

- | NO | DESCRIPTION |
|-----|------------------------------|
| 1C | CARGO TANK VALVE |
| 5C | HEADER VALVE |
| 8C | RELIEF VALVE/STACK |
| 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: 2" CONDUIT BELOW GRATE FOR EMS.

INGALLS IRON -- EX: N/A

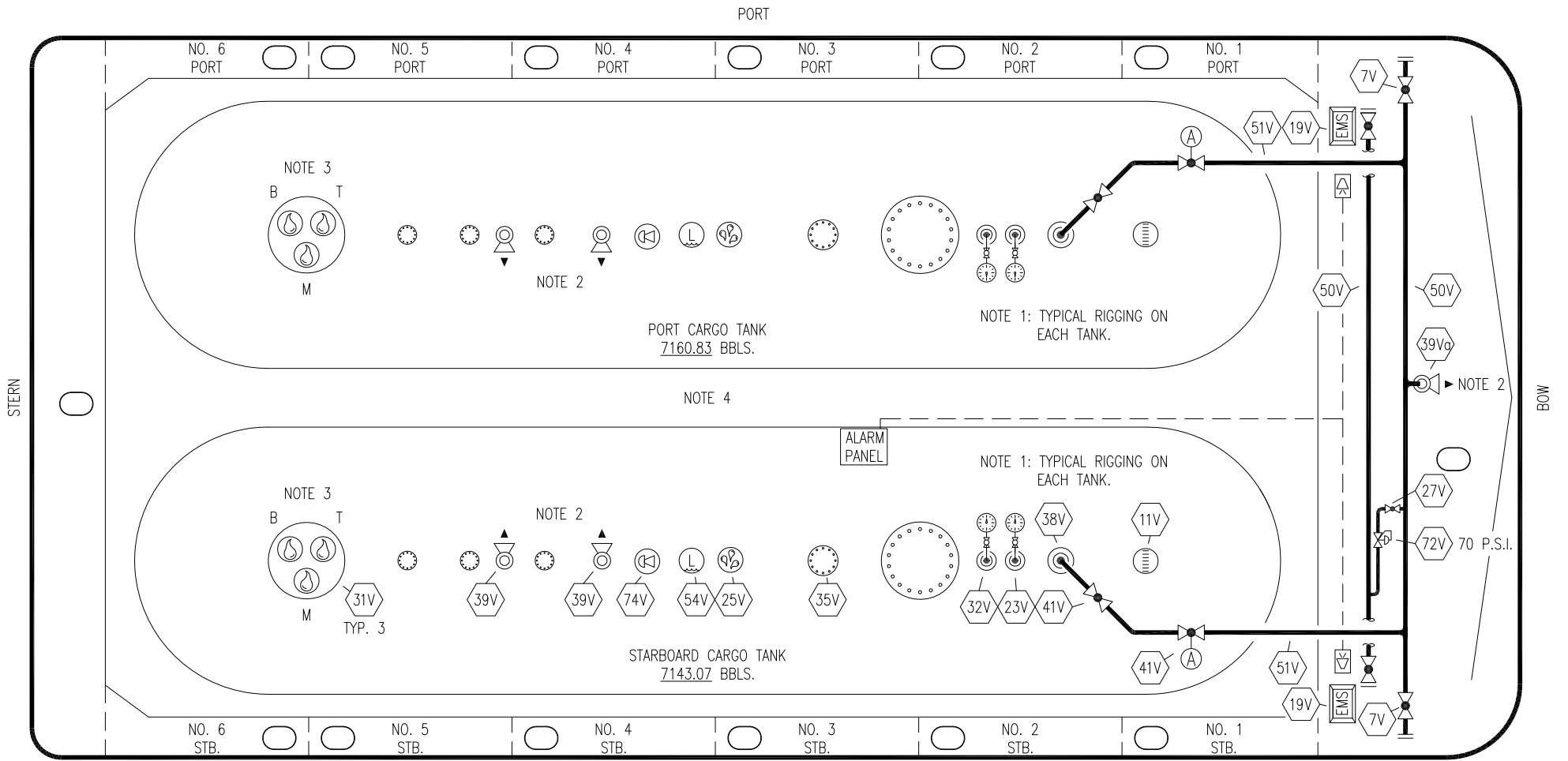
REV.	DATE	BY	CHK	APP	REVISION DESCRIPTION
2	03/15/22	MRV	DDA	DR	REVISED PER CLIENT COMMENTS
1	04/02/12	DCB	DDA		REVISED HEADER
0	01/08/10	RB	BR	OF	APPROVED

KIRBY INLAND MARINE

CARGO

PIPING FLOW DIAGRAM

SCALE: NONE	USL 146	REV.
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- | | | | |
|------|-------------------------------|-----|---------------------------|
| NO | DESCRIPTION | NO | DESCRIPTION |
| 7V | HEADER VALVE | 41V | VAPOR TANK VALVE |
| 11V | GAUGE STICK (MIDDLE) | 50V | VAPOR HEADER |
| 19V | EMERGENCY SHUT DOWN STATIONS | 51V | VAPOR PIPELINE |
| 25V | SPEW TUBES | 54V | LOW LEVEL GAUGE |
| 27V | VALVE | 72V | VAPOR DISCHARGE REGULATOR |
| 31V | SAMPLE STATIONS | 74V | RSA ALARM |
| 32V | TEMPERATURE GAUGE | — | ABOVE DECK PIPING |
| 38V | VAPOR DROP OR PENETRATION (⊙) | (A) | AIR ACTUATED VALVE |
| 39V | PRESSURE/VACUUM VALVE | | |
| 39Vg | STACK PRESSURE/VACUUM VALVE | | |

STARBOARD

NOTE 1: TYPICAL RIGGING ON EACH TANK

NOTE 2: P/V VALVES VENTED TO ATMOSPHERE

NOTE 3: SAMPLES—T=TOP, M=MIDDLE, B=BOTTOM

NOTE 4: 2" CONDUIT BELOW GRATE FOR EMS.

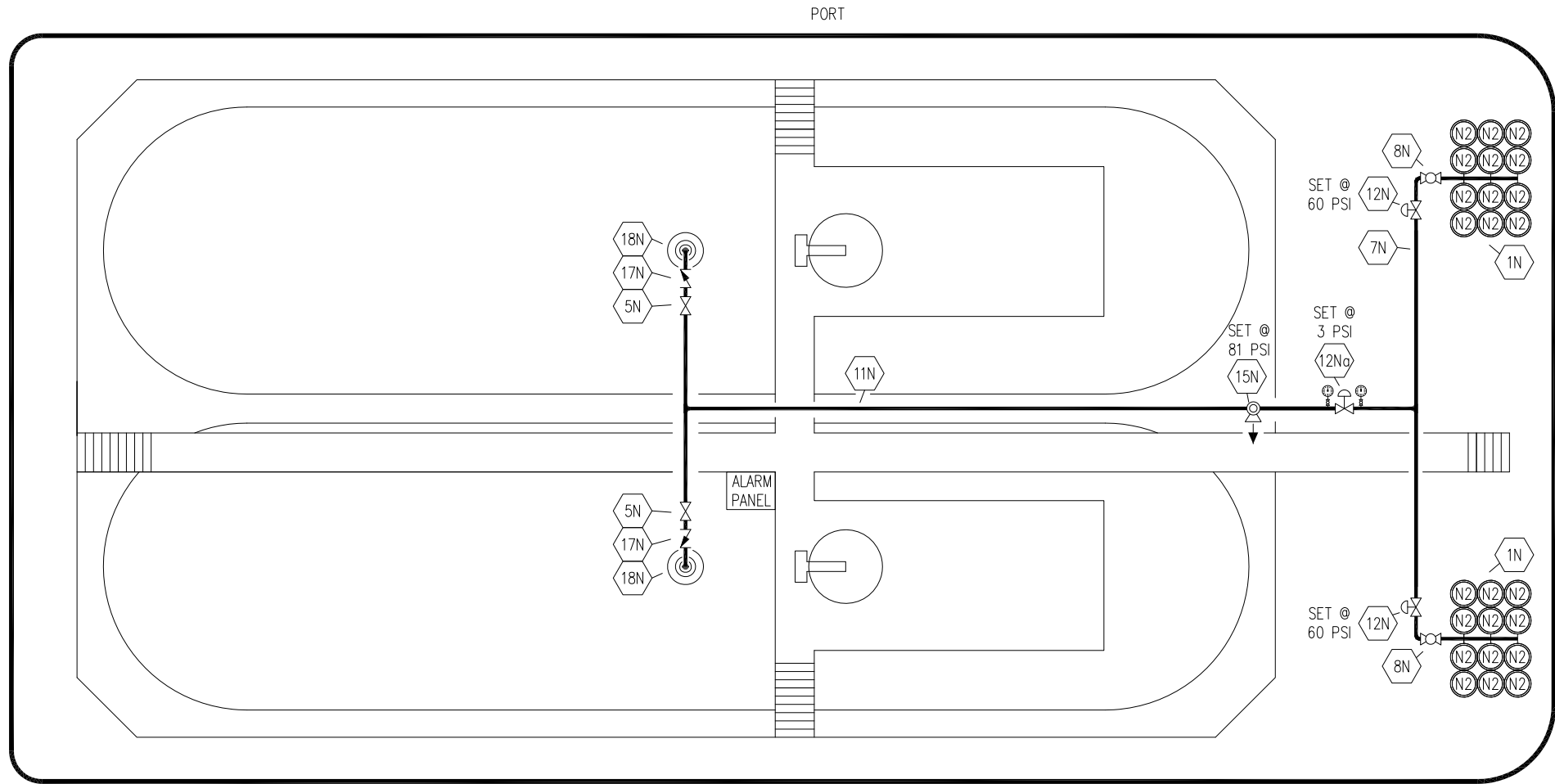
INGALLS IRON — EX: N/A

REV.	DATE	BY	CHK	APP	REVISION DESCRIPTION
3	03/15/22	MRV	DDA	DR	REVISED PER CLIENT COMMENTS
2	08/12/13	DCB	DDA		REVISED HEADERS
1	04/02/12	DCB	DDA		REVISED HEADERS
0	01/08/10	RB	BR	OF	APPROVED

KIRBY INLAND MARINE

VAPOR
PIPING FLOW DIAGRAM

SCALE: NONE	USL 146	REV. 3
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 |
| 12No | 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
2	03/15/22	MRV	DDA	DR	REVISED PER CLIENT COMMENTS
1	09/27/11	JN	DDA		REVISED PSI
0	11/09/10	RB	RB	OF	APPROVED

KIRBY INLAND MARINE	
NITROGEN PIPING FLOW DIAGRAM	
SCALE: NONE	USL 146
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