



1. ALL SP ITEM, THIS IN POINT & INSTRUMENT TAG NUMBERS, EXCEPT LINE NUMBERS ON THIS DRAWING SHALL BE PREFIXED BY PROJECT BREAK DOWN ID CODE (PP01) AND SYSTEM NO. 361, UNLESS SPECIFIED OTHERWISE.
2. ALL PIPING/PIPELINE OF THIS DRAWING WILL BE FOR OUR SERVICE.
3. UTILITIES FOR PV-1001/2001/3001 TO BE SUPPLIED BY DS-1.
4. DELETED.
5. AS PER COMPANY'S NEW ADDITIONAL REQUIREMENT OPERATOR SHALL LINE UP MAXIMUM 2 NOS. OF TRAINS FROM DS-1, DS-3 OR DS-1 & DS-3. OTHER THREE (3) TRAINS TO BE KEPT ISOLATED.
6. ON HIGH PRESSURE IN THE PIPELINE, THE PRESSURE CONTROLLER OF THE TRAIN SEPARATORS SHALL BE OVERRIDDEN, VIA A LOW CONTROL SIGNAL SELECTOR, BY A PIPELINE HIGH PRESSURE PROTECTIVE CONTROLLER.
7. CONTROL VALVES PV-1001/2001/3001 SHALL BE LOCATED NEAR THE TIE-IN POINTS.
8. REFER LEGEND SHEET NO. 100478CP-N-PG-PP01-FR-PID-0001 SHEET 002 FOR INJECTION QUILITY DETAILS.
9. VENTS TO BE LOCATED AT HIGH POINT AND DRAINS AT LOW POINT.
10. DELETED.
11. COSASOO TYPE FITTING WITH INBUILT NRV. CHEMICAL INJECTION FLOW RATE TO BE MANUALLY ADJUSTED BASED ON GAS FLOW MEASURED VIA FLOW INSTRUMENT PROVIDED AT EACH TRAIN. INJECTION FLOW TO BE STOPPED WHEN FUEL GAS FLOW FROM RESPECTIVE TRAIN IS STOPPED.
12. DELETED.
13. SACRIFICIAL SPOOL PIECE OF 100 LENGTH AT DOWN STREAM OF INJECTION POINT SHALL BE MADE OF LTCS + 6 mm CA. THE SPOOL SHALL BE INSPECTED FOR CORROSION THROUGH ULTRA SONIC TESTING.
14. CORROSION INHIBITION FLOW TO THE PARTICULAR TRAIN WILL BE ADJUSTED BASED ON FLOW FROM THAT TRAIN.
15. DELETED.
16. SET POINT OF DEGASSING STATION DS-1 1ST STAGE SEPARATOR PRESSURE WILL BE INPUT/CHANGED UNDER PASSWORD CONTROL)
BY ROO OPERATIONS. EPP CONTROL ROOM OPERATOR CAN INPUT/CHANGE SET POINT OF PIPELINE HIGH PRESSURE PROTECTIVE CONTROLLER OVERRIDE SETPOINT AS LONG AS SET POINT ENTERED IS NOT LOWER THAN UPSTREAM 1ST STAGE SEPARATOR PRESSURE CONTROLLER. ANY SET POINTS REQUIRE CHANGING BY EITHER PARTY WILL BE CARRIED OUT UNDER A MANAGEMENT OF CHANGE PROCESS UNDER PASSWORD CONTROL.
17. PV-1001 AND 201-PCV-0102 ARE USED TO CONTROL TRAIN-1 1ST STAGE SEPARATOR PRESSURE (PIC-1001) VIA SPLIT RANGE ARRANGEMENT. AS PRESSURE IN THE SEPARATOR INCREASES, PV-1001 WILL BE OPENED FIRST GIVING PRIORITY GAS FLOW TO EPP AND FINALLY 201-PCV-0102 ON BGC/FLARE LINE WILL BE OPENED.
18. PV-2001 AND 202-PCV-0102 ARE USED TO CONTROL TRAIN-2 1ST STAGE SEPARATOR PRESSURE (PIC-2001) VIA SPLIT RANGE ARRANGEMENT. AS PRESSURE IN THE SEPARATOR INCREASES, PV-2001 WILL BE OPENED FIRST GIVING PRIORITY GAS FLOW TO EPP AND FINALLY 202-PCV-0102 ON BGC/FLARE LINE WILL BE OPENED.
19. PV-3001 AND 203-PCV-0102 ARE USED TO CONTROL TRAIN-3 1ST STAGE SEPARATOR PRESSURE (PIC-3001) VIA SPLIT RANGE ARRANGEMENT. AS PRESSURE IN THE SEPARATOR INCREASES, PV-3001 WILL BE OPENED FIRST GIVING PRIORITY GAS FLOW TO EPP AND FINALLY 203-PCV-0102 ON BGC/FLARE LINE WILL BE OPENED.
20. REMOVABLE SPOOL IS PROVIDED FOR FUTURE DS-1 KOD CONNECTION. REMOVABLE SPOOL LENGTH TO BE SUFFICIENT TO INCLUDE TWO TEE CONNECTIONS AND ONE ISOLATION VALVE.
21. REMOVABLE SPOOL TO BE PLACED NEAR THE PROPOSED NEW KOD LOCATION.
22. EXACT SPLIT RANGE SHALL BE DECIDED BASED ON CV SELECTED FOR CONTROL VALVE TO BGC/FLARE. ICSS VENDOR TO KEEP PROVISION FOR ADJUSTMENT OF SPLIT RANGE.
23. CONTROL OF NEW PCV STATION (SPLIT RANGE CONTROLLER) SHALL BE IMPLEMENTED IN CONTRACTOR SUPPLIED RTU/HYBRID SYSTEM. HOWEVER PCV WILL BE UNDER CONTROL OF OPERATIONS. ALL ALARMS, TRIPS AND SET POINT WILL BE AGREED BETWEEN ROO AND EPP OPERATIONS.
24. FOR DETAILS PERTAINING TO EPP AND ROO INTERFACES IN TERMS OF ENGINEERING, OPERATIONS, CONTROL, MAINTENANCE AND COMMISSIONING REFER FINAL AGREED POINTS WITH COMPANY IN DOC. NO. 100478CP-CN-009.
25. LINES FROM THE TIE-INS UP TO THE REMOVABLE SPOOL FOR FUTURE KO DRAIN ARE SUBJECTED TO TWO PHASE FLOW. PIPING TO PROVIDE ADEQUATE SUPPORTS.

1. FOR GENERAL NOTES, LEGENDS AND SYMBOLS REFER DRAWING NO.
100478CP-N-PG-PP01-PR-PID-0001 SHEETS 001 TO 017.

2. FOR ESD CAUSE & EFFECT CHART FOR PROCESS AREA REFER DOCUMENT NO.
100478CP-N-PG-PP01-PR-DCE-0001.

DX	VII	AB	SO
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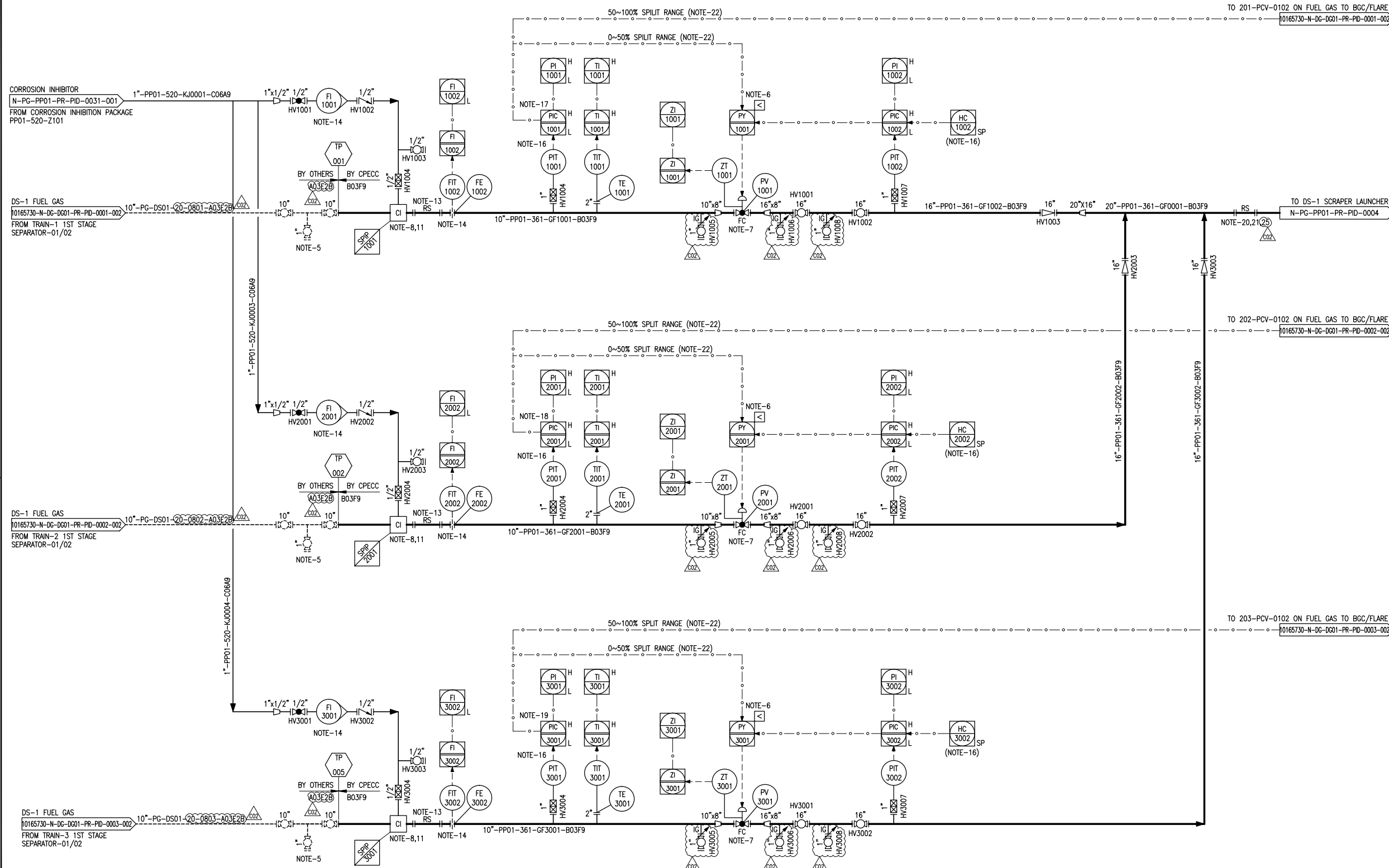


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DRAWING TITLE:

PROJECT NO.	100478CP	SCALE:	NONE	DWG SIZE:	A1
DRAWING NUMBER:				SHT. NO.:	REV.
100478CP-N-PG-PP01-PR-PID-0002-001				01/01	C02

CAD FILENAME: 1004780P-N-PG-P801-P8-PID-0002-001-002.DR



NOTES:

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- ALL PIPING/PIPELINE OF THIS DRAWING WILL BE FOR SOUR SERVICE.
- UTILITIES FOR PV-1001/2001/3001 TO BE SUPPLIED BY DS-1.
- DELETED.
- AS PER COMPANY'S NEW ADDITIONAL REQUIREMENT OPERATOR SHALL LINE UP MAXIMUM 2 NOS. OF TRAINS FROM DS-1, DS-3 OR DS-1 & DS-3. OTHER THREE (3) TRAINS TO BE KEPT ISOLATED.
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- CONTROL VALVES PV-1001/2001/3001 SHALL BE LOCATED NEAR THE TIE-IN POINTS.
- REFER LEGEND SHEET NO. 100478CP-N-PG-PP01-PR-PID-0001 SHEET 002 FOR INJECTION QUILL DETAILS.
- VENTS TO BE LOCATED AT HIGH POINT AND DRAINS AT LOW POINT.
- DELETED.
- COSASCO TYPE FITTING WITH INBUILT NRV. CHEMICAL INJECTION FLOW RATE TO BE MANUALLY ADJUSTED BASED ON GAS FLOW MEASURED VIA FLOW INSTRUMENT PROVIDED AT EACH TRAIN. INJECTION FLOW TO BE STOPPED WHEN FUEL GAS FLOW FROM RESPECTIVE TRAIN IS STOPPED.
- DELETED.
- SACRIFICIAL SPOOL PIECE OF 100 LENGTH AT DOWN STREAM OF INJECTION POINT SHALL BE MADE OF LTCS + 6 mm CA. THE SPOOL SHALL BE INSPECTED FOR CORROSION THROUGH ULTRA SONIC TESTING.
- CORROSION INHIBITION FLOW TO THE PARTICULAR TRAIN WILL BE ADJUSTED BASED ON FLOW FROM THAT TRAIN.
- DELETED.
- SET POINT OF DEGASSING STATION DS-1 1ST STAGE SEPARATOR PRESSURE WILL BE INPUT/CHANGED (UNDER PASSWORD CONTROL) BY ROO OPERATIONS. EPP CONTROL ROOM OPERATOR CAN INPUT/CHANGE SET POINT OF PIPELINE HIGH PRESSURE PROTECTIVE CONTROLLER OVERRIDE SETPOINT AS LONG AS SET POINT ENTERED IS NOT LOWER THAN UPSTREAM 1ST STAGE SEPARATOR PRESSURE CONTROLLER. ANY SET POINTS REQUIRE CHANGING BY EITHER PARTY WILL BE CARRIED OUT UNDER A MANAGEMENT OF CHANGE PROCESS UNDER PASSWORD CONTROL.
- PV-1001 AND 201-PCV-0102 ARE USED TO CONTROL TRAIN-1 1ST STAGE SEPARATOR PRESSURE (PIC-1001) VIA SPLIT RANGE ARRANGEMENT. AS PRESSURE IN THE SEPARATOR INCREASES, PV-1001 WILL BE OPENED FIRST GIVING PRIORITY GAS FLOW TO EPP AND FINALLY 201-PCV-0102 ON BGC/FLARE LINE WILL BE OPENED.
- PV-2001 AND 202-PCV-0102 ARE USED TO CONTROL TRAIN-2 1ST STAGE SEPARATOR PRESSURE (PIC-2001) VIA SPLIT RANGE ARRANGEMENT. AS PRESSURE IN THE SEPARATOR INCREASES, PV-2001 WILL BE OPENED FIRST GIVING PRIORITY GAS FLOW TO EPP AND FINALLY 202-PCV-0102 ON BGC/FLARE LINE WILL BE OPENED.
- PV-3001 AND 203-PCV-0102 ARE USED TO CONTROL TRAIN-3 1ST STAGE SEPARATOR PRESSURE (PIC-3001) VIA SPLIT RANGE ARRANGEMENT. AS PRESSURE IN THE SEPARATOR INCREASES, PV-3001 WILL BE OPENED FIRST GIVING PRIORITY GAS FLOW TO EPP AND FINALLY 203-PCV-0102 ON BGC/FLARE LINE WILL BE OPENED.
- REMOVABLE SPOOL IS PROVIDED FOR FUTURE DS-1 KOD CONNECTION. REMOVABLE SPOOL LENGTH TO BE SUFFICIENT TO INCLUDE TWO TEE CONNECTIONS AND ONE ISOLATION VALVE.
- REMOVABLE SPOOL TO BE PLACED NEAR THE PROPOSED NEW KOD LOCATION.
- EXACT SPLIT RANGE SHALL BE DECIDED BASED ON CY SELECTED FOR CONTROL VALVE TO BGC/FLARE. ICSS VENDOR TO KEEP PROVISION FOR ADJUSTMENT OF SPLIT RANGE.
- CONTROL OF NEW PCV STATION (SPLIT RANGE CONTROLLER) SHALL BE IMPLEMENTED IN CONTRACTOR SUPPLIED RTU/HYBRID SYSTEM. HOWEVER PCV WILL BE UNDER CONTROL OF ROO OPERATIONS. ALL ALARMS, TRIPS AND SET POINT WILL BE AGREED BETWEEN ROO AND EPP OPERATIONS.
- FOR DETAILS PERTAINING TO EPP AND ROO INTERFACES IN TERMS OF ENGINEERING, OPERATIONS, CONTROL, MAINTENANCE AND COMMISSIONING REFER FINAL AGREED POINTS WITH COMPANY IN DOC. NO. 100478CP-CAN-009.
- LINES FROM THE TIE-INS UPTO THE REMOVABLE SPOOL FOR FUTURE KO DRUM ARE SUBJECT TO TWO PHASE FLOW. PIPING TO PROVIDE ADEQUATE SUPPORTS.

GENERAL NOTES:

- FOR GENERAL NOTES, LEGENDS AND SYMBOLS REFER DRAWING NO. 100478CP-N-PG-PP01-PR-PID-0001 SHEETS 001 TO 017.
- FOR ESD CAUSE & EFFECT CHART FOR PROCESS AREA REFER DOCUMENT NO. 100478CP-N-PG-PP01-PR-DCE-0001.

CO2	01.09.16	ISSUED FOR CONSTRUCTION	DX	VU	AB	SQ
CO1	01.06.16	ISSUED FOR CONSTRUCTION	DX	VU	AB	SQ
DO1	28.02.16	ISSUED FOR USE (DD)	DX	DM/VU	AB	SQ
HO1	07.01.16	ISSUED FOR HAZOP (DD)	DX	DM/VU	TT	SQ
GO1	06.10.15	ISSUED FOR REVIEW (DD)	DX	DM/VU	TT	SQ
BO2	06.08.15	APPROVED FOR COMPLETION OF FEED	DX	HM/SI	TT	SQ
BO1	26.03.15	ISSUED FOR FEED HAZOP	DX	SI/RS	TT	SQ
AO1	19.02.15	ISSUED FOR COMPANY REVIEW	DX	HM/RS	TT	JF
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D	



EARLY POWER PLANT
RUMAILA OIL FIELD
CONTRACT NO. 100478



中国石油工程建设公司
CHINA PETROLEUM ENGINEERING & CONSTRUCTION CORP.



DRAWING TITLE:
PIPING AND INSTRUMENTATION DIAGRAM
DS-1 NEW PCV STATION

PROJECT NO.	100478CP	SCALE:	NONE	DWG SIZE:	A1
DRAWING NUMBER:	100478CP-N-PG-PP01-PR-PID-0002-001	SHT. NO.:	REV.		