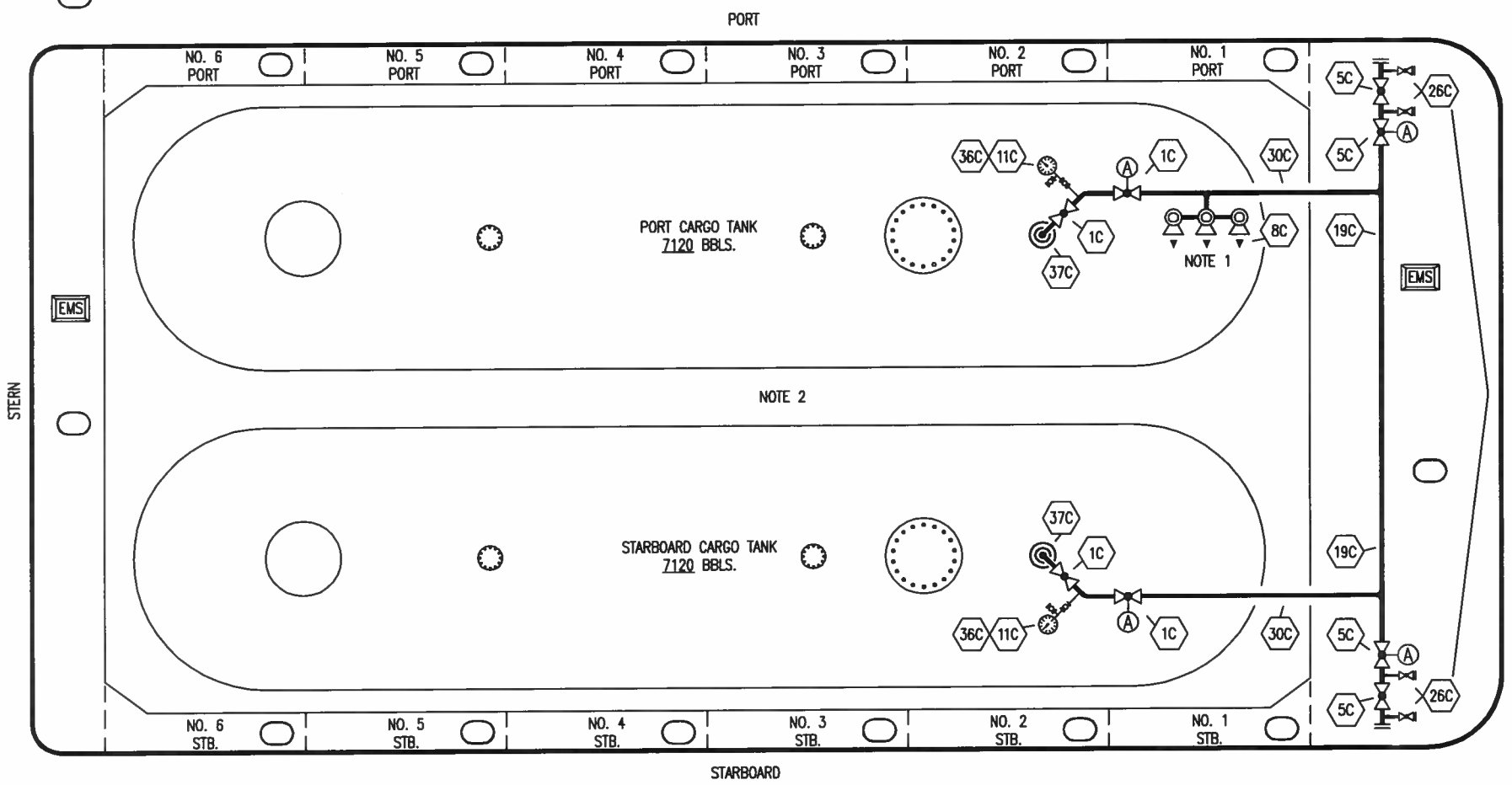


NO	DESCRIPTION
1C	4" CARGO TANK VALVE
5C	6" HEADER VALVE
8C	3 RELIEF VALVE/4" STACK
11C	BLEED OFF VALVE
19C	6" CARGO HEADER
26C	DRAIN (BLEED) VALVE
30C	4" CARGO PIPELINE
36C	0-300# PRESSURE GAUGE
37C	4" CARGO DROP
A	AIR ACTUATED AUTOMATIC VALVE
	ABOVE DECK PIPING

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
0	01/08/10	RB	BR	OF	APPROVED

KIRBY INLAND MARINE

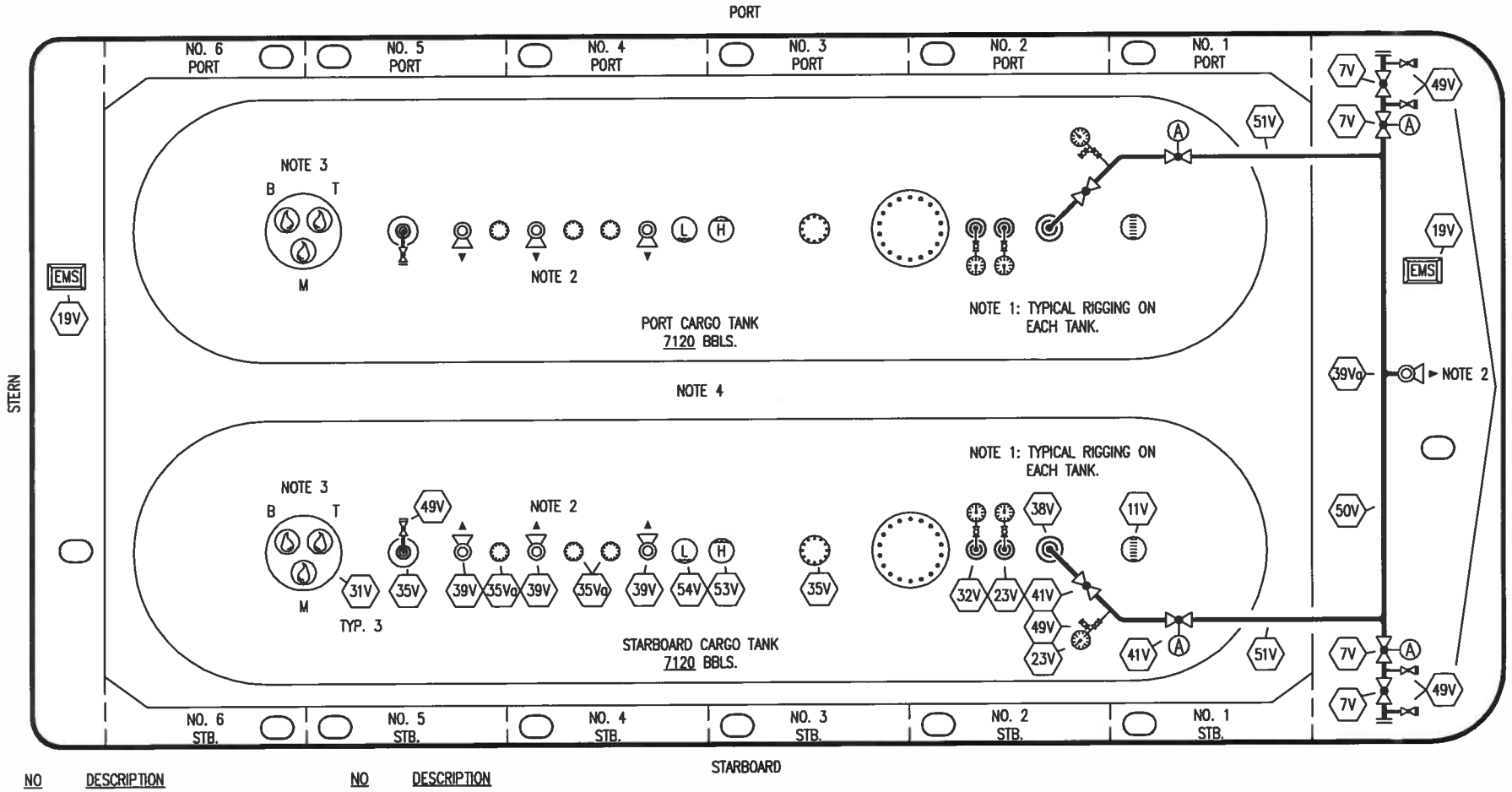
CARGO
PIPING FLOW DIAGRAM

SCALE: NONE

PAGE: 1 OF 3

USL 148

REV. 0



NO	DESCRIPTION
7V	4" HEADER VALVE
11V	GAUGE STICK (MIDDLE)
19V	EMERGENCY SHUT DOWN STATIONS
23V	PRESSURE GAUGE 0-300#
31V	SAMPLE STATIONS
32V	TEMPERATURE GAUGE 0-160 F
35V	12" NOZZLE W/ 2" BLIND
35Vo	SPARE 6" (BLIND)
38V	VAPOR DROP OR PENETRATION
39V	PRESSURE/VACUUM VALVE @ 260 PSI
39Vo	4" STACK-3 PRESSURE/VACUUM VALVE

NO	DESCRIPTION
41V	3" VAPOR TANK VALVE
49V	BLEED VALVE
50V	4" VAPOR HEADER
51V	3" VAPOR PIPELINE
53V	HIGH LEVEL GAUGE
54V	LOW LEVEL GAUGE
—	ABOVE DECK PIPING
A	AIR ACTUATED AUTOMATIC VALVE

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
1	02/17/12	DCB	DDA		REMOVED P/V VALVES
0	01/08/10	RB	BR	OF	APPROVED

KIRBY INLAND MARINE

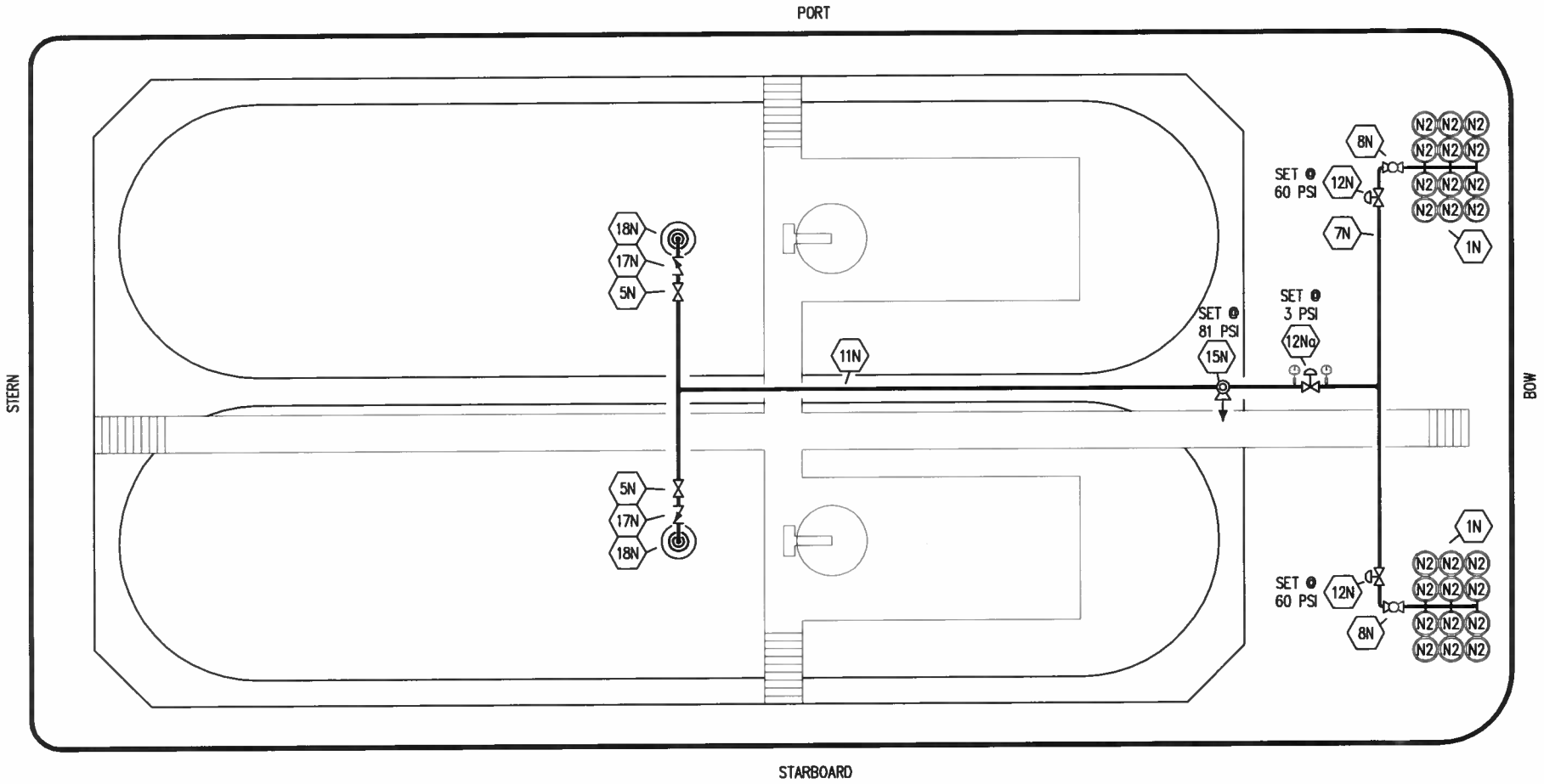
VAPOR
PIPING FLOW DIAGRAM

SCALE: NONE

PAGE: 2 OF 3

USL 148

REV. 1



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
12Na	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	09/27/11	JN	DDA		REVISED PSI
0	11/09/10	RB	RB	OF	APPROVED

KIRBY INLAND MARINE

NITROGEN PIPING FLOW DIAGRAM

SCALE: NONE

PAGE: 3 OF 3

USL 146, 147 & 148

REV. 1