



**Cochin Pipeline**

**Cochin B Station DRA**

**Controls Description of Operation**

 **Change Record**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Author** | **Version** | **Change Reference** |
| 3/13/2014 | Eric Setka | 1.0 | Original |
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# Tank A / Tank B

|  |  |
| --- | --- |
| ID | 1 |
| Function | Tank Level and Mixer Monitoring |
| Instrumentation |
| Tanks A/B* Level Transmitter (LTA/LTB)
* Mixers A/B
 |
| PLC Control Strategy  |
| Control: Start/Stop DRA |
| Local Operator Interface |
| Operator Interface Terminal (OIT): * Local SCADA - PC
	+ Display:
		- Level Transmitter A
		- Level Transmitter B
		- Tank Mixer A on/off
		- Tank Mixer B on/off
 |
| SCADA Functions |
| Display:* + - Level Transmitter A
		- Level Transmitter B
		- Tank Mixer A on/off
		- Tank Mixer B on/off
 |
| NOTES: |
|  |

# Charge Pumps

|  |  |
| --- | --- |
| ID | 2 |
| Function | Charge Pump Monitoring |
| Instrumentation |
| Charge pump A / Charge Pump B* Charge pump A (PRV PA)
* Charge pump B (PRV PB)
 |
| PLC Control Strategy |
| Control: Start/Stop DRA |
| Local Control Panel  |
| Operator Interface Terminal (OIT): * Local SCADA - PC
	+ Display
		- Run status on/off
	+ Control
		- N/A
 |
| SCADA Functions |
| Display* Charge pump A run status on/off
* Charge pump B run status on/off

Control* Start/Stop DRA
 |
| NOTES: |
|  |

# Tank A / B Injection Valves

|  |  |
| --- | --- |
| ID | 3 |
| Function | Valve Monitoring |
| Instrumentation |
| Tanks A/B Injection Valves* MOV A
* MOV B
 |
| PLC Control Strategy |
| Control: DRA Start/Stop |
| Local Control Panel  |
| Operator Interface Terminal (OIT): * Local SCADA - PC
	+ Display
		- MOV A Open / Close
		- MOV B Open / Close
	+ Control
		- N/A
 |
| SCADA Functions |
| Display* MOV A Open / Closed
* MOV B Open / Closed

Control* DRA Start/Stop
 |
| NOTES: |
| 1. |

# DRA Discharge Pressure

|  |  |
| --- | --- |
| ID | 4 |
| Function | DRA release valve monitoring |
| Instrumentation |
| DRA Discharge Pressure* MOV D
 |
| PLC Control Strategy  |
| Control: Start/Stop DRA |
| Local Operator Interface |
| Operator Interface Terminal (OIT): * Local SCADA - PC
	+ Display: MOV D Open/Close
	+ Control: N/A
 |
| SCADA Functions |
| Display:* MOV D Open/Close

Control:* DRA Start/Stop
 |
| NOTES: |
| 1. |

# Injection Pump

|  |  |
| --- | --- |
| ID | 7 |
| Function | DRA Injection  |
| Instrumentation |
| Injection Pump (P3)* Injection pump
 |
| PLC Control Strategy |
| Control: Start/Stop DRA |
| Local Control Panel  |
| Operator Interface Terminal (OIT): * Local SCADA - PC
	+ Display
		- Injection pump on/off
 |
| SCADA Functions |
| Display* Injection pump on/off

Control* Start/Stop DRA
 |
| NOTES: |
|  |

# Local Discharge Pressure

|  |  |
| --- | --- |
| ID | 8 |
| Function | Pressure monitoring |
| Instrumentation |
| Pl2* Indicates pressure between the injection pump and MOV D
 |
| PLC Control Strategy  |
| Control: N/A |
| Local Operator Interface |
| Operator Interface Terminal (OIT): * Local SCADA - PC
	+ Display:
		- Displays pressure in PSI
	+ Control: N/A
 |
| SCADA Functions |
| Display:* Displays pressure in PSI

Control: N/A |
| NOTES: |
|  |