

FISHING VESSEL FV-R35



DATA SHEET - [VARIANT 3]

REVIEWED



03 APRIL, 2021

SEE LETTER: E-121680-165892

**PLAN(S) NOW SENT SUPERSEDE
THE APPROPRIATE PLAN(S)
PREVIOUSLY APPROVED/NOTED
ON.31.MARCH, 2021**

Table of Contents

1. MAIN PARTICULARS	2
2. SPECIFICATION	3
2.1 Main Engine & Generator	3
2.2 Fishing Gear	3
2.3 Fish Hold.....	3
2.4 Fish Net Hold.....	3
2.5 Capacities	3
2.6 Hull & Accommodation Structure.....	3
2.7 Bollards and Anchor.....	3
2.8 Navigation and Communication	4
2.9 Mast/ Navigation and Signal Lights Arrangements.....	4
2.10 Life Saving Appliances.....	4
2.11 Fire Fighting Appliances	4
2.12 Pumps	4
2.13 Doors/ Windows/ Hatches.....	5
2.14 Materials and Workmanship.....	5
2.14.1 Materials.....	5
2.14.2 Workmanship	5
2.15 Painting Schemes.....	5
3. RULES & REGULATION	7
4. GENERAL ARRANGEMENT.....	7
5. TANK PLAN	9
6. MIDSHIP SECTION	11
7. PROFILE & DECK	13
8. STABILITY CALCULATION	15
9. LINES PLAN	134
Table 1 : Main Particular	2
Table 2 : Light Arrangement.....	4
Table 3 : Hatch Detail	5
Table 4 : Paint Scheme	7

1. MAIN PARTICULARS

Description	Abbreviation		Unit
Length Overall	LOA	20.00	m
LBP	LBP	18.40	m
Breadth (Max.)	B	6.30	m
Depth	D	3.00	m
Draught (Max.)	T	1.56	m
Speed	V	8.00	knots
Displacement	Δ	89.2	tonnes
Lightship Weight	Lwt	52.00	tonnes
Complement		8	Nos.

Table 1 : Main Particular

2. SPECIFICATION

2.1 Main Engine & Generator

- Main Engine : 180 ~ 200 HP approx. [@ maximum Continuous Rating (MCR)]
- Diesel Generator : Adequate size suitable for load.

2.2 Fishing Gear

- Long-liner Winch : Suitable to haul 3 mm monoline and to put 350-600 hooks at a time.
- Gillnet Hauler : Suitable for hauling and releasing gill net.

2.3 Fish Hold

- Insulated Fish Hold : 35 cu. m approx.
- Refrigeration : A part or Full of the Fish Hold Volume (-4 Deg)

2.4 Fish Net Hold

Fish Net will be stored at main deck as shown in General Arrangement.

2.5 Capacities

- Diesel oil tank : 8,000 L approx.
- Fresh water tank : 10,000 L approx.
- F.W overhead tank (FRP) : 250 L approx.

2.6 Hull & Accommodation Structure

The vessel will be constructed using IS grade 2062 Grade B steel (3rd Party certification by IRS) or equivalent and with good quality welding consumables. Thickness of the plating shall be in accordance with Indian Register of Shipping (IRS) "Rules and Regulation for Construction and Classification of Steel Ships".

The superstructure will be made of FRP material as required, with scantlings designed meeting Indian Register of Shipping (IRS) rules.

2.7 Bollards and Anchor

MS Fabricated / Casted anchor (1 no.) with rope of sufficient length will be provided as a loose item. Anchor will be operated manually from over-board.

MS fabricated T type bollard with adequate stiffening at underside will be provided at aft (2 nos.) and forward portion (1 no.) as shown in General Arrangement.

2.8 Navigation and Communication

- Global Positioning System (GPS)
- Automatic identification system (AIS)
- Very high frequency with digital selective calling (VHF-DSC)
- Distress Alert Transmitter (DAT)
- Fish Finder (Eco-Sounder)
- Magnetic Compass

2.9 Mast/ Navigation and Signal Lights Arrangements

Sl. No.	Description	Quantity	Shade in Color
1	Masthead Light	1	White
2	Anchor Light	1	White
3	Port Side Light	1	Red
4	Starboard Side Light	1	Green
5	Stern Light	1	White
6	NUC	2	Red
7	NUC/ All Round Light Red	2	Red
8	All Round Light White	2	White
9	Black Ball	2	
10	Cones	2	

Table 2 : Light Arrangement

2.10 Life Saving Appliances

The vessel will be fitted with following LSA items and installed as per the lifesaving appliance plan.

- Life Jackets : 10 nos. (As per SOLAS standard)
- Life Buoy : 2 nos. (As per SOLAS standard)

2.11 Fire Fighting Appliances

- Portable Fire Extinguisher : 4 nos.

2.12 Pumps

The Freshwater and bilge/General Service pump (IS/ BIS standard or equivalent) will be fitted in the vessel.

2.13 Doors/ Windows/ Hatches

Following access hatches are arranged as shown in the general arrangement plan.

Sl. No.	Description	Number	Type	Coaming Height
1	Flush Type Hatch	2	Watertight	0 mm
2	Normal Hatch	2	Weather-tight	380 mm

Table 3 : Hatch Detail

Good quality weathertight FRP Doors will be provided at entrances of wheel house, crew accommodation, toilet, galley, etc. The sill height of doors on the main deck is to be at least 380 mm.

2.14 Materials and Workmanship

2.14.1 Materials

All materials and equipment to be used for the construction of the Vessel shall be good quality and suitable for intended purpose.

2.14.2 Workmanship

All workmanship used for the construction of the vessel shall be of good quality and in accordance with standard of normal shipbuilding practice for this type of ship. The workmanship shall be such as to assure reasonable fair lines and smooth surfaces.

2.15 Painting Schemes

The painting schedule of the vessel will be as per normal ship building standards with good quality marine paint shall be provided, as per the guidelines and the painting scheme as recommended by the paint manufacturer. Necessary alteration may be made by the Yard based on manufacturers recommendation /site requirement. However, following indicative painting schedule is given as guidance.

Location	Description	No. of Coats	Dry film thickness *
Hull Exterior Surface: Under water hull	Surface tolerant High build epoxy	1	150
	Epoxy tie coat	1	100

	TBT Free Self-Polishing AF.	1	100
	TBT Free Self-Polishing AF	1	100
Hull Exterior Surface: Topsides	Surface tolerant High build epoxy	1	100
	Surface tolerant High build epoxy	1	100
	poly urethane/ Polysiloxane	1	50
Fresh Water Tanks	Phenolic Epoxy	1	200
Fish holds, Void tanks	Ballast tank epoxy coatings	1	160
	Ballast tank epoxy coatings	1	160
Bulwarks inside, Hatch covers, Coamings	Surface tolerant High build epoxy	1	125
	Surface tolerant High build epoxy	1	125
	poly urethane/ Polysiloxane	1	50
Deck fittings, Davits etc.	Surface tolerant High build epoxy	1	125
	poly urethane/ Polysiloxane	1	50
Inside Engine Room, SGR, Stores-Sides & overhead, Interior of vent trunk	Alkyd primer/ Acylic Primer	1	40
	Alkyd primer/ Acylic Primer	1	40
	Alkyd primer/ Acylic Primer	1	40
Engine Room, SGR, Stores - floor and foundations	Alkyd primer/ Acylic Primer	1	40
	Alkyd primer/ Acylic Primer	1	40
	Alkyd primer/ Acylic Primer	1	40
Anchor	Surface tolerant epoxy	1	125
	Surface tolerant epoxy	1	125
Space for fishing net	Surface tolerant High build epoxy	1	125
	Surface tolerant High build epoxy	1	125
Fuel oil tanks & other oil tanks	Epoxy primer	1	50
Draft Marks	Alkyd finish	1	70
Exhaust pipes	HR aluminium	1	25
	HR aluminium	1	25

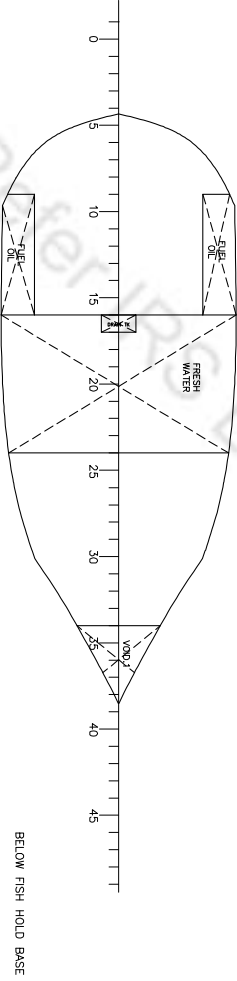
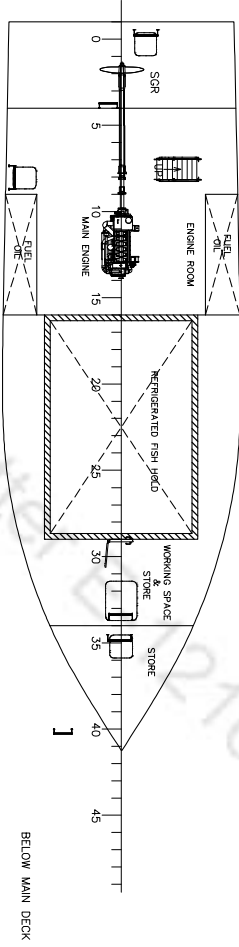
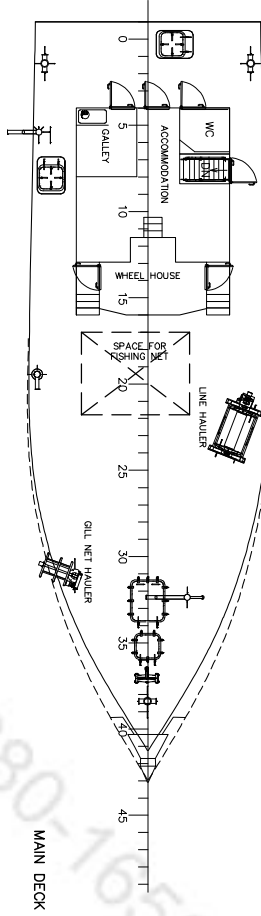
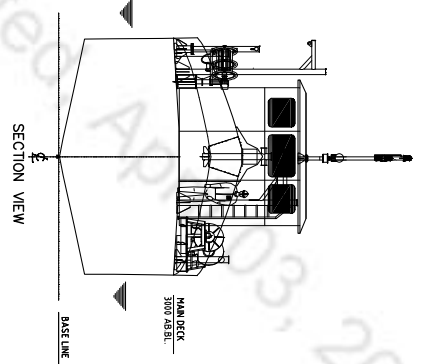
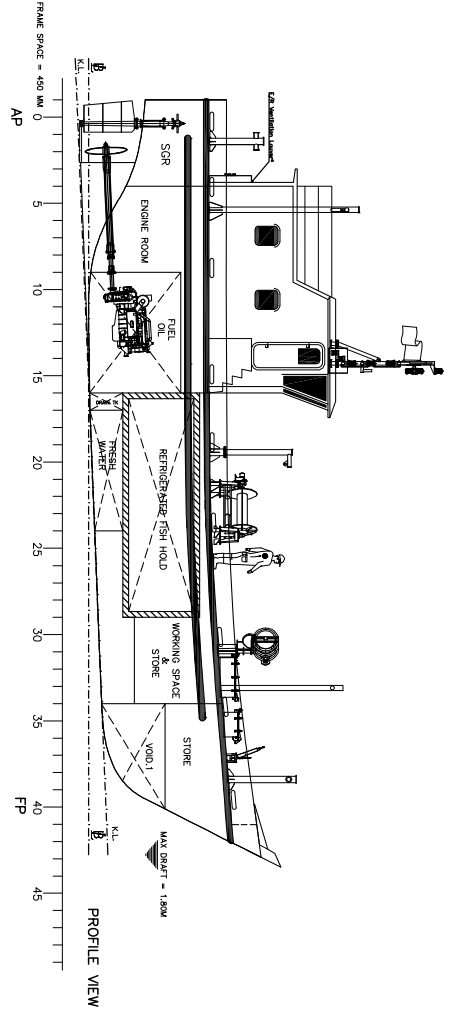
Vessel Name, Port of registry, Marking	PU	1	70
--	----	---	----

Table 4 : Paint Scheme

3. RULES & REGULATION

- Vessel built according to Rules and Regulation for the construction and classification of steel ships by the Indian Register of Shipping (IRS) or/and to corresponding regulations of respective administrative regulation body.
 - Steel: IS 2062 Grade B (3rd Party certification by IRS) or equivalent.
- Intact Stability Criteria in accordance with IS code 2008.

4. GENERAL ARRANGEMENT



MAIN PARTICULARS :

LENGTH O.A.	abt 20.00 M.
LENGTH B.P.	abt 18.40 M.
DEPTH (MAX)	abt 3.00 M.
DEPTH (MIN)	abt 1.80 M.
DRAFT (MAX)	450 MM.
FRAME SPACING	450 MM.
SPEED	8 KNOTS.
REFRIGERATED FISH HOLD.	abt 35 Cu m.

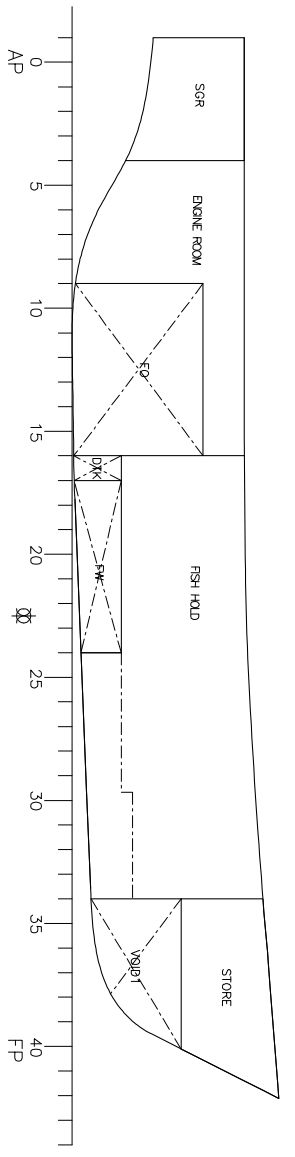
- NOTE:
1. DRAWING ONLY FOR IN PRINCIPLE APPROVAL.
 2. DETAILED DRAWING SHALL BE SUBMITTED BY THE RESPECTIVE YARD.
 3. * MINIMUM HEIGHT OF VENTILATION LOUVER IS 2.30 M FROM WATERLINE

VARIANT 3

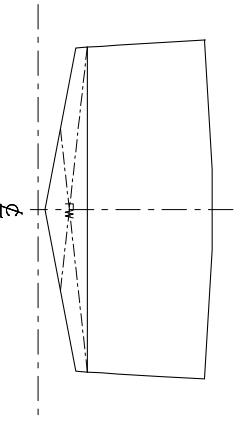
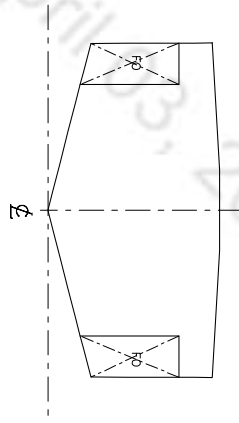
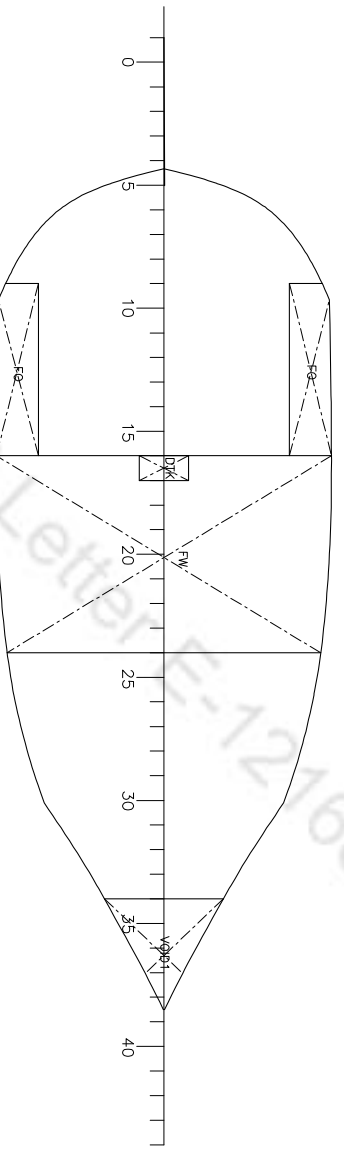
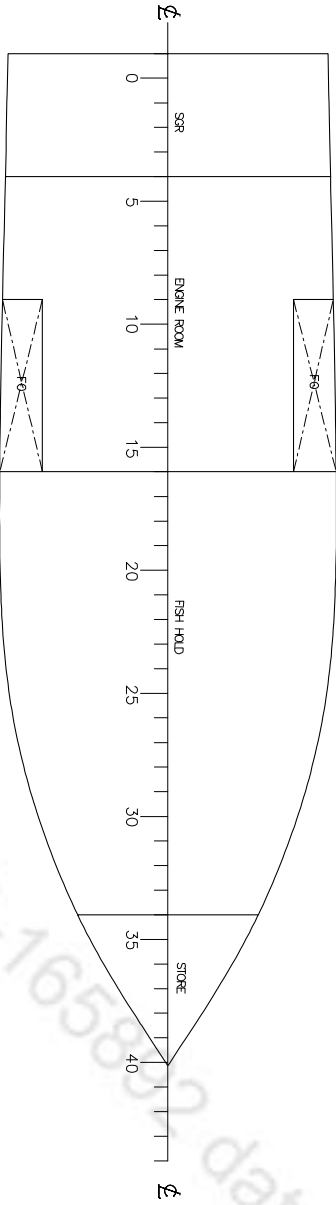
Rev.1	25.Mar.2021	INCORPORATING IRS COMMENTS			
Rev.0	03.Feb.2021	PRELIMINARY			
No:	Date	Description	Drawn	Checked	Approved
CUSTOMER	TBD	FISHING VESSEL FV-R35			
Yard Nos.:	TBD	TITLE			
		GENERAL ARRANGEMENT			
COCHIN SHIPYARD LIMITED P.O. Bag 1653, COCHIN-682015, INDIA		Scale	Formal	Project No.	Dwg. No.
		1:128	A3	FV-R35	FV/R35-101-001 01/01
<small>ACCORDING TO INTERNATIONAL LAWS, THE DRAWINGS ARE THE PROPERTY OF COCHIN SHIPYARD LTD. THE DRAWING CAN NOT BE MADE PUBLIC. CONS. OR OTHERS. (S&P, W/ISSN) WITHIN COCHIN.</small>					

5. TANK PLAN

Refer IRS Letter E-121680-165892 dated, April 03, 2021



PROFILE



MAIN PARTICULARS:
 LENGTH O.A. obt 20.00 M.
 LENGTH B.P. obt 18.40 M.
 BREADTH (MID) obt 6.30 M.
 DEPTH (MIDSHIP) obt 3.00 M.
 DRAFT (MAX.) obt 1.80 M.
 FRAME SPACING 450 MM
 SPEED 8 KNOTS.
 REFRIGERATED FISH HOLD. obt 35 Cu m.

TANK SUMMARY

Sl. No.	NAME	DESCRIPTION	CONTENT	DENSITY	NET VOLUME	MASS	FR-MIN	FR-MAX	COX	COY	COZ	REMARKS
1	W01	F.O. T.K.(FS)	00	0.8500	4.0	3.4	9.0	16.0	6.13	2.67	1.54	
2	W02	F.O. T.K.(FS)	00	0.8500	4.0	3.4	9.0	16.0	6.13	-2.67	1.54	
				Total Diesel Oil	8.0	6.8						
3	W03	FW T.K.1	FW	1.0000	10.6	10.6	16.0	24.0	9.43	0.00	0.62	
4	W04	W01	W00	1.025	4.05	4.67	34.0	40.0	17.12	0.0	1.17	
5	W05	DRWN TK.	DRWN WATER	1.025	0.3	0.30	16.0	17.0	7.87	0.0	0.49	

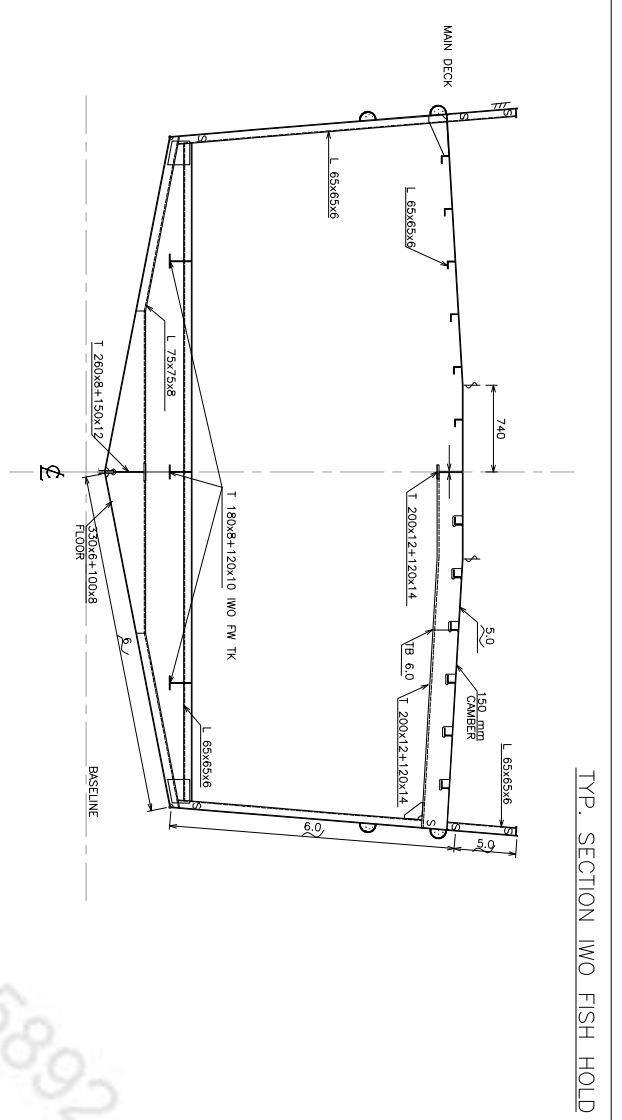
NOTE:
 1. DRAWING ONLY FOR IN PRINCIPLE APPROVAL.
 2. DETAILED DRAWING SHALL BE SUBMITTED BY THE RESPECTIVE YARD.

VARIANT 3

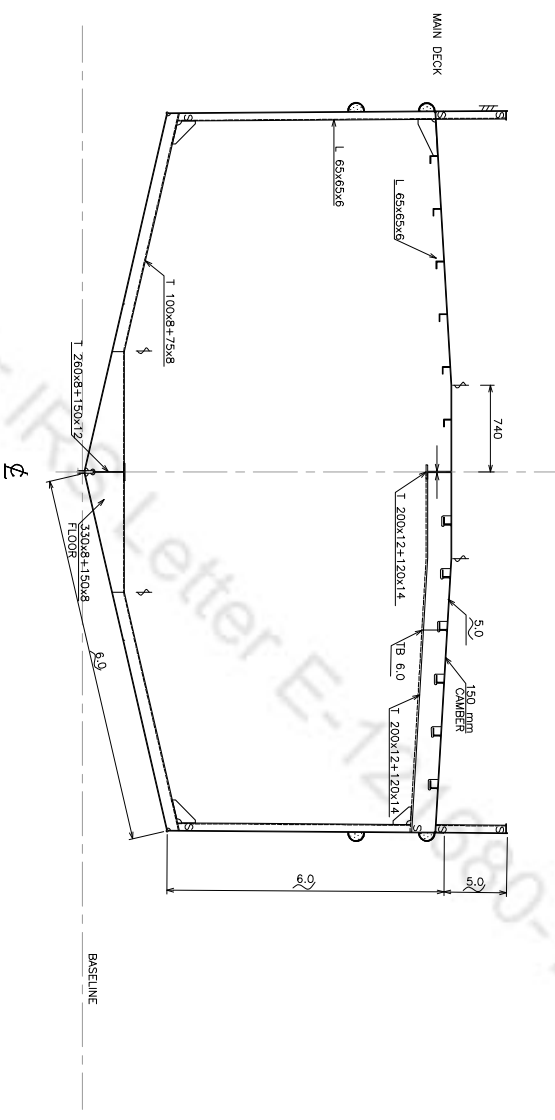
Rev 0	24 Feb 2021	Preliminary			
No.	Date	Description	Drawn	Checked	Approved
CUSTOMER			TANK PLAN		
TBD			FISHING VESSEL FV-R35		
Yard Nos.: TBD			1501	A3	FV-R35
SOCOM SHIPYARD LIMITED			FV-R35-101-007 01/01		
Scale: Final Project No.			Dwg No.		
Scale: Final Project No.			Sheet No.		
<small>ACCORDING TO INTERNATIONAL PRACTICE THIS DRAWING IS THE PROPERTY OF SOCOM SHIPYARD LIMITED DRAWING ON HERETIC MADE PUBLIC COPY OR OTHERWISE VOID WITHOUT WRITTEN CONSENT</small>					

6. MIDSHIP SECTION

Refer IRS Letter E-121680-165892 dated, April 03, 2021



TYP. SECTION IWO FISH HOLD



TYP. SECTION IWO ENGINE ROOM

MAIN PARTICULARS :

- LENGTH O.A. obt 20.00 M.
- LENGTH B.P. obt 18.40 M.
- BREADTH (MID) obt 6.30 M.
- DEPTH (MIDSHIP) obt 3.00 M.
- DRAFT (MAX.) obt 1.80 M.
- FRAME SPACING 450 MM.
- SPEED 8 KNOTS.
- REFRIGERATED FISH HOLD. obt 35 Cu m.

- NOTE:
1. DRAWING ONLY FOR IN-PRINCIPLE APPROVAL
 2. DETAILED DRAWING SHALL BE SUBMITTED BY THE RESPECTIVE YARD.
 3. MATERIAL: ALL PLATES & STIFFS : IRS APPROVED IS 2002 GRADE B/EQUIVALENT
 4. ALL DIMENSIONS ARE IN mm. (EXC. NOTED)

VARIANT 3

Rev#1	25-Mar-2021	Incorporating IRS Comments		
Rev#0	03-Feb-2021	Preliminary		
No.	Date	Description	Drawn	Checked
CUSTOMER		TBD		
TITLE		FISHING VESSEL FV-R35		
Yard Nos.: TBD		Midship Section		

COCHIN SHIPYARD LIMITED
P.O. Bag 1633, COCHIN-682015, INDIA

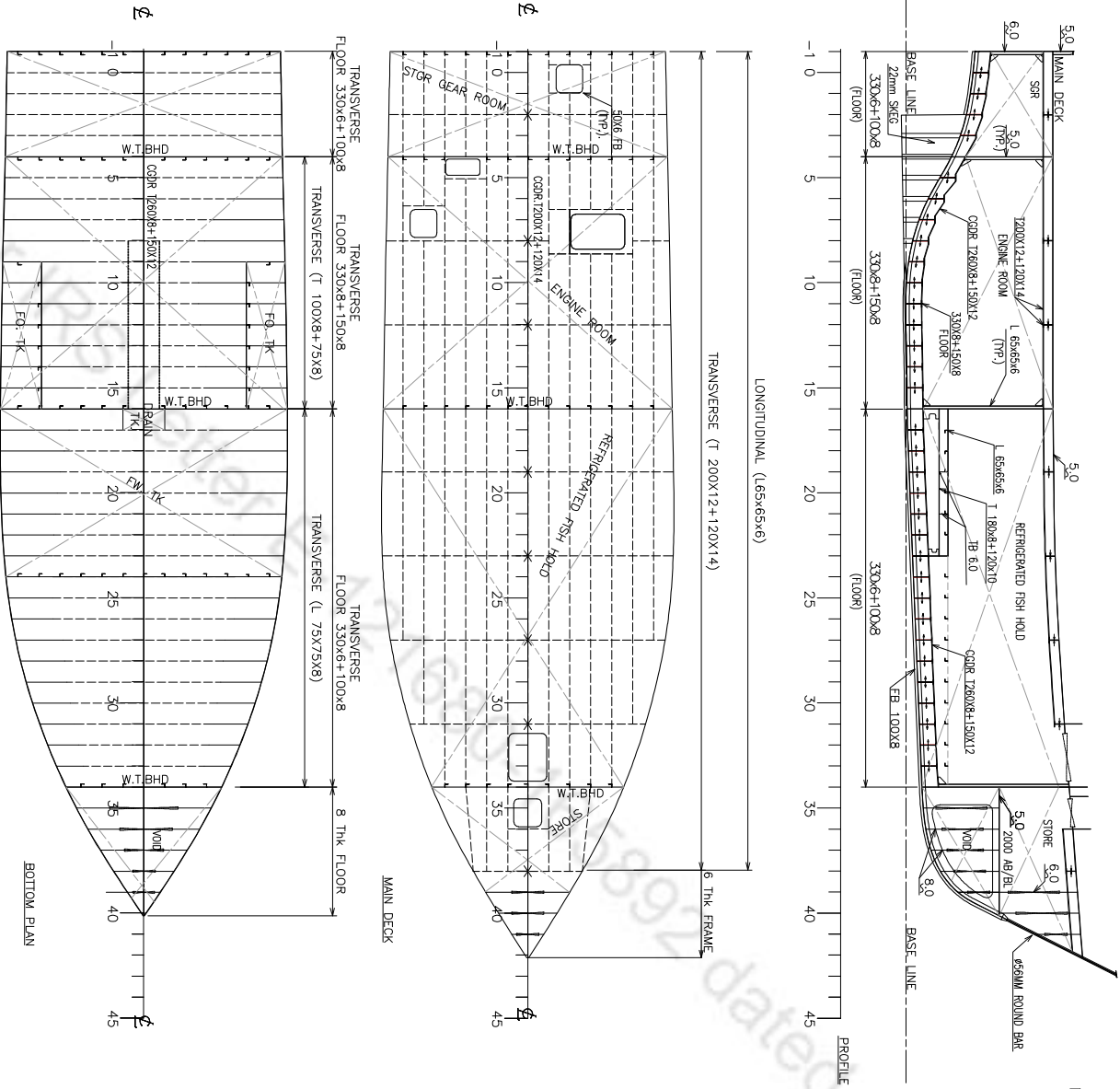
Scale: 1:40
Format: A3
Project No.: FV-R35
Dwg no.: FVR35-200-003
Sheet No.: 01/01

INCORPORATING TO INTERNATIONAL STANDARDS, THE DRAWING IS THE PROPERTY OF COCHIN SHIPYARD LIMITED. THE DRAWING CAN NOT BE MADE PUBLIC, COPIED OR OTHERWISE USED, WITHOUT WRITTEN CONSENT.

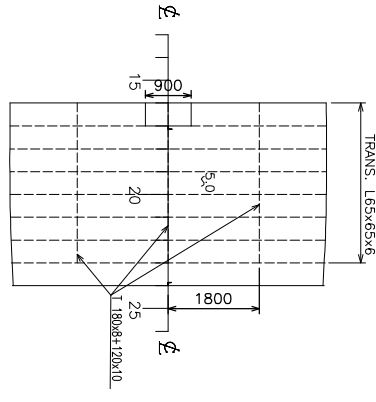
Refer IPR Letter E-11880-105892 dated, April 03, 2021

7. PROFILE & DECK

Refer IRS Letter E-121680-165892 dated, April 03, 2021



- NOTE:
1. DRAWING ONLY FOR IN PRINCIPLE APPROVAL
 2. DETAILED DRAWING SHALL BE SUBMITTED BY THE RESPECTIVE YARD.
 3. MATERIAL: ALL PLATES & STIFFERS : IS 2062 GRADE B/ EQUIVALENT [3RD PARTY CERTIFICATION BY IRS]
 4. SUITABLE INSERT PLATES OF HIGHER THICKNESS WILL BE PROVIDED
- IWO DECK FITTING
5. FISH HOLD BOTTOM ARRANGEMENT WILL BE DESIGNED BASED ON FISH HOLD MAX. LOAD
 6. ALL DIMENSIONS ARE IN MM. (EXC. NOTED)



MAIN PARTICULARS :

LENGTH O.A..... dnt 20.00 M.
 LENGTH B.P..... dnt 18.40 M.
 BREADTH (M.L.D.)..... dnt 6.30 M.
 DEPTH (MIDSHIP)..... dnt 3.00 M.
 DRAFT (MAX.)..... dnt 1.80 M.
 FRAME SPACING..... 450 MM
 SPEED..... 8 KNOTS.
 REFRIGERATED FISH HOLD.. dnt 35 Cu m.

VARIANT 3

Rev. 2	31 Mar 2021	Shifted E/R Bhd to Frame 16		
Rev. 1	25 Mar 2021	Incorporating IRS Comment		
Rev. 0	03 Feb 2020	Preliminary		
No.	Date	Description	Drawn	Checked
CUSTOMER: TBD		FISHING VESSEL FV-R35		
Yard Nos.: TBD		TITLE		
		Profile and Deck Plan		

COCHIN SHIPYARD LIMITED
 P.O. Bag 1633, COCHIN-682015, INDIA

Scale: Form A3
 Project No. FV-R35
 Dwg No. FV-R35-200-004
 Sheet No. 01/01

IN ACCORDANCE TO INTERNATIONAL STANDARDS, THE DRAWING IS THE PROPERTY OF COCHIN SHIPYARD LIMITED. DRAWINGS CAN NOT BE MADE PUBLIC, COPIED OR OTHERWISE USED, WITHOUT WRITTEN CONSENT.

8. STABILITY CALCULATION

Refer IRS Letter E-121680-165892 dated, April 03, 2021

TABLE OF CONTENTS

1. INSTRUCTIONS TO THE MASTER	1-1
2. MAIN PARTICULARS	2-1
3. STABILITY CRITERIA	3-1
4. LOADING CONDITION	4-1
5. HYDROSTATIC TABLE	5-1
6. CROSS CURVE	6-1

1. INSTRUCTIONS TO THE MASTER

This stability information shows that the ship complies with definite intact stability requirements in all designed conditions and gives the data deemed necessary for the calculation and evaluation of stability to the master in order that he can take suitable measures for securing the stability in any service condition.

- Compliance with the stability criteria does not ensure immunity against capsizing, regardless of the circumstances, or absolve the master from his responsibilities. Masters should therefore exercise prudence and good seamanship having regard to the season of the year, weather forecasts and the navigational zone and should take the appropriate action as to speed and course warranted by the prevailing circumstances.
- Care should be taken that the cargo allocated to the ship is capable of being stowed so that compliance with the criteria can be achieved. If necessary, the amount should be limited to the extent that ballast weight may be required.
- Before a voyage commences, care should be taken to ensure that the cargo and sizeable pieces of equipment have been properly stowed or lashed so as to minimize the possibility of both longitudinal and lateral shifting, while at sea, under the effect of acceleration caused by rolling and pitching.
- The number of partially filled or slack tanks should be kept to a minimum because of their adverse effect on stability.
- All doorways and other openings, through which water can enter into the hull or deckhouses, fore-castle, etc., should be suitably closed in adverse weather conditions and accordingly all appliances for this purpose should be maintained on board and in good condition.
- Weather tight and watertight hatches, doors, etc., should be kept closed during navigation, except when necessarily opened for the working of the ship and should always be ready for immediate closure and be clearly marked to indicate that these fittings are to be kept closed except for access. Hatch cover in fishing vessels should be kept properly secured when not in use during fishing operations.

Apart from general precautions, the following measures should be considered as preliminary guidance on matters influencing safety as related to stability.

- All fishing gear and other large weights should be properly stowed and placed as low as possible.
 - Particular care should be taken when pull from fishing gear might have a bad effect on stability, e.g., when nets are hauled by power-block.
-

- Gear for releasing deck load in fishing vessels carrying catch on deck, e.g., herring, should be kept in good working condition for use when necessary.
- Fish should never be carried in bulk without first being sure that the portable divisions in the holds are properly installed;
- Reliance on automatic steering may be dangerous as this prevents changes to course which may be needed in bad weather.
- In all conditions of loading necessary care should be taken to maintain a seaworthy freeboard.
- Particular care should be taken when the pull from fishing gear results in dangerous heel angles. This may occur when fishing gear fastens onto an underwater obstacle or when handling fishing gear, particularly on purse seiners. The heel angles caused by the fishing gear in these situations may be eliminated by employing devices which can relieve or remove excessive forces applied through the fishing gear. Such devices should not impose a danger to the vessel through operating in circumstances other than those for which they were intended.

All longitudinal levers, namely LCB, LCG, and LCF are computed with reference to the transom of the ship.

Notes on use of Cross Curves of stability

The purpose of the cross curves of stability is to enable stability curves to be drawn for the ship in any loading condition. Intact stability is then determined on the basis of this curve.

Yard No. TBD

Main Particulars

2. MAIN PARTICULARS

Ship Name : TBD
Ship Type : Fishing vessel
Owner :
Builder's Name : TBD
Yard No. : TBD
Port of Registry :
Classification : Indian Register of Shipping

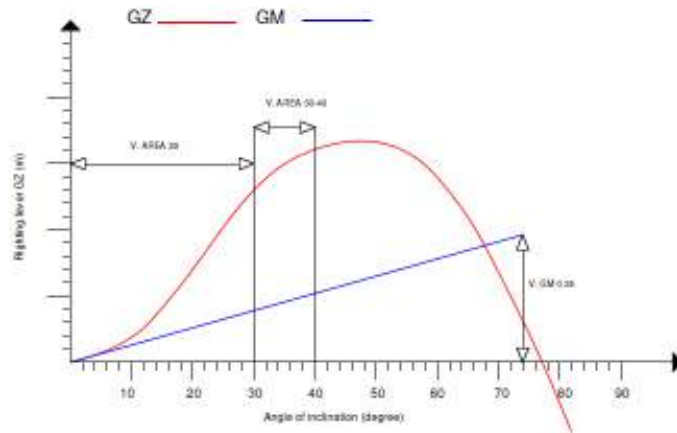
Length overall : 20.00 m
Length between perpendiculars : 18.40 m
Breadth (Moulded) : 6.30 m
Draught (Scantling) : 1.80 m
Draught (Max. Design) : 1.56 m
Depth moulded at side : 3.00 m
Displacement at design draught : 89.2 MT
Speed : 8.00 knots

3. STABILITY CRITERIA

Intact Stability Criteria

Regulation

Intact Stability Criteria in accordance with IS code 2008.



- Initial Metacentric height GM_0 not less than 0.35 m.
- The area under the righting lever curve (GZ curve) up to $\phi = 30^\circ$ angle of heel shall be not less than 0.055 m-rad.
- The area under the righting lever (GZ) curve shall not be less than 0.090 m-rad up to an angle of flooding (ϕ_f) or 40° , whichever is less.
- The area under the righting lever (GZ) curve shall not be less than 0.030 m-rad between the angle of heel 30 deg & angle of flooding (ϕ_f) or 40 deg., whichever is less.
- The righting lever GZ should be at least 0.20 m at an angle of heel equal to or greater than 30 deg.
- The maximum righting lever should occur at an angle of heel preferably exceeding 30 deg, but not less than 25 deg.

For the purpose of calculating the heeling moments the following assumptions shall be made:

Moments due to wind pressure:

1. A wind pressure may be taken as

h (m)	1	2	3	4	5	6 and over
P (Pa)	316	386	429	460	485	504

Where h is the vertical distance from the centre of the projected vertical area of the vessel above the waterline, to the waterline

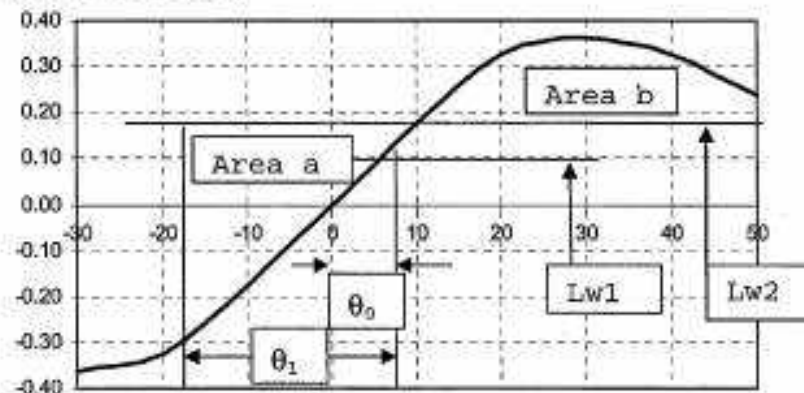
2. The area applicable shall be the projected lateral area of the ship above the waterline corresponding to the intact condition;
3. The moment arm shall be the vertical distance from a point at one half of the mean draught corresponding to the intact condition to the centre of gravity of the lateral area.

Recommended weather criterion (IS CODE 2008)

The ability of a ship to withstand the combined effects of beam wind and rolling should be demonstrated for each standard condition of loading, with reference to the figure as follows:

1. The ship is subjected to a steady wind pressure acting perpendicular to the ship's centreline which results in a steady wind heeling level ($Lw1$).
2. From the resultant angle of equilibrium (θ_0), the ship is assumed to roll owing to wave action to an angle of roll (θ_1) to windward. The angle of heel under action of steady wind (θ_0) should not
3. exceed 16° or 80% of the angle of deck edge immersion, whichever is less. Attention should be paid to the effect of steady wind so that excessive resultant angles of heel are avoided.
4. The ship is then subjected to a gust wind pressure which results in a gust wind heeling lever ($Lw2$).
5. Under these circumstances, area "b" should be equal to or greater than area "a".
6. Free surface effects should be accounted for in the standard conditions of loading.

Weather Criteria



7. The angles are defined as follows:

- θ_0 = angle of heel under action of steady wind

- θ_1 = angle of roll to windward due to wave action
- θ_2 = angle of down flooding (θ_f) or 50° or θ_c , whichever is less

Where:

- θ_f = angle of heel at which openings in the hull, superstructures or deckhouses which cannot be closed weather tight immerse. In applying this criterion, small openings through which progressive flooding cannot take place need not be considered as open.
- θ_c = angle of second intercept between wind heeling lever lw_2 and GZ curves.

The wind heeling levers lw_1 and lw_2 are constant values at all angles of inclination and should be calculated as follows:

$$\begin{aligned} Lw_1 &= (P \cdot A \cdot Z / (1000 \cdot g \cdot \Delta)) \\ Lw_2 &= 1.5 \cdot Lw_1 \end{aligned}$$

- P = wind pressure of 504 Pa. The value of P used for ships in restricted service may be reduced subject to the approval of the Administration
- A = projected lateral area of the portion of the ship and deck cargo above the waterline (m^2).
- Z = vertical distance from the centre of A to the centre of the underwater lateral area or approximately to a point at one half the mean draught (m)
- Δ = displacement (t)
- g = gravitational acceleration of 9.81 m/s^2

The angle of roll (θ_1) should be calculated as follows:

$$\theta_1 = 109kX_1X_2\sqrt{rs} \text{ (degrees)}$$

Where:

- X_1 = factor as shown in table 1
- X_2 = factor as shown in table 2
- k = factor as follows:
 - $k = 1.0$ for round-bilged ship having no bilge or bar keels

Yard No. TBD

Stability Criteria

- $k = 0.7$ for a ship having sharp bilges
- $k =$ as shown in table 3 for a ship having bilge keels, a bar keel or both

$$r = 0.73 \pm 0.6 OG/d$$

With:

- OG = distance between the centre of gravity and the waterline (m) (+ if centre of gravity is above the waterline, - if it is below)
- d = mean moulded draught of the ship (m)
- s = factor as shown in table 4.

Table 1 Values of factor X1

B/d	X1
≤ 2.4	1.0
2.5	0.98
2.6	0.96
2.7	0.95
2.8	0.93
2.9	0.91
3.0	0.90
3.1	0.88
3.2	0.86
3.3	0.84
3.4	0.82
≥ 3.5	0.80

Table 2 Values of factor X2

CB	X2
≤ 0.45	0.75
0.50	0.82
0.55	0.89
0.60	0.95
0.65	0.97
≥ 0.70	1.0

Table 3 Values of factor X3

Ak.100/(LB)	K
0	1.0
1.0	0.98
1.5	0.95
2.0	0.88
2.5	0.79
3.0	0.74
3.5	0.72
≥ 4.0	0.70

Table 4 Values of factor X4

T	S
≤6	0.100
7	0.098
8	0.093
12	0.065
14	0.053
16	0.044
18	0.038
≥20	0.035

(Intermediate values in tables 1-4 should be obtained by linear interpolation.)

$$\text{Rolling period } T = \frac{2CB}{\sqrt{GM}} \text{ (s)}$$

Where:

- $C = 0.373 + 0.023 (B/d) - 0.043 (L/100)$
- L = length of the ship at waterline (m)
- B = moulded breadth of the ship (m)
- d = mean moulded draught of the ship (m)
- CB = block coefficient
- A_k = total overall area of bilge keels, or area of the lateral projection of the bar keel, or sum of these areas (m²)
- GM = metacentric height corrected for free surface effect (m).

4. LOADING CONDITIONS

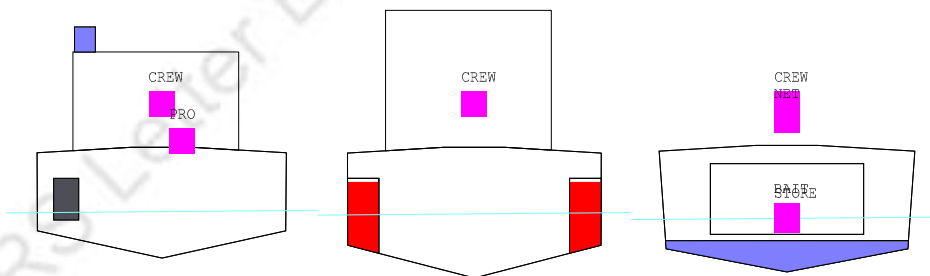
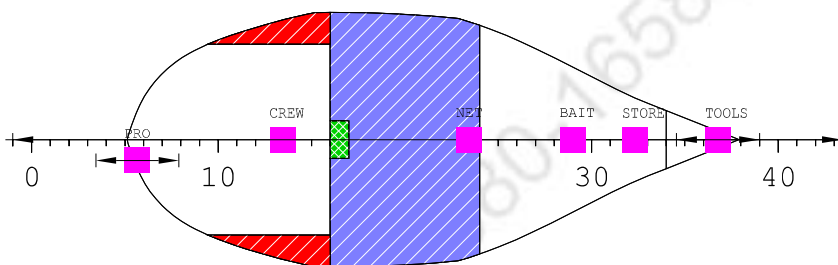
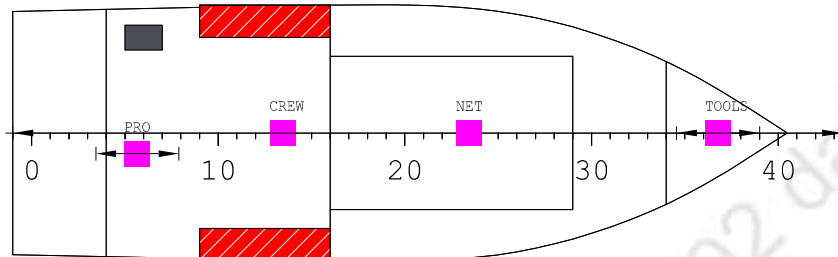
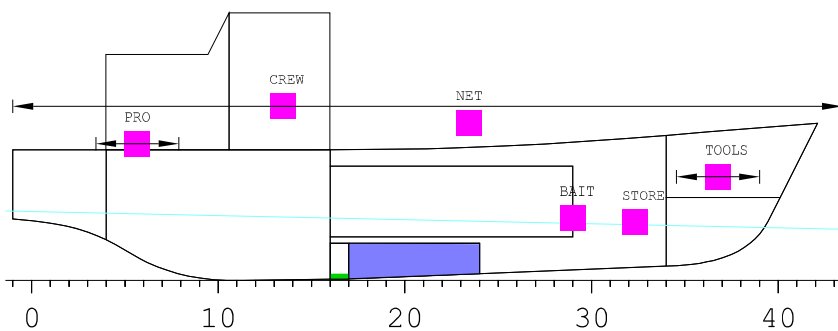
Refer IRS Letter E-121680-165892 dated, April 03, 2021

LOADING CONDITIONS SUMMARY TABLE

LOADING CONDITION	T m	TR m	HEEL deg	GM m	DISP t
FULL LOAD DEPART. W/O ICE	1.471	-0.401	-0.5	1.624	82.2
FULL LOAD ARR. W/O ICE	1.441	-0.177	0.0	1.530	77.8
FULL LOAD DEPART. WITH ICE	1.555	-0.250	-0.5	1.461	89.2
FULL LOAD ARR. WITH ICE	1.441	-0.177	0.0	1.530	77.8
DEPT. 50% CONS & 100% CATCH W/O ICE	1.537	-0.139	-0.2	1.442	86.7
DEPT. 50% CONS & 100% CATCH WITH ICE	1.537	-0.139	-0.2	1.442	86.7
ARR. 10% CONS & 40% CATCH W/O ICE	1.332	-0.375	0.0	1.790	68.8
ARR. 10% CONS & 40% CATCH WITH ICE	1.374	-0.266	0.1	1.675	72.0
ARR. 10% CONS & 20% CATCH W/O ICE	1.295	-0.444	0.0	1.898	65.8
ARR. 10% CONS & 20% CATCH WITH ICE	1.338	-0.364	0.0	1.773	69.3
ARR. 10% CONS & 0% CATCH W/O ICE	1.258	-0.514	0.0	2.017	62.8
ARR. 10% CONS & 0% CATCH WITH ICE	1.301	-0.432	0.0	1.879	66.3

LOADING CONDITION	KG m
FULL LOAD DEPART. W/O ICE	2.150
FULL LOAD ARR. W/O ICE	2.348
FULL LOAD DEPART. WITH ICE	2.148
FULL LOAD ARR. WITH ICE	2.348
DEPT. 50% CONS & 100% CATCH W/O ICE	2.224
DEPT. 50% CONS & 100% CATCH WITH ICE	2.224
ARR. 10% CONS & 40% CATCH W/O ICE	2.377
ARR. 10% CONS & 40% CATCH WITH ICE	2.365
ARR. 10% CONS & 20% CATCH W/O ICE	2.388
ARR. 10% CONS & 20% CATCH WITH ICE	2.375
ARR. 10% CONS & 0% CATCH W/O ICE	2.400
ARR. 10% CONS & 0% CATCH WITH ICE	2.386

FULL LOAD DEPART. W/O ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

FULL LOAD DEPART. W/O ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.671 m
Draught at FP (moulded)	1.270 m
Mean Draught (moulded)	1.471 m

Trim (+ by Bow)	-0.401 m
Heel (+ PS)	-0.5 deg

KM above moulded BL	4.128 m
KG above moulded BL	2.150 m
GM0 (solid)	1.978 m
Free Surface Correction	0.354 m
GM (liquid)	1.624 m
Density of Water	1.025 t/m ³

LCB :	8.2335923714263 m Fwd of AP
LCF :	7.8404014945774 m Fwd of AP
MCT :	1.11 tm/cm
TPC :	0.95 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.2	13.500	0.000	1.500
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.0	7.872	0.000	0.116
CREW	0.6	6.500	0.000	4.200
Diesel Oil	6.5	6.127	0.000	1.502
Fresh Water	10.3	9.259	0.045	0.729
FISH NET	6.0	11.000	0.000	3.800
PROVISION	2.5	3.000	-0.500	3.300
STORE	2.5	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	30.2	9.013	0.015	1.927
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	30.2	9.013	0.015	1.927
Total weight	82.2	8.259	-0.013	2.150

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	95.0	3.3	3.8	0.00
R.FOTK.1S	DO	95.0	3.3	3.8	0.00
TOTAL			6.5	7.6	0.00

Fresh Water 1.00 t/m3

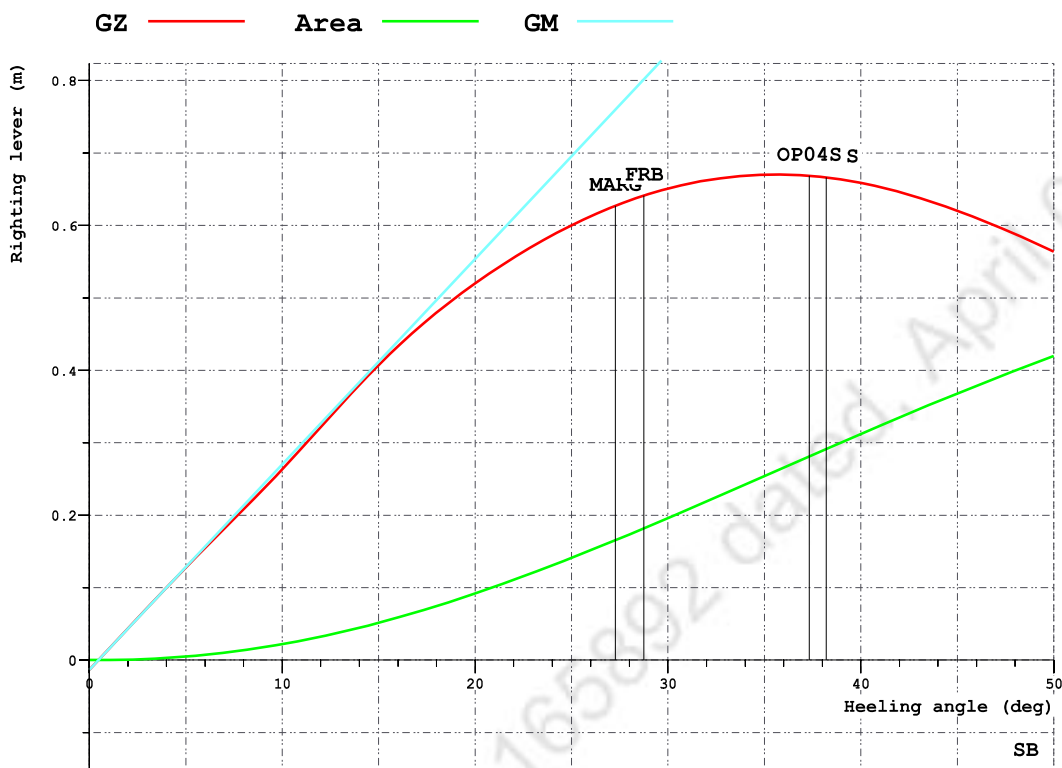
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	95.0	10.1	10.1	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			10.3	10.3	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	10.0	0.0	0.0	0.03
TOTAL			0.0	0.0	0.03

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTN	UNIT	STAT
V.AREA30	0.196	mrاد	OK
V.AREA40	0.281	mrاد	OK
V.AREA3040	0.085	mrاد	OK
V.GZ0.2	0.670	m	OK
V.MAXGZ25	35.599	deg	OK
V.GM0.35	1.624	m	OK
V.IMOWEATHER	1.672		OK
2008IS-A2.3.1.2	2.881	deg	OK

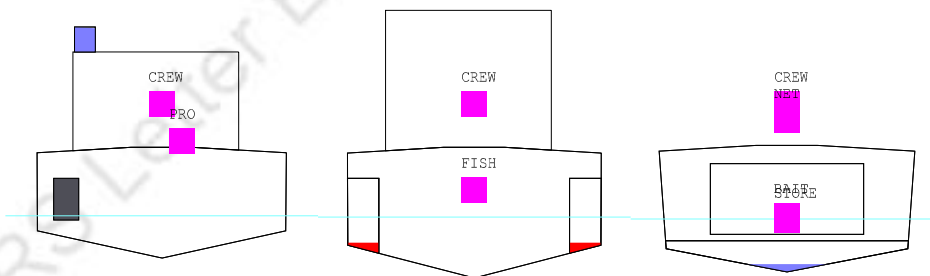
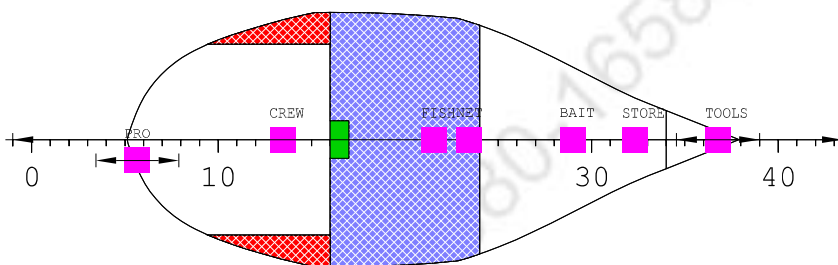
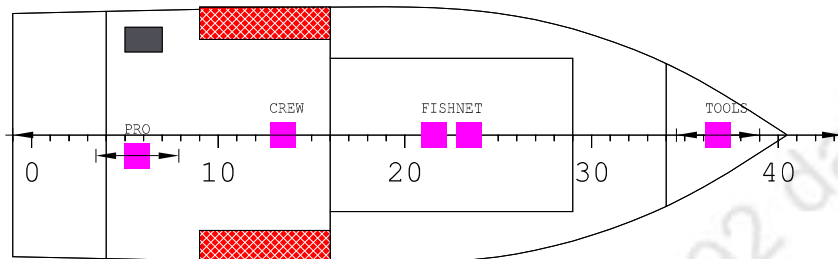
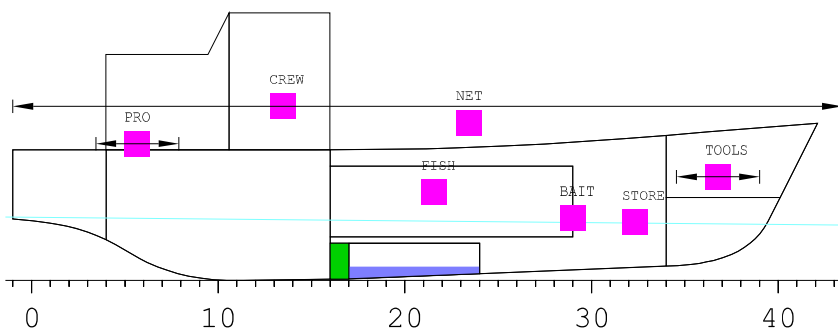
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.471	-0.401	-0.013	0.000
0.5	1.471	-0.401	0.000	0.000
5.0	1.464	-0.398	0.128	0.005
10.0	1.443	-0.366	0.263	0.022
15.0	1.404	-0.300	0.408	0.051
20.0	1.337	-0.220	0.520	0.092
30.0	1.119	-0.036	0.651	0.196
40.0	0.834	0.117	0.659	0.312
50.0	0.521	0.219	0.564	0.420

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	-	1.921
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-38.2	1.872
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	-	1.990
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-37.3	1.940
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.645
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.446
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.475
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.475
OP9S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.475
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	2.866
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	-	1.978
OP12S	E/R VENTILAT.	WEATHERTIGHT	2.690	-1.900	4.100	-	2.471

FULL LOAD ARR. W/O ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

FULL LOAD ARR. W/O ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.530 m
Draught at FP (moulded)	1.353 m
Mean Draught (moulded)	1.441 m

Trim (+ by Bow)	-0.177 m
Heel (+ PS)	0.0 deg

KM above moulded BL	4.251 m
KG above moulded BL	2.348 m
GM0 (solid)	1.903 m
Free Surface Correction	0.373 m
GM (liquid)	1.530 m
Density of Water	1.025 t/m ³

LCB :	8.5746428869088 m Fwd of AP
LCF :	7.8727246325902 m Fwd of AP
MCT :	1.11 tm/cm
TPC :	0.95 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.0	0.000	0.000	0.000
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.3	7.875	0.000	0.489
CREW	0.6	6.500	0.000	4.200
Diesel Oil	0.7	6.433	0.000	0.749
FISH	15.0	10.150	0.000	2.130
Fresh Water	1.3	7.964	0.370	1.351
FISH NET	6.0	11.000	0.000	3.800
PROVISION	0.2	3.000	-0.500	3.300
STORE	0.2	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	25.9	10.130	0.061	2.485
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	25.9	10.130	0.061	2.485
Total weight	77.8	8.588	0.000	2.348

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	9.5	0.3	0.4	0.00
R.FOTK.1S	DO	9.5	0.3	0.4	0.00
TOTAL			0.7	0.8	0.00

Fresh Water 1.00 t/m3

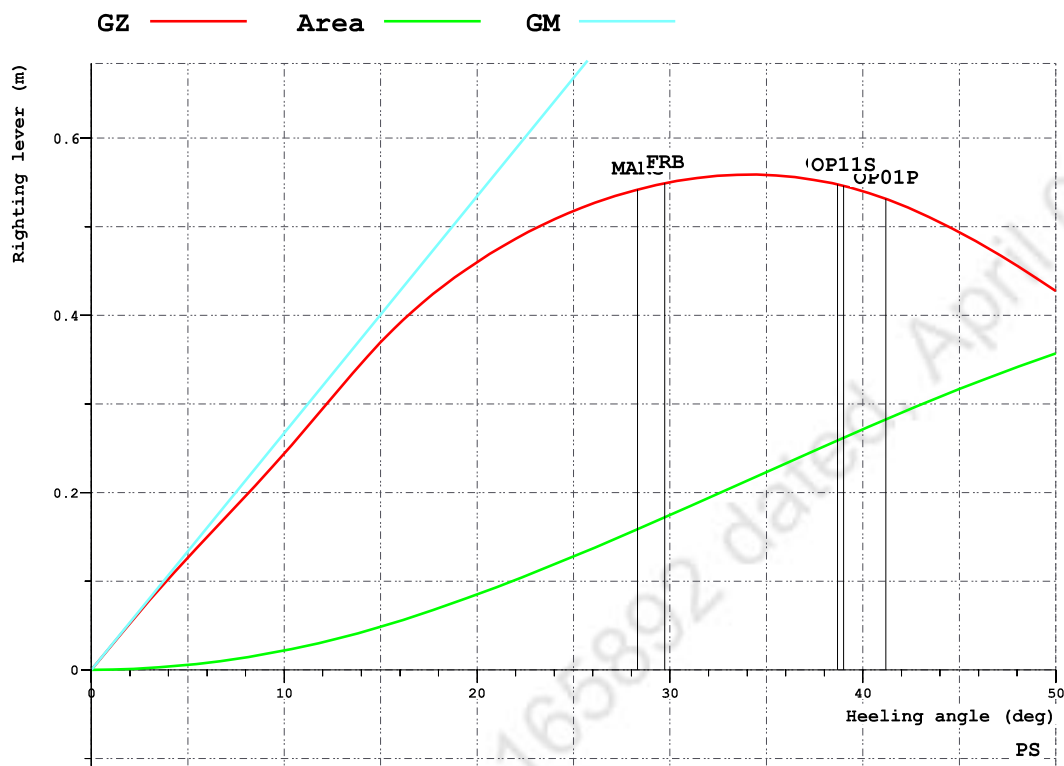
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	9.5	1.0	1.0	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			1.3	1.3	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	100.0	0.3	0.3	0.00
TOTAL			0.3	0.3	0.00

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTN	UNIT	STAT
V.AREA30	0.175	mrاد	OK
V.AREA40	0.259	mrاد	OK
V.AREA3040	0.084	mrاد	OK
V.GZ0.2	0.559	m	OK
V.MAXGZ25	34.147	deg	OK
V.GM0.35	1.530	m	OK
V.IMOWEATHER	1.532		OK
2008IS-A2.3.1.2	2.841	deg	OK

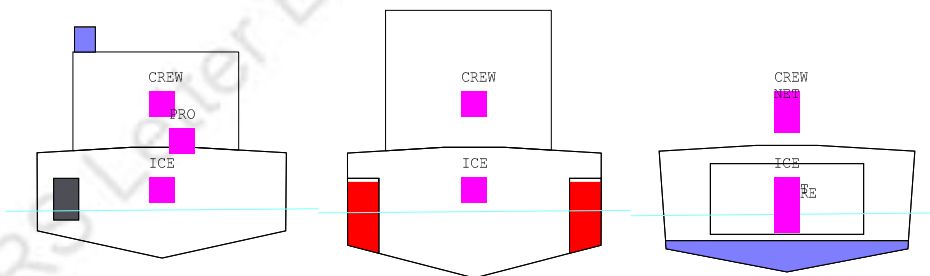
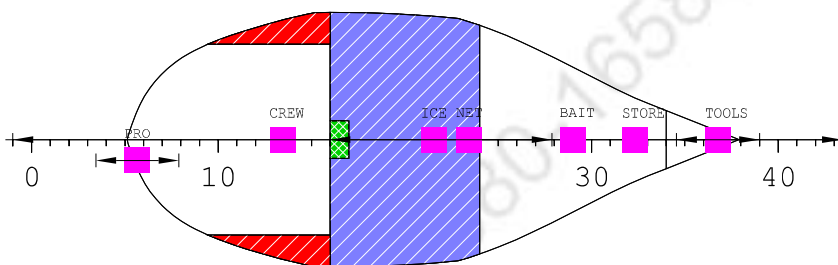
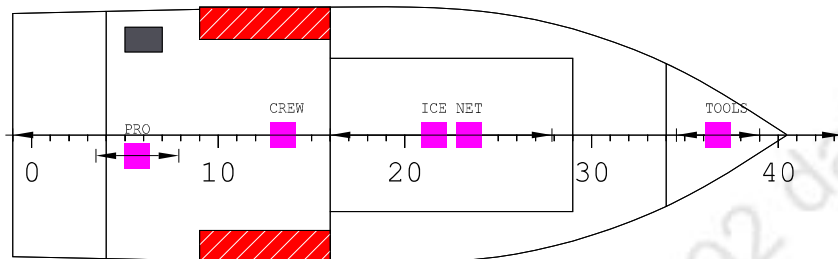
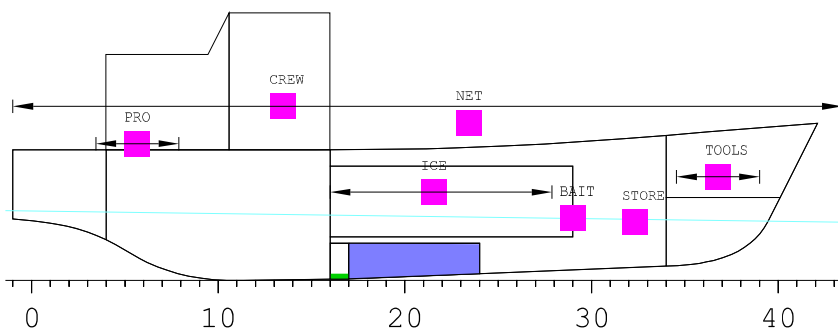
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.441	-0.177	0.000	0.000
5.0	1.434	-0.156	0.127	0.006
10.0	1.410	-0.099	0.244	0.022
15.0	1.368	-0.012	0.370	0.049
20.0	1.299	0.087	0.460	0.085
30.0	1.076	0.296	0.550	0.175
40.0	0.779	0.500	0.540	0.271
50.0	0.456	0.653	0.427	0.357

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	41.2	1.972
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-	1.972
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	38.7	2.002
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-	2.002
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.723
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.562
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.596
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.596
OP09S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.596
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	2.786
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	39.0	1.997
OP12S	E/R VENTILAT.	WEATHERTIGHT	2.690	-1.900	4.100	-	2.596

FULL LOAD DEPART. WITH ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

FULL LOAD DEPART. WITH ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.680 m
Draught at FP (moulded)	1.430 m
Mean Draught (moulded)	1.555 m

Trim (+ by Bow)	-0.250 m
Heel (+ PS)	-0.5 deg

KM above moulded BL	3.935 m
KG above moulded BL	2.148 m
GM0 (solid)	1.787 m
Free Surface Correction	0.326 m
GM (liquid)	1.461 m
Density of Water	1.025 t/m ³

LCB	: 8.3920662613761 m Fwd of AP
LCF	: 7.8742664014084 m Fwd of AP
MCT	: 1.12 tm/cm
TPC	: 0.96 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.2	13.500	0.000	1.500
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.0	7.872	0.000	0.116
CREW	0.6	6.500	0.000	4.200
Diesel Oil	6.5	6.127	0.000	1.502
Fresh Water	10.3	9.259	0.045	0.729
ICE	7.0	10.150	0.000	2.130
FISH NET	6.0	11.000	0.000	3.800
PROVISION	2.5	3.000	-0.500	3.300
STORE	2.5	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	37.2	9.227	0.012	1.965
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	37.2	9.227	0.012	1.965
Total weight	89.2	8.407	-0.012	2.148

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	95.0	3.3	3.8	0.00
R.FOTK.1S	DO	95.0	3.3	3.8	0.00
TOTAL			6.5	7.6	0.00

Fresh Water 1.00 t/m3

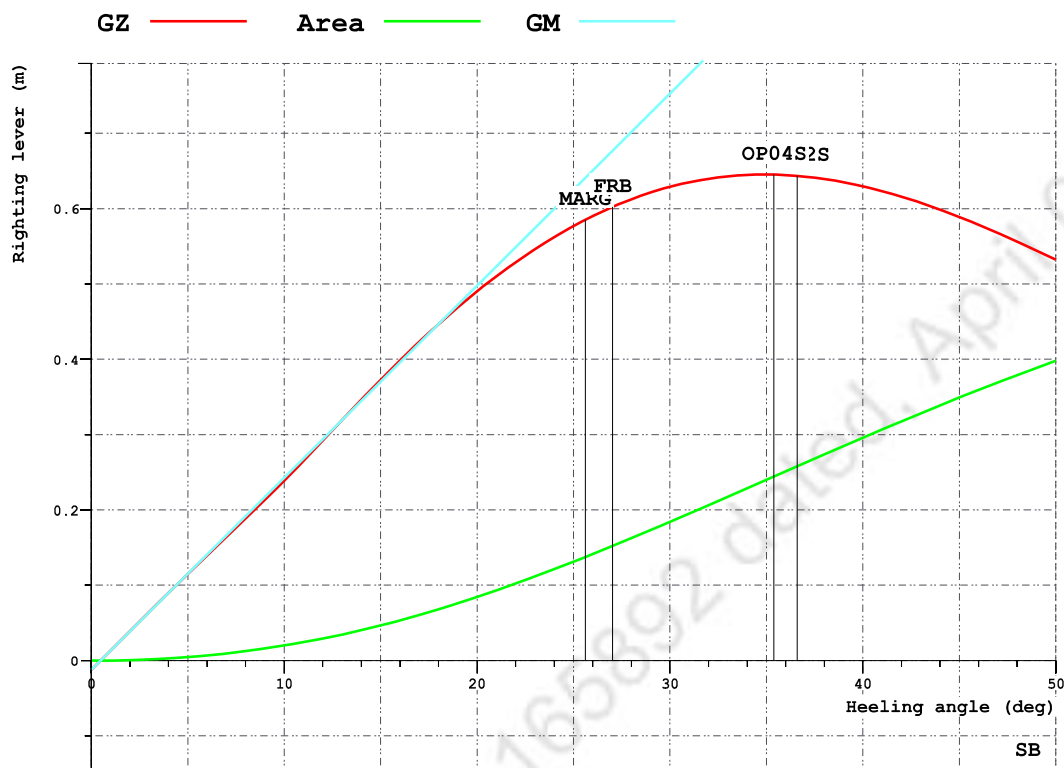
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	95.0	10.1	10.1	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			10.3	10.3	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	10.0	0.0	0.0	0.03
TOTAL			0.0	0.0	0.03

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTN	UNIT	STAT
V.AREA30	0.184	mrاد	OK
V.AREA40	0.244	mrاد	OK
V.AREA3040	0.060	mrاد	OK
V.GZ0.2	0.645	m	OK
V.MAXGZ25	34.916	deg	OK
V.GM0.35	1.461	m	OK
V.IMOWEATHER	1.612		OK
2008IS-A2.3.1.2	2.884	deg	OK

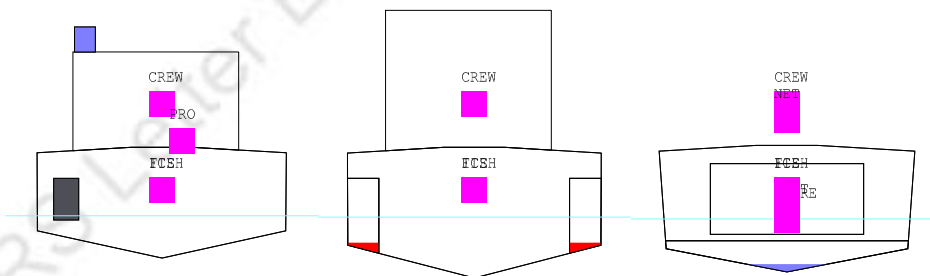
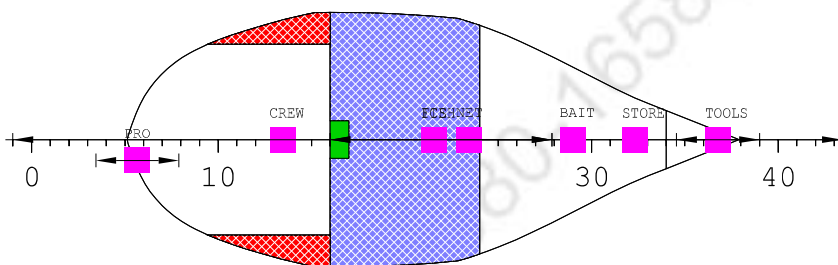
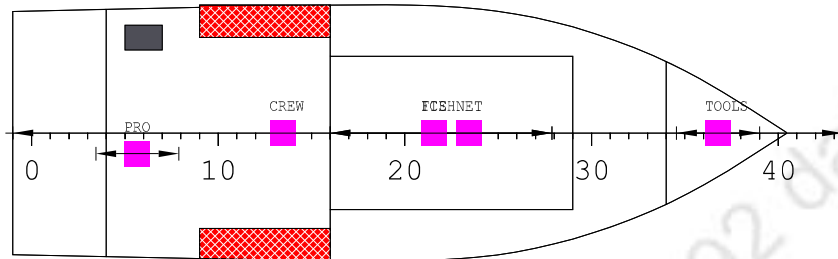
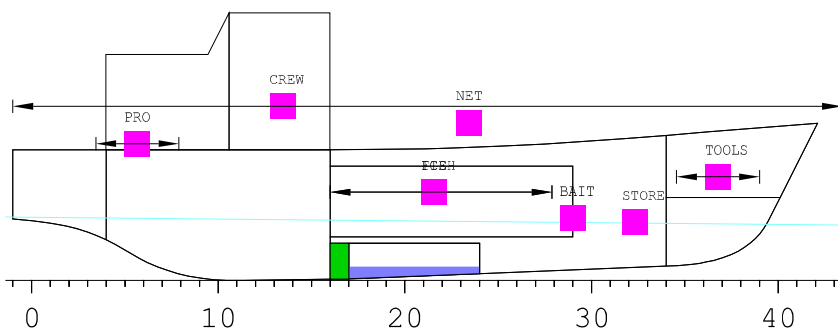
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.555	-0.250	-0.012	0.000
0.5	1.555	-0.250	0.000	0.000
5.0	1.548	-0.249	0.115	0.005
10.0	1.526	-0.222	0.239	0.020
15.0	1.487	-0.162	0.373	0.047
20.0	1.424	-0.079	0.490	0.084
30.0	1.212	0.104	0.629	0.184
40.0	0.938	0.246	0.630	0.296
50.0	0.636	0.338	0.532	0.398

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	-	1.868
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-36.6	1.818
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	-	1.912
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-35.4	1.861
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.591
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.416
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.444
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.444
OP9S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.444
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	2.708
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	-	1.904
OP12S	E/R VENTILAT.	WEATHER TIGHT	2.690	-1.900	4.100	-	2.440

FULL LOAD ARR. WITH ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

FULL LOAD ARR. WITH ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.530 m
Draught at FP (moulded)	1.353 m
Mean Draught (moulded)	1.441 m

Trim (+ by Bow)	-0.177 m
Heel (+ PS)	0.0 deg

KM above moulded BL	4.251 m
KG above moulded BL	2.348 m
GM0 (solid)	1.903 m
Free Surface Correction	0.373 m
GM (liquid)	1.530 m
Density of Water	1.025 t/m ³

LCB :	8.5746428869088 m Fwd of AP
LCF :	7.8727246325902 m Fwd of AP
MCT :	1.11 tm/cm
TPC :	0.95 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.0	0.000	0.000	0.000
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.3	7.875	0.000	0.489
CREW	0.6	6.500	0.000	4.200
Diesel Oil	0.7	6.433	0.000	0.749
FISH	11.5	10.150	0.000	2.130
Fresh Water	1.3	7.964	0.370	1.351
ICE	3.5	10.150	0.000	2.130
FISH NET	6.0	11.000	0.000	3.800
PROVISION	0.2	3.000	-0.500	3.300
STORE	0.2	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	25.9	10.130	0.061	2.485
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	25.9	10.130	0.061	2.485
Total weight	77.8	8.588	0.000	2.348

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	9.5	0.3	0.4	0.00
R.FOTK.1S	DO	9.5	0.3	0.4	0.00
TOTAL			0.7	0.8	0.00

Fresh Water 1.00 t/m3

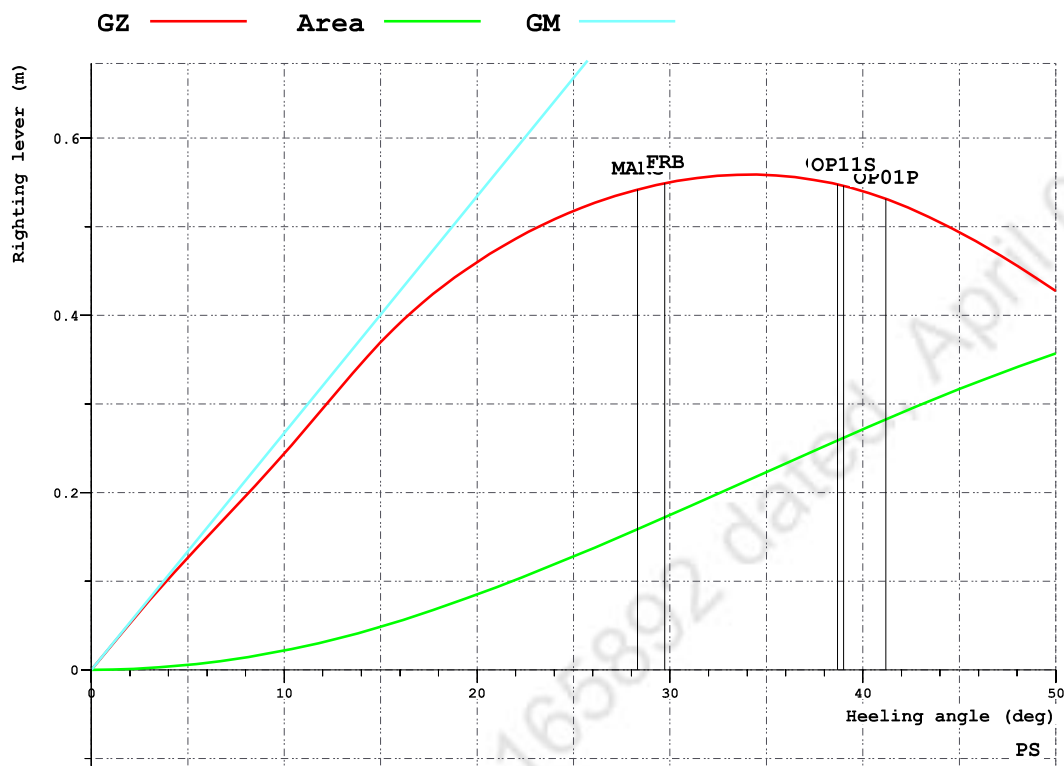
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	9.5	1.0	1.0	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			1.3	1.3	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	100.0	0.3	0.3	0.00
TOTAL			0.3	0.3	0.00

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTN	UNIT	STAT
V.AREA30	0.175	mrاد	OK
V.AREA40	0.259	mrاد	OK
V.AREA3040	0.084	mrاد	OK
V.GZ0.2	0.559	m	OK
V.MAXGZ25	34.147	deg	OK
V.GM0.35	1.530	m	OK
V.IMOWEATHER	1.532		OK
2008IS-A2.3.1.2	2.841	deg	OK

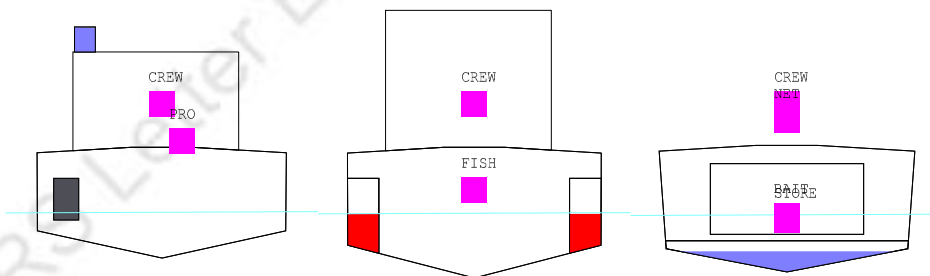
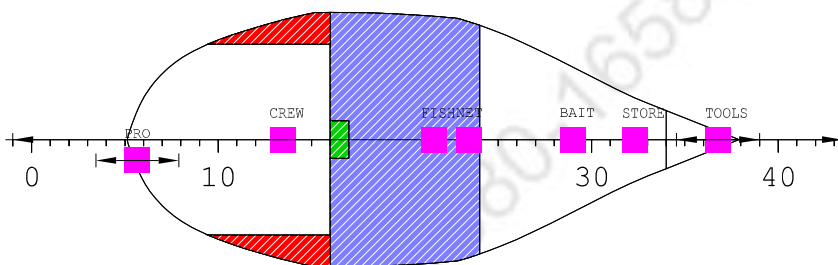
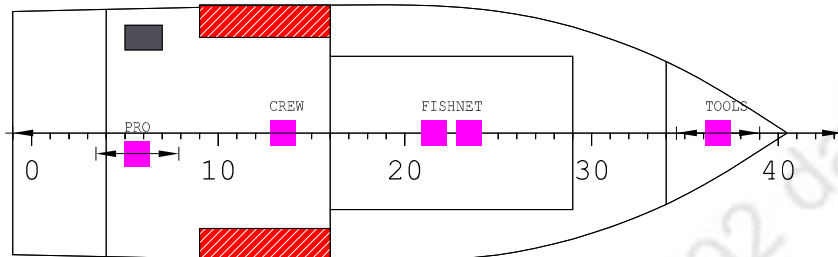
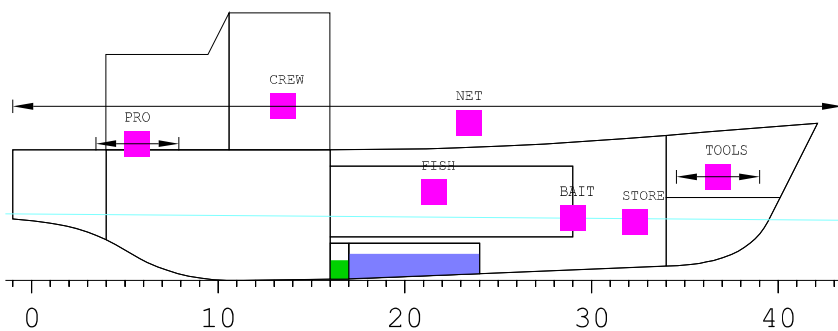
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.441	-0.177	0.000	0.000
5.0	1.434	-0.156	0.127	0.006
10.0	1.410	-0.099	0.244	0.022
15.0	1.368	-0.012	0.370	0.049
20.0	1.299	0.087	0.460	0.085
30.0	1.076	0.296	0.550	0.175
40.0	0.779	0.500	0.540	0.271
50.0	0.456	0.653	0.427	0.357

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	41.2	1.972
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-	1.972
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	38.7	2.002
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-	2.002
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.723
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.562
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.596
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.596
OP09S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.596
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	2.786
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	39.0	1.997
OP12S	E/R VENTILAT.	WEATHERTIGHT	2.690	-1.900	4.100	-	2.596

DEPT. 50% CONS & 100% CATCH W/O ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

DEPT. 50% CONS & 100% CATCH W/O ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.607 m
Draught at FP (moulded)	1.468 m
Mean Draught (moulded)	1.537 m

Trim (+ by Bow)	-0.139 m
Heel (+ PS)	-0.2 deg

KM above moulded BL	4.001 m
KG above moulded BL	2.224 m
GM0 (solid)	1.777 m
Free Surface Correction	0.335 m
GM (liquid)	1.442 m
Density of Water	1.025 t/m ³

LCB	: 8.5510361159147 m Fwd of AP
LCF	: 7.8795295175669 m Fwd of AP
MCT	: 1.12 tm/cm
TPC	: 0.96 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.0	0.000	0.000	0.000
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.2	7.874	0.000	0.284
CREW	0.6	6.500	0.000	4.200
Diesel Oil	3.4	6.158	0.000	1.115
FISH	15.0	10.150	0.000	2.130
Fresh Water	5.5	9.090	0.084	0.701
FISH NET	6.0	11.000	0.000	3.800
PROVISION	1.2	3.000	-0.500	3.300
STORE	1.2	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	34.8	9.666	0.031	2.140
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	34.8	9.666	0.031	2.140
Total weight	86.7	8.560	-0.005	2.224

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	50.0	1.7	2.0	0.00
R.FOTK.1S	DO	50.0	1.7	2.0	0.00
TOTAL			3.4	4.0	0.00

Fresh Water 1.00 t/m3

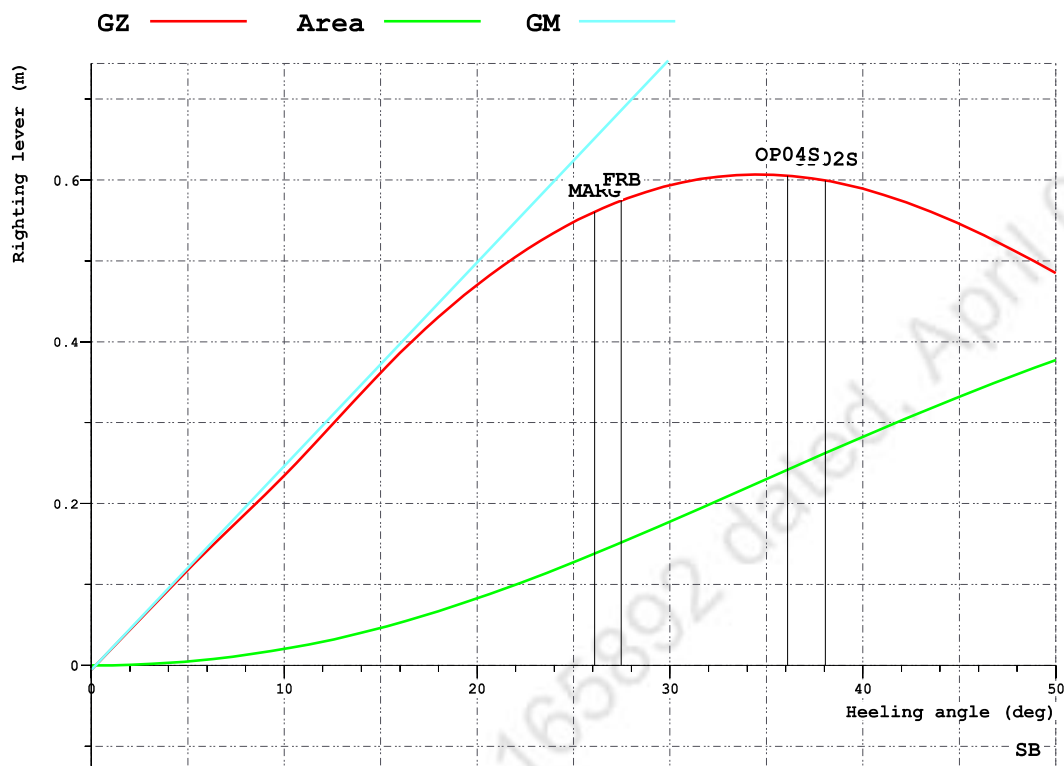
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	50.0	5.3	5.3	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			5.5	5.5	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	50.0	0.2	0.2	0.03
TOTAL			0.2	0.2	0.03

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTV	UNIT	STAT
V.AREA30	0.177	mrاد	OK
V.AREA40	0.242	mrاد	OK
V.AREA3040	0.064	mrاد	OK
V.GZ0.2	0.607	m	OK
V.MAXGZ25	34.567	deg	OK
V.GM0.35	1.442	m	OK
V.IMOWEATHER	1.593		OK
2008IS-A2.3.1.2	2.802	deg	OK

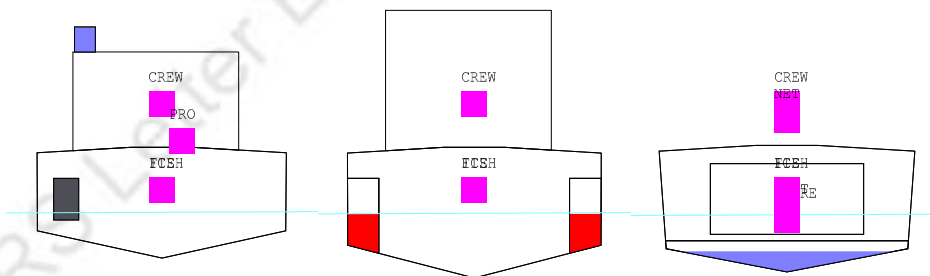
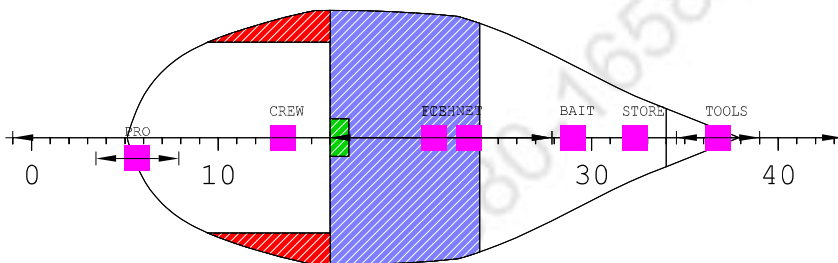
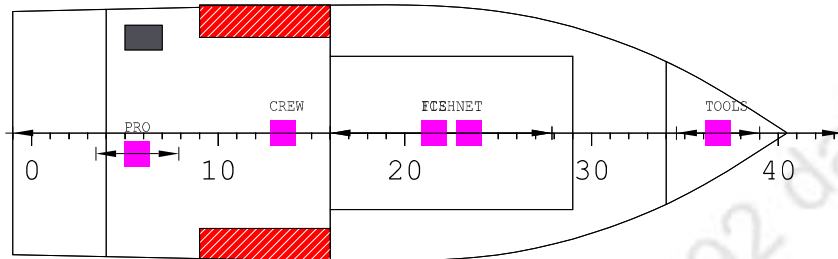
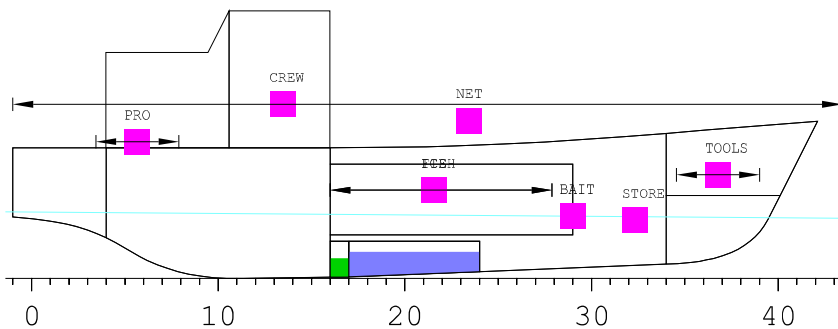
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.537	-0.139	-0.005	0.000
0.2	1.537	-0.139	0.000	0.000
5.0	1.530	-0.132	0.118	0.005
10.0	1.507	-0.093	0.234	0.020
15.0	1.467	-0.023	0.362	0.046
20.0	1.402	0.069	0.470	0.083
30.0	1.187	0.265	0.593	0.177
40.0	0.906	0.438	0.589	0.282
50.0	0.598	0.556	0.485	0.377

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	-	1.896
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-38.1	1.873
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	-	1.920
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-36.1	1.896
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.633
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.477
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.508
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.508
OP9S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.508
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	2.672
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	-	1.915
OP12S	E/R VENTILAT.	WEATHERTIGHT	2.690	-1.900	4.100	-	2.506

DEPT. 50% CONS & 100% CATCH WITH ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

DEPT. 50% CONS & 100% CATCH WITH ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.607 m
Draught at FP (moulded)	1.468 m
Mean Draught (moulded)	1.537 m

Trim (+ by Bow)	-0.139 m
Heel (+ PS)	-0.2 deg

KM above moulded BL	4.001 m
KG above moulded BL	2.224 m
GM0 (solid)	1.777 m
Free Surface Correction	0.335 m
GM (liquid)	1.442 m
Density of Water	1.025 t/m ³

LCB :	8.5510361159147 m Fwd of AP
LCF :	7.8795295175669 m Fwd of AP
MCT :	1.12 tm/cm
TPC :	0.96 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.0	0.000	0.000	0.000
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.2	7.874	0.000	0.284
CREW	0.6	6.500	0.000	4.200
Diesel Oil	3.4	6.158	0.000	1.115
FISH	11.5	10.150	0.000	2.130
Fresh Water	5.5	9.090	0.084	0.701
ICE	3.5	10.150	0.000	2.130
FISH NET	6.0	11.000	0.000	3.800
PROVISION	1.2	3.000	-0.500	3.300
STORE	1.2	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	34.8	9.666	0.031	2.140
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	34.8	9.666	0.031	2.140
Total weight	86.7	8.560	-0.005	2.224

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	50.0	1.7	2.0	0.00
R.FOTK.1S	DO	50.0	1.7	2.0	0.00
TOTAL			3.4	4.0	0.00

Fresh Water 1.00 t/m3

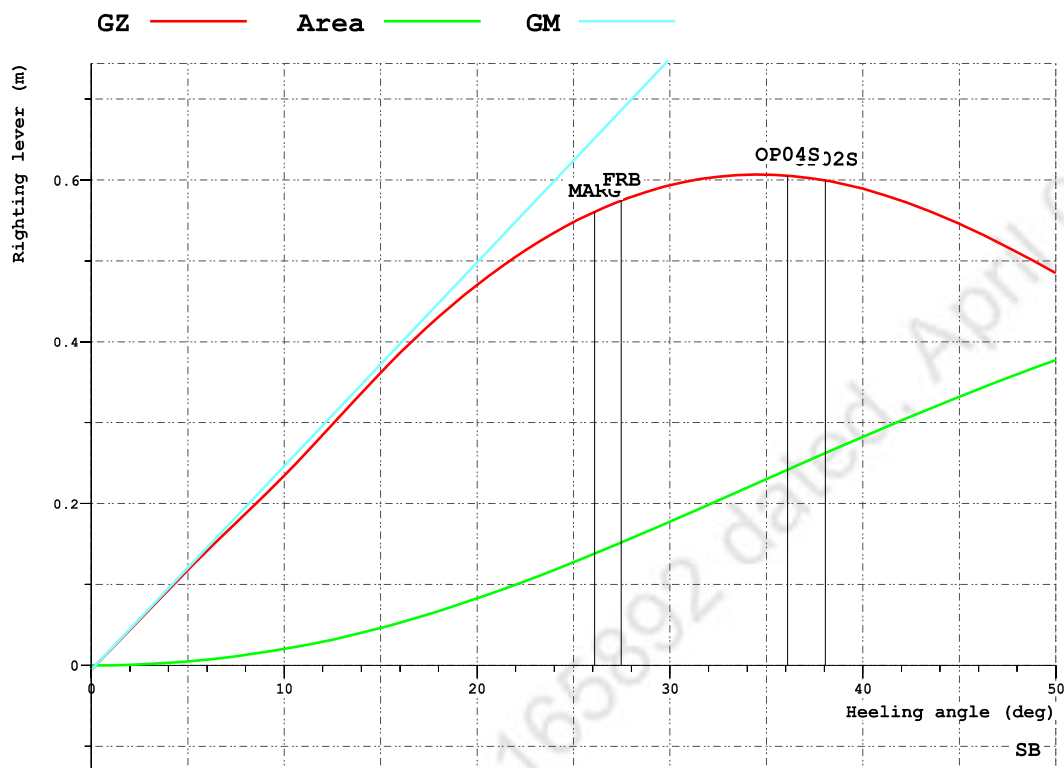
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	50.0	5.3	5.3	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			5.5	5.5	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	50.0	0.2	0.2	0.03
TOTAL			0.2	0.2	0.03

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTN	UNIT	STAT
V.AREA30	0.177	mrاد	OK
V.AREA40	0.242	mrاد	OK
V.AREA3040	0.064	mrاد	OK
V.GZ0.2	0.607	m	OK
V.MAXGZ25	34.567	deg	OK
V.GM0.35	1.442	m	OK
V.IMOWEATHER	1.593		OK
2008IS-A2.3.1.2	2.802	deg	OK

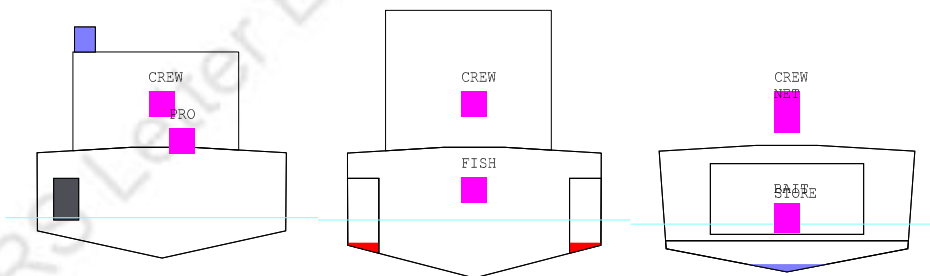
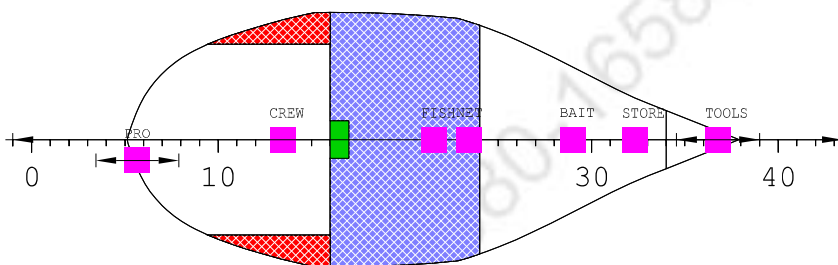
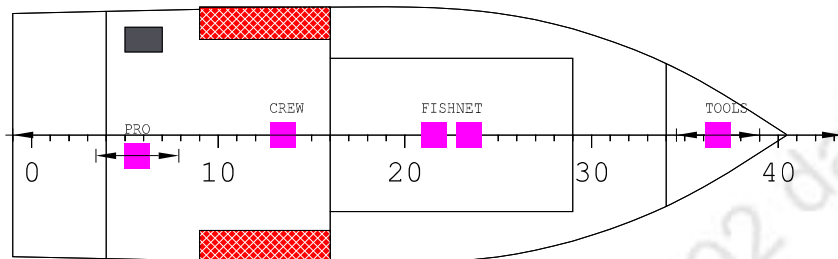
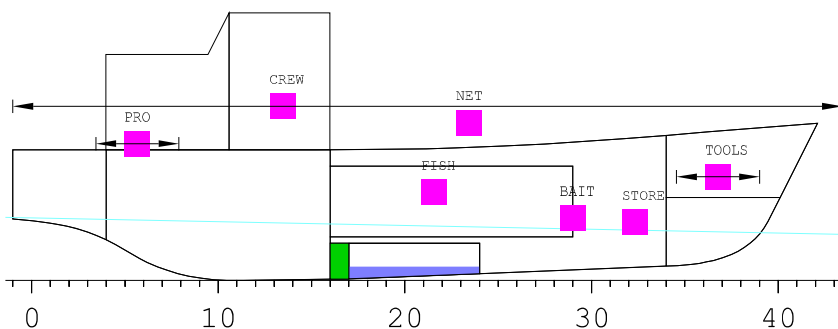
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.537	-0.139	-0.005	0.000
0.2	1.537	-0.139	0.000	0.000
5.0	1.530	-0.132	0.118	0.005
10.0	1.507	-0.093	0.234	0.020
15.0	1.467	-0.023	0.362	0.046
20.0	1.402	0.069	0.470	0.083
30.0	1.187	0.265	0.593	0.177
40.0	0.906	0.438	0.589	0.282
50.0	0.598	0.556	0.485	0.377

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	-	1.896
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-38.1	1.873
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	-	1.920
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-36.1	1.896
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.633
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.477
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.508
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.508
OP9S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.508
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	2.672
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	-	1.915
OP12S	E/R VENTILAT.WEATHERTIGHT		2.690	-1.900	4.100	-	2.506

ARR. 10% CONS & 40% CATCH W/O ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

ARR. 10% CONS & 40% CATCH W/O ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.520 m
Draught at FP (moulded)	1.145 m
Mean Draught (moulded)	1.332 m

Trim (+ by Bow)	-0.375 m
Heel (+ PS)	0.0 deg

KM above moulded BL	4.589 m
KG above moulded BL	2.377 m
GM0 (solid)	2.212 m
Free Surface Correction	0.422 m
GM (liquid)	1.790 m
Density of Water	1.025 t/m ³

LCB	: 8.3537044142907 m Fwd of AP
LCF	: 7.8327085023158 m Fwd of AP
MCT	: 1.07 tm/cm
TPC	: 0.94 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.0	0.000	0.000	0.000
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.3	7.875	0.000	0.489
CREW	0.6	6.500	0.000	4.200
Diesel Oil	0.7	6.433	0.000	0.749
FISH	6.0	10.150	0.000	2.130
Fresh Water	1.3	7.964	0.370	1.351
FISH NET	6.0	11.000	0.000	3.800
PROVISION	0.2	3.000	-0.500	3.300
STORE	0.2	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	16.9	10.119	0.094	2.675
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	16.9	10.119	0.094	2.675
Total weight	68.8	8.384	0.000	2.377

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	9.5	0.3	0.4	0.00
R.FOTK.1S	DO	9.5	0.3	0.4	0.00
TOTAL			0.7	0.8	0.00

Fresh Water 1.00 t/m3

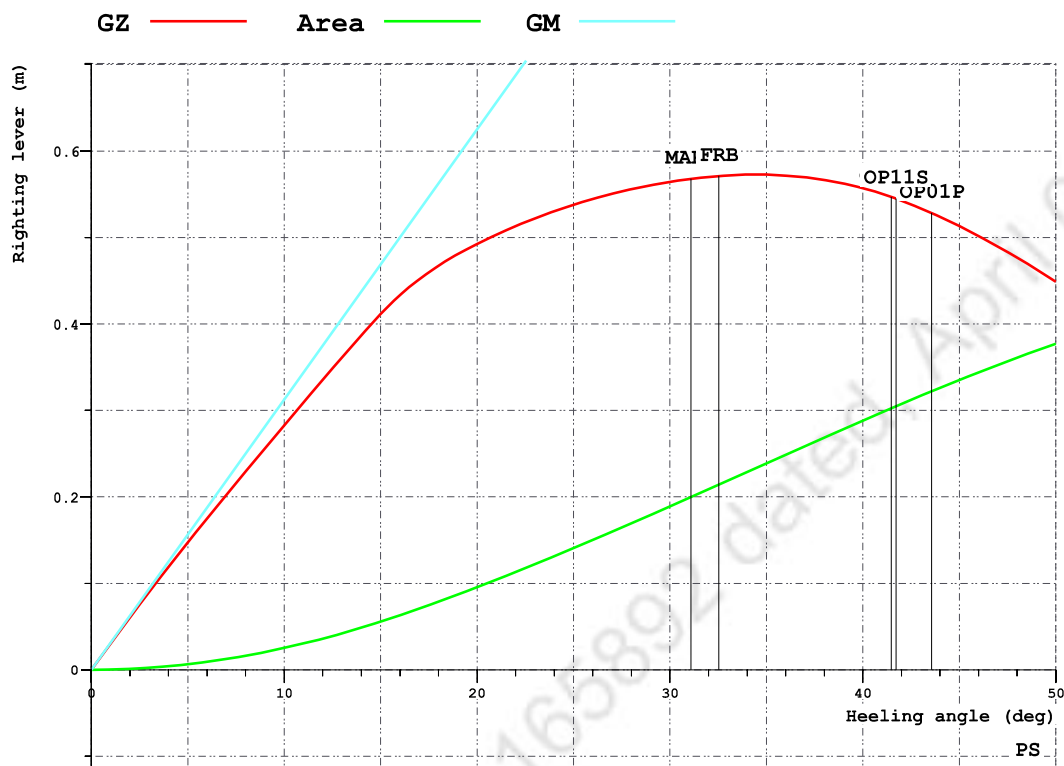
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	9.5	1.0	1.0	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			1.3	1.3	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	100.0	0.3	0.3	0.00
TOTAL			0.3	0.3	0.00

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTN	UNIT	STAT
V.AREA30	0.189	mrاد	OK
V.AREA40	0.288	mrاد	OK
V.AREA3040	0.099	mrاد	OK
V.GZ0.2	0.573	m	OK
V.MAXGZ25	34.446	deg	OK
V.GM0.35	1.790	m	OK
V.IMOWEATHER	1.498		OK
2008IS-A2.3.1.2	2.879	deg	OK

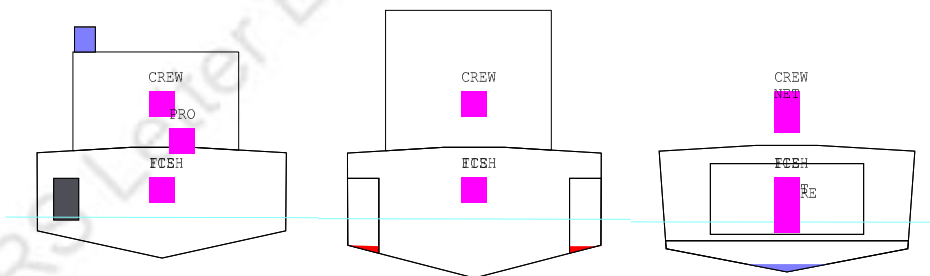
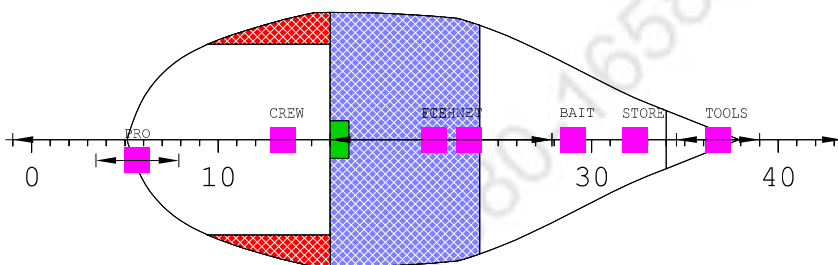
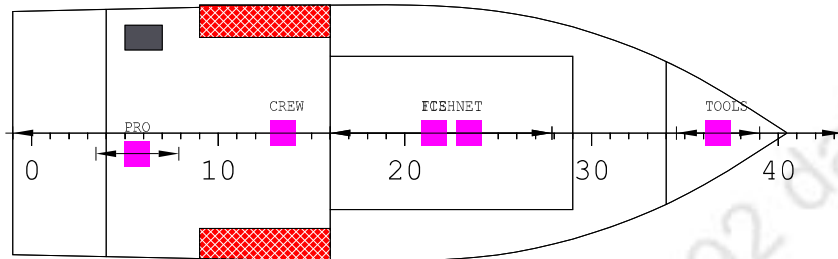
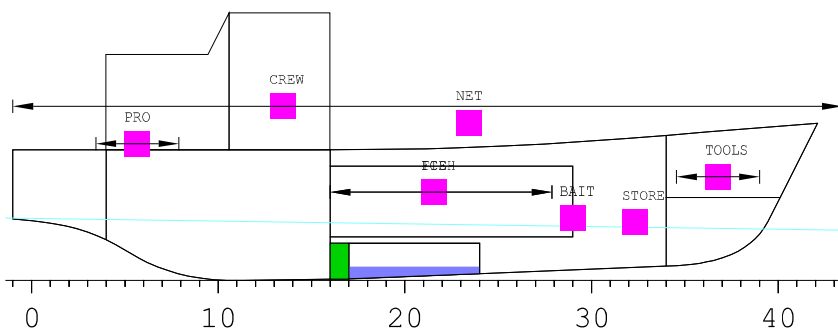
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.332	-0.375	0.000	0.000
5.0	1.324	-0.349	0.147	0.007
10.0	1.301	-0.284	0.282	0.025
15.0	1.256	-0.197	0.411	0.056
20.0	1.180	-0.101	0.493	0.096
30.0	0.952	0.107	0.564	0.189
40.0	0.644	0.322	0.557	0.288
50.0	0.309	0.491	0.449	0.377

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	43.6	2.040
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-	2.040
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	41.5	2.104
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-	2.104
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.791
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.600
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.635
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.635
OP09S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.635
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	2.993
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	41.7	2.093
OP12S	E/R VENTILAT.	WEATHERTIGHT	2.690	-1.900	4.100	-	2.635

ARR. 10% CONS & 40% CATCH WITH ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

ARR. 10% CONS & 40% CATCH WITH ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.507 m
Draught at FP (moulded)	1.241 m
Mean Draught (moulded)	1.374 m

Trim (+ by Bow)	-0.266 m
Heel (+ PS)	0.1 deg

KM above moulded BL	4.443 m
KG above moulded BL	2.365 m
GM0 (solid)	2.078 m
Free Surface Correction	0.403 m
GM (liquid)	1.675 m
Density of Water	1.025 t/m ³

LCB :	8.4943278454794 m Fwd of AP
LCF :	7.8887977805403 m Fwd of AP
MCT :	1.08 tm/cm
TPC :	0.94 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.2	13.500	0.000	1.500
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.3	7.875	0.000	0.489
CREW	0.6	6.500	0.000	4.200
Diesel Oil	0.3	6.612	0.000	0.695
FISH	6.0	10.150	0.000	2.130
Fresh Water	1.3	7.964	0.370	1.351
ICE	3.5	10.150	0.000	2.130
FISH NET	6.0	11.000	0.000	3.800
PROVISION	0.0	0.000	0.000	0.000
STORE	0.2	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	20.1	10.315	0.085	2.586
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	20.1	10.315	0.085	2.586
Total weight	72.0	8.515	0.002	2.365

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	5.0	0.2	0.2	0.00
R.FOTK.1S	DO	5.0	0.2	0.2	0.00
TOTAL			0.3	0.4	0.00

Fresh Water 1.00 t/m3

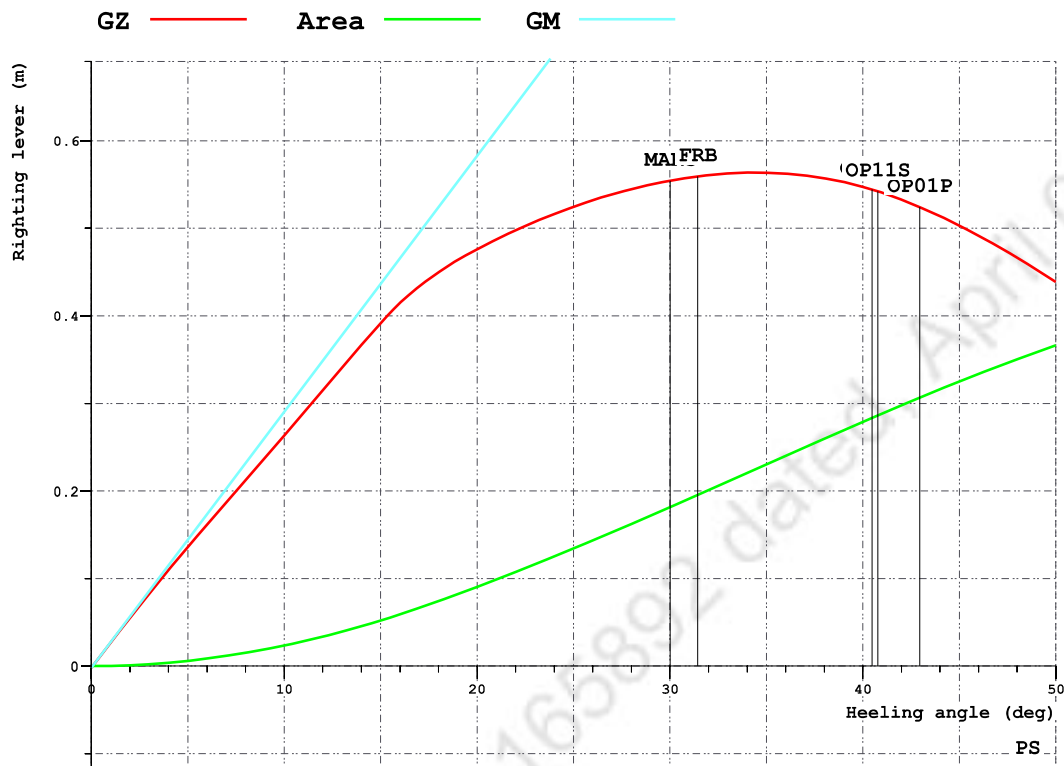
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	9.5	1.0	1.0	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			1.3	1.3	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	100.0	0.3	0.3	0.00
TOTAL			0.3	0.3	0.00

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTN	UNIT	STAT
V.AREA30	0.181	mrاد	OK
V.AREA40	0.279	mrاد	OK
V.AREA3040	0.098	mrاد	OK
V.GZ0.2	0.564	m	OK
V.MAXGZ25	34.470	deg	OK
V.GM0.35	1.675	m	OK
V.IMOWEATHER	1.524		OK
2008IS-A2.3.1.2	2.956	deg	OK

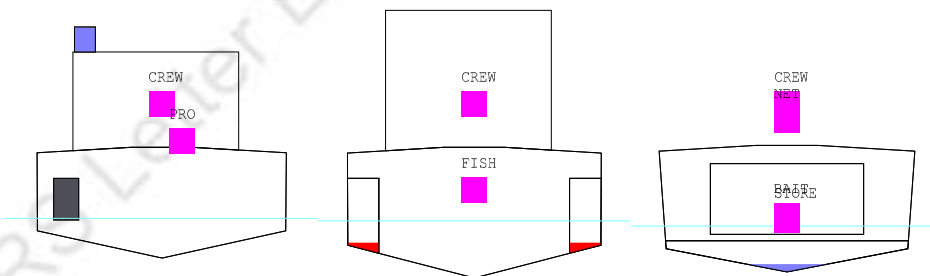
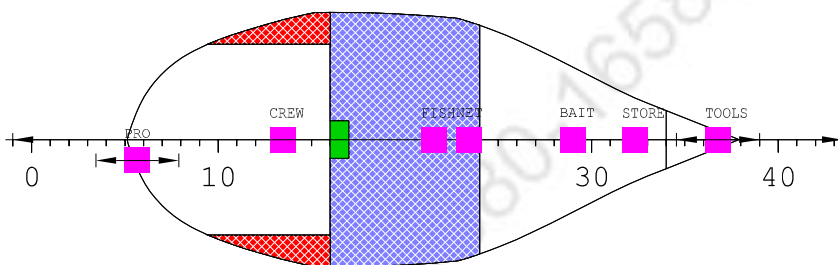
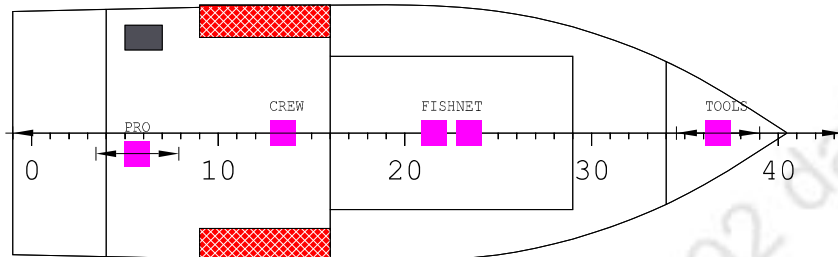
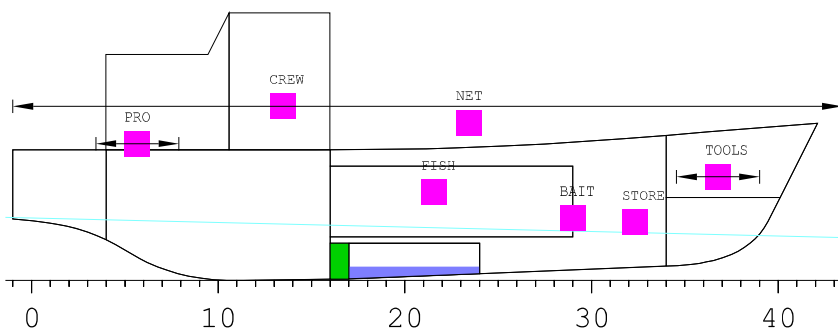
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.374	-0.266	-0.002	0.000
0.1	1.374	-0.266	0.000	0.000
5.0	1.366	-0.239	0.136	0.006
10.0	1.342	-0.174	0.263	0.023
15.0	1.298	-0.083	0.392	0.052
20.0	1.225	0.017	0.476	0.090
30.0	0.998	0.228	0.554	0.181
40.0	0.694	0.442	0.547	0.279
50.0	0.362	0.609	0.439	0.366

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	43.0	2.017
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-	2.025
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	40.5	2.063
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-	2.070
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.772
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.598
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.633
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.633
OP9S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.633
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	2.898
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	40.8	2.055
OP12S	E/R VENTILAT.	WEATHERTIGHT	2.690	-1.900	4.100	-	2.634

ARR. 10% CONS & 20% CATCH W/O ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

ARR. 10% CONS & 20% CATCH W/O ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.517 m
Draught at FP (moulded)	1.073 m
Mean Draught (moulded)	1.295 m

Trim (+ by Bow)	-0.444 m
Heel (+ PS)	0.0 deg

KM above moulded BL	4.727 m
KG above moulded BL	2.388 m
GM0 (solid)	2.339 m
Free Surface Correction	0.441 m
GM (liquid)	1.898 m
Density of Water	1.025 t/m ³

LCB : 8.267033450373 m Fwd of AP
 LCF : 7.8104720100997 m Fwd of AP
 MCT : 1.06 tm/cm
 TPC : 0.94 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.0	0.000	0.000	0.000
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.3	7.875	0.000	0.489
CREW	0.6	6.500	0.000	4.200
Diesel Oil	0.7	6.433	0.000	0.749
FISH	3.0	10.150	0.000	2.130
Fresh Water	1.3	7.964	0.370	1.351
FISH NET	6.0	11.000	0.000	3.800
PROVISION	0.2	3.000	-0.500	3.300
STORE	0.2	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	13.9	10.112	0.114	2.792
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	13.9	10.112	0.114	2.792
Total weight	65.8	8.303	0.000	2.388

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	9.5	0.3	0.4	0.00
R.FOTK.1S	DO	9.5	0.3	0.4	0.00
TOTAL			0.7	0.8	0.00

Fresh Water 1.00 t/m3

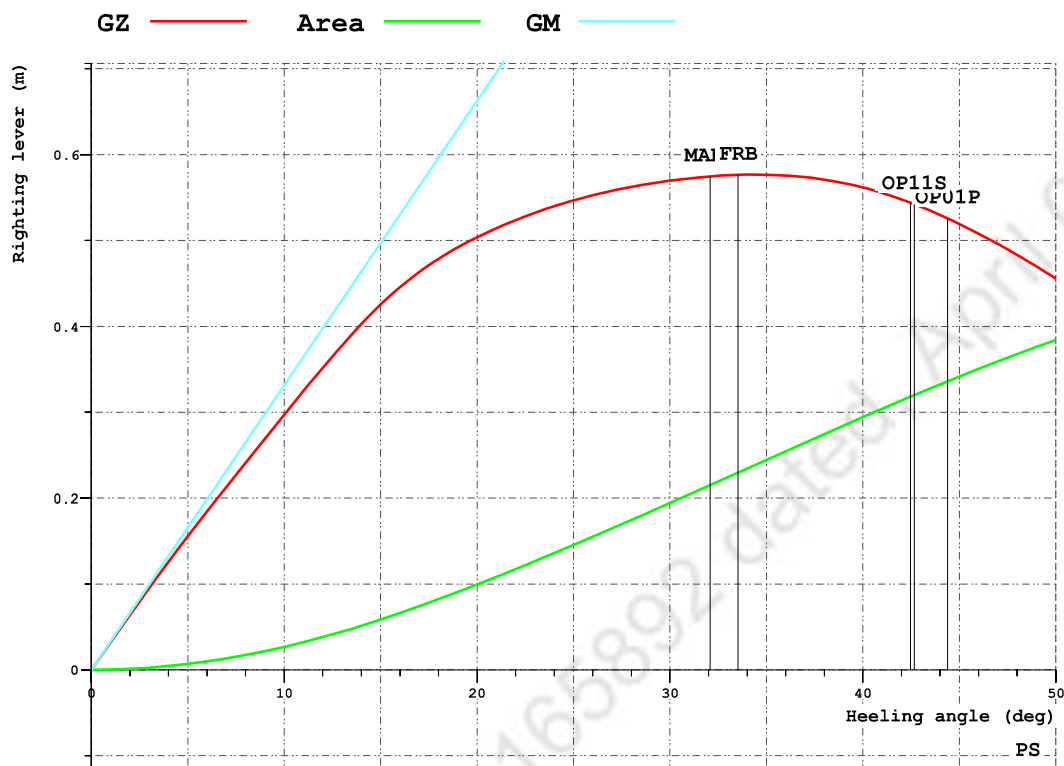
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	9.5	1.0	1.0	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			1.3	1.3	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	100.0	0.3	0.3	0.00
TOTAL			0.3	0.3	0.00

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTN	UNIT	STAT
V.AREA30	0.194	mrاد	OK
V.AREA40	0.294	mrاد	OK
V.AREA3040	0.100	mrاد	OK
V.GZ0.2	0.577	m	OK
V.MAXGZ25	34.402	deg	OK
V.GM0.35	1.898	m	OK
V.IMOWEATHER	1.452		OK
2008IS-A2.3.1.2	2.880	deg	OK

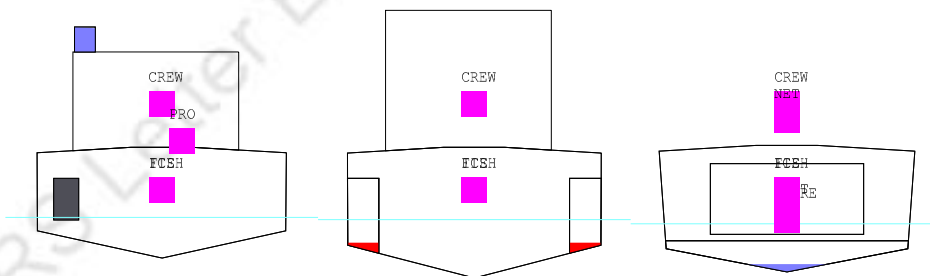
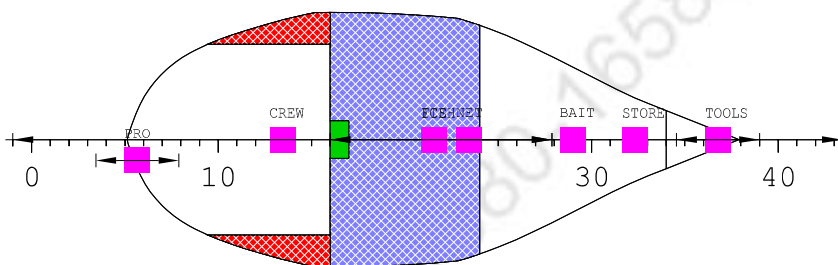
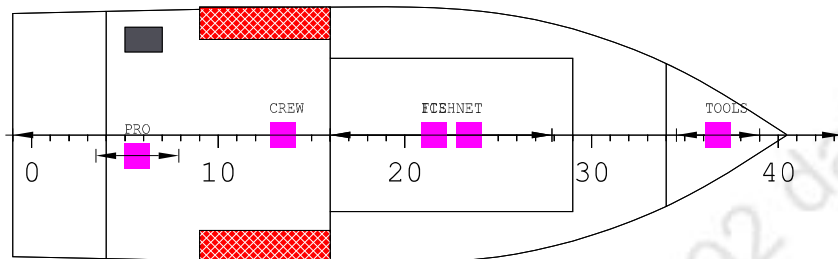
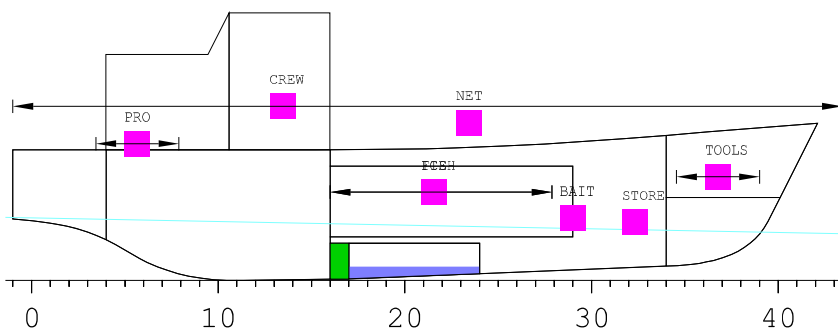
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.295	-0.444	0.000	0.000
5.0	1.287	-0.416	0.156	0.007
10.0	1.264	-0.350	0.297	0.027
15.0	1.216	-0.264	0.425	0.058
20.0	1.139	-0.170	0.504	0.099
30.0	0.908	0.038	0.570	0.194
40.0	0.598	0.255	0.562	0.294
50.0	0.259	0.430	0.456	0.384

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	44.4	2.063
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-	2.063
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	42.5	2.139
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-	2.139
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.814
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.613
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.647
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.647
OP09S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.647
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	3.064
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	42.7	2.125
OP12S	E/R VENTILAT.	WEATHERTIGHT	2.690	-1.900	4.100	-	2.647

ARR. 10% CONS & 20% CATCH WITH ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

ARR. 10% CONS & 20% CATCH WITH ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.520 m
Draught at FP (moulded)	1.156 m
Mean Draught (moulded)	1.338 m

Trim (+ by Bow)	-0.364 m
Heel (+ PS)	0.0 deg

KM above moulded BL	4.567 m
KG above moulded BL	2.375 m
GM0 (solid)	2.192 m
Free Surface Correction	0.419 m
GM (liquid)	1.773 m
Density of Water	1.025 t/m ³

LCB :	8.3674393840678 m Fwd of AP
LCF :	7.8360863871138 m Fwd of AP
MCT :	1.08 tm/cm
TPC :	0.94 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.0	0.000	0.000	0.000
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.3	7.875	0.000	0.489
CREW	0.6	6.500	0.000	4.200
Diesel Oil	0.7	6.433	0.000	0.749
FISH	3.0	10.150	0.000	2.130
Fresh Water	1.3	7.964	0.370	1.351
ICE	3.5	10.150	0.000	2.130
FISH NET	6.0	11.000	0.000	3.800
PROVISION	0.2	3.000	-0.500	3.300
STORE	0.2	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	17.4	10.120	0.091	2.659
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	17.4	10.120	0.091	2.659
Total weight	69.3	8.397	0.000	2.375

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	9.5	0.3	0.4	0.00
R.FOTK.1S	DO	9.5	0.3	0.4	0.00
TOTAL			0.7	0.8	0.00

Fresh Water 1.00 t/m3

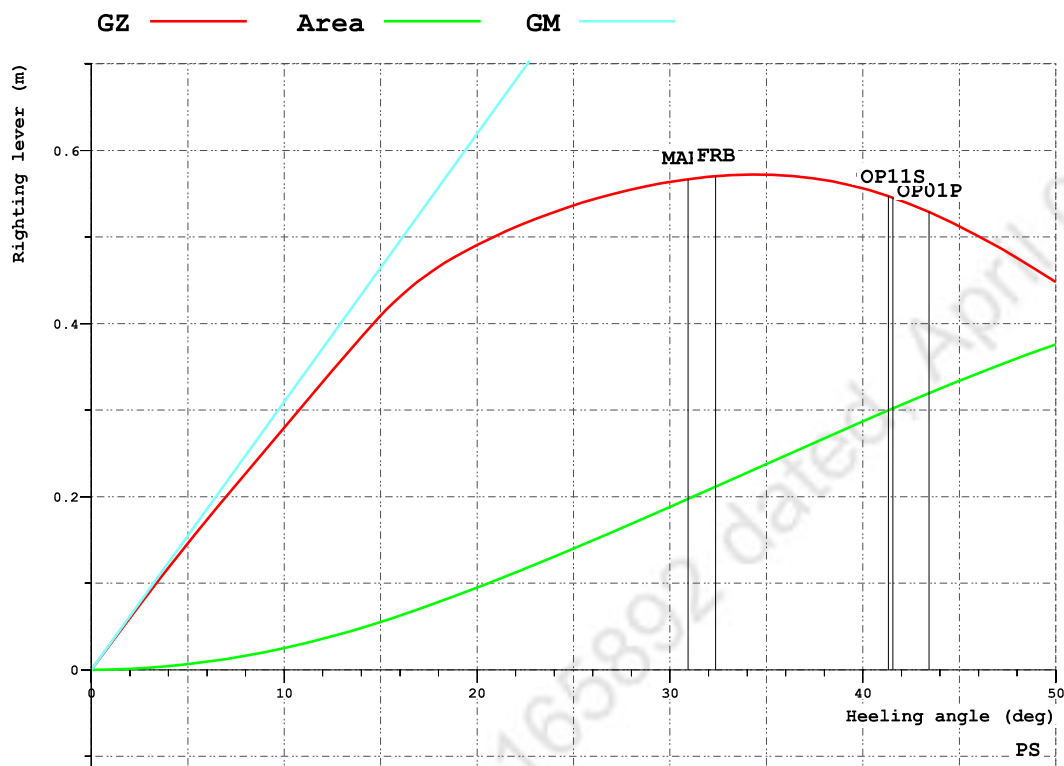
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	9.5	1.0	1.0	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			1.3	1.3	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	100.0	0.3	0.3	0.00
TOTAL			0.3	0.3	0.00

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTN	UNIT	STAT
V.AREA30	0.188	mrاد	OK
V.AREA40	0.287	mrاد	OK
V.AREA3040	0.099	mrاد	OK
V.GZ0.2	0.572	m	OK
V.MAXGZ25	34.444	deg	OK
V.GM0.35	1.773	m	OK
V.IMOWEATHER	1.506		OK
2008IS-A2.3.1.2	2.878	deg	OK

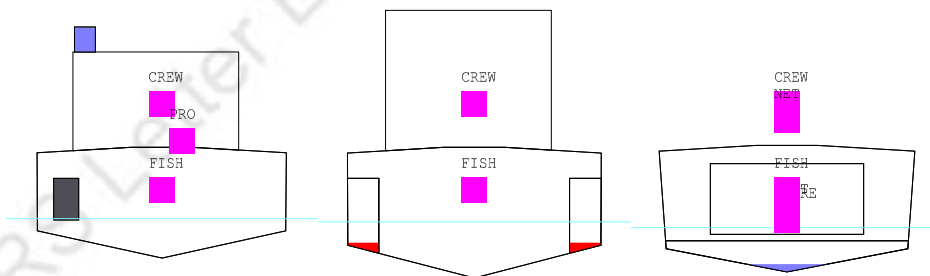
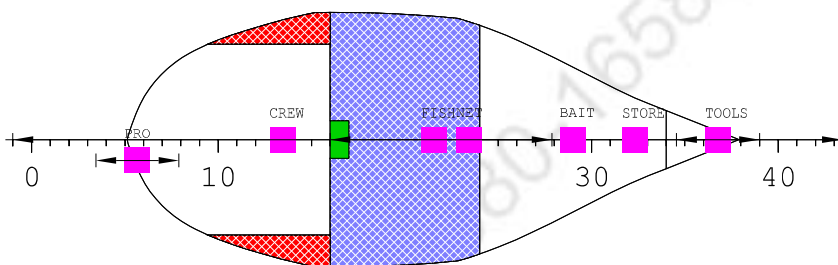
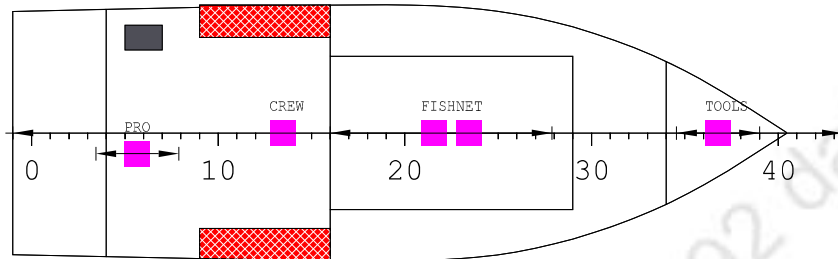
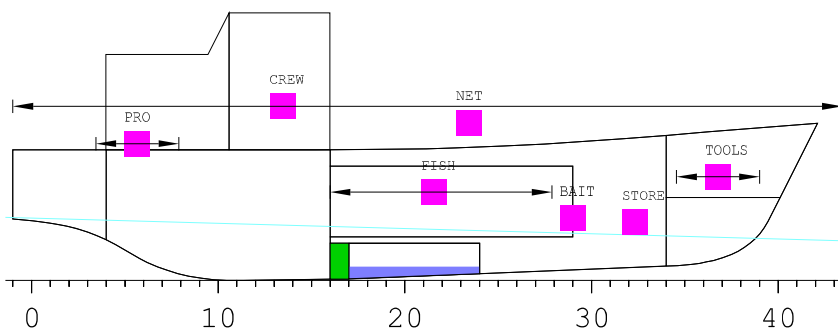
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.338	-0.364	0.000	0.000
5.0	1.330	-0.339	0.146	0.006
10.0	1.307	-0.274	0.280	0.025
15.0	1.262	-0.186	0.409	0.055
20.0	1.187	-0.090	0.491	0.095
30.0	0.959	0.119	0.564	0.188
40.0	0.652	0.332	0.556	0.287
50.0	0.317	0.500	0.448	0.376

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	43.4	2.036
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-	2.036
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	41.3	2.098
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-	2.098
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.787
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.598
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.632
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.632
OP09S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.632
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	2.982
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	41.6	2.088
OP12S	E/R VENTILAT.	WEATHERTIGHT	2.690	-1.900	4.100	-	2.632

ARR. 10% CONS & 0% CATCH W/O ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

ARR. 10% CONS & 0% CATCH W/O ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.515 m
Draught at FP (moulded)	1.001 m
Mean Draught (moulded)	1.258 m

Trim (+ by Bow)	-0.514 m
Heel (+ PS)	0.0 deg

KM above moulded BL	4.880 m
KG above moulded BL	2.400 m
GM0 (solid)	2.479 m
Free Surface Correction	0.462 m
GM (liquid)	2.017 m
Density of Water	1.025 t/m ³

LCB	: 8.1723173522092 m Fwd of AP
LCF	: 7.7804060088759 m Fwd of AP
MCT	: 1.04 tm/cm
TPC	: 0.94 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.0	0.000	0.000	0.000
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.3	7.875	0.000	0.489
CREW	0.6	6.500	0.000	4.200
Diesel Oil	0.7	6.433	0.000	0.749
FISH	0.0	0.000	0.000	0.000
Fresh Water	1.3	7.964	0.370	1.351
FISH NET	6.0	11.000	0.000	3.800
PROVISION	0.2	3.000	-0.500	3.300
STORE	0.2	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	10.9	10.102	0.145	2.975
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	10.9	10.102	0.145	2.975
Total weight	62.8	8.215	0.000	2.400

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	9.5	0.3	0.4	0.00
R.FOTK.1S	DO	9.5	0.3	0.4	0.00
TOTAL			0.7	0.8	0.00

Fresh Water 1.00 t/m3

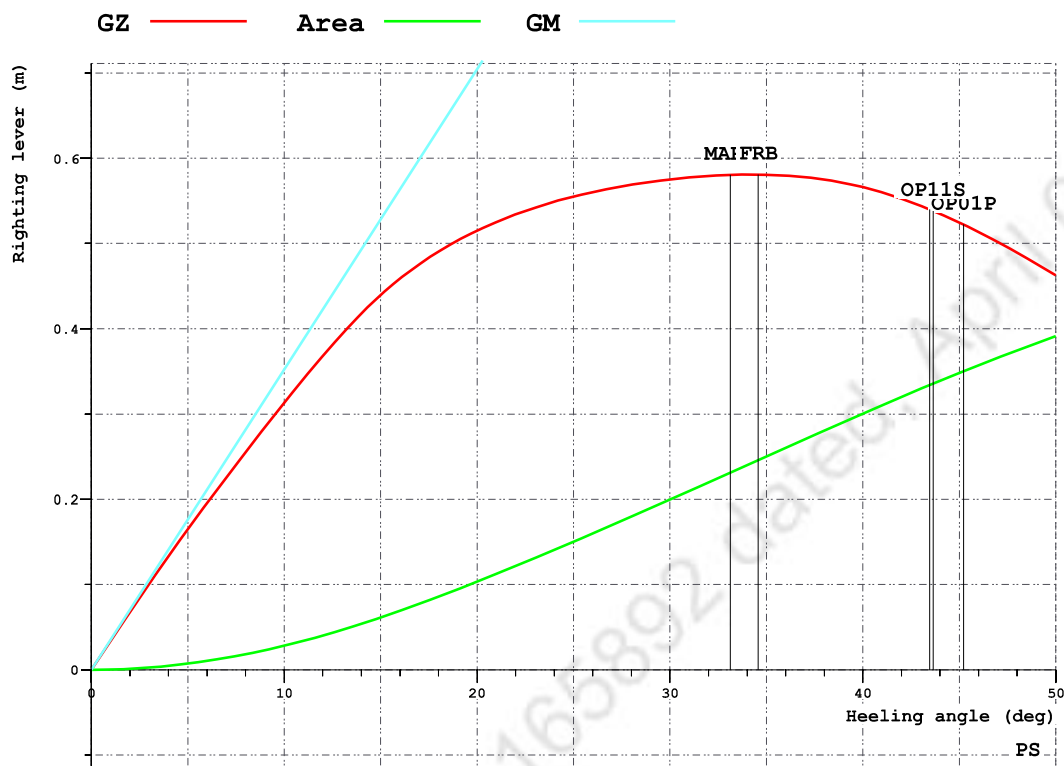
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	9.5	1.0	1.0	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			1.3	1.3	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	100.0	0.3	0.3	0.00
TOTAL			0.3	0.3	0.00

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTV	UNIT	STAT
V.AREA30	0.200	mrاد	OK
V.AREA40	0.300	mrاد	OK
V.AREA3040	0.101	mrاد	OK
V.GZ0.2	0.581	m	OK
V.MAXGZ25	34.234	deg	OK
V.GM0.35	2.017	m	OK
V.IMOWEATHER	1.401		OK
2008IS-A2.3.1.2	2.886	deg	OK

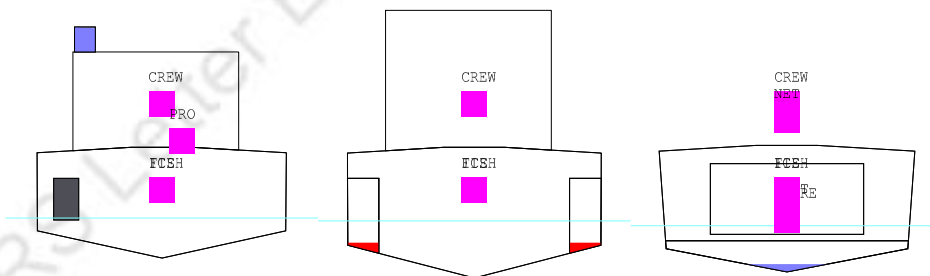
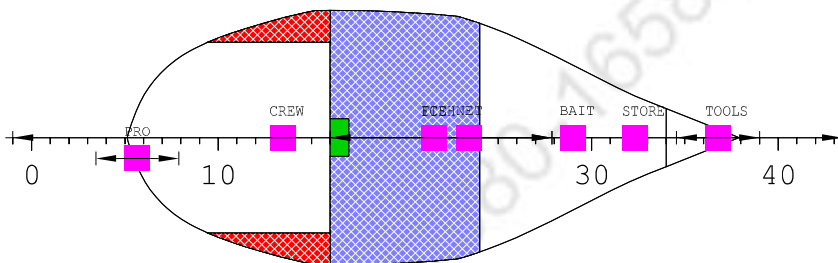
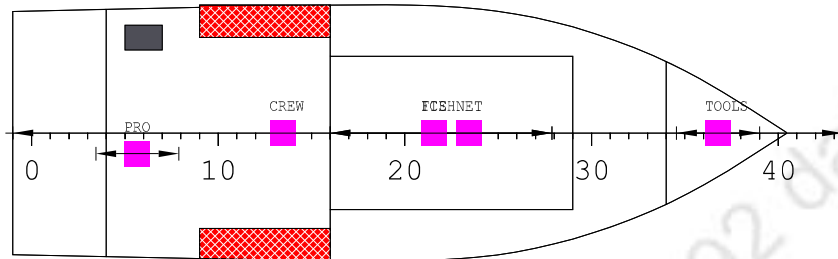
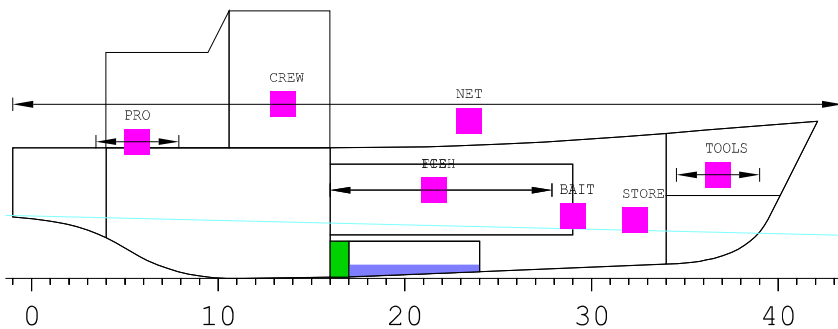
GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.258	-0.514	0.000	0.000
5.0	1.250	-0.485	0.165	0.007
10.0	1.226	-0.418	0.313	0.028
15.0	1.176	-0.335	0.440	0.061
20.0	1.097	-0.242	0.515	0.103
30.0	0.864	-0.035	0.575	0.200
40.0	0.551	0.185	0.566	0.300
50.0	0.208	0.364	0.463	0.391

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	45.2	2.085
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-	2.085
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	43.5	2.173
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-	2.173
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.837
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.625
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.659
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.659
OP09S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.659
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	3.135
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	43.6	2.158
OP12S	E/R VENTILAT.	WEATHERTIGHT	2.690	-1.900	4.100	-	2.659

ARR. 10% CONS & 0% CATCH WITH ICE



Machinery Sp.	STORE	Cold Room Store
General spaces	Accommodation	Wheelhouse
Diesel Oil	Fresh Water	Void
BIO TOILET	BALLAST WATER	

ARR. 10% CONS & 0% CATCH WITH ICE

Floating Position - Intact condition

Draught at AP (moulded)	1.517 m
Draught at FP (moulded)	1.085 m
Mean Draught (moulded)	1.301 m

Trim (+ by Bow)	-0.432 m
Heel (+ PS)	0.0 deg

KM above moulded BL	4.703 m
KG above moulded BL	2.386 m
GM0 (solid)	2.317 m
Free Surface Correction	0.438 m
GM (liquid)	1.879 m
Density of Water	1.025 t/m ³

LCB : 8.2820084188697 m Fwd of AP
 LCF : 7.8151821403472 m Fwd of AP
 MCT : 1.06 tm/cm
 TPC : 0.94 t/cm

LOAD SUMMARY TABLE

NAME	MASS t	LCG m	TCG m	VCG m
BAIT	0.0	0.000	0.000	0.000
BIO TOILET	0.5	3.150	2.300	1.900
BALLAST WATER	0.3	7.875	0.000	0.489
CREW	0.6	6.500	0.000	4.200
Diesel Oil	0.7	6.433	0.000	0.749
FISH	0.0	0.000	0.000	0.000
Fresh Water	1.3	7.964	0.370	1.351
ICE	3.5	10.150	0.000	2.130
FISH NET	6.0	11.000	0.000	3.800
PROVISION	0.2	3.000	-0.500	3.300
STORE	0.2	15.000	0.000	1.400
TOOLS	1.0	17.000	0.000	2.500
Deadweight	14.4	10.114	0.110	2.769
Lightweight	52.0	7.820	-0.030	2.280
Deadweight	14.4	10.114	0.110	2.769
Total weight	66.3	8.317	0.000	2.386

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Loading Conditions

Chapter 4

Fishing Vessel

31-03-2021

Diesel Oil (Density 0.860 t/m3)

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FOTK.1P	DO	9.5	0.3	0.4	0.00
R.FOTK.1S	DO	9.5	0.3	0.4	0.00
TOTAL			0.7	0.8	0.00

Fresh Water 1.00 t/m3

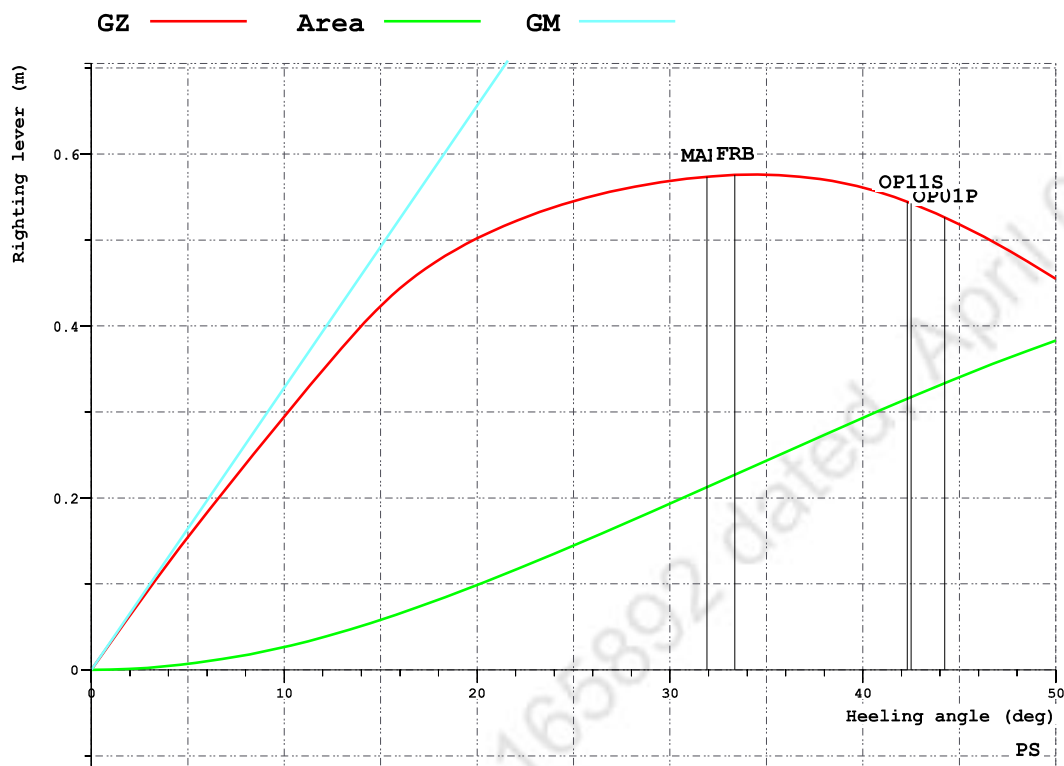
NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.FWTK	FW	9.5	1.0	1.0	29.05
R.FWTK_OVER	FW	95.0	0.3	0.3	0.00
TOTAL			1.3	1.3	29.05

Slurry Ice Water 1.025 t/m3

Fish Hold Drain Water 1.025 t/m3

NAME	PURP	FILL %	MASS t	VOL m3	FRSM tm
R.DRAIN.TK	BW	100.0	0.3	0.3	0.00
TOTAL			0.3	0.3	0.00

INTACT STABILITY CHECK PLOT



INTACT STABILITY CRITERIA

RCR	TEXT	REQ
V.AREA30	Area under GZ curve up to 30 deg	0.055
V.AREA40	Area under GZ curve up to 40 deg.	0.090
V.AREA3040	Area under GZ curve between 30 and 40 deg	0.030
V.GZ0.2	Min. GZ > 0.2	0.200
V.MAXGZ25	Max. GZ at an angle > 25 deg.	25.000
V.GM0.35	GM > 0.35 m	0.350
V.IMOWEATHER	IMO weather criterion	1.000
2008IS-A2.3.1.2	Heeling angle due to steady wind <16 or <=80% of deck imm.	16.000

RCR	ATTN	UNIT	STAT
V.AREA30	0.193	mrاد	OK
V.AREA40	0.293	mrاد	OK
V.AREA3040	0.100	mrاد	OK
V.GZ0.2	0.576	m	OK
V.MAXGZ25	34.417	deg	OK
V.GM0.35	1.879	m	OK
V.IMOWEATHER	1.460		OK
2008IS-A2.3.1.2	2.880	deg	OK

GZ CURVE DATA

HEEL deg	T m	TR m	GZ m	AREA mrad
0.0	1.301	-0.432	0.000	0.000
5.0	1.294	-0.405	0.154	0.007
10.0	1.270	-0.339	0.295	0.026
15.0	1.223	-0.253	0.423	0.058
20.0	1.146	-0.158	0.502	0.099
30.0	0.915	0.050	0.569	0.193
40.0	0.606	0.267	0.561	0.293
50.0	0.267	0.441	0.455	0.383

RELEVANT OPENINGS

NAME	TEXT	WT	X m	Y m	Z m	IMMA deg	IMMR m
OP01P	FO TANK PORT	UNPROTECTED	5.400	2.980	3.450	44.3	2.059
OP02S	FO TANK STBD	UNPROTECTED	5.400	-2.980	3.450	-	2.059
OP03P	FW TANK PORT	UNPROTECTED	8.550	3.022	3.450	42.3	2.133
OP04S	FW TANK STBD	UNPROTECTED	8.550	-3.022	3.450	-	2.133
OP05S	E/R IN	UNPROTECTED	5.500	-0.330	7.200	-	5.810
OP06S	E/R OUT	UNPROTECTED	2.690	-0.725	6.066	-	4.610
OP07S	MAIN ENG IN	UNPROTECTED	2.690	-1.450	4.100	-	2.645
OP08S	MAIN ENG OUT	UNPROTECTED	2.690	-1.470	4.100	-	2.645
OP09S	DG EXHAUST	UNPROTECTED	2.690	-1.490	4.100	-	2.645
OP10S	VOID TANK	UNPROTECTED	18.275	-0.088	4.141	-	3.052
OP11S	DRAIN TANK	UNPROTECTED	8.000	3.022	3.450	42.5	2.120
OP12S	E/R VENTILAT.	WEATHERTIGHT	2.690	-1.900	4.100	-	2.645

100643/2021/Fisheries-DOF

FV-R35

Yard No.- TBD

Preliminary Stability Manual

Hydrostatic Table

Chapter 5

Fishing Vessel

25-03-2021

5. HYDROSTATICS DATA

Refer IRS Letter E-121680-165892 dated, April 03, 2021

MAIN CHARACTERISTICS OF THE VESSEL:

Length between perpendiculars	18.40	m
Breadth (moulded)	6.16	m
Design draught (moulded)	1.80	m
X-coordinate of aft perpendicular	0.00	m
X-coordinate of reference point (XREF)	9.20	m
X-coordinate of midship section (XMID)	8.03	m
Thickness of keelplate	0.006	m
Mean thickness of shell plating	0.006	m
Seawater density	1.025	ton/m3

Calculations are based on STABHULL date 2021-03-22 time 12:26

Shell thickness used in the calculation	6.0	mm
X-coord. of aft end of DWL	0.00	m
X-coord. of fore end of DWL	18.40	m
Calc. sections	31	
Plate thickness	6.0	mm

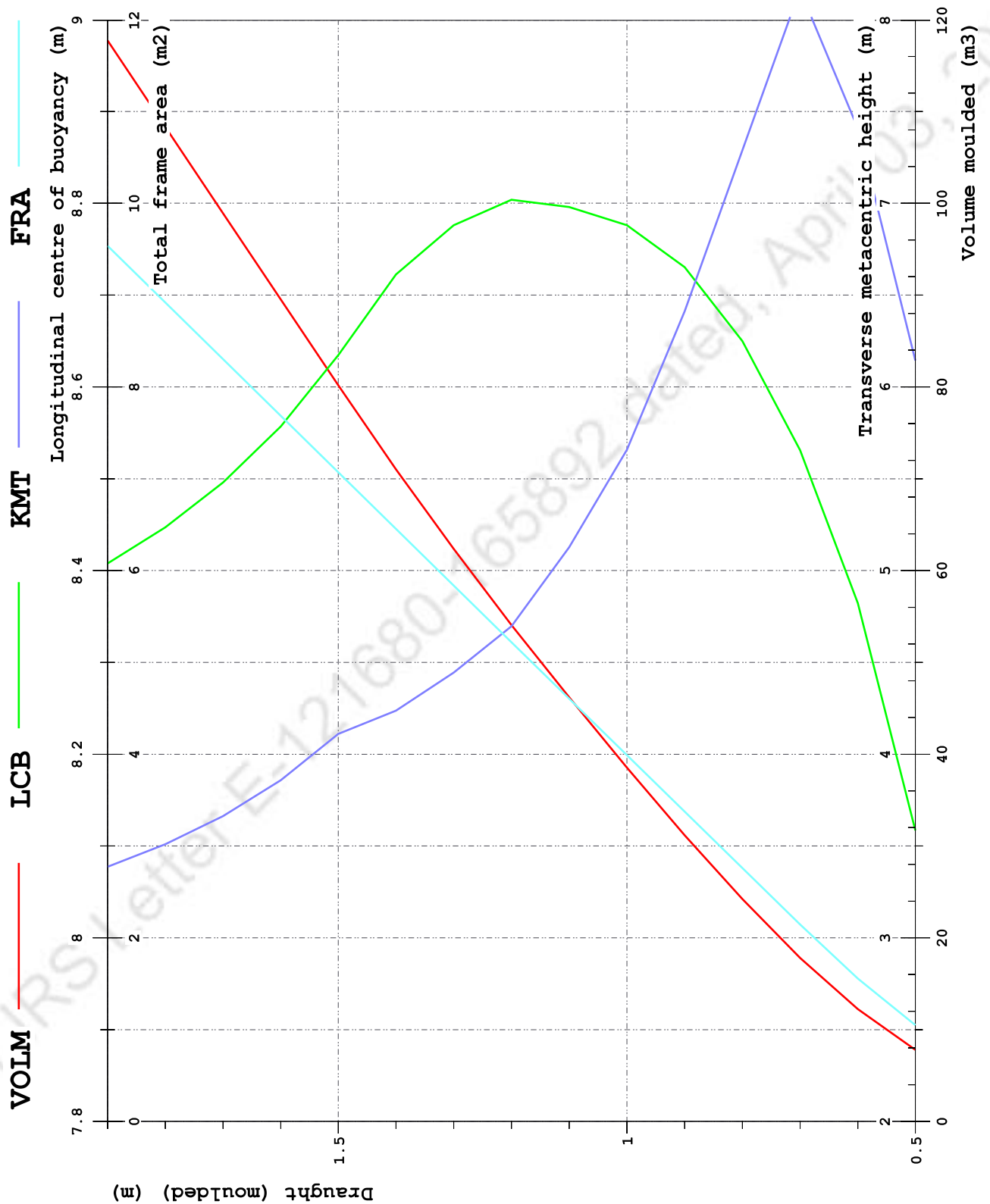
EXPLANATION OF SYMBOLS:

T	Draught (moulded)	m
TK	Draught below keel	m
DISP	Total displacement	t
LCB	longitudinal centre of buoyancy	m
VCB	Vertical center of buoyancy	m
LCF	Longitudinal centre of flotation	m
KMT	Transverse metacentric height	m
MCT	Moment to change trim	tm/cm
TPC	change of displacement/change of draught	t/cm

Trim: -0.1 m

T m	TK m	DISP t	LCB m	VCB m	LCF m	KMT m	MCT tm/cm	TPC t/cm
0.500	0.506	8.2	8.117	0.361	8.70	6.144	0.2	0.4
0.600	0.606	12.9	8.364	0.431	8.86	7.408	0.3	0.5
0.700	0.706	18.6	8.531	0.500	8.96	8.163	0.4	0.6
0.800	0.806	25.3	8.650	0.566	9.01	7.287	0.5	0.7
0.900	0.906	32.4	8.730	0.629	9.01	6.412	0.5	0.7
1.000	1.006	40.0	8.776	0.690	8.97	5.658	0.6	0.8
1.100	1.106	47.9	8.796	0.750	8.88	5.127	0.7	0.8
1.200	1.206	56.0	8.804	0.808	8.71	4.697	0.8	0.8
1.300	1.306	64.5	8.776	0.867	8.50	4.444	0.9	0.9
1.400	1.406	73.5	8.723	0.926	8.14	4.238	1.0	0.9
1.500	1.506	82.9	8.635	0.987	7.87	4.111	1.1	1.0
1.600	1.606	92.5	8.557	1.046	7.90	3.859	1.1	1.0
1.700	1.706	102.1	8.496	1.104	7.92	3.663	1.1	1.0
1.800	1.806	111.8	8.447	1.160	7.94	3.509	1.2	1.0
1.900	1.906	121.5	8.408	1.216	7.96	3.387	1.2	1.0

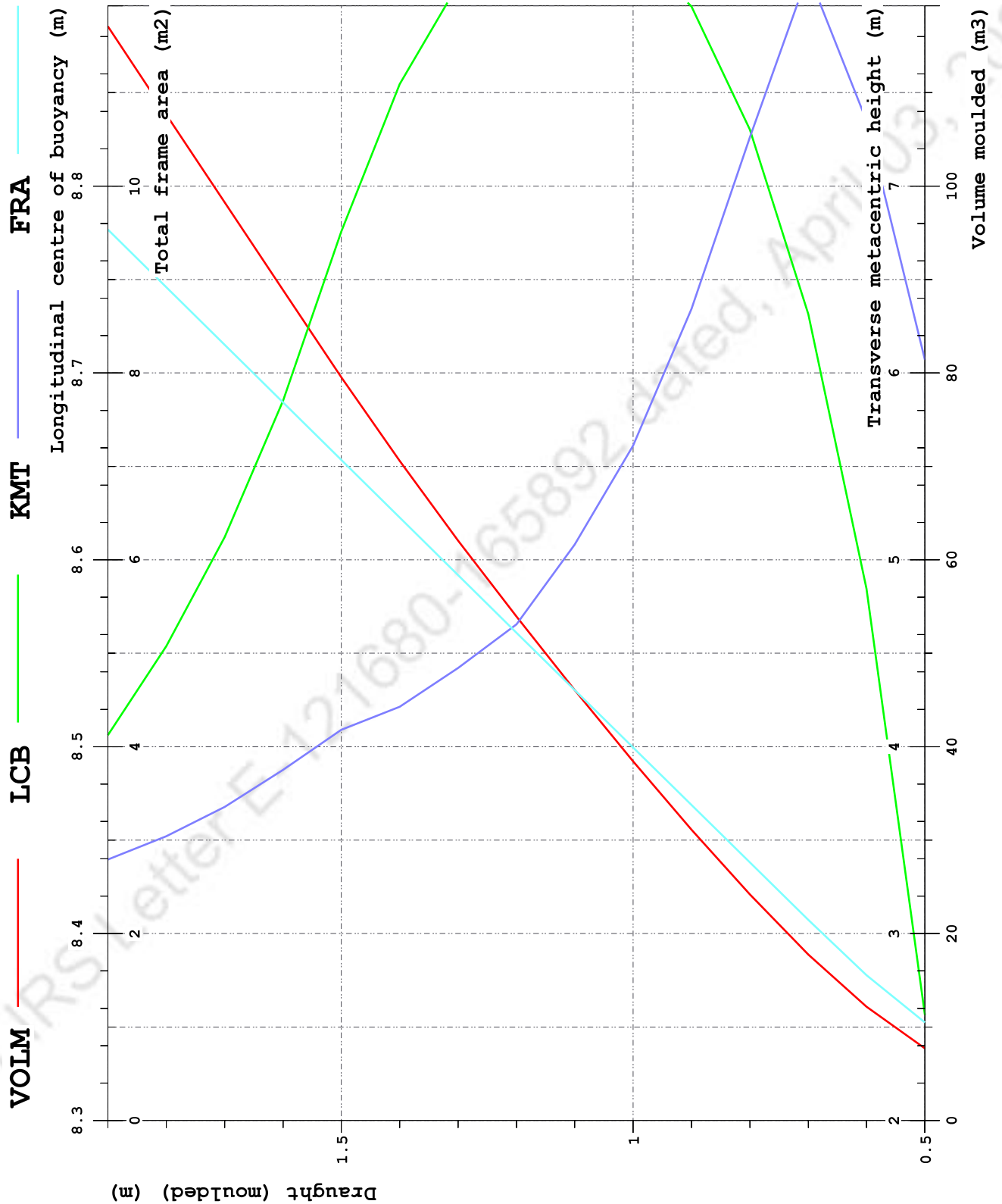
Trim: -0.1 m



Trim: 0 m

T m	TK m	DISP t	LCB m	VCB m	LCF m	KMT m	MCT tm/cm	TPC t/cm
0.500	0.506	8.2	8.356	0.359	8.90	6.071	0.2	0.4
0.600	0.606	12.8	8.585	0.429	9.02	7.350	0.3	0.5
0.700	0.706	18.6	8.731	0.498	9.10	8.137	0.4	0.6
0.800	0.806	25.2	8.830	0.565	9.13	7.262	0.5	0.7
0.900	0.906	32.4	8.896	0.628	9.11	6.343	0.5	0.7
1.000	1.006	39.9	8.929	0.689	9.06	5.612	0.6	0.8
1.100	1.106	47.8	8.936	0.748	8.97	5.083	0.7	0.8
1.200	1.206	55.8	8.934	0.806	8.82	4.655	0.7	0.8
1.300	1.306	64.2	8.908	0.865	8.61	4.422	0.8	0.9
1.400	1.406	73.0	8.855	0.923	8.36	4.214	0.9	0.9
1.500	1.506	82.2	8.776	0.982	7.96	4.090	1.1	1.0
1.600	1.606	91.8	8.685	1.042	7.90	3.877	1.1	1.0
1.700	1.706	101.5	8.612	1.099	7.93	3.677	1.1	1.0
1.800	1.806	111.1	8.554	1.156	7.95	3.521	1.2	1.0
1.900	1.906	120.8	8.506	1.212	7.97	3.397	1.2	1.0

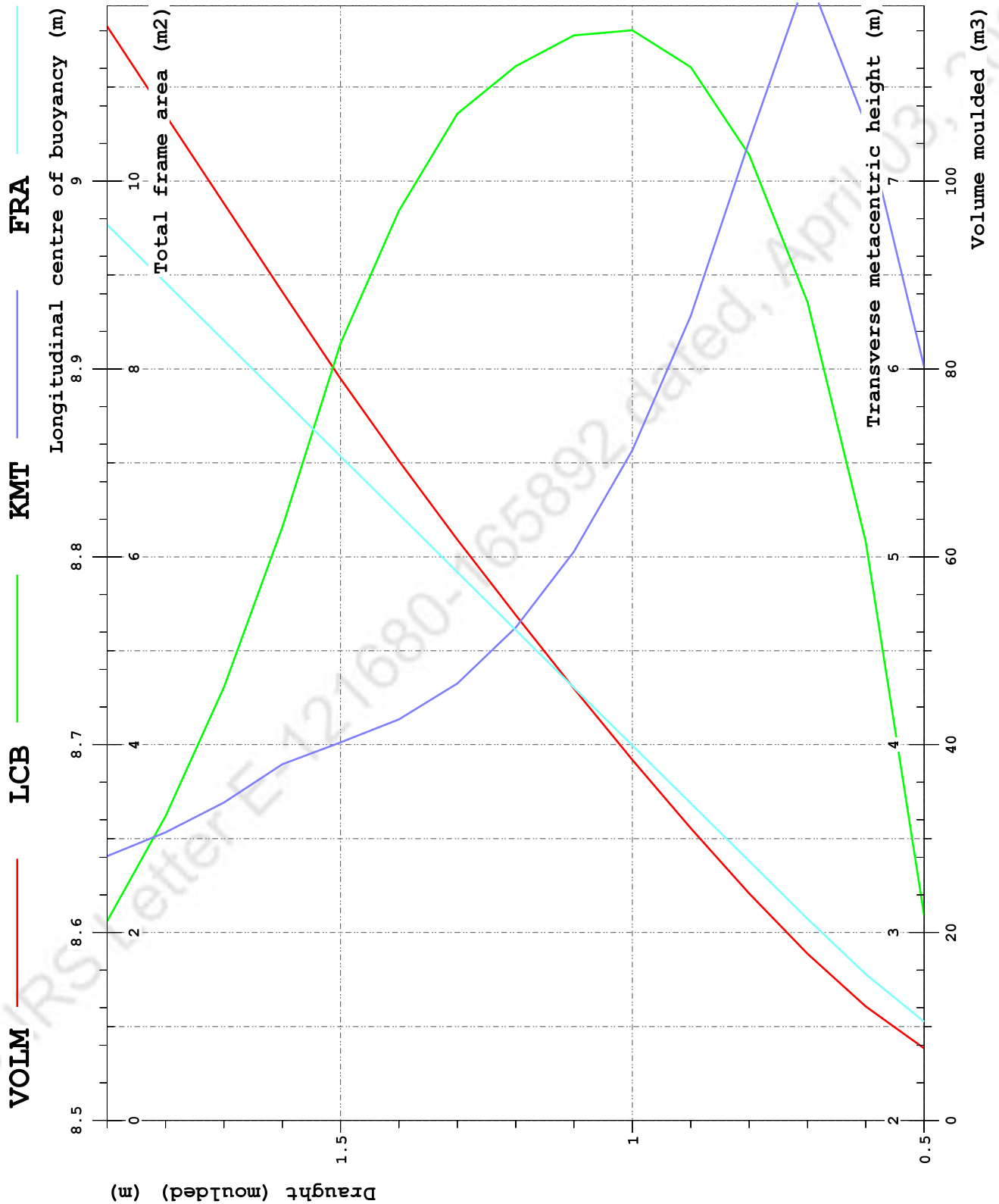
Trim: 0 m



Trim: 0.1 m

T m	TK m	DISP t	LCB m	VCB m	LCF m	KMT m	MCT tm/cm	TPC t/cm
0.500	0.506	8.1	8.609	0.359	9.09	6.010	0.2	0.4
0.600	0.606	12.8	8.808	0.429	9.18	7.303	0.3	0.5
0.700	0.706	18.6	8.935	0.499	9.23	8.100	0.4	0.6
0.800	0.806	25.2	9.014	0.565	9.24	7.211	0.5	0.7
0.900	0.906	32.4	9.061	0.628	9.21	6.282	0.5	0.7
1.000	1.006	39.9	9.080	0.689	9.14	5.568	0.6	0.8
1.100	1.106	47.7	9.078	0.748	9.05	5.028	0.7	0.8
1.200	1.206	55.7	9.061	0.806	8.92	4.624	0.7	0.8
1.300	1.306	64.0	9.036	0.863	8.73	4.326	0.8	0.8
1.400	1.406	72.6	8.984	0.921	8.51	4.134	0.9	0.9
1.500	1.506	81.6	8.914	0.979	8.13	4.012	1.0	0.9
1.600	1.606	91.1	8.816	1.038	7.91	3.896	1.1	1.0
1.700	1.706	100.8	8.731	1.096	7.94	3.693	1.1	1.0
1.800	1.806	110.5	8.662	1.152	7.96	3.533	1.2	1.0
1.900	1.906	120.2	8.606	1.208	7.98	3.407	1.2	1.0

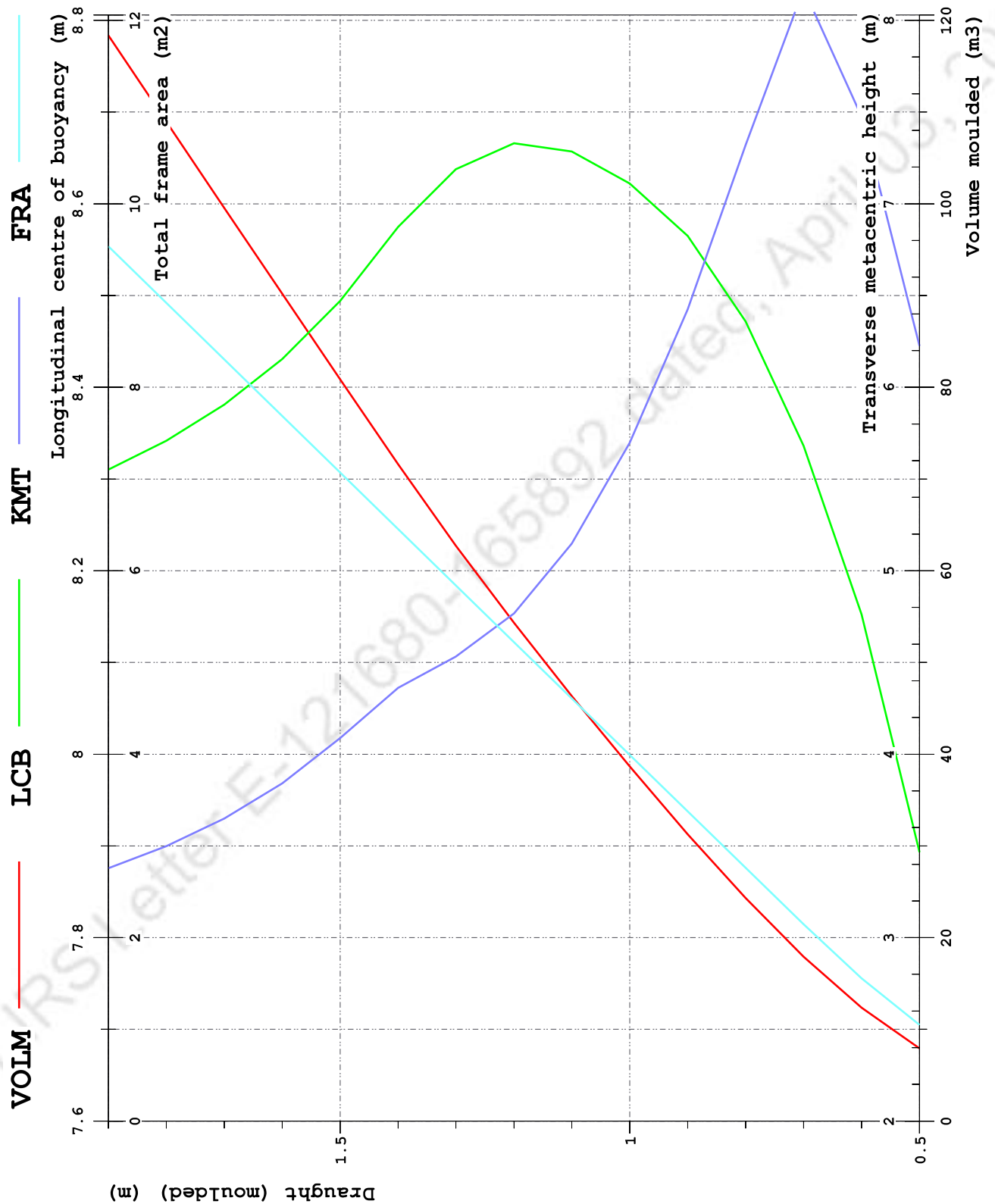
Trim: 0.1 m



Trim: -0.2 m

T m	TK m	DISP t	LCB m	VCB m	LCF m	KMT m	MCT tm/cm	TPC t/cm
0.500	0.506	8.4	7.893	0.365	8.51	6.225	0.2	0.4
0.600	0.606	13.0	8.152	0.434	8.70	7.476	0.3	0.5
0.700	0.706	18.8	8.336	0.502	8.82	8.171	0.4	0.6
0.800	0.806	25.4	8.472	0.568	8.89	7.321	0.5	0.7
0.900	0.906	32.5	8.565	0.631	8.91	6.424	0.5	0.7
1.000	1.006	40.1	8.622	0.692	8.88	5.698	0.6	0.8
1.100	1.106	48.0	8.657	0.752	8.79	5.148	0.7	0.8
1.200	1.206	56.3	8.666	0.811	8.60	4.768	0.8	0.8
1.300	1.306	64.9	8.638	0.871	8.33	4.532	0.9	0.9
1.400	1.406	74.1	8.575	0.931	7.91	4.362	1.1	0.9
1.500	1.506	83.6	8.494	0.992	7.87	4.088	1.1	1.0
1.600	1.606	93.2	8.431	1.051	7.89	3.841	1.1	1.0
1.700	1.706	102.8	8.381	1.108	7.91	3.649	1.1	1.0
1.800	1.806	112.4	8.342	1.165	7.93	3.498	1.1	1.0
1.900	1.906	122.1	8.310	1.220	7.96	3.379	1.2	1.0

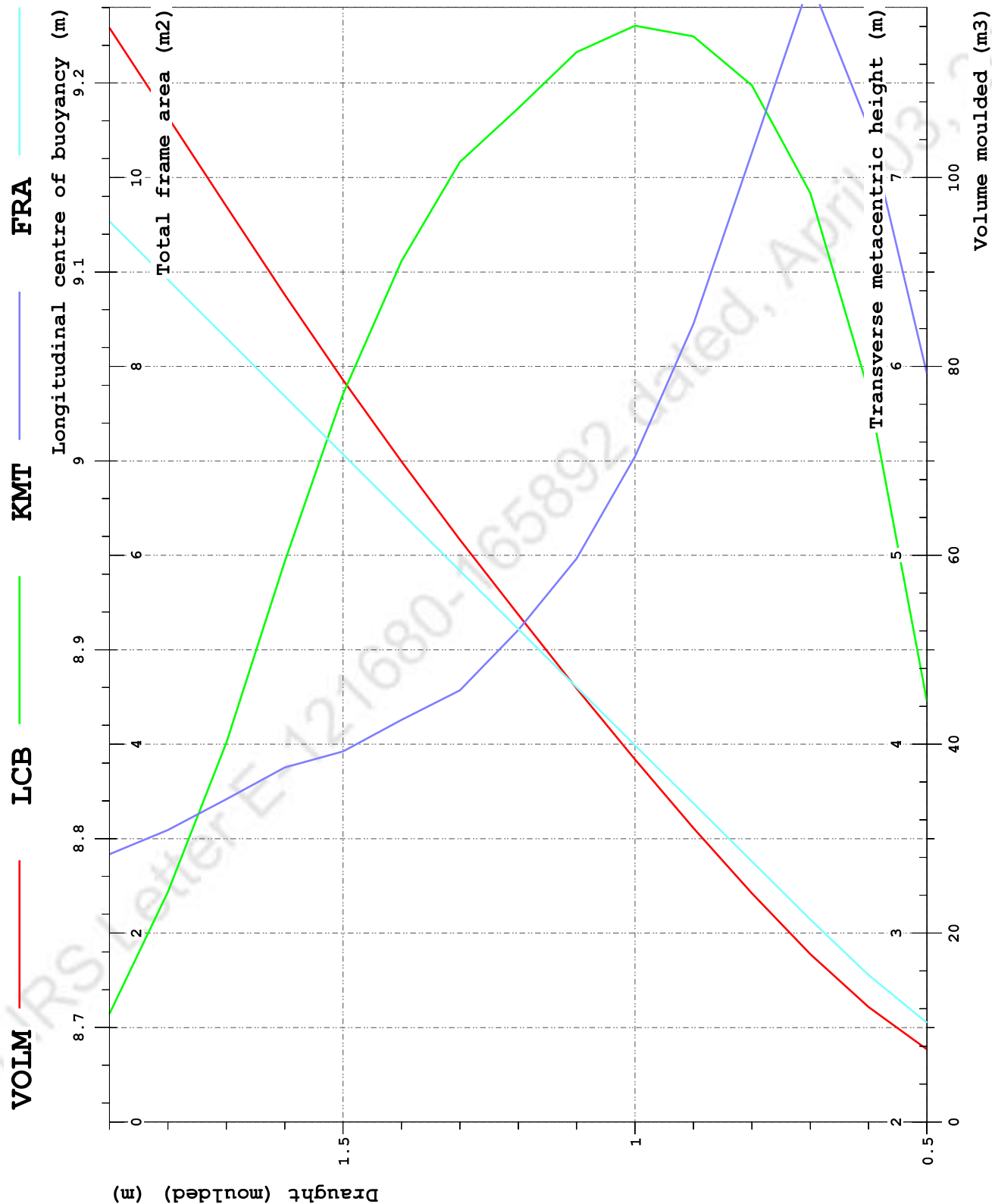
Trim: -0.2 m



Trim: 0.2 m

T m	TK m	DISP t	LCB m	VCB m	LCF m	KMT m	MCT tm/cm	TPC t/cm
0.500	0.506	8.1	8.873	0.361	9.28	5.960	0.2	0.4
0.600	0.606	12.8	9.037	0.431	9.34	7.266	0.3	0.5
0.700	0.706	18.6	9.142	0.501	9.37	8.043	0.4	0.6
0.800	0.806	25.2	9.199	0.567	9.35	7.131	0.5	0.7
0.900	0.906	32.4	9.225	0.630	9.30	6.224	0.5	0.7
1.000	1.006	39.8	9.230	0.690	9.22	5.522	0.6	0.8
1.100	1.106	47.6	9.216	0.749	9.12	4.982	0.6	0.8
1.200	1.206	55.6	9.187	0.806	9.00	4.605	0.7	0.8
1.300	1.306	63.8	9.158	0.863	8.82	4.285	0.8	0.8
1.400	1.406	72.3	9.106	0.920	8.62	4.129	0.8	0.9
1.500	1.506	81.2	9.035	0.977	8.39	3.961	0.9	0.9
1.600	1.606	90.5	8.947	1.035	7.99	3.877	1.1	1.0
1.700	1.706	100.1	8.851	1.093	7.94	3.709	1.2	1.0
1.800	1.806	109.8	8.772	1.149	7.97	3.546	1.2	1.0
1.900	1.906	119.5	8.707	1.205	7.99	3.418	1.2	1.0

Trim: 0.2 m



6. CROSS CURVES

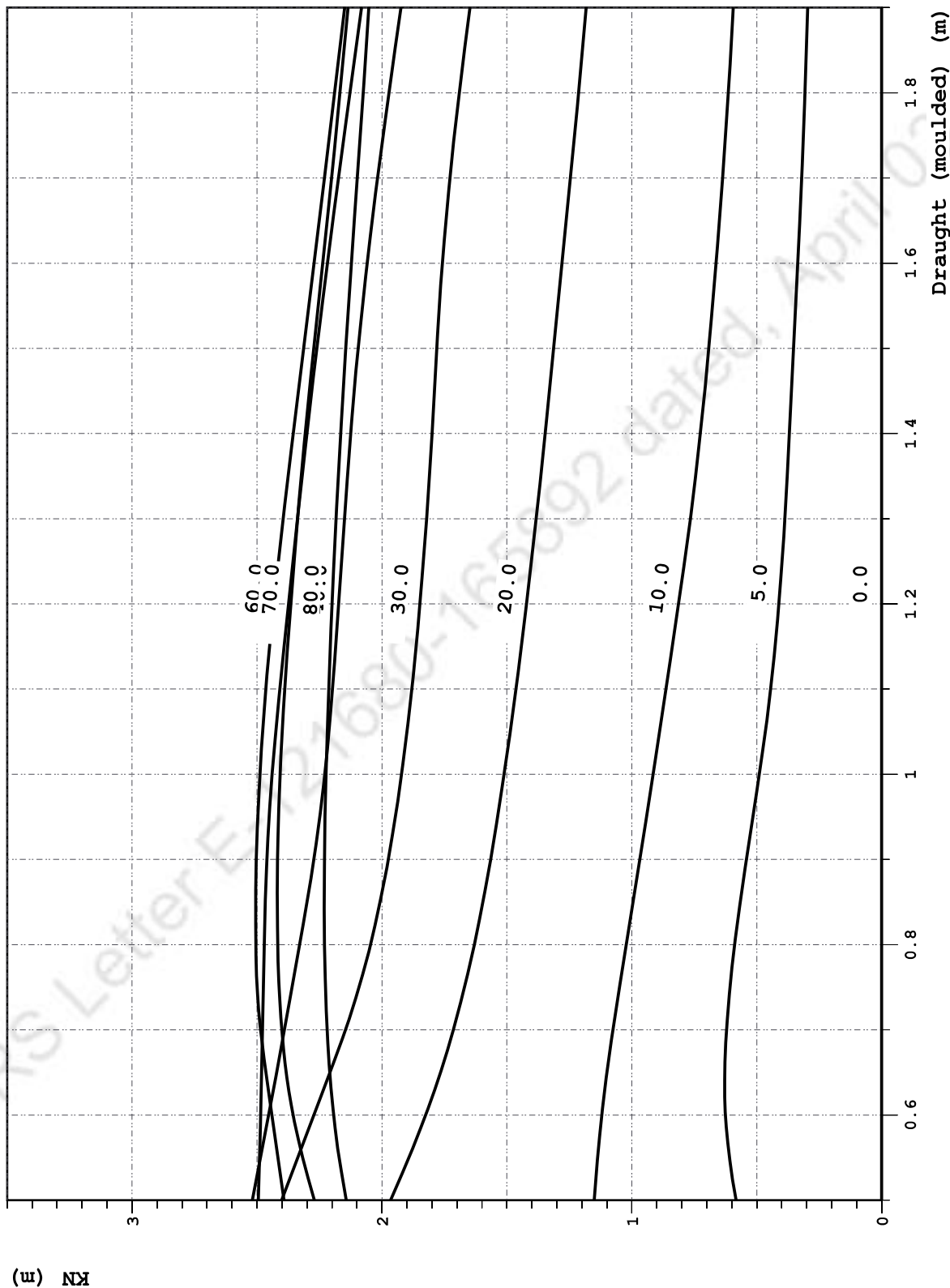
Refer IRS Letter E-121680-165892 dated, April 03, 2021

Trim: -0.1 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.583	1.150	1.966	2.401	2.518	2.495	2.392	2.270
0.600	0.000	0.626	1.121	1.825	2.272	2.453	2.485	2.441	2.355
0.700	0.000	0.621	1.075	1.714	2.146	2.390	2.478	2.486	2.401
0.800	0.000	0.589	1.023	1.630	2.046	2.329	2.471	2.505	2.417
0.900	0.000	0.542	0.968	1.565	1.975	2.273	2.461	2.503	2.418
1.000	0.000	0.489	0.914	1.511	1.921	2.228	2.439	2.488	2.407
1.100	0.000	0.444	0.863	1.464	1.881	2.198	2.409	2.465	2.389
1.200	0.000	0.412	0.813	1.421	1.848	2.173	2.374	2.432	2.364
1.300	0.000	0.387	0.766	1.383	1.822	2.150	2.338	2.395	2.338
1.400	0.000	0.369	0.726	1.347	1.800	2.125	2.300	2.355	2.307
1.500	0.000	0.353	0.692	1.313	1.781	2.095	2.260	2.314	2.273
1.600	0.000	0.336	0.663	1.279	1.759	2.059	2.218	2.272	2.237
1.700	0.000	0.320	0.637	1.246	1.728	2.017	2.174	2.230	2.202
1.800	0.000	0.307	0.614	1.213	1.691	1.972	2.128	2.189	2.168
1.900	0.000	0.296	0.594	1.183	1.647	1.924	2.082	2.149	2.136

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.143
0.600	2.194
0.700	2.219
0.800	2.230
0.900	2.230
1.000	2.224
1.100	2.213
1.200	2.200
1.300	2.184
1.400	2.165
1.500	2.144
1.600	2.122
1.700	2.099
1.800	2.075
1.900	2.052

Trim: -0.1 m

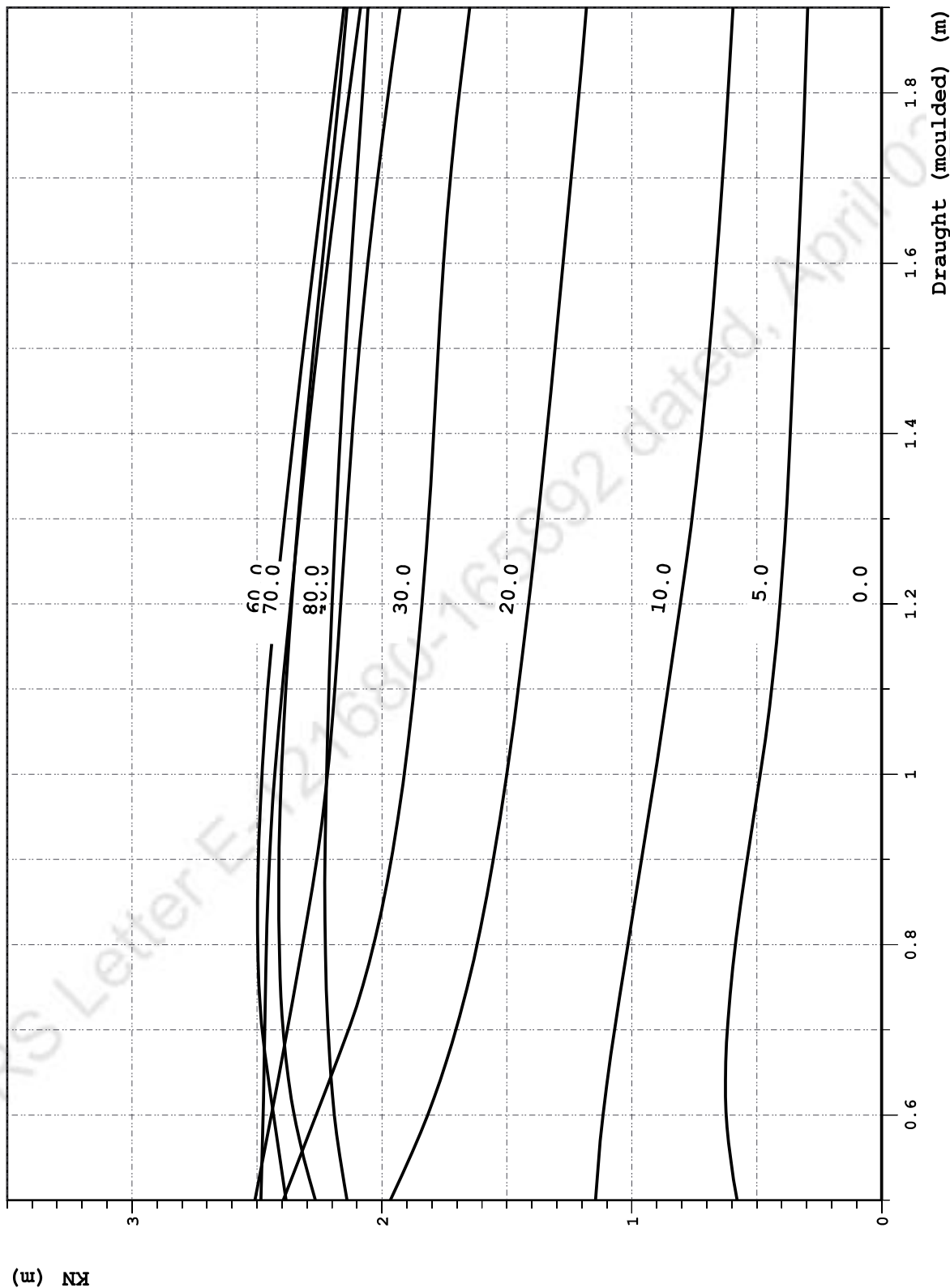


Trim: 0 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.578	1.145	1.967	2.395	2.508	2.485	2.384	2.266
0.600	0.000	0.622	1.115	1.817	2.263	2.442	2.476	2.434	2.351
0.700	0.000	0.618	1.069	1.704	2.134	2.378	2.469	2.479	2.396
0.800	0.000	0.585	1.016	1.619	2.033	2.317	2.462	2.497	2.411
0.900	0.000	0.538	0.961	1.554	1.963	2.261	2.451	2.495	2.412
1.000	0.000	0.486	0.907	1.500	1.911	2.218	2.429	2.480	2.403
1.100	0.000	0.440	0.856	1.455	1.871	2.188	2.399	2.457	2.385
1.200	0.000	0.407	0.806	1.413	1.839	2.165	2.366	2.426	2.362
1.300	0.000	0.383	0.759	1.376	1.814	2.142	2.332	2.390	2.336
1.400	0.000	0.365	0.721	1.340	1.793	2.119	2.296	2.353	2.306
1.500	0.000	0.351	0.689	1.307	1.774	2.091	2.259	2.314	2.273
1.600	0.000	0.336	0.661	1.275	1.753	2.057	2.218	2.273	2.239
1.700	0.000	0.321	0.637	1.243	1.726	2.018	2.175	2.232	2.204
1.800	0.000	0.308	0.615	1.211	1.691	1.974	2.131	2.192	2.171
1.900	0.000	0.297	0.595	1.182	1.649	1.927	2.086	2.152	2.140

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.140
0.600	2.190
0.700	2.216
0.800	2.227
0.900	2.228
1.000	2.222
1.100	2.212
1.200	2.200
1.300	2.184
1.400	2.166
1.500	2.146
1.600	2.124
1.700	2.101
1.800	2.078
1.900	2.056

Trim: 0 m

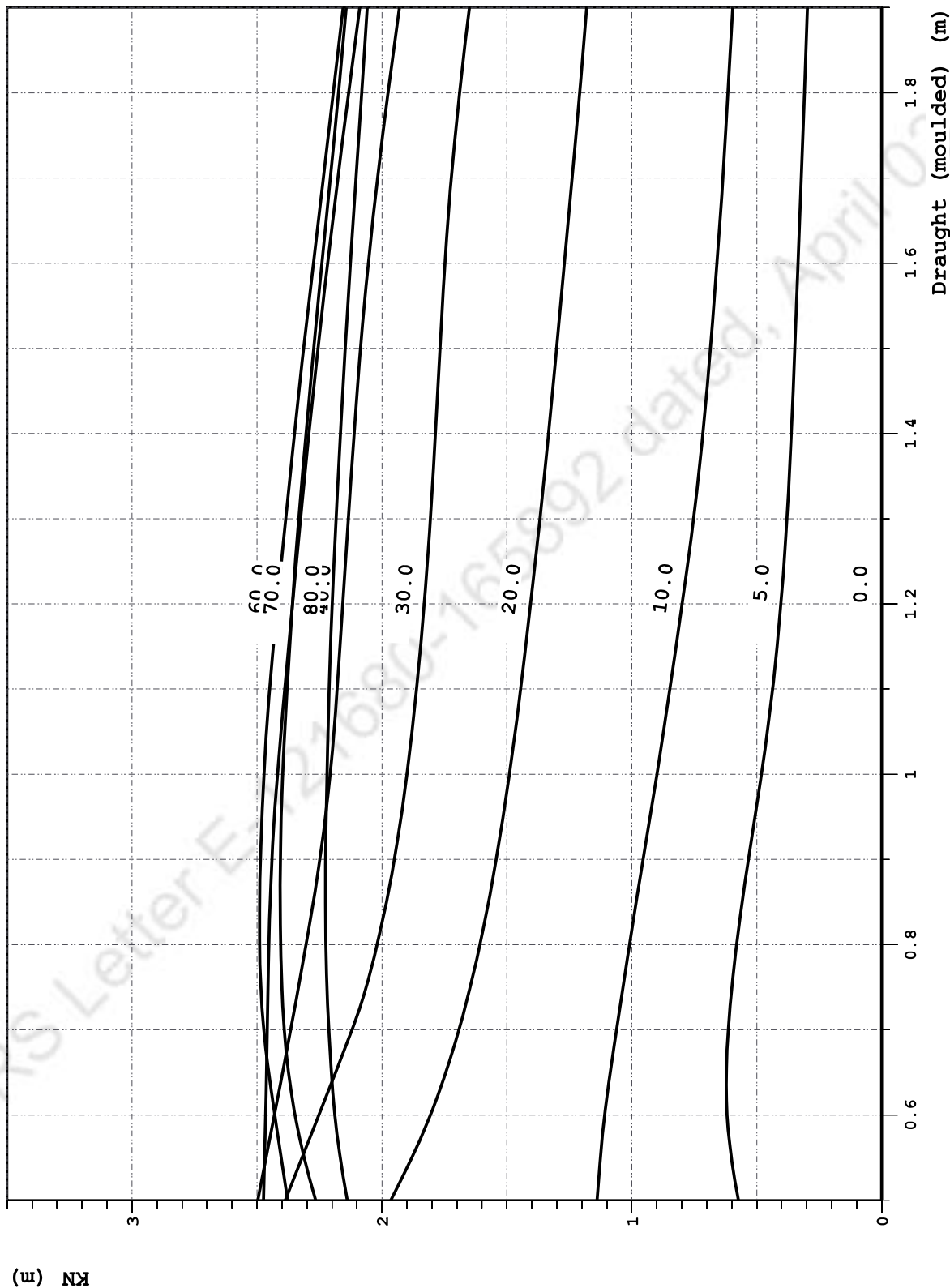


Trim: 0.1 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.574	1.139	1.964	2.386	2.497	2.474	2.377	2.265
0.600	0.000	0.619	1.109	1.806	2.252	2.430	2.466	2.429	2.348
0.700	0.000	0.614	1.061	1.692	2.119	2.365	2.459	2.473	2.391
0.800	0.000	0.581	1.009	1.608	2.019	2.304	2.453	2.490	2.406
0.900	0.000	0.534	0.955	1.543	1.950	2.248	2.440	2.487	2.407
1.000	0.000	0.481	0.900	1.490	1.900	2.207	2.418	2.472	2.398
1.100	0.000	0.437	0.848	1.445	1.861	2.179	2.389	2.449	2.380
1.200	0.000	0.403	0.798	1.405	1.831	2.157	2.358	2.419	2.358
1.300	0.000	0.379	0.753	1.368	1.806	2.135	2.326	2.385	2.333
1.400	0.000	0.361	0.716	1.334	1.785	2.112	2.292	2.350	2.304
1.500	0.000	0.348	0.685	1.301	1.767	2.086	2.256	2.313	2.273
1.600	0.000	0.335	0.659	1.270	1.748	2.054	2.217	2.274	2.240
1.700	0.000	0.322	0.636	1.239	1.722	2.017	2.176	2.234	2.207
1.800	0.000	0.309	0.615	1.209	1.690	1.975	2.133	2.195	2.174
1.900	0.000	0.298	0.596	1.181	1.650	1.930	2.089	2.156	2.143

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.139
0.600	2.188
0.700	2.213
0.800	2.224
0.900	2.226
1.000	2.220
1.100	2.211
1.200	2.199
1.300	2.184
1.400	2.166
1.500	2.147
1.600	2.126
1.700	2.103
1.800	2.081
1.900	2.059

Trim: 0.1 m

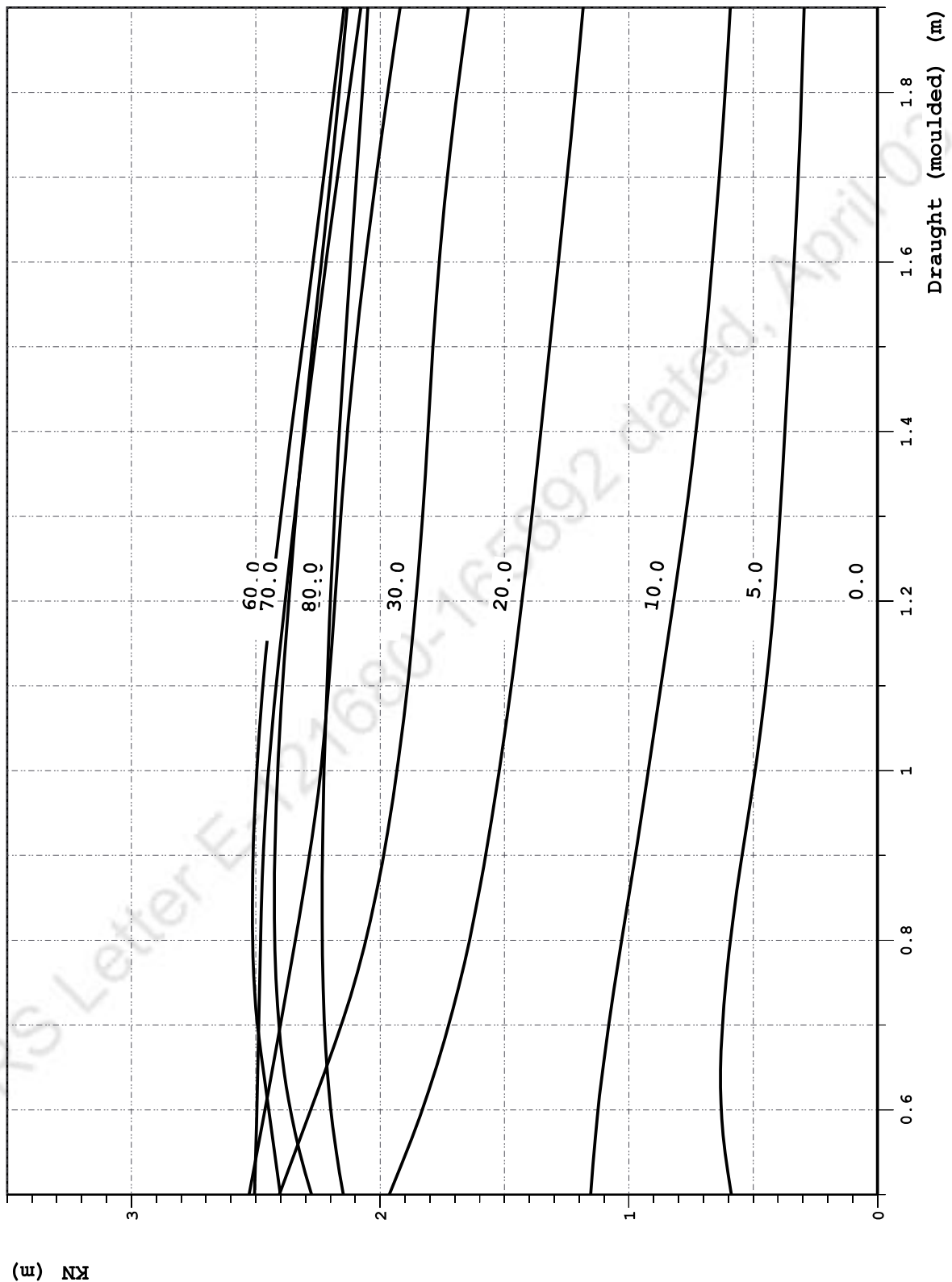


Trim: -0.2 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.588	1.153	1.963	2.405	2.527	2.505	2.402	2.276
0.600	0.000	0.628	1.124	1.831	2.279	2.463	2.495	2.448	2.361
0.700	0.000	0.623	1.081	1.724	2.156	2.401	2.488	2.493	2.407
0.800	0.000	0.592	1.029	1.641	2.058	2.341	2.480	2.512	2.424
0.900	0.000	0.545	0.974	1.576	1.986	2.284	2.470	2.511	2.423
1.000	0.000	0.492	0.922	1.521	1.932	2.239	2.449	2.496	2.412
1.100	0.000	0.449	0.871	1.473	1.890	2.207	2.419	2.471	2.393
1.200	0.000	0.416	0.820	1.430	1.857	2.182	2.382	2.438	2.367
1.300	0.000	0.392	0.772	1.390	1.830	2.158	2.343	2.400	2.339
1.400	0.000	0.373	0.730	1.354	1.808	2.132	2.304	2.357	2.308
1.500	0.000	0.354	0.695	1.318	1.788	2.099	2.262	2.313	2.273
1.600	0.000	0.335	0.664	1.283	1.763	2.060	2.217	2.270	2.235
1.700	0.000	0.319	0.637	1.249	1.730	2.016	2.172	2.227	2.199
1.800	0.000	0.306	0.613	1.215	1.690	1.970	2.125	2.186	2.165
1.900	0.000	0.295	0.592	1.184	1.645	1.920	2.078	2.145	2.132

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.148
0.600	2.198
0.700	2.224
0.800	2.233
0.900	2.232
1.000	2.225
1.100	2.214
1.200	2.200
1.300	2.184
1.400	2.164
1.500	2.142
1.600	2.120
1.700	2.096
1.800	2.072
1.900	2.050

Trim: -0.2 m

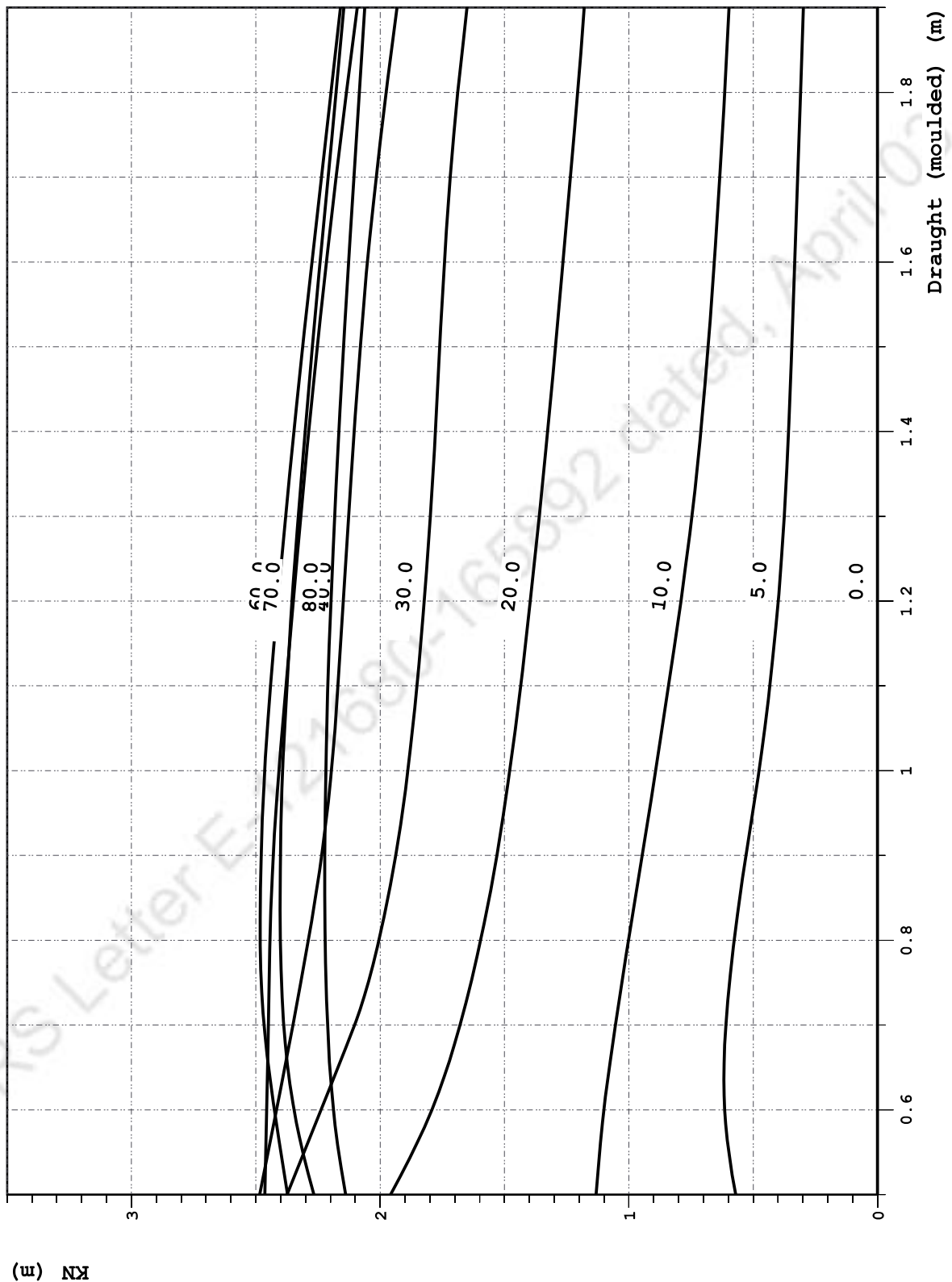


Trim: 0.2 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.570	1.132	1.958	2.375	2.484	2.464	2.372	2.267
0.600	0.000	0.615	1.101	1.792	2.238	2.417	2.456	2.425	2.346
0.700	0.000	0.610	1.054	1.679	2.103	2.351	2.449	2.467	2.388
0.800	0.000	0.576	1.001	1.596	2.005	2.289	2.443	2.482	2.401
0.900	0.000	0.529	0.946	1.531	1.937	2.235	2.430	2.478	2.401
1.000	0.000	0.477	0.892	1.479	1.889	2.196	2.407	2.464	2.392
1.100	0.000	0.433	0.840	1.435	1.852	2.170	2.379	2.441	2.375
1.200	0.000	0.399	0.791	1.396	1.822	2.148	2.349	2.412	2.354
1.300	0.000	0.375	0.746	1.360	1.798	2.127	2.319	2.380	2.329
1.400	0.000	0.358	0.710	1.327	1.778	2.105	2.287	2.347	2.301
1.500	0.000	0.345	0.681	1.295	1.761	2.080	2.253	2.311	2.272
1.600	0.000	0.333	0.656	1.265	1.742	2.051	2.216	2.274	2.241
1.700	0.000	0.322	0.634	1.235	1.718	2.016	2.177	2.236	2.209
1.800	0.000	0.310	0.615	1.206	1.688	1.976	2.135	2.197	2.177
1.900	0.000	0.299	0.597	1.179	1.650	1.932	2.092	2.159	2.146

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.139
0.600	2.188
0.700	2.211
0.800	2.221
0.900	2.223
1.000	2.218
1.100	2.210
1.200	2.198
1.300	2.183
1.400	2.166
1.500	2.148
1.600	2.127
1.700	2.106
1.800	2.084
1.900	2.062

Trim: 0.2 m

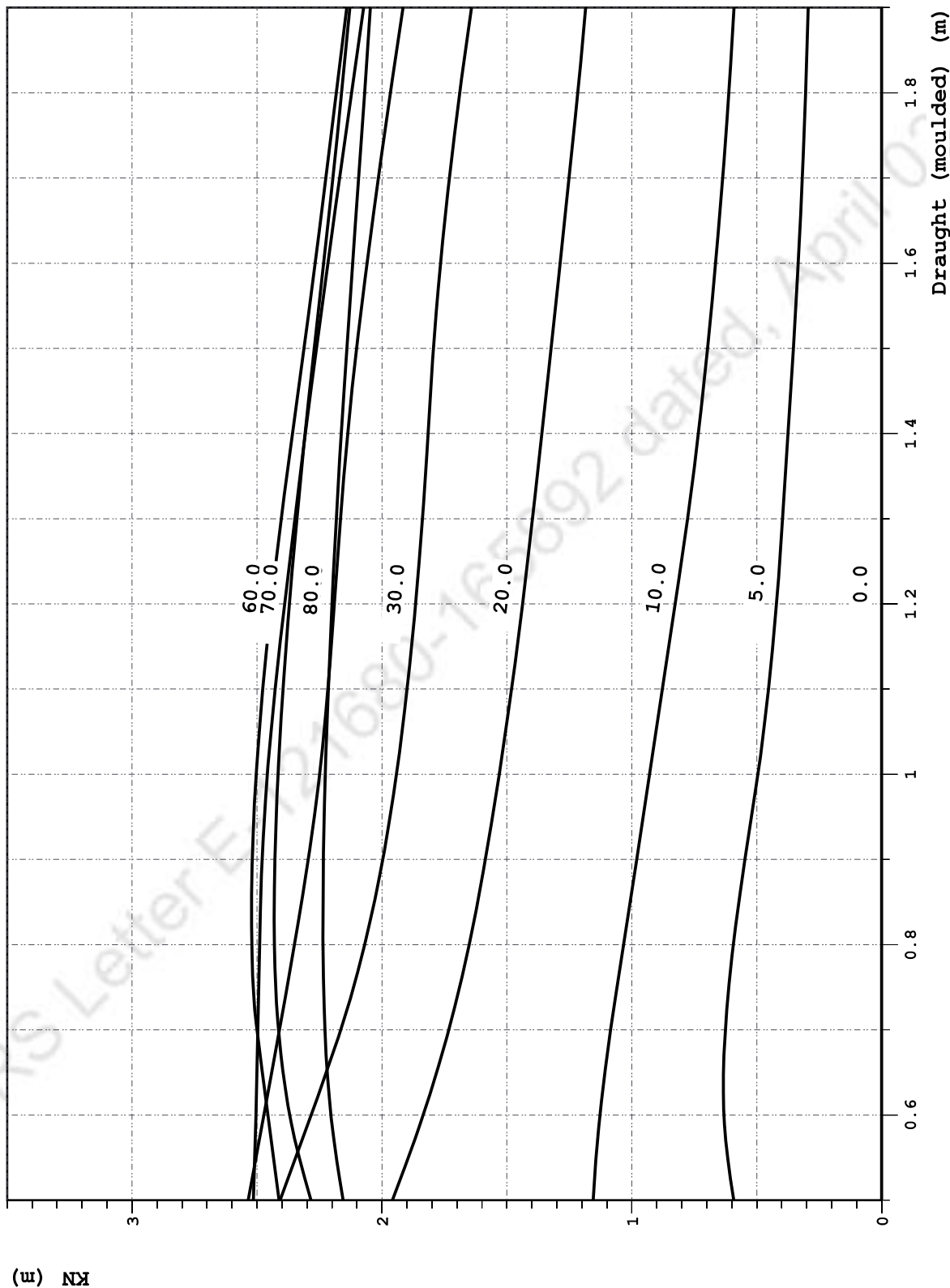


Trim: -0.3 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.592	1.155	1.958	2.407	2.535	2.515	2.412	2.284
0.600	0.000	0.631	1.128	1.835	2.283	2.472	2.505	2.457	2.369
0.700	0.000	0.626	1.085	1.732	2.165	2.410	2.497	2.501	2.414
0.800	0.000	0.594	1.034	1.651	2.069	2.351	2.489	2.521	2.431
0.900	0.000	0.547	0.981	1.586	1.997	2.295	2.480	2.519	2.428
1.000	0.000	0.495	0.929	1.530	1.942	2.249	2.459	2.503	2.416
1.100	0.000	0.453	0.878	1.481	1.899	2.216	2.428	2.477	2.396
1.200	0.000	0.421	0.827	1.437	1.865	2.191	2.389	2.443	2.370
1.300	0.000	0.396	0.777	1.397	1.838	2.166	2.348	2.403	2.340
1.400	0.000	0.375	0.734	1.360	1.815	2.137	2.306	2.359	2.307
1.500	0.000	0.354	0.697	1.323	1.794	2.101	2.262	2.312	2.271
1.600	0.000	0.334	0.664	1.287	1.766	2.060	2.216	2.267	2.233
1.700	0.000	0.318	0.636	1.251	1.730	2.015	2.169	2.224	2.196
1.800	0.000	0.305	0.612	1.216	1.689	1.966	2.121	2.182	2.161
1.900	0.000	0.294	0.591	1.184	1.642	1.916	2.073	2.140	2.129

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.155
0.600	2.204
0.700	2.228
0.800	2.236
0.900	2.234
1.000	2.227
1.100	2.214
1.200	2.200
1.300	2.183
1.400	2.162
1.500	2.140
1.600	2.117
1.700	2.093
1.800	2.069
1.900	2.047

Trim: -0.3 m

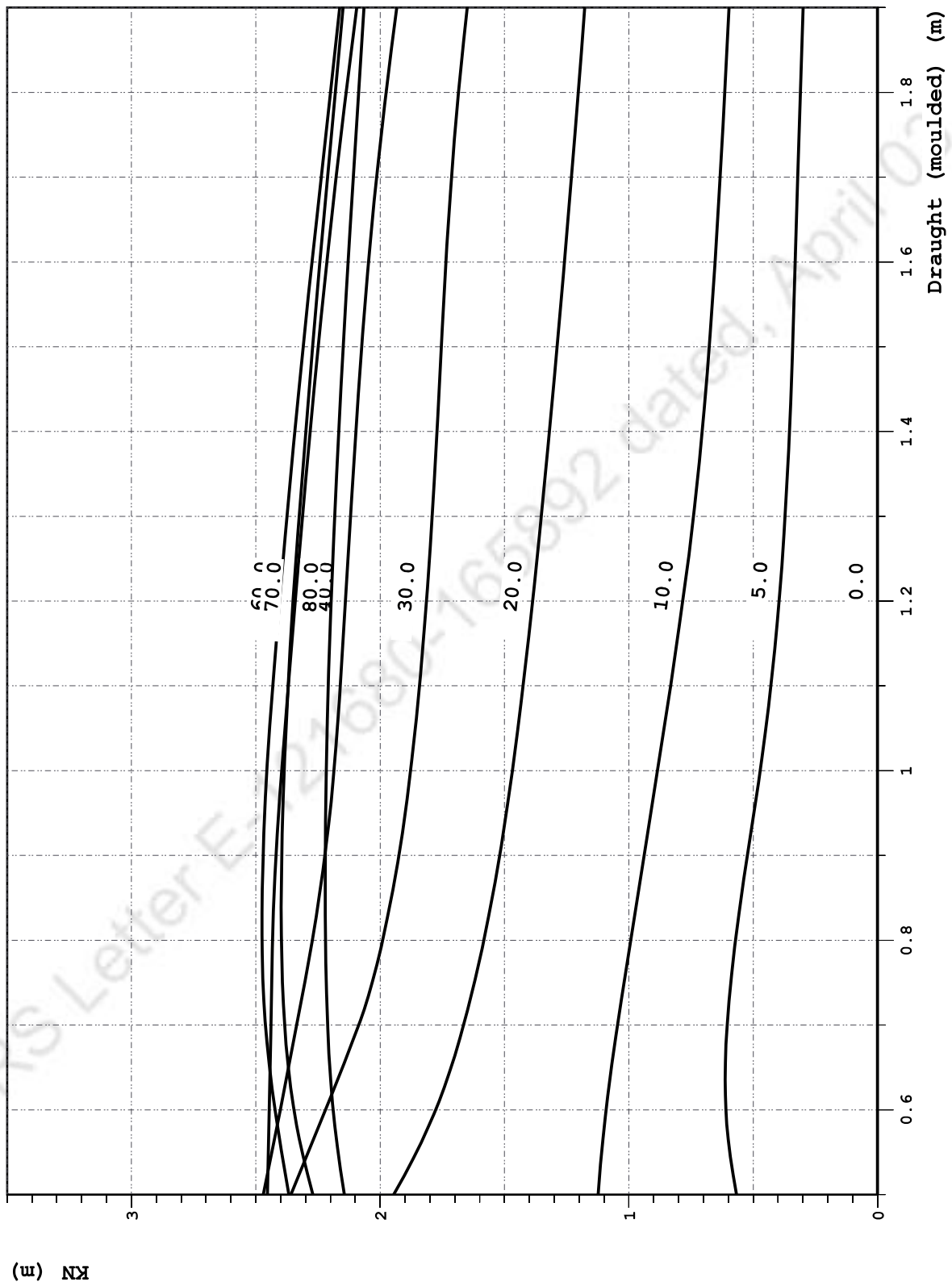


Trim: 0.3 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.567	1.124	1.945	2.359	2.470	2.453	2.367	2.270
0.600	0.000	0.610	1.092	1.776	2.220	2.402	2.446	2.422	2.347
0.700	0.000	0.605	1.046	1.665	2.086	2.335	2.439	2.461	2.384
0.800	0.000	0.571	0.992	1.583	1.990	2.273	2.432	2.475	2.397
0.900	0.000	0.523	0.938	1.519	1.924	2.222	2.419	2.470	2.396
1.000	0.000	0.472	0.885	1.468	1.878	2.185	2.396	2.456	2.386
1.100	0.000	0.429	0.832	1.425	1.842	2.160	2.369	2.432	2.370
1.200	0.000	0.396	0.783	1.387	1.814	2.140	2.341	2.404	2.350
1.300	0.000	0.372	0.740	1.352	1.791	2.120	2.312	2.374	2.325
1.400	0.000	0.354	0.705	1.319	1.771	2.098	2.281	2.343	2.299
1.500	0.000	0.341	0.677	1.289	1.754	2.074	2.249	2.309	2.271
1.600	0.000	0.331	0.653	1.259	1.735	2.047	2.214	2.274	2.242
1.700	0.000	0.321	0.633	1.231	1.713	2.014	2.177	2.237	2.211
1.800	0.000	0.310	0.614	1.203	1.685	1.976	2.137	2.200	2.180
1.900	0.000	0.300	0.597	1.177	1.650	1.933	2.094	2.162	2.150

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.144
0.600	2.189
0.700	2.211
0.800	2.220
0.900	2.221
1.000	2.217
1.100	2.209
1.200	2.197
1.300	2.182
1.400	2.166
1.500	2.148
1.600	2.129
1.700	2.108
1.800	2.086
1.900	2.065

Trim: 0.3 m

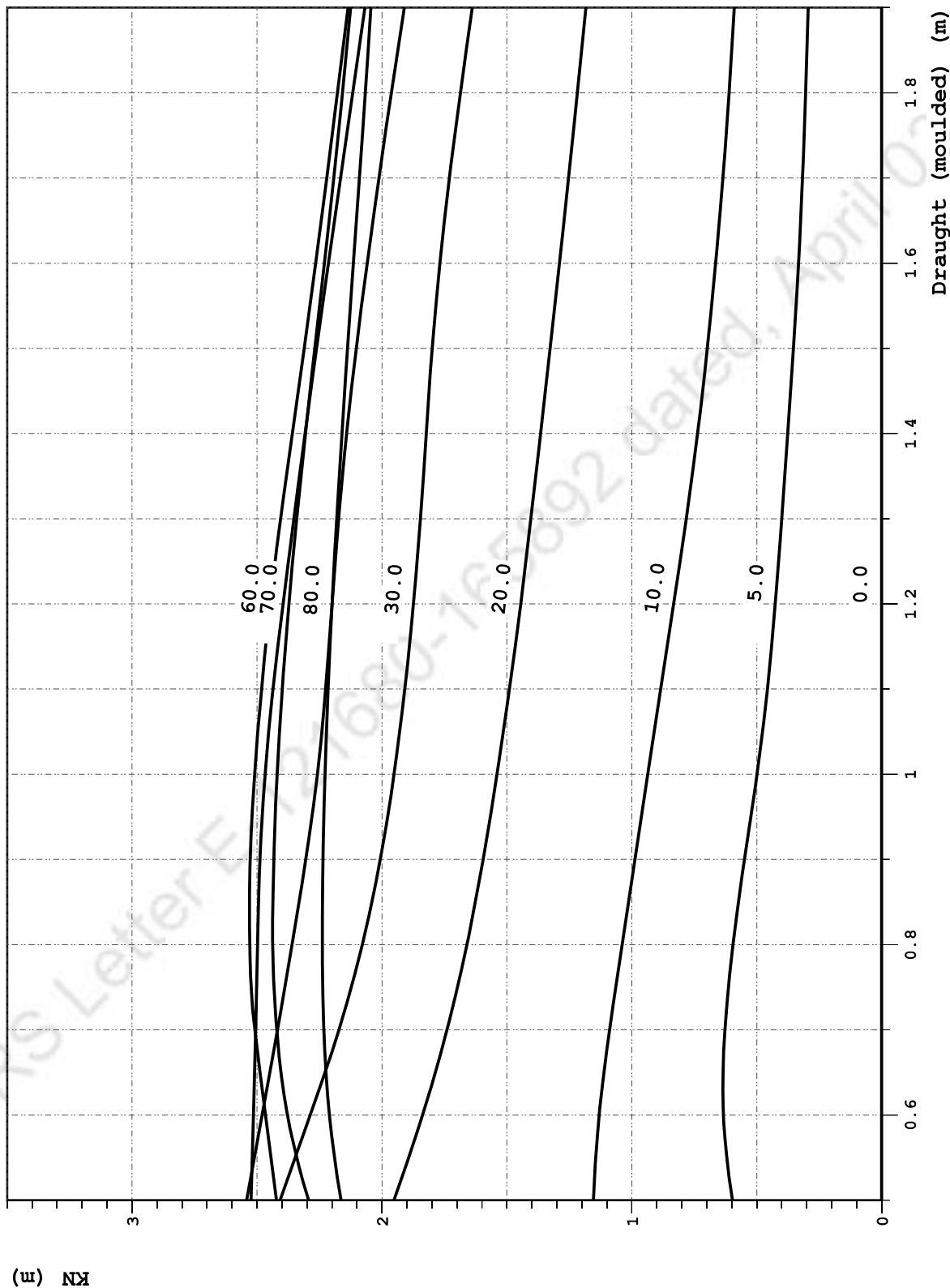


Trim: -0.4 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.597	1.154	1.952	2.408	2.542	2.524	2.422	2.294
0.600	0.000	0.633	1.131	1.837	2.286	2.480	2.514	2.466	2.378
0.700	0.000	0.627	1.089	1.740	2.172	2.418	2.505	2.509	2.421
0.800	0.000	0.595	1.038	1.660	2.079	2.360	2.498	2.529	2.437
0.900	0.000	0.549	0.987	1.595	2.007	2.305	2.489	2.527	2.433
1.000	0.000	0.499	0.936	1.539	1.952	2.259	2.468	2.509	2.420
1.100	0.000	0.458	0.885	1.490	1.908	2.226	2.436	2.482	2.399
1.200	0.000	0.426	0.833	1.445	1.874	2.200	2.396	2.447	2.373
1.300	0.000	0.400	0.782	1.404	1.846	2.173	2.353	2.406	2.341
1.400	0.000	0.376	0.737	1.365	1.822	2.141	2.308	2.359	2.306
1.500	0.000	0.353	0.698	1.327	1.799	2.103	2.262	2.311	2.269
1.600	0.000	0.333	0.664	1.289	1.768	2.059	2.214	2.265	2.230
1.700	0.000	0.317	0.635	1.253	1.730	2.012	2.166	2.221	2.193
1.800	0.000	0.304	0.610	1.218	1.686	1.962	2.117	2.178	2.158
1.900	0.000	0.294	0.590	1.184	1.638	1.910	2.068	2.136	2.125

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.164
0.600	2.210
0.700	2.232
0.800	2.238
0.900	2.236
1.000	2.228
1.100	2.215
1.200	2.199
1.300	2.181
1.400	2.160
1.500	2.138
1.600	2.114
1.700	2.090
1.800	2.066
1.900	2.044

Trim: -0.4 m

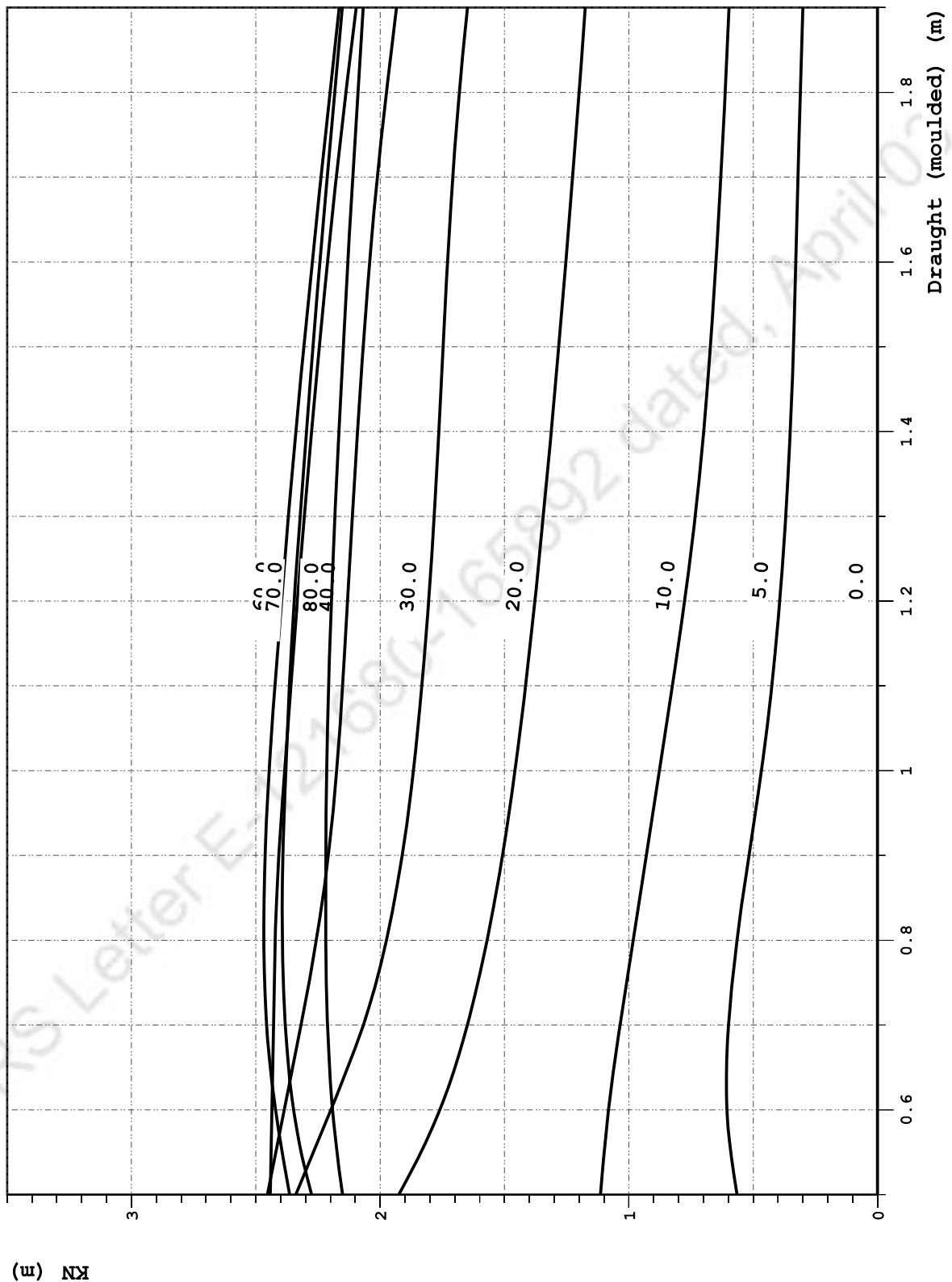


Trim: 0.4 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.565	1.115	1.925	2.339	2.453	2.442	2.364	2.276
0.600	0.000	0.605	1.082	1.760	2.198	2.385	2.435	2.421	2.348
0.700	0.000	0.599	1.036	1.649	2.067	2.318	2.428	2.457	2.381
0.800	0.000	0.565	0.983	1.570	1.975	2.256	2.422	2.468	2.393
0.900	0.000	0.517	0.930	1.508	1.911	2.209	2.407	2.462	2.391
1.000	0.000	0.467	0.877	1.457	1.866	2.175	2.384	2.447	2.380
1.100	0.000	0.425	0.825	1.415	1.832	2.151	2.359	2.423	2.365
1.200	0.000	0.393	0.776	1.378	1.805	2.132	2.333	2.397	2.345
1.300	0.000	0.369	0.733	1.344	1.783	2.112	2.305	2.369	2.322
1.400	0.000	0.351	0.699	1.312	1.764	2.091	2.276	2.339	2.296
1.500	0.000	0.338	0.672	1.282	1.747	2.068	2.245	2.307	2.270
1.600	0.000	0.328	0.649	1.253	1.729	2.042	2.212	2.273	2.242
1.700	0.000	0.320	0.630	1.226	1.708	2.011	2.176	2.238	2.213
1.800	0.000	0.310	0.613	1.200	1.682	1.975	2.137	2.201	2.182
1.900	0.000	0.300	0.597	1.175	1.649	1.934	2.096	2.165	2.153

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.151
0.600	2.191
0.700	2.211
0.800	2.219
0.900	2.218
1.000	2.215
1.100	2.207
1.200	2.195
1.300	2.182
1.400	2.166
1.500	2.148
1.600	2.130
1.700	2.110
1.800	2.089
1.900	2.068

Trim: 0.4 m

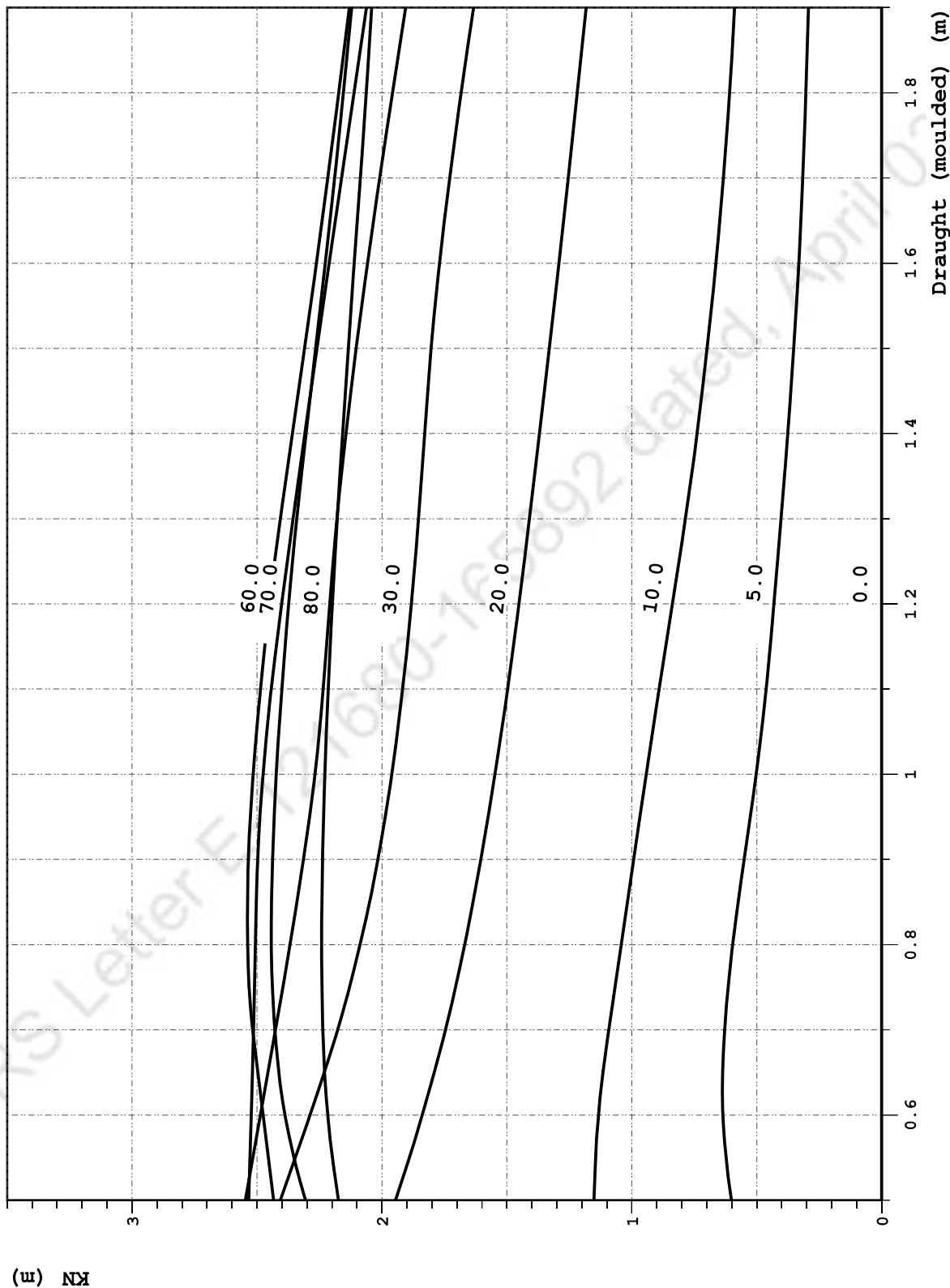


Trim: -0.5 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.602	1.152	1.945	2.407	2.547	2.533	2.433	2.306
0.600	0.000	0.635	1.133	1.838	2.288	2.486	2.523	2.476	2.388
0.700	0.000	0.628	1.092	1.746	2.177	2.426	2.514	2.518	2.429
0.800	0.000	0.596	1.042	1.668	2.087	2.368	2.507	2.537	2.443
0.900	0.000	0.550	0.993	1.604	2.016	2.314	2.497	2.534	2.437
1.000	0.000	0.503	0.943	1.548	1.961	2.268	2.476	2.515	2.423
1.100	0.000	0.463	0.891	1.497	1.917	2.235	2.443	2.486	2.401
1.200	0.000	0.431	0.838	1.452	1.882	2.209	2.402	2.450	2.374
1.300	0.000	0.403	0.785	1.410	1.854	2.180	2.356	2.407	2.341
1.400	0.000	0.376	0.739	1.369	1.829	2.145	2.309	2.358	2.304
1.500	0.000	0.352	0.698	1.330	1.803	2.103	2.260	2.309	2.266
1.600	0.000	0.332	0.664	1.292	1.769	2.058	2.212	2.262	2.227
1.700	0.000	0.316	0.634	1.255	1.729	2.009	2.162	2.217	2.190
1.800	0.000	0.303	0.609	1.218	1.683	1.958	2.112	2.173	2.155
1.900	0.000	0.293	0.588	1.182	1.633	1.905	2.062	2.131	2.121

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.174
0.600	2.217
0.700	2.237
0.800	2.241
0.900	2.238
1.000	2.228
1.100	2.215
1.200	2.199
1.300	2.179
1.400	2.158
1.500	2.135
1.600	2.111
1.700	2.086
1.800	2.063
1.900	2.041

Trim: -0.5 m

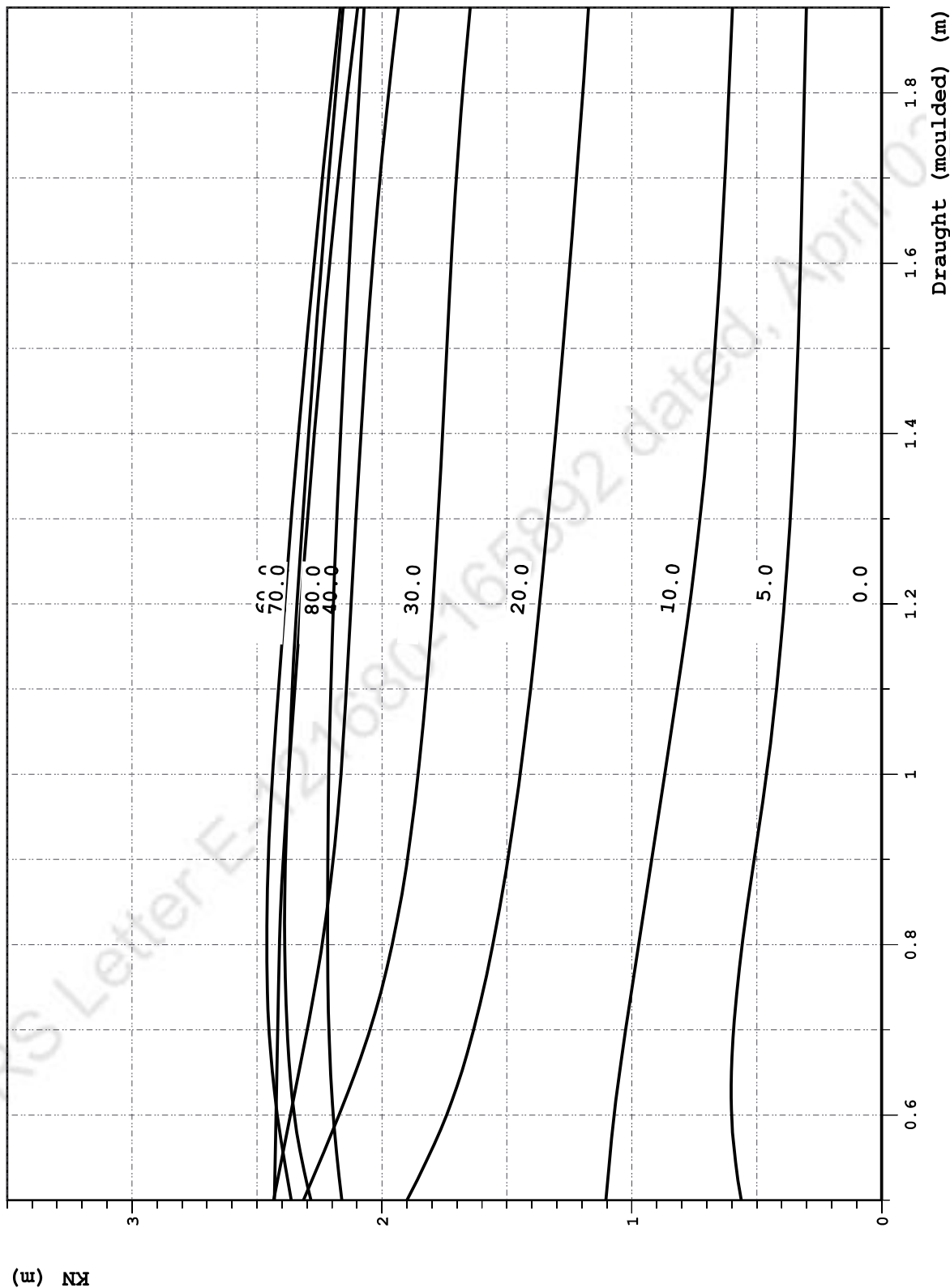


Trim: 0.5 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.562	1.104	1.900	2.314	2.434	2.430	2.363	2.284
0.600	0.000	0.601	1.071	1.742	2.171	2.367	2.424	2.419	2.351
0.700	0.000	0.593	1.025	1.633	2.048	2.299	2.418	2.452	2.379
0.800	0.000	0.558	0.973	1.556	1.959	2.239	2.411	2.461	2.389
0.900	0.000	0.511	0.921	1.496	1.898	2.195	2.395	2.455	2.386
1.000	0.000	0.461	0.868	1.447	1.855	2.164	2.373	2.438	2.374
1.100	0.000	0.421	0.817	1.405	1.823	2.142	2.349	2.414	2.360
1.200	0.000	0.390	0.768	1.369	1.797	2.123	2.324	2.389	2.340
1.300	0.000	0.366	0.727	1.336	1.775	2.105	2.298	2.363	2.317
1.400	0.000	0.348	0.694	1.305	1.757	2.084	2.270	2.334	2.293
1.500	0.000	0.335	0.667	1.275	1.741	2.062	2.240	2.304	2.268
1.600	0.000	0.325	0.646	1.248	1.723	2.037	2.209	2.272	2.242
1.700	0.000	0.318	0.628	1.221	1.702	2.008	2.175	2.238	2.214
1.800	0.000	0.310	0.612	1.196	1.677	1.973	2.138	2.203	2.185
1.900	0.000	0.301	0.597	1.173	1.647	1.934	2.098	2.167	2.156

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.160
0.600	2.195
0.700	2.213
0.800	2.218
0.900	2.216
1.000	2.213
1.100	2.205
1.200	2.194
1.300	2.181
1.400	2.165
1.500	2.148
1.600	2.131
1.700	2.112
1.800	2.092
1.900	2.071

Trim: 0.5 m

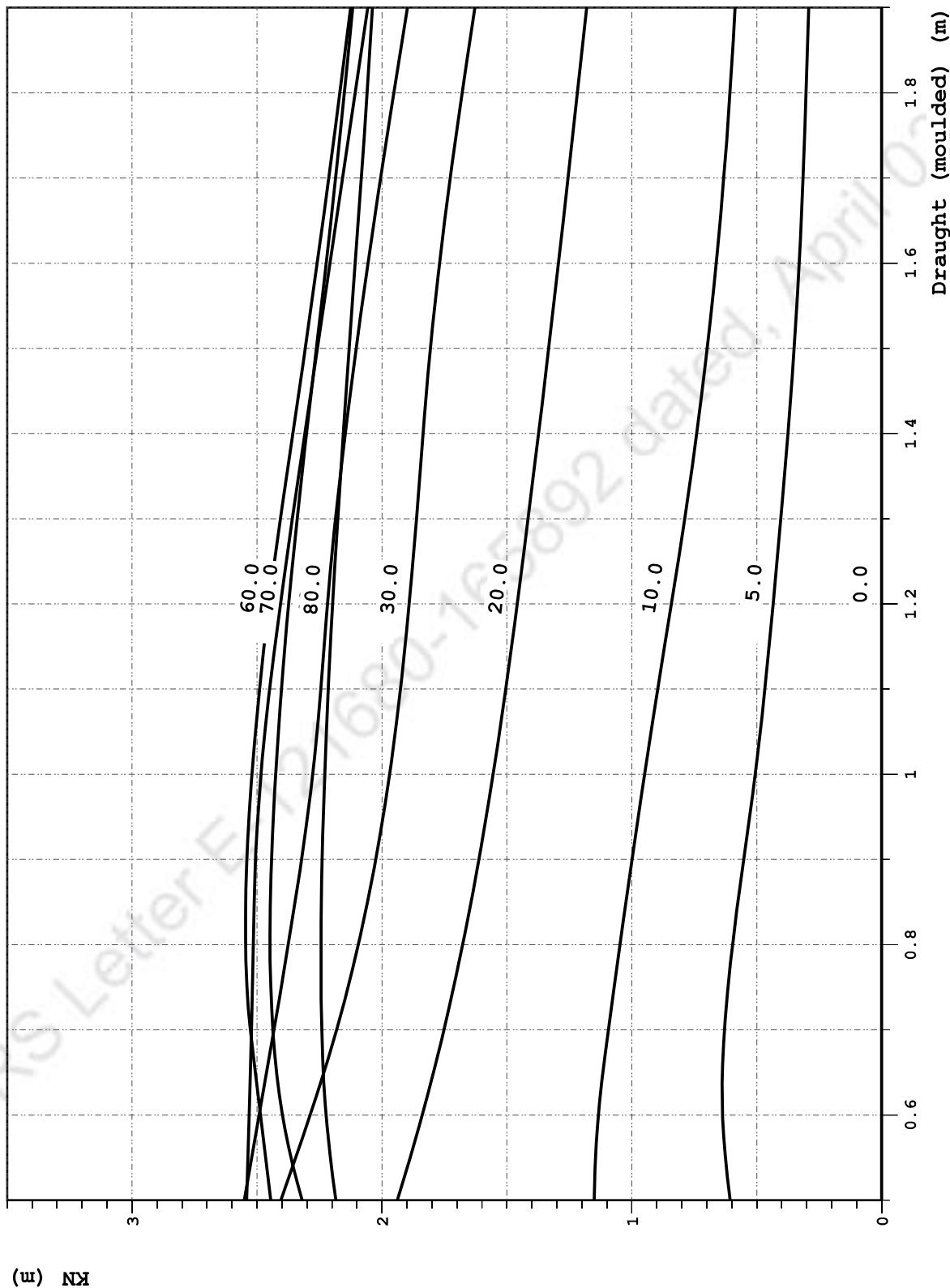


Trim: -0.6 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.606	1.151	1.938	2.404	2.551	2.541	2.445	2.319
0.600	0.000	0.637	1.134	1.838	2.288	2.492	2.531	2.486	2.399
0.700	0.000	0.629	1.094	1.751	2.182	2.432	2.522	2.527	2.436
0.800	0.000	0.597	1.048	1.677	2.095	2.375	2.515	2.546	2.448
0.900	0.000	0.552	0.999	1.612	2.025	2.322	2.506	2.541	2.441
1.000	0.000	0.506	0.949	1.555	1.969	2.277	2.484	2.520	2.425
1.100	0.000	0.467	0.896	1.505	1.926	2.244	2.450	2.490	2.402
1.200	0.000	0.435	0.842	1.458	1.891	2.218	2.406	2.452	2.373
1.300	0.000	0.404	0.788	1.415	1.862	2.186	2.358	2.407	2.339
1.400	0.000	0.375	0.740	1.373	1.836	2.147	2.309	2.357	2.302
1.500	0.000	0.350	0.698	1.333	1.806	2.103	2.259	2.307	2.262
1.600	0.000	0.330	0.662	1.294	1.769	2.056	2.208	2.259	2.223
1.700	0.000	0.315	0.632	1.256	1.727	2.005	2.158	2.213	2.186
1.800	0.000	0.302	0.607	1.218	1.679	1.953	2.107	2.168	2.151
1.900	0.000	0.293	0.587	1.180	1.628	1.898	2.056	2.125	2.117

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.185
0.600	2.224
0.700	2.241
0.800	2.244
0.900	2.239
1.000	2.229
1.100	2.215
1.200	2.198
1.300	2.177
1.400	2.154
1.500	2.131
1.600	2.107
1.700	2.083
1.800	2.059
1.900	2.038

Trim: -0.6 m

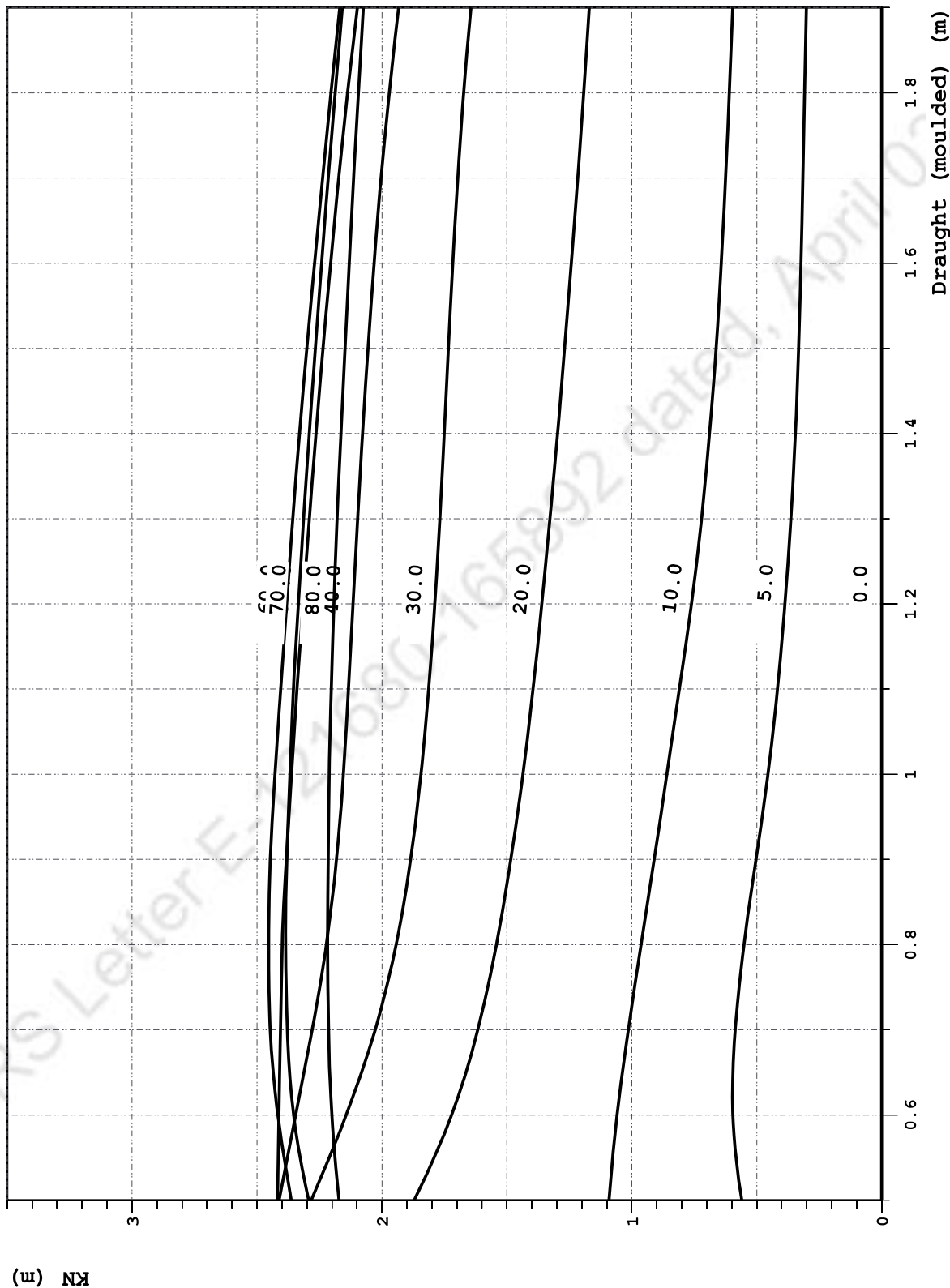


Trim: 0.6 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.560	1.092	1.871	2.283	2.412	2.418	2.362	2.293
0.600	0.000	0.596	1.059	1.721	2.143	2.346	2.412	2.416	2.353
0.700	0.000	0.586	1.014	1.617	2.027	2.279	2.406	2.447	2.379
0.800	0.000	0.551	0.963	1.542	1.943	2.222	2.399	2.453	2.385
0.900	0.000	0.503	0.911	1.484	1.885	2.182	2.383	2.446	2.381
1.000	0.000	0.455	0.860	1.436	1.844	2.154	2.362	2.428	2.369
1.100	0.000	0.417	0.810	1.395	1.813	2.134	2.340	2.405	2.354
1.200	0.000	0.387	0.761	1.360	1.788	2.116	2.316	2.381	2.335
1.300	0.000	0.363	0.721	1.328	1.768	2.097	2.291	2.357	2.313
1.400	0.000	0.345	0.689	1.297	1.750	2.078	2.264	2.330	2.291
1.500	0.000	0.332	0.663	1.269	1.734	2.056	2.236	2.301	2.267
1.600	0.000	0.323	0.642	1.242	1.717	2.031	2.206	2.270	2.242
1.700	0.000	0.315	0.625	1.216	1.697	2.003	2.173	2.238	2.215
1.800	0.000	0.309	0.610	1.193	1.673	1.971	2.137	2.204	2.187
1.900	0.000	0.301	0.596	1.170	1.644	1.933	2.099	2.169	2.158

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.171
0.600	2.201
0.700	2.214
0.800	2.218
0.900	2.216
1.000	2.211
1.100	2.203
1.200	2.193
1.300	2.179
1.400	2.164
1.500	2.148
1.600	2.131
1.700	2.113
1.800	2.094
1.900	2.074

Trim: 0.6 m

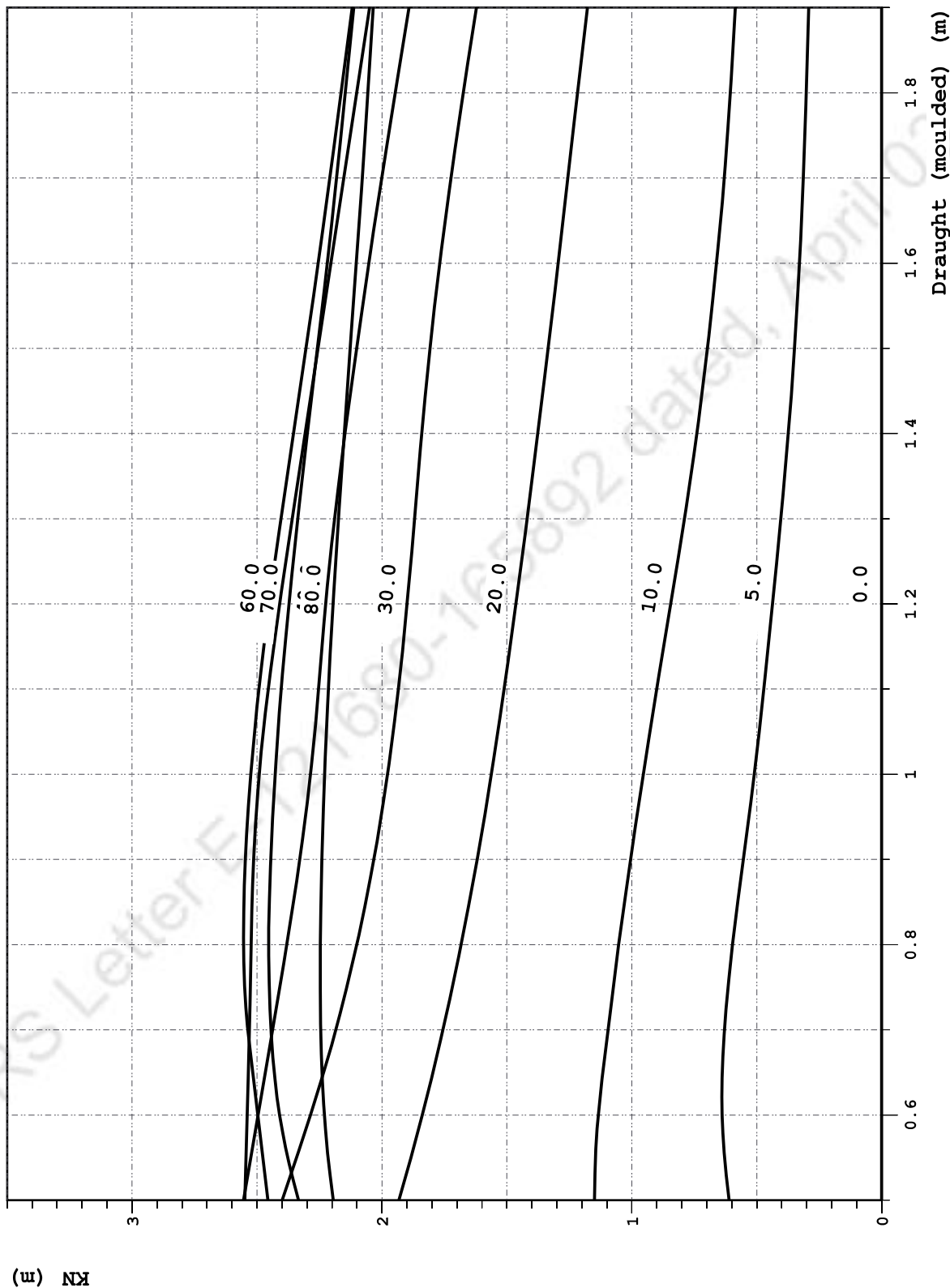


Trim: -0.7 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.611	1.150	1.932	2.400	2.554	2.549	2.456	2.334
0.600	0.000	0.638	1.134	1.838	2.286	2.496	2.539	2.497	2.410
0.700	0.000	0.630	1.095	1.756	2.184	2.437	2.531	2.537	2.444
0.800	0.000	0.597	1.053	1.683	2.101	2.381	2.523	2.553	2.453
0.900	0.000	0.554	1.005	1.619	2.032	2.329	2.514	2.547	2.445
1.000	0.000	0.510	0.954	1.562	1.977	2.286	2.491	2.525	2.427
1.100	0.000	0.472	0.900	1.511	1.934	2.254	2.455	2.492	2.403
1.200	0.000	0.437	0.844	1.464	1.899	2.226	2.409	2.452	2.372
1.300	0.000	0.404	0.789	1.419	1.869	2.190	2.359	2.405	2.337
1.400	0.000	0.374	0.740	1.376	1.841	2.148	2.308	2.354	2.299
1.500	0.000	0.349	0.697	1.335	1.808	2.102	2.256	2.304	2.258
1.600	0.000	0.329	0.661	1.295	1.768	2.052	2.205	2.255	2.219
1.700	0.000	0.314	0.630	1.256	1.724	2.001	2.153	2.209	2.182
1.800	0.000	0.302	0.606	1.217	1.675	1.947	2.102	2.164	2.146
1.900	0.000	0.292	0.586	1.177	1.622	1.892	2.050	2.119	2.112

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.195
0.600	2.231
0.700	2.245
0.800	2.246
0.900	2.240
1.000	2.230
1.100	2.215
1.200	2.196
1.300	2.174
1.400	2.151
1.500	2.128
1.600	2.103
1.700	2.079
1.800	2.056
1.900	2.035

Trim: -0.7 m

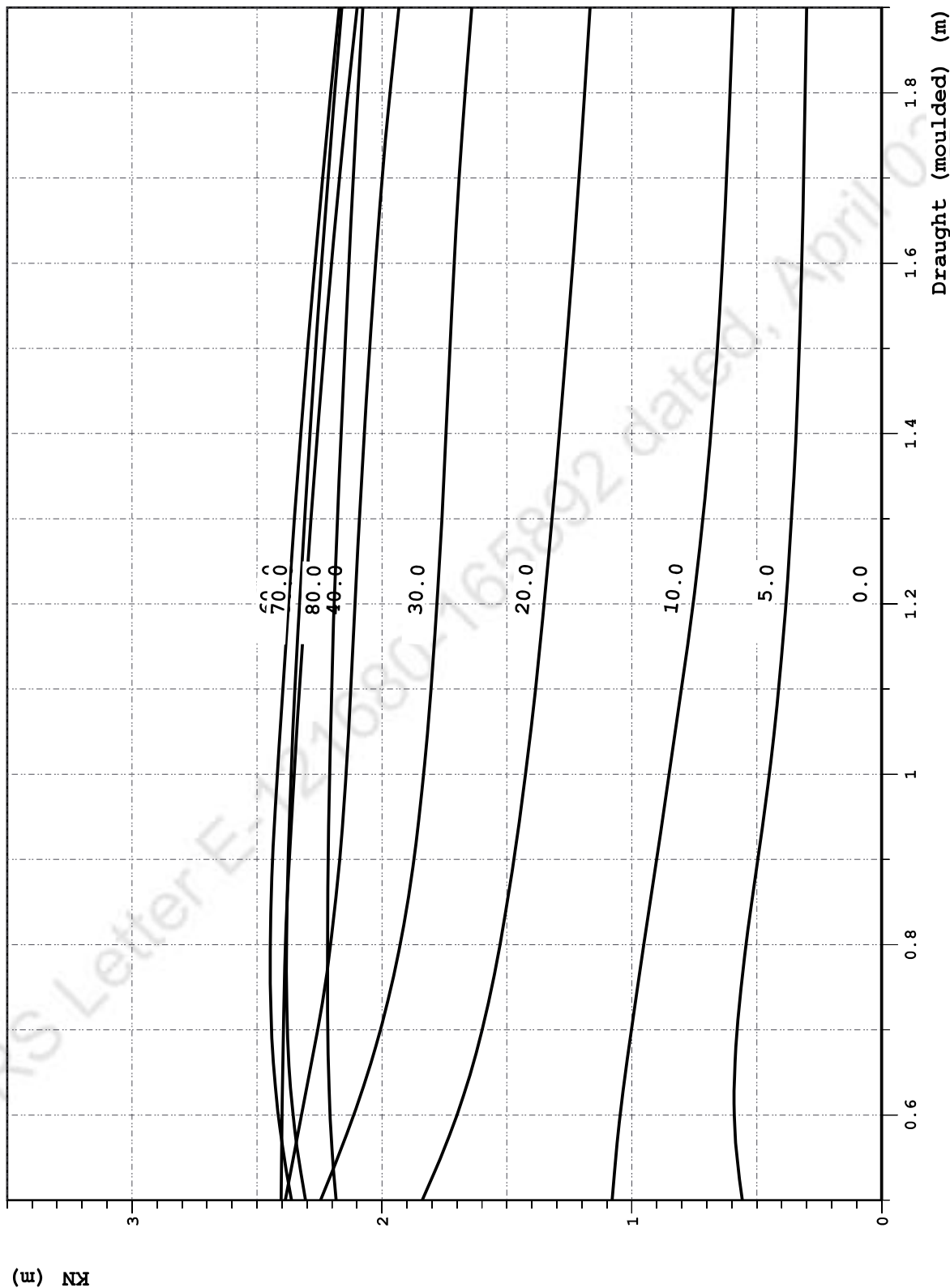


Trim: 0.7 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.558	1.079	1.839	2.245	2.387	2.403	2.362	2.305
0.600	0.000	0.590	1.047	1.700	2.113	2.322	2.400	2.415	2.356
0.700	0.000	0.578	1.002	1.599	2.006	2.257	2.394	2.442	2.378
0.800	0.000	0.543	0.952	1.527	1.927	2.205	2.387	2.447	2.382
0.900	0.000	0.496	0.901	1.472	1.872	2.169	2.371	2.438	2.376
1.000	0.000	0.450	0.851	1.425	1.833	2.143	2.352	2.419	2.364
1.100	0.000	0.413	0.801	1.386	1.803	2.125	2.331	2.397	2.349
1.200	0.000	0.384	0.755	1.351	1.780	2.108	2.308	2.374	2.329
1.300	0.000	0.361	0.715	1.319	1.760	2.090	2.283	2.351	2.309
1.400	0.000	0.343	0.684	1.290	1.744	2.071	2.258	2.325	2.288
1.500	0.000	0.330	0.658	1.262	1.728	2.049	2.231	2.297	2.265
1.600	0.000	0.320	0.638	1.236	1.711	2.026	2.202	2.268	2.241
1.700	0.000	0.313	0.621	1.212	1.691	1.999	2.170	2.237	2.216
1.800	0.000	0.307	0.607	1.189	1.668	1.968	2.136	2.205	2.189
1.900	0.000	0.301	0.595	1.168	1.640	1.932	2.099	2.171	2.161

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.184
0.600	2.207
0.700	2.217
0.800	2.218
0.900	2.215
1.000	2.209
1.100	2.201
1.200	2.191
1.300	2.178
1.400	2.163
1.500	2.148
1.600	2.132
1.700	2.115
1.800	2.096
1.900	2.077

Trim: 0.7 m

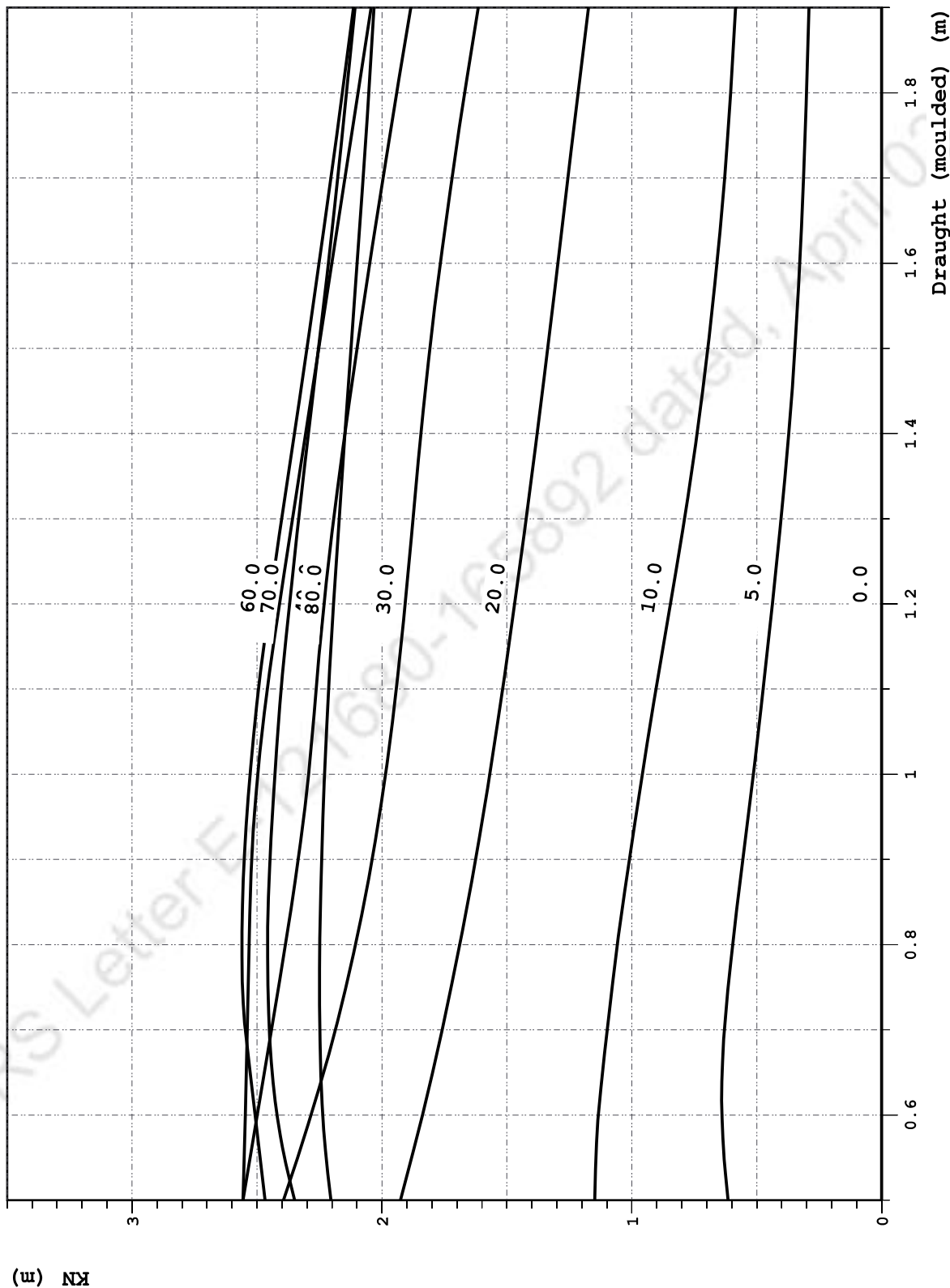


Trim: -0.8 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.615	1.149	1.926	2.394	2.556	2.556	2.468	2.349
0.600	0.000	0.640	1.134	1.838	2.284	2.499	2.547	2.508	2.420
0.700	0.000	0.630	1.099	1.759	2.186	2.442	2.539	2.546	2.451
0.800	0.000	0.597	1.058	1.689	2.106	2.387	2.532	2.561	2.457
0.900	0.000	0.556	1.010	1.625	2.039	2.335	2.521	2.551	2.449
1.000	0.000	0.514	0.958	1.568	1.985	2.294	2.497	2.528	2.428
1.100	0.000	0.475	0.904	1.517	1.942	2.263	2.459	2.494	2.403
1.200	0.000	0.438	0.845	1.469	1.907	2.232	2.410	2.450	2.370
1.300	0.000	0.403	0.789	1.423	1.876	2.193	2.358	2.401	2.333
1.400	0.000	0.372	0.739	1.379	1.844	2.148	2.306	2.350	2.294
1.500	0.000	0.347	0.696	1.336	1.808	2.100	2.253	2.300	2.254
1.600	0.000	0.328	0.659	1.296	1.767	2.049	2.200	2.251	2.214
1.700	0.000	0.313	0.629	1.256	1.720	1.995	2.148	2.204	2.177
1.800	0.000	0.301	0.604	1.215	1.669	1.941	2.095	2.158	2.142
1.900	0.000	0.292	0.585	1.174	1.615	1.884	2.043	2.113	2.108

----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.205
0.600	2.237
0.700	2.248
0.800	2.249
0.900	2.241
1.000	2.230
1.100	2.213
1.200	2.193
1.300	2.171
1.400	2.148
1.500	2.123
1.600	2.099
1.700	2.075
1.800	2.052
1.900	2.031

Trim: -0.8 m

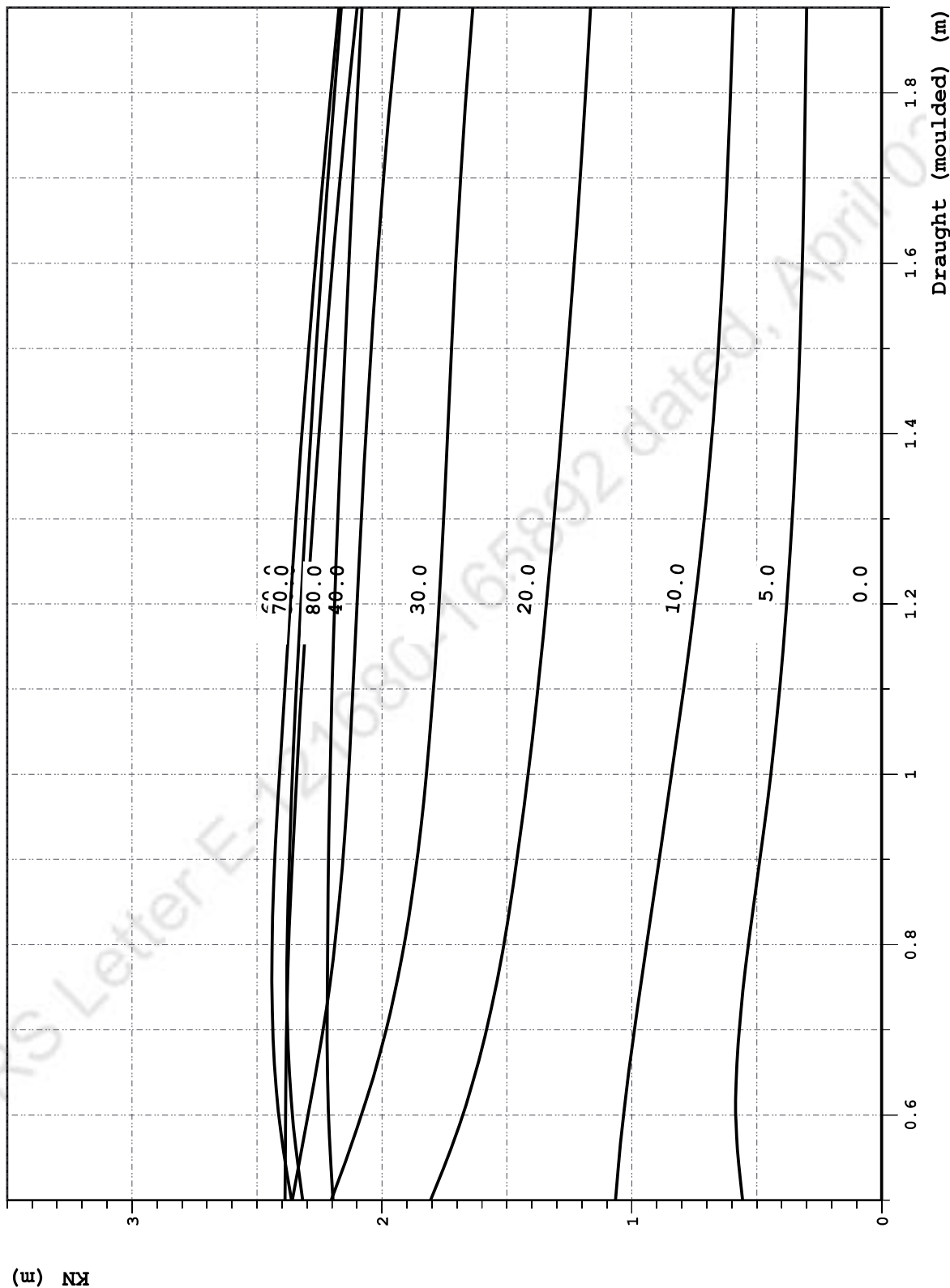


Trim: 0.8 m

----- KN (For Diff Heel Angles) -----									
draught	0.0	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0
0.500	0.000	0.556	1.065	1.805	2.203	2.359	2.388	2.362	2.317
0.600	0.000	0.584	1.033	1.676	2.082	2.296	2.386	2.413	2.358
0.700	0.000	0.570	0.989	1.582	1.983	2.235	2.382	2.437	2.377
0.800	0.000	0.534	0.941	1.512	1.911	2.189	2.373	2.440	2.379
0.900	0.000	0.488	0.890	1.460	1.860	2.156	2.359	2.429	2.370
1.000	0.000	0.444	0.842	1.415	1.822	2.133	2.341	2.410	2.359
1.100	0.000	0.409	0.793	1.376	1.794	2.116	2.321	2.389	2.343
1.200	0.000	0.381	0.748	1.342	1.771	2.100	2.300	2.367	2.324
1.300	0.000	0.358	0.709	1.311	1.753	2.083	2.276	2.344	2.305
1.400	0.000	0.341	0.679	1.283	1.737	2.064	2.252	2.320	2.285
1.500	0.000	0.328	0.654	1.256	1.722	2.043	2.226	2.294	2.263
1.600	0.000	0.318	0.634	1.230	1.705	2.020	2.198	2.266	2.240
1.700	0.000	0.310	0.618	1.207	1.685	1.994	2.167	2.236	2.216
1.800	0.000	0.305	0.605	1.185	1.663	1.964	2.134	2.205	2.190
1.900	0.000	0.300	0.593	1.165	1.636	1.930	2.099	2.172	2.163

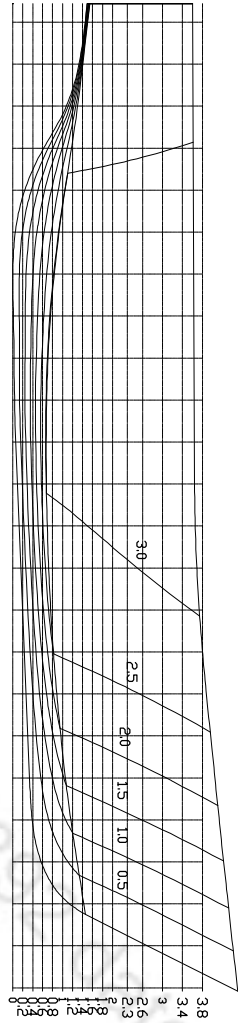
----- KN (For Diff Heel Angles) -----	
draught	80.0
0.500	2.196
0.600	2.214
0.700	2.219
0.800	2.218
0.900	2.215
1.000	2.208
1.100	2.200
1.200	2.189
1.300	2.177
1.400	2.162
1.500	2.148
1.600	2.132
1.700	2.115
1.800	2.098
1.900	2.079

Trim: 0.8 m

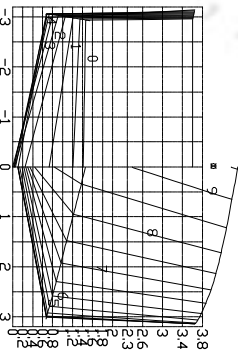


9. LINES PLAN

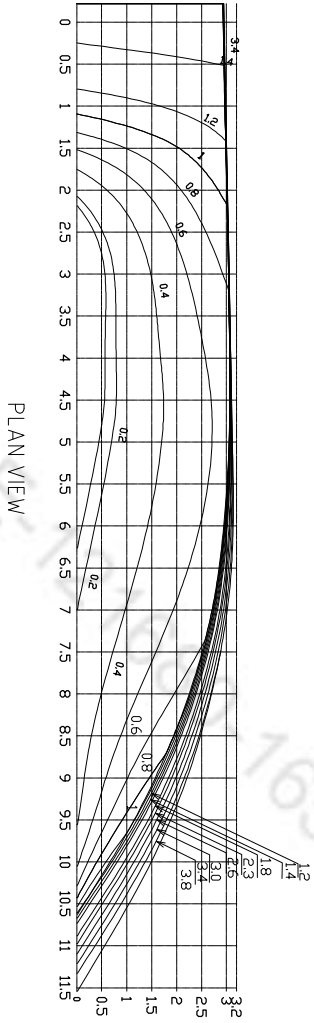
Refer IRS Letter E-121680-165892 dated, April 03, 2021



PROFILE VIEW



SECTION VIEW



PLAN VIEW


MAIN PARTICULARS :

- LENGTH D.A..... abt 20.00 M.
- LENGTH B.P..... abt 18.40 M.
- BREADTH (MLD)..... abt 5.30 M.
- DEPTH (MIDSHIP)..... abt 3.00 M.
- DRAFT (MAX)..... abt 1.80 M.
- FRAME SPACING..... 450 MM
- SPEED..... 8 KNOTS.
- REFRIGERATED FISH HOLD..... abt 35 Cu m.

VARIANT 3

NOTE:

1. DRAWING ONLY FOR IN PRINCIPLE APPROVAL
2. THIS DRAWING IS ONLY FOR GUIDANCE ONLY.

Rev 0	13Mar 2021	Preliminary	Janil S	Amable	Biny
No.	Date	Description	Drawn	Checked	Approved
CUSTOMER		TBD	FISHING VESSEL FV-R35		
Yard Nos:		TBD	Lines Plan		
 COCHIN SHIPYARD LIMITED P.O. Box 1031, COCHIN-682011, INDIA		Scale	Format	Project No.	Dwg. No.
		1:80	A3	FV-R35	FV-R35-101-002
<small>ACCORDING TO INTERNATIONAL LAWS, THIS DRAWING IS THE PROPERTY OF COCHIN SHIPYARD LIMITED. DRAWINGS CAN NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.</small>					

Refer IRS Letter No. 1658 dated April 03, 2021