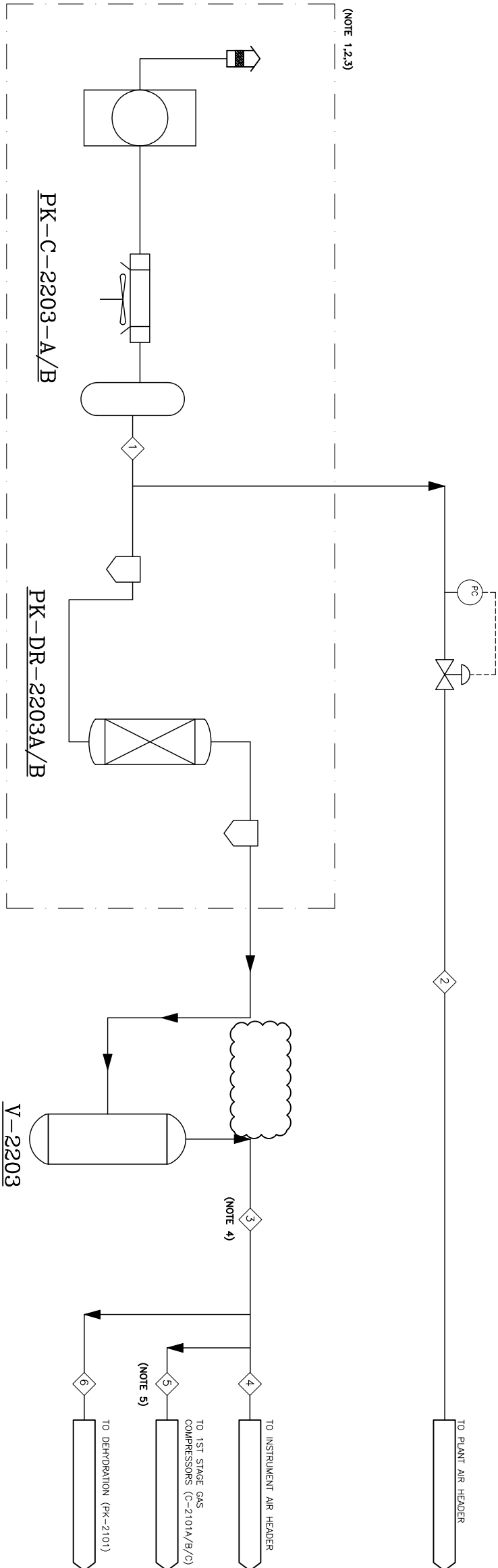
	KEY PLAN

			
HESSMAN ENERGY & DESIGN & INSPECTION COMPANIES		PETROBRÁS DEVELOPMENT COMPANY	
DRAWING TITLE: Utility Flow Diagrams (UPD) Diesel Generator (PK-2206)			
SCALE	SIZE	DRAWING NO.	SHEET NO.
NS	A3	BR-003-PRD00-130-PP-UT-0001	1 of 9
		DWG.	REV.
		D03	D03

NOTES

- 1- AIR PURITY SHOULD BE SPECIFIED BY PACKAGE VENDOR.
- 2- 23.9 mm^3/hr DRY AIR IS CONSIDERED (ASSUMED) FOR AIR DRYER REGENERATION.
- 3- MIN. PRESSURE OF INSTRUMENT AIR IS 4.2 BARG AND MAX. IS 8 BARG.
- 4- 30% OVER DESIGN IS CONSIDERED FOR INSTRUMENT AIR CONSUMPTION.
- 5- WILL BE FINALIZED AFTER RECEIVING GAS COMPRESSORS AIR CONSUMPTION VENDOR DATA.

LEGEND



KEY PL

REFERENCE DRAWING	DRG. No.
Symbol & Legend For PTD & PAD	BK-GCS-PEDCO-120-PR-P1-0001

						06-08
D08	AUG 2002	IFA	N.ATTYING	N.ATTYING	N.ATTYING	06-08
D02	MAR 2002	IFA	N.ATTYING	N.ATTYING	N.ATTYING	06-08
D01	DEC 2001	IFA	N.ATTYING	N.ATTYING	N.ATTYING	06-08
D00	OCT 2001	IPC	N.ATTYING	N.ATTYING	N.ATTYING	06-08
REV	DATE	P.O.L.S	PREP.	CHK.	APP.	AUT.

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

PROJECT NO.:	971020
--------------	--------

EPC CONTRACTOR:  **HIRSHMAN ENERGY - DESIGN & INSPECTION**
COMPANIES

EPC/IPC CONTRACTOR (GC):  **PETRO DEVELOPMENT COMPANY**
PECO

[illegible]

STREAM NO.	1	2	3	4	5	6
FLOW RATE (Nm ³ /hr)	173	30	143	45	21	20
PRESSURE (barg)	9	4.5	8	8	8	8
TEMPERATURE (°C)	65	60	65	65	65	65
DENSITY (kg/m ³)	10.7	5.7	9.3	9.3	9.3	9.3

PK-C-2203 A/B
AIR COMPRESSOR PACKAGE

NORMAL CAPACITY (DRY BASIS) : 173 Nm³/h
DIFFERENTIAL PRESS. : 9 bar

PK-DR-2203 A/B
AIR DRYER PACKAGE

OPERATING CAPACITY (DRY BASIS) : 143 Nm³/h
OPERATING TEMP. : 65 °C
OPERATING PRESS. : 9 barg

V-2203
INSTRUMENT AIR RECEIVER

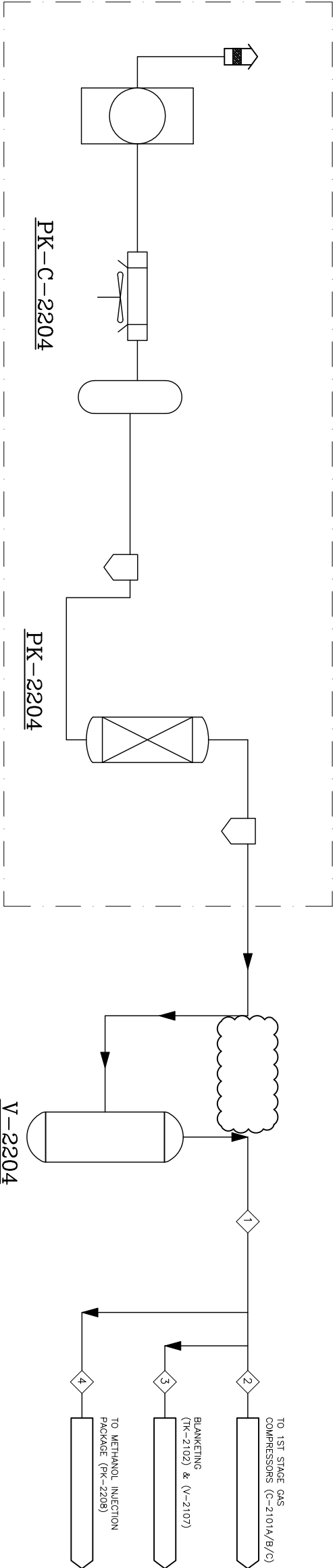
OPERATING TEMP. : 65 °C
OPERATING PRESS. : 8 barg

NOTES

PK-C-2204
AIR COMPRESSOR PACKAGE
NORMAL CAPACITY (DRY BASIS) : 113 Nm³/hr
OPERATING PRESS. : 9 barg

PK-G-2204
NITROGEN PACKAGE
NORMAL CAPACITY : 31 Nm³/hr
OPERATING PRESS. : 9 barg

V-2204
NITROGEN RECEIVER
OPERATING TEMP. : 60 °C
OPERATING PRESS. : 8 barg



STREAM NO.	1	2	3
FLOW RATE (Nm ³ /hr)	31	18	13
PRESSURE (barg)	8	8	8
TEMPERATURE (°C)	60	60	60
DENSITY (kg/m ³)	8.65	8.65	8.65

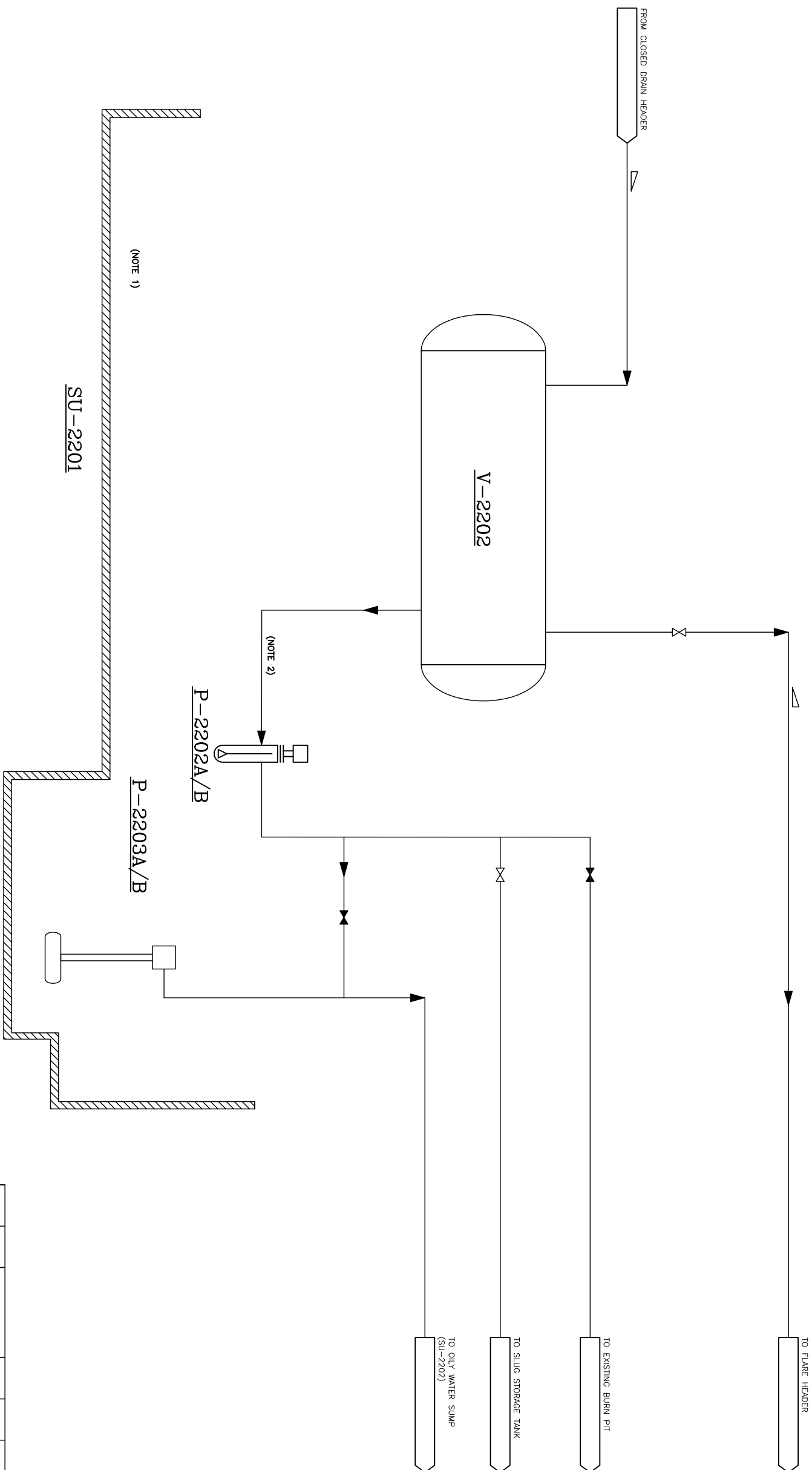
(VENDOR TITLE BLOCK)**				
SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.
NS	A3	BK-CGS-PBDCO-180-PR-UP-0001	3 OF 9	D03

DRAWING TITLE: Utility Flow Diagrams (UPD) Nitrogen (PK-2204)				
EPC CONTRACTOR: BIRGAN ENERGY - DESIGN & INSPECTION COMPANIES		EPC/PRC CONTRACTOR (GC): PETROBRAS DEVELOPMENT COMPANY		
DO3	AUG 2022	TPA	WAW/AB	WAW/AB
DO2	MAR 2022	TPA	WAW/AB	WAW/AB
DO1	DEC 2021	TPA	WAW/AB	WAW/AB
DO0	OCT 2021	TPC	WAW/AB	WAW/AB
REV.	DATE	P.O.I.S	PREP.	CHK.
PROJECT NAME: BINAQ OILFIELD DEVELOPMENT/SURFACE FACILITIES				
PROJECT NO.: 971020				
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED				
BIDDER REF. LOCATION SIZE CLASS SERIAL NO. SHEET REVISION				
DO3-075-0184 7 2 A 706778 3 OF 9 D03				

REFERENCE DRAWING	DRG. No.
Symbol & Legend For PFD & PAD	BK-CGS-PBDCO-180-PR-P1-0001

KEY PLAN

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NOTES

1- FLARE K.O. DRUM, CLOSED DRAIN AND RELATED PUMPS ARE IN COMMON PIT.

2- PHYSICAL CONDITION OF FLUID IS
- DENSITY = 980 kg/m^3

$$-H_{2S}(\text{max.}) = 861 \text{ ppm}$$

V-2202

CLOSED DRAIN DRUM

WORKING CAPACITY : 38 m³
OPERATING TEMP. : AMB.
OPERATING PRESS. : ATM

SU-2201

LP FLARE K.O. DRUM AND CLOSED DRAIN
DRUM SUMP

P-2202 A/B
CLOSED DRAIN DRUM PUMPS

WORKING CAPACITY : 3 m³/hr
DIFFERENTIAL PRESS. : 7 bar

P-2203 A/B
SUMP PUMPS

WORKING CAPACITY : 5 m³/hr
DIFFERENTIAL PRESS. : 2 bar

NOTES	
1- FLARE K.O. DRUM, CLOSED DRAIN AND RELATED PUMPS ARE IN COMMON PIT.	
2- PHYSICAL CONDITION OF FLUID IS:	
- DENSITY = 980 kg/m ³	
- VISCOSITY = 270 cP	
- H ₂ S (max.) = 861 ppm	

REFERENCE DRAWING	DWG. No.
Symbol & Legend For PFD & P&ID	BR-GCS-FRDOO-120-PF-P1-0001

12022ND

KEY PLAN	
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REV.	DATE	P.O.L.S	PROG.	CHK.	APP.	AUT.
D03	AUG.2002	IFA	KAYMAK	KAYMAK	KAYMAK	00.00
D02	MAR.2002	IFA	KAYMAK	KAYMAK	KAYMAK	00.00
D01	DEC.2001	IFA	KAYMAK	KAYMAK	KAYMAK	00.00
D00	OCT.2001	IPC	KAYMAK	KAYMAK	KAYMAK	00.00

PROJECT NAME:	BNAK OUTLET DEVELOPMENT/SURFACE FACILITIES
PROJECT NO.:	971020
	 THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREON ARE THE SOLE PROPERTY OF N.S.O.C./ FIELDS

EPC CONTRACTOR:  ENERGIAN ENERGY SERVICES ENERGIAN ENERGY - DESIGN & INSPECTION COMPANIES	EPC CONTRACTOR (GC):  PETROBRÁS DEVELOPMENT COMPANY	BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION			
	DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.

DRAWING TITLE: Utility Flow Diagrams (UFD) CLOSED DRAIN SYSTEM									
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED									
APPROVED FOR CONSTRUCTION					BY: DATE:				
DRAWING NO.			SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.
SCALE	SIZE								SHEET
NS	A3	HK-003-FR003-150-PR-UF-0001	4 OF 9	D03	003-079-0164	F	2	A	004779
									4 OF 9
									D03
(RECORD TITLE BLOCK)*									

PK-2207
CORROSION INHIBITOR PACKAGE

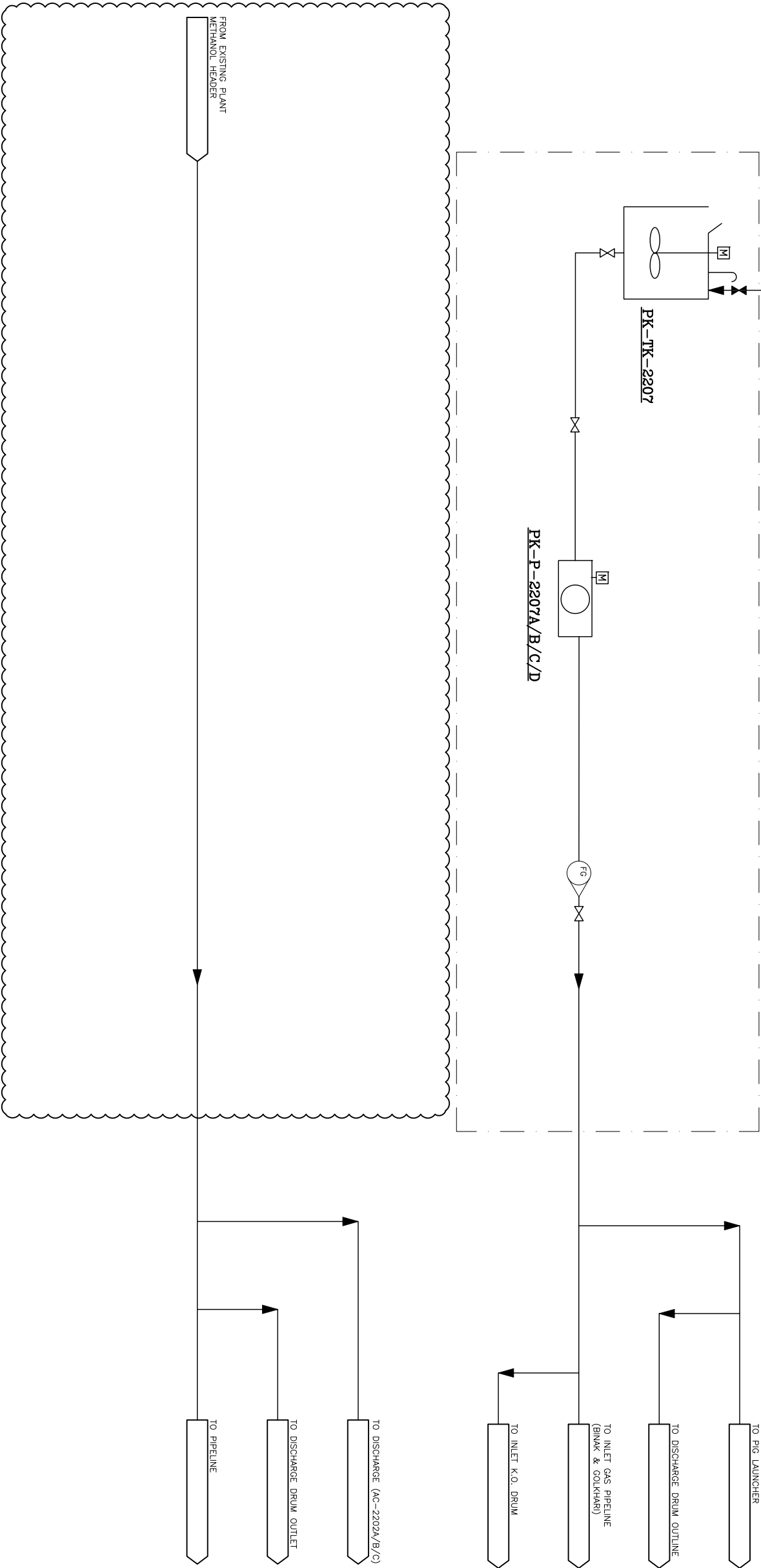
PK-TK-2207
CORROSION INHIBITOR TANK
WORKING CAPACITY : 0.8 m³
OPERATING TEMP. : AMB.
OPERATING PRESS. : ATM

FROM DIESEL PUMP (P-2206)
BK-CGS-FEDCO-120-PR-UP-001-1/5

PK-2207

PK-TK-2207

PK-P-2207A/B/C/D



PK-P-2207A/B/C/D
CORROSION INHIBITOR PUMP

HIGH PRESS. WORKING FLOWRATE : 2.27 llt/hr
HIGH PRESS. DISCHARGE PRESS. : 62 barg
LOW PRESS. WORKING FLOWRATE : 2.28 llt/hr
LOW PRESS. DISCHARGE PRESS. : 3 barg

NOTES

LEGEND

REFERENCE DRAWING	DWG. No.
Symbol & Legend For PFD & PAD	BK-CGS-FEDCO-120-PR-PI-001

KEY PLAN

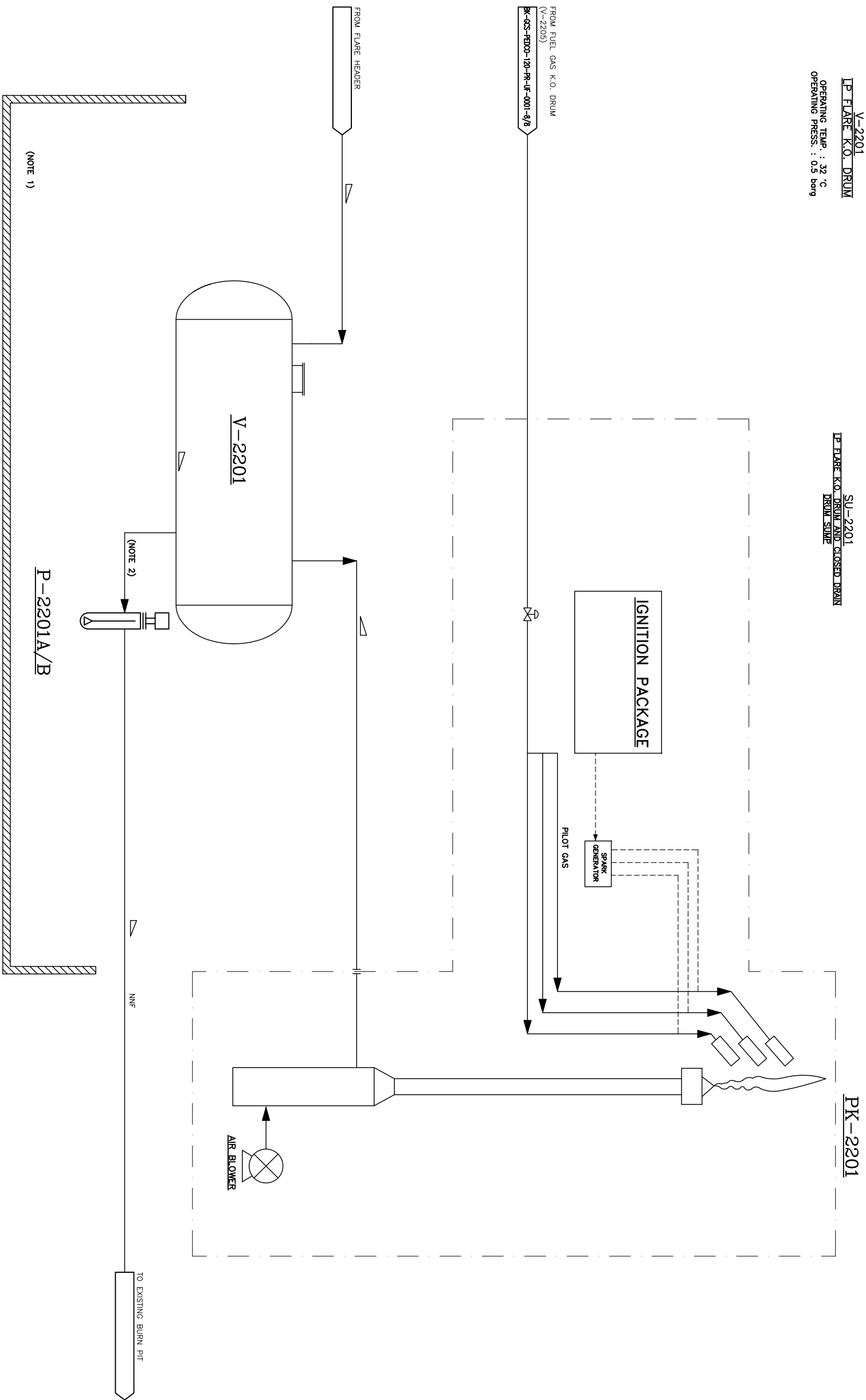
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DO2	MAR.2022	TPA	MAN/AN	MAN/AN	MAN/AN	00.00	*****			
DO1	DEC.2021	TPA	MAN/AN	MAN/AN	MAN/AN	00.00	REV.	DESCRIPTION	BY	DATE
DO0	OCT.2021	TPC	MAN/AN	MAN/AN	MAN/AN	00.00	REV.	DESCRIPTION	CHECKED	DATE
REV.	DATE	P.O.L.S	PREP.	CHK.	APP.	AUT.				
PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES										
PROJECT NO.: 971020										
EPC CONTRACTOR:			EPC/TEC CONTRACTOR (GC):							
BIRGAN ENERGY - DESIGN & INSPECTION			PETROBRAS DEVELOPMENT COMPANY							
DRAWING TITLE: Utility Flow Diagrams (UPD)			NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED							
Corrosion Inhibitor (PK-2207) and Methanol Injection (PK-2208)			APPROVED FOR CONSTRUCTION BY: DATE:							
SCALE			DRAWING NO.		SHEET NO.		REV.		DATE:	
NS			43		6 OF 9		DO3		DO3	

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(VENDOR TITLE BLOCK)**

NOTES

- 1- FLARE K.O. DRUM, CLOSED DRAIN AND RELATED PUMPS ARE IN COMMON PIT.
- 2- PHYSICAL CONDITION OF FLUID IS:
- DENSITY = 980 kg/m³
 - VISCOSITY = 0.46 cP



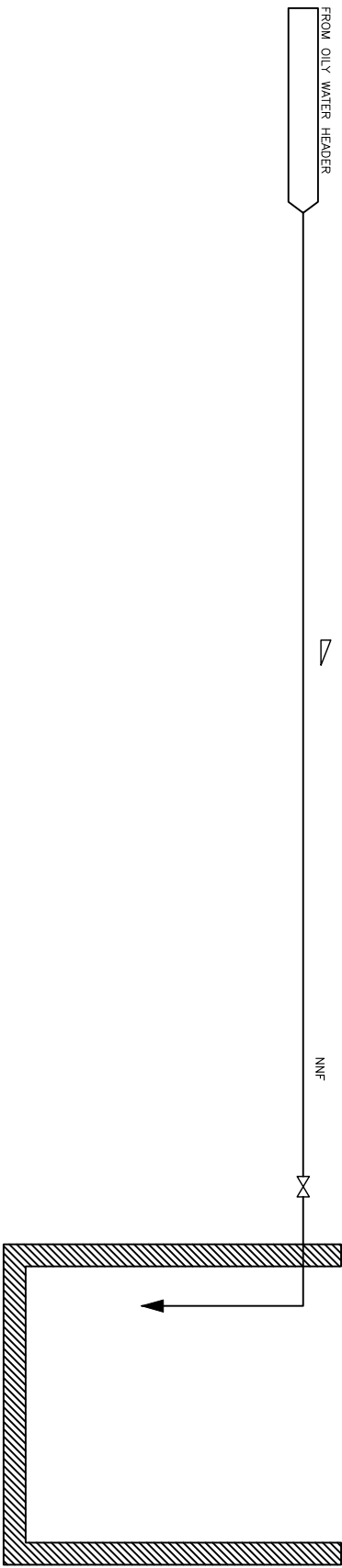
LEGEND	
REFERENCE DRAWING	DRG. NO.
Symbol & Legend For PFD & PAD	BR-GCS-PBDOO-180-PF-P1-0001

[illegible]

DRAWING TITLE:	NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED											
	APPROVED FOR CONSTRUCTION BY: DATE:											
Utility Flow Diagrams (UFD) IP Plate Package (PR-2201)												
(VENDOR TITLE BLOCK)**												
SCALE	SIZE	DRAWING NO.		SHEET NO.	REV.	BIDDIER REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
NS	A3	BR-003-PR000-100-PR-17-0001		7 OF 9	D03	D03-075-0104	F	2	A	704778	7 OF 9	D03

NOTES

SU-2202
OILY WATER SUMP
WORKING CAPACITY : 26.4 m³



SU-2202

[illegible]