

- | NO  | DESCRIPTION                  |
|-----|------------------------------|
| 1C  | CARGO TANK VALVE             |
| 5C  | HEADER VALVE                 |
| 8C  | RELIEF VALVE/STACK           |
| 11C | BLEED OFF VALVE              |
| 19C | CARGO HEADER                 |
| 26C | DRAIN (BLEED) VALVE          |
| 30C | CARGO PIPELINE               |
| 36C | PRESSURE GAUGE               |
| 37C | CARGO DROP                   |
| (A) | AIR ACTUATED AUTOMATIC VALVE |
| —   | ABOVE DECK PIPING            |

NOTE 1: P/V VALVES VENTED TO ATMOSPHERE

NOTE 2: CONDUIT BELOW GRATE FOR EMS.

INGALLS IRON – EX: N/A

REV.	DATE	BY	CHK	APP	REVISION DESCRIPTION
1	01/10/23	MRV	DDA	DAR	REVISED PER CLIENT COMMENTS
0	03/08/13	DCB	DDA		FOR REVIEW

**KIRBY INLAND MARINE** 

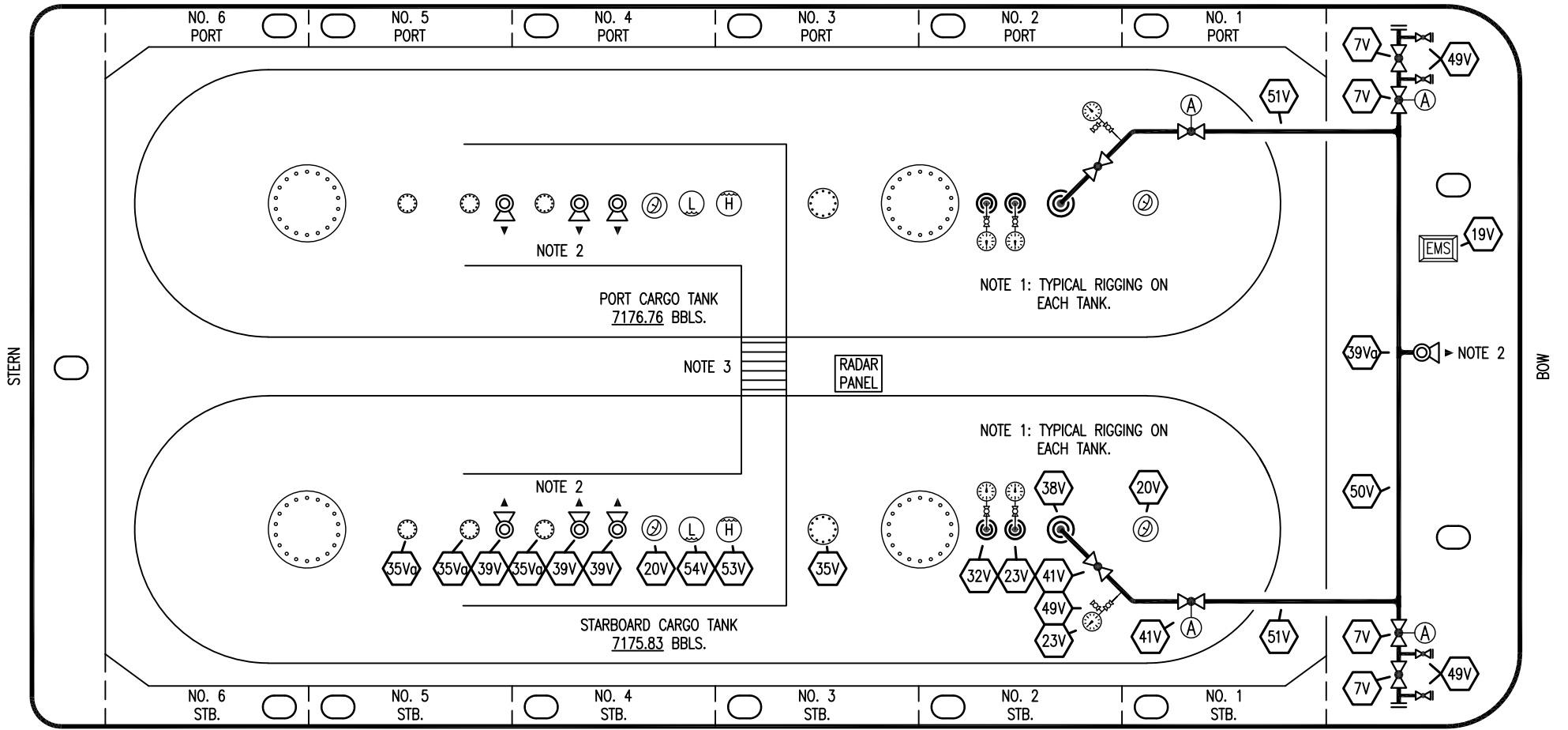
**CARGO  
PIPING FLOW DIAGRAM**

SCALE: NONE  
PAGE: 1 OF 3

**USL 129**

REV. **1**

PORT



STARBOARD

- |           |                               |           |                              |
|-----------|-------------------------------|-----------|------------------------------|
| <b>NO</b> | <b>DESCRIPTION</b>            | <b>NO</b> | <b>DESCRIPTION</b>           |
| 7V        | HEADER VALVE                  | 41V       | VAPOR TANK VALVE             |
| 11V       | GAUGE STICK (MIDDLE)          | 49V       | BLEED VALVE                  |
| 19V       | EMERGENCY SHUT DOWN STATIONS  | 50V       | VAPOR HEADER                 |
| 20V       | RADAR GAUGING                 | 51V       | VAPOR PIPELINE               |
| 23V       | PRESSURE GAUGE                | 53V       | HIGH LEVEL GAUGE             |
| 32V       | TEMPERATURE GAUGE             | 54V       | LOW LEVEL GAUGE              |
| 35V       | NOZZLE W/BLIND                | —         | ABOVE DECK PIPING            |
| 35V       | SPARE (BLIND)                 | (A)       | AIR ACTUATED AUTOMATIC VALVE |
| 38V       | VAPOR DROP OR PENETRATION (☉) |           |                              |
| 39V       | PRESSURE/VACUUM VALVE         |           |                              |
| 39V       | STACK-PRESSURE/VACUUM VALVE   |           |                              |

NOTE 1: TYPICAL RIGGING ON EACH TANK  
 NOTE 2: P/V VALVES VENTED TO ATMOSPHERE  
 NOTE 3: CONDUIT BELOW GRATE FOR EMS.

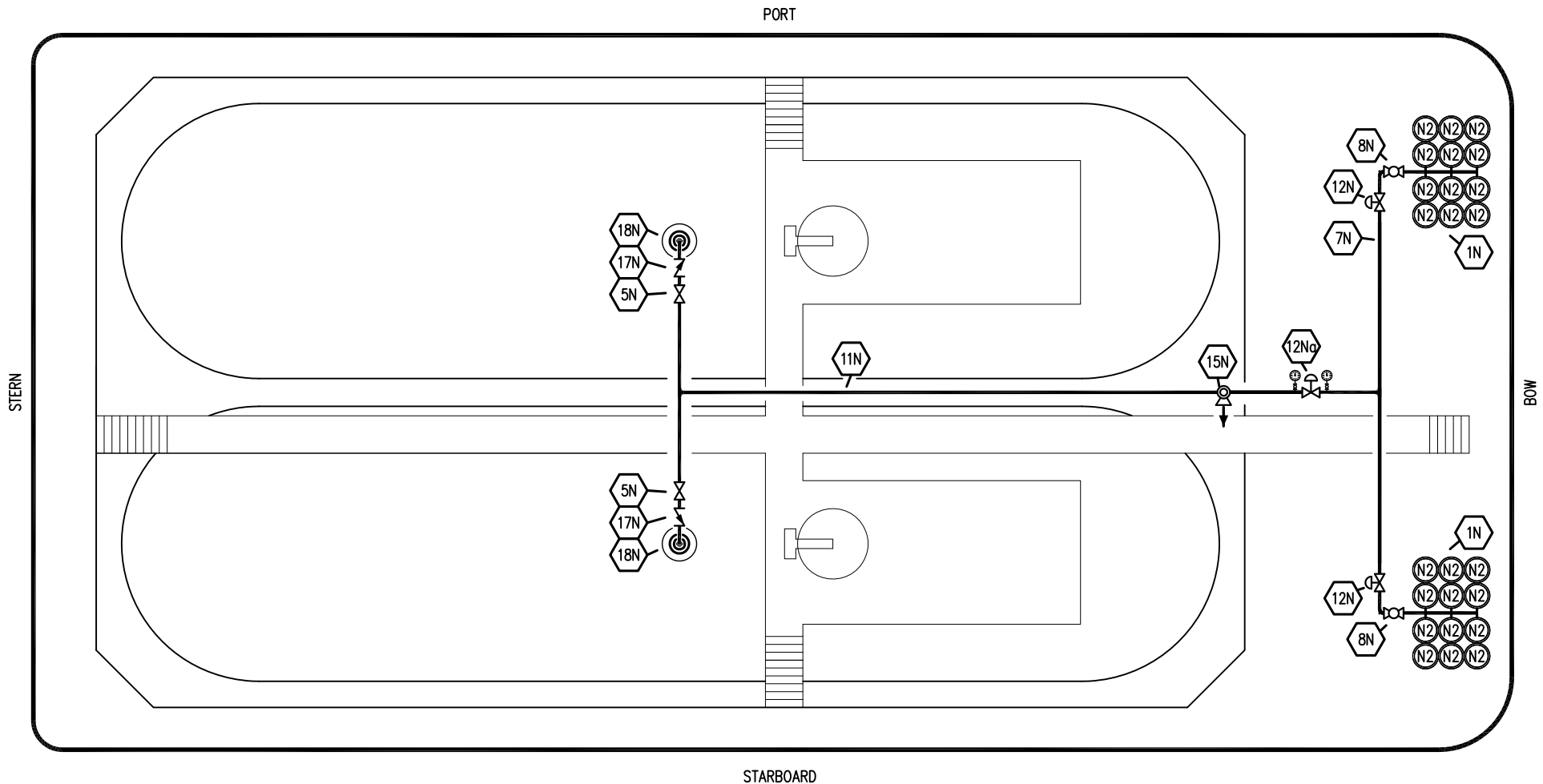
INGALLS IRON – EX: N/A


1	01/10/23	MRV	DDA	DAR	REVISED PER CLIENT COMMENTS
0	03/08/13	DCB	DDA		FOR REVIEW
REV.	DATE	BY	CHK	APP	REVISION DESCRIPTION

**KIRBY INLAND MARINE**

**VAPOR PIPING FLOW DIAGRAM**

SCALE: NONE	<b>USL 129</b>	REV. 1
PAGE: 2 OF 3		



- | NO   | DESCRIPTION   |
|------|---|
| 1N   | NITROGEN BOTTLE RACK (12 PK.)   |
| 5N   | N2 SUPPLY VALVE   |
| 7N   | NITROGEN HEADER   |
| 8N   | N2 REGULATOR CONTROL VALVE  |
| 11N  | NITROGEN PIPELINE   |
| 12N  | HARRIS NITROGEN REGULATOR   |
| 12Ng | FISHER NITROGEN REGULATOR   |
| 15N  | N2 RELIEF VALVE   |
| 17N  | N2 CHECK VALVE  |
| 18N  | N2 TANK PENETRATION  |

 ABOVE DECK PIPING

REV.	DATE	BY	CHK	APP	REVISION DESCRIPTION
1	01/01/23	MRV	DDA	DAR	REVISED PER CLIENT COMMENTS
0	03/08/13	DCB	DDA		FOR REVIEW

**KIRBY INLAND MARINE** 

**NITROGEN  
PIPING FLOW DIAGRAM**

SCALE: NONE  
PAGE: 3 OF 3

**USL 129**

REV. **1**