

3 Decks.

IRON OR STEEL STEAMER.

SAT 29 JUN 1895

No. 31969

State if Report is also sent on the Machinery of the Vessel

Date of completion of report 27th June 1895 Port of Newcastle Received at London OfficeSurvey held at Newcastle Date, First Survey Sept 4th 1893 Last Survey 27th June 1895

On the S.S. "Makara" Rig Schooner

NAME under Tonnage Deck 2212 11

Total under Upper Dk. 2212 11

Do. of Poop 2.48

Do. of Bridge House 106.19

Do. of Forecastle 236.68

Do. of Houses on Dk. 3.61

Do. of excess of Hatchways 27.24

Do. above Crown of 5828.34

Engine Room 130.08

Less Crew Space 5498.26

Less above Crown of 1801.07

Engine Room 36.99

TONNAGE FOR FEES 3660.40

Less Room 1801.07

Tonnage on Beam 3660.40

THREE DECKED VESSEL.

CLASS 100 A 1

FEET.

Half Breadth (moulded) 26.89

Depth from upper part of Keel to top of Upper Deck Beams 33.06

Girth of Half Midship Frame (as per Rule) 54.34

deduct 7 feet 114.32

1st Number 109.32

Length 418.00

2nd Number 44.859

Proportions—Breadth to Length 7.64

Depth to Length—Upper Deck to top of Keel 12.64

Main Deck ditto 18.90

Destined Voyage If Surveyed while Building, Afloat, or in Dry Dock

Master J. Wilson

Year of appointment (1) As Master in service of owner of present vessel—1895 (2) As Master of this vessel—1895

Built at Newcastle

When built 1895 Launched 26 April

By whom built R. W. Mearns, Ruler & Co.

Owners New Zealand Shipping Co.

Managers

(Where necessary to be entered in Reg. Book.)

Residence London

Port belonging to Plymouth

TH on Deck	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH top of Floor to	Feet.	Inches.	Power of Horse.	No. of Decks with flat laid
Rule	418	0	Moulded	53	9	Do. do.	28	0 1/2	Engines 600	2
Ship per Register, Length	418.0		breadth	54.0		depth	28.45			
						Moulded depth, ft.	32	ins.		
									To Upper Dk.	13
										ins.

FRAMING.

	Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as Approved.	Inches per Rule Or as Approved.	20ths per Rule Or as Approved.
Angles, or L or T Bars for length amidships	6	3 1/2	10	6	3 1/2	10
or 1/2 at each end	6	3 1/2	9	6	3 1/2	9
in way of Double Bottoms at Solid Floors	3 1/2	3 1/2	10	3 1/2	3 1/2	10
" " at intermdt. Bkts.	25			25		
Distance of Frames from moulding edge to moulding edge, all fore and aft	8	3	11	8	3	11
REVERSED FRAME, Angles	10 1/2			10 1/2		
DEEP FRAMING, depth of girder						
FLOORS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships						
" " in way of Engines and Boilers						
" " thickness at the ends of vessel						
" " depth at 1/2 the half breadth, as per Rule						
" " height extended at the Bilges						
FLOORS & BRACKETS in Cell Dble Bottoms	48	+	9	48	+	9
" " Distance apart	25			25		
CENTRE GIRDER, in Double bottom, depth and thickness	48	+	11	48	+	11
" " Angles, Top	4 1/2	4	10	4 1/2	4	10
" " Bottom	6 1/2	4 1/2	10	6 1/2	4 1/2	10
IDE GIRDERS, number and thickness	2 1/2			9		
" " Angles	3 1/2	3 1/2	10	3 1/2	3 1/2	10
MARGIN PLATE, depth (exclusive of flange) and thickness	34	+	10	34	+	10
" " Angles	4	4	10	4	4	10
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake	48	+	11	48	+	12
" " in Engine and Boiler space	48	+	11	48	+	12
" " Remainder in Holds	9-8			9-8		
AMS, Upper Deck, Single Angle, Bulb	11	6	10	11	6	10
Angle, Plate or Tee Bulb						
Angles on upper edge						
Average space	50			50		
Middle Deck, Single Angle, Bulb	12	6 1/2	12	12	6 1/2	12
Angle, Plate or Tee Bulb						
Angles on upper edge						
Average space	50			50		
wer Deck, Single Angle, Bulb						
Angle, Plate or Tee Bulb						
Angles on upper edge						
Average space						
BEAMS, Hold, or Orlop, Plate or Tee Bulb						
Angles on upper edge						
Average space						
BEAMS, Poop Deck, Angle, Bulb Angle, Plate or Tee Bulb	9	5 1/4	10	9	5 1/4	10
Angles on upper edge						
Average space	50			50		
MS, Bridge Deck, Angle, Bulb Angle, Plate or Tee Bulb	9	5 1/4	10	9	5 1/4	10
Angles on upper edge						
Average space	50			50		
AMS, Forecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb	10	6	9	10	6	9
Angles on upper edge						
Average space	50			50		
LLARS, In 'tween Deck, size and spacing						
" " Hold	4 1/8	+	50	4 1/8	+	50
" " Quarter 'tween Dks.	3	+	50	3	+	50
" " in Hold	4 1/8	+	50	4 1/8	+	50
FRAMES, In Fore Body, No. and spacing						
" " brdth. & thickness						
No. of Side Stringers						
B-FRAMES, In E. & B. Space, No. & spacing						
" " brdth. & thickness						
EB-FRAMES, In After Body, No. and spacing						
" " brdth. & thickness						
No. of Side Stringers						
Size of Angles or Tee Bars to Web-Frames						
BRACKET PLATES to Stringers between Web Frames, depth and thickness						

FORGINGS OF CASTINGS.

	Inches in Ship.	Inches per Rule Or as Approved.
KEEL, Bar or Side Plates, depth and thickness	12 + 3 1/8	12 + 3 1/8
STEM, moulding and thickness	12 + 3 1/4	12 + 3 1/4
STERN-POST for Rudder do. do.	12 + 3 1/4	12 + 3 1/4
" " for Propeller	10 1/2	10 1/2
MAIN PIECE of Rudder, diameter at head	5 1/4	5 1/4
" " do. at heel	5 1/4	5 1/4
RUDDER, how constructed Forged Iron		
Can the Rudder be unshipped afloat?	Yes	

KEELSONS & STRINGERS.

	Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as Approved.	Inches per Rule Or as Approved.	20ths per Rule Or as Approved.
CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate						
" Rider Plate						
" Bulb Plate to Intercoastal Keelson						
" Horizontal Plates on Floors						
" Angles						
SIDE KEELSON, Angles						
" Bulb or Plate above floors, for lng.						
" Intercoastal Plate, for length						
" Attached to outside Plating with Angle						
BILGE KEELSON, Angles						
" Bulb or Plate above floors, for lng.						
" Intercoastal Plate for length						
" Attached to outside Plating with Angle						
BILGE STRINGER Angles						
" Bulb Plate for length						
" Intercoastal Plate for length						
" Attached to outside Plating with Angle						
SIDE STRINGER Angles	6	4	11	6	4	11
" Bulb or Intercoastal Plate, for lng.	29	3 1/2	10	29	3 1/2	10
" Attached to outside plating with Angle	3 1/2	3 1/2	10	3 1/2	3 1/2	10
Upper Deck Stringer Plates, br'dth & thickness	65	+	13	65	+	13
" Angle on ditto	4 + 1 1/2	+	9	4 + 1 1/2	+	9
" Tie Plates fore and aft, outside Hatchways						
Deck, * Iron or Steel, for lng.	9-8			9-8		
Wood Deck, Material & thickness	3 1/2	11		3 1/2	11	
Middle Deck Stringer Plate, br'dth & thickness	65	+	11	65	+	11
" Angles on ditto, No. 2	4 + 1 1/2	+	9	4 + 1 1/2	+	9
" Tie Plates outside Hatchways						
" Diagonal Tie Plates on Dmg. No. of prs.						
Deck, * Iron or Steel, for lng.	8-4			8-4		
Wood Deck, Material & thickness						
Lower Deck Stringer Plate, br'dth & thickness						
" Angles on ditto, No.						
" Tie Plates, outside Hatchways						
Deck, * Material and thickness						
Hold, or Orlop Stringer Plate, br'dth & thckn's						
" Angles on ditto, No.						
" Tie Plates outside Hatchways						
Deck, Material and thickness						
Poop Deck Stringer Plate, breadth & thickness	38	+	4	38	+	4
" Angle on ditto	4 + 1 1/2	+	8	4 + 1 1/2	+	8
" Tie Plates	3 1/2	+	4	3 1/2	+	4
Deck, Material and thickness	3 1/2			3 1/2		
Bridge Deck Stringer Plate, br'dth & thickness	38	+	9	38	+	9
" Angle on ditto	4 + 1 1/2	+	8	4 + 1 1/2	+	8
" Tie Plates	3 1/2	+	4	3 1/2	+	4
Deck, Material and thickness	3 1/2			3 1/2		
Forecastle Deck Stringer Plate, br'dth & th'kns	38	+	4	38	+	4
" Angle on ditto	4 + 1 1/2	+	8	4 + 1 1/2	+	8
" Tie Plates	3 1/2	+	4	3 1/2	+	4
Deck, Material and thickness	3 1/2			3 1/2		

* If Iron or Steel Deck, state if whole or part, and if Wood Deck is laid thereon.

BULKHEADS.	Number.		Thickness.	STIFFENERS.			Single or Double Frames.	Height up				
	In Vessel.	Per Rule.		Horizontal.	Vertical.	Spacing.						
W. T. BULKHEADS	4	6	8	4	5 1/2	12	6	5 1/2	10	20	dbl	Up d
PARTITION												
LONGITUDINAL												
Are the outside Plates doubled two spaces of Frames in length?												

PLATING.										RIVETING.									
STRAKES.	AS IN SHIP.				PER RULE OR AS APPROVED.		EDGES.		BUTTS.		IF LAPPED.								
	AMIDSHIP.		FORWARD.		AFT.		Single or Double.	Breadth of Lap.	Rivets.	Double or Treble and for what Length.	Rivets.	Straps.	If Lapped.						
	Breadth.	Thickness.	Thickness.	Thickness.	Breadth.	Thickness.													
FLAT PLATE KEEL	18	14	14	14	18	14	Double	18	18	18	18	18	18						
GARBOARD OR A Strake	18	14	14	14	18	14	"	18	18	18	18	18	18						
B	18	14	14	14	18	14	"	18	18	18	18	18	18						
C	18	14	14	14	18	14	"	18	18	18	18	18	18						
D	18	14	14	14	18	14	"	18	18	18	18	18	18						
E	18	14	14	14	18	14	"	18	18	18	18	18	18						
F	18	14	14	14	18	14	"	18	18	18	18	18	18						
G	18	14	14	14	18	14	"	18	18	18	18	18	18						
H	18	14	14	14	18	14	"	18	18	18	18	18	18						
J	18	14	14	14	18	14	"	18	18	18	18	18	18						
K	18	14	14	14	18	14	"	18	18	18	18	18	18						
L	18	14	14	14	18	14	"	18	18	18	18	18	18						
M	18	14	14	14	18	14	"	18	18	18	18	18	18						
N	18	14	14	14	18	14	"	18	18	18	18	18	18						
O	18	14	14	14	18	14	"	18	18	18	18	18	18						
P	18	14	14	14	18	14	"	18	18	18	18	18	18						
Q	18	14	14	14	18	14	"	18	18	18	18	18	18						
R	18	14	14	14	18	14	"	18	18	18	18	18	18						
DOUBLING OF Flat Plate Keel	18	14	14	14	18	14	"	18	18	18	18	18	18						
Length and thickness of Sheerstrakes	18	14	14	14	18	14	"	18	18	18	18	18	18						
POOP SIDES	18	14	14	14	18	14	"	18	18	18	18	18	18						
BRIDGE SIDES	18	14	14	14	18	14	"	18	18	18	18	18	18						
FORECASTLE SIDES	18	14	14	14	18	14	"	18	18	18	18	18	18						

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, Plating, &c. *James Martin Steel Co.*

Upper Deck (Butts, treble riveted for *Full* length amidship.

Stringer Plate (Straps, single, double or overlapped for *Full* length amidship.

Middle Deck (Butts, treble riveted for *Full* length amidship.

Stringer Plate (Straps, single, double or overlapped for *Full* length amidship.

Butts of Bilge & Side Stringers and Tie Plates, treble or double riveted? *Double*

Inner Bottom Plating, riveting of Edges *Double* Butts *Double*

Centre Girder Butts, *Double* Keelson Butts, *Double* riveted.

Frames, riveted through Plates with *1/2"* in Rivets, about *1/4"* apart.

Rivets, state whether Iron or Steel *Iron*

FRAMES extend in one length from *Keel to Bilge and Bilge to Gunwale*

REVERSED FRAMES on floors and frames extend from *Upper deck off fore and aft. All to up. deck at aft of after peak bulkhead, and alternately to forecastle deck*

MASTS, SPARS, &c.										
LOWER MASTS.	Material.	Total Length.	DIAMETER AND THICKNESS.				No. of Plates in round.	ANGLES.		RIVETING.
			At Partners.	Heel.	Hounds.	Head.		Number.	Size.	
Fore	Steel	95	24	10 1/2	21	10 1/2	21	2	Double	Double
Main	Steel	91	26	10 1/2	21	10 1/2	21	2	Double	Double

Boomsprit *Fore said Steel 68' 20 dia. Plates 1/2" 1/4" 3/8" 1/2" 3/4" 1" 1 1/4" 1 1/2" 1 3/4" 2" 2 1/4" 2 1/2" 3" 3 1/4" 3 1/2" 4" 4 1/2" 5" 5 1/2" 6" 6 1/2" 7" 7 1/2" 8" 8 1/2" 9" 9 1/2" 10" 10 1/2" 11" 11 1/2" 12" 12 1/2" 13" 13 1/2" 14" 14 1/2" 15" 15 1/2" 16" 16 1/2" 17" 17 1/2" 18" 18 1/2" 19" 19 1/2" 20" 20 1/2" 21" 21 1/2" 22" 22 1/2" 23" 23 1/2" 24" 24 1/2" 25" 25 1/2" 26" 26 1/2" 27" 27 1/2" 28" 28 1/2" 29" 29 1/2" 30" 30 1/2" 31" 31 1/2" 32" 32 1/2" 33" 33 1/2" 34" 34 1/2" 35" 35 1/2" 36" 36 1/2" 37" 37 1/2" 38" 38 1/2" 39" 39 1/2" 40" 40 1/2" 41" 41 1/2" 42" 42 1/2" 43" 43 1/2" 44" 44 1/2" 45" 45 1/2" 46" 46 1/2" 47" 47 1/2" 48" 48 1/2" 49" 49 1/2" 50" 50 1/2" 51" 51 1/2" 52" 52 1/2" 53" 53 1/2" 54" 54 1/2" 55" 55 1/2" 56" 56 1/2" 57" 57 1/2" 58" 58 1/2" 59" 59 1/2" 60" 60 1/2" 61" 61 1/2" 62" 62 1/2" 63" 63 1/2" 64" 64 1/2" 65" 65 1/2" 66" 66 1/2" 67" 67 1/2" 68" 68 1/2" 69" 69 1/2" 70" 70 1/2" 71" 71 1/2" 72" 72 1/2" 73" 73 1/2" 74" 74 1/2" 75" 75 1/2" 76" 76 1/2" 77" 77 1/2" 78" 78 1/2" 79" 79 1/2" 80" 80 1/2" 81" 81 1/2" 82" 82 1/2" 83" 83 1/2" 84" 84 1/2" 85" 85 1/2" 86" 86 1/2" 87" 87 1/2" 88" 88 1/2" 89" 89 1/2" 90" 90 1/2" 91" 91 1/2" 92" 92 1/2" 93" 93 1/2" 94" 94 1/2" 95" 95 1/2" 96" 96 1/2" 97" 97 1/2" 98" 98 1/2" 99" 99 1/2" 100" 100 1/2" 101" 101 1/2" 102" 102 1/2" 103" 103 1/2" 104" 104 1/2" 105" 105 1/2" 106" 106 1/2" 107" 107 1/2" 108" 108 1/2" 109" 109 1/2" 110" 110 1/2" 111" 111 1/2" 112" 112 1/2" 113" 113 1/2" 114" 114 1/2" 115" 115 1/2" 116" 116 1/2" 117" 117 1/2" 118" 118 1/2" 119" 119 1/2" 120" 120 1/2" 121" 121 1/2" 122" 122 1/2" 123" 123 1/2" 124" 124 1/2" 125" 125 1/2" 126" 126 1/2" 127" 127 1/2" 128" 128 1/2" 129" 129 1/2" 130" 130 1/2" 131" 131 1/2" 132" 132 1/2" 133" 133 1/2" 134" 134 1/2" 135" 135 1/2" 136" 136 1/2" 137" 137 1/2" 138" 138 1/2" 139" 139 1/2" 140" 140 1/2" 141" 141 1/2" 142" 142 1/2" 143" 143 1/2" 144" 144 1/2" 145" 145 1/2" 146" 146 1/2" 147" 147 1/2" 148" 148 1/2" 149" 149 1/2" 150" 150 1/2" 151" 151 1/2" 152" 152 1/2" 153" 153 1/2" 154" 154 1/2" 155" 155 1/2" 156" 156 1/2" 157" 157 1/2" 158" 158 1/2" 159" 159 1/2" 160" 160 1/2" 161" 161 1/2" 162" 162 1/2" 163" 163 1/2" 164" 164 1/2" 165" 165 1/2" 166" 166 1/2" 167" 167 1/2" 168" 168 1/2" 169" 169 1/2" 170" 170 1/2" 171" 171 1/2" 172" 172 1/2" 173" 173 1/2" 174" 174 1/2" 175" 175 1/2" 176" 176 1/2" 177" 177 1/2" 178" 178 1/2" 179" 179 1/2" 180" 180 1/2" 181" 181 1/2" 182" 182 1/2" 183" 183 1/2" 184" 184 1/2" 185" 185 1/2" 186" 186 1/2" 187" 187 1/2" 188" 188 1/2" 189" 189 1/2" 190" 190 1/2" 191" 191 1/2" 192" 192 1/2" 193" 193 1/2" 194" 194 1/2" 195" 195 1/2" 196" 196 1/2" 197" 197 1/2" 198" 198 1/2" 199" 199 1/2" 200" 200 1/2" 201" 201 1/2" 202" 202 1/2" 203" 203 1/2" 204" 204 1/2" 205" 205 1/2" 206" 206 1/2" 207" 207 1/2" 208" 208 1/2" 209" 209 1/2" 210" 210 1/2" 211" 211 1/2" 212" 212 1/2" 213" 213 1/2" 214" 214 1/2" 215" 215 1/2" 216" 216 1/2" 217" 217 1/2" 218" 218 1/2" 219" 219 1/2" 220" 220 1/2" 221" 221 1/2" 222" 222 1/2" 223" 223 1/2" 224" 224 1/2" 225" 225 1/2" 226" 226 1/2" 227" 227 1/2" 228" 228 1/2" 229" 229 1/2" 230" 230 1/2" 231" 231 1/2" 232" 232 1/2" 233" 233 1/2" 234" 234 1/2" 235" 235 1/2" 236" 236 1/2" 237" 237 1/2" 238" 238 1/2" 239" 239 1/2" 240" 240 1/2" 241" 241 1/2" 242" 242 1/2" 243" 243 1/2" 244" 244 1/2" 245" 245 1/2" 246" 246 1/2" 247" 247 1/2" 248" 248 1/2" 249" 249 1/2" 250" 250 1/2" 251" 251 1/2" 252" 252 1/2" 253" 253 1/2" 254" 254 1/2" 255" 255 1/2" 256" 256 1/2" 257" 257 1/2" 258" 258 1/2" 259" 259 1/2" 260" 260 1/2" 261" 261 1/2" 262" 262 1/2" 263" 263 1/2" 264" 264 1/2" 265" 265 1/2" 266" 266 1/2" 267" 267 1/2" 268" 268 1/2" 269" 269 1/2" 270" 270 1/2" 271" 271 1/2" 272" 272 1/2" 273" 273 1/2" 274" 274 1/2" 275" 275 1/2" 276" 276 1/2" 277" 277 1/2" 278" 278 1/2" 279" 279 1/2" 280" 280 1/2" 281" 281 1/2" 282" 282 1/2" 283" 283 1/2" 284" 284 1/2" 285" 285 1/2" 286" 286 1/2" 287" 287 1/2" 288" 288 1/2" 289" 289 1/2" 290" 290 1/2" 291" 291 1/2" 292" 292 1/2" 293" 293 1/2" 294" 294 1/2" 295" 295 1/2" 296" 296 1/2" 297" 297 1/2" 298" 298 1/2" 299" 299 1/2" 300" 300 1/2" 301" 301 1/2" 302" 302 1/2" 303" 303 1/2" 304" 304 1/2" 305" 305 1/2" 306" 306 1/2" 307" 307 1/2" 308" 308 1/2" 309" 309 1/2" 310" 310 1/2" 311" 311 1/2" 312" 312 1/2" 313" 313 1/2" 314" 314 1/2" 315" 315 1/2" 316" 316 1/2" 317" 317 1/2" 318" 318 1/2" 319" 319 1/2" 320" 320 1/2" 321" 321 1/2" 322" 322 1/2" 323" 323 1/2" 324" 324 1/2" 325" 325 1/2" 326" 326 1/2" 327" 327 1/2" 328" 328 1/2" 329" 329 1/2" 330" 330 1/2" 331" 331 1/2" 332" 332 1/2" 333" 333 1/2" 334" 334 1/2" 335" 335 1/2" 336" 336 1/2" 337" 337 1/2" 338" 338 1/2" 339" 339 1/2" 340" 340 1/2" 341" 341 1/2" 342" 342 1/2" 343" 343 1/2" 344" 344 1/2" 345" 345 1/2" 346" 346 1/2" 347" 347 1/2" 348" 348 1/2" 349" 349 1/2" 350" 350 1/2" 351" 351 1/2" 352" 352 1/2" 353" 353 1/2" 354" 354 1/2" 355" 355 1/2" 356" 356 1/2" 357" 357 1/2" 358" 358 1/2" 359" 359 1/2" 360" 360 1/2" 361" 361 1/2" 362" 362 1/2" 363" 363 1/2" 364" 364 1/2" 365" 365 1/2" 366" 366 1/2" 367" 367 1/2" 368" 368 1/2" 369" 369 1/2" 370" 370 1/2" 371" 371 1/2" 372" 372 1/2" 373" 373 1/2" 374" 374 1/2" 375" 375 1/2" 376" 376 1/2" 377" 377 1/2" 378" 378 1/2" 379" 379 1/2" 380" 380 1/2" 381" 381 1/2" 382" 382 1/2" 383" 383 1/2" 384" 384 1/2" 385" 385 1/2" 386" 386 1/2" 387" 387 1/2" 388" 388 1/2" 389" 389 1/2" 390" 390 1/2" 391" 391 1/2" 392" 392 1/2" 393" 393 1/2" 394" 394 1/2" 395" 395 1/2" 396" 396 1/2" 397" 397 1/2" 398" 398 1/2" 399" 399 1/2" 400" 400 1/2" 401" 401 1/2" 402" 402 1/2" 403" 403 1/2" 404" 404 1/2" 405" 405 1/2" 406" 406 1/2" 407" 407 1/2" 408" 408 1/2" 409" 409 1/2" 410" 410 1/2" 411" 411 1/2" 412" 412 1/2" 413" 413 1/2" 414" 414 1/2" 415" 415 1/2" 416" 416 1/2" 417" 417 1/2" 418" 418 1/2" 419" 419 1/2" 420" 420 1/2" 421" 421 1/2" 422" 422 1/2" 423" 423 1/2" 424" 424 1/2" 425" 425 1/2" 426" 426 1/2" 427" 427 1/2" 428" 428 1/2" 429" 429 1/2" 430" 430 1/2" 431" 431 1/2" 432" 432 1/2" 433" 433 1/2" 434" 434 1/2" 435" 435 1/2" 436" 436 1/2" 437" 437 1/2" 438" 438 1/2" 439" 439 1/2" 440" 440 1/2" 441" 441 1/2" 442" 442 1/2" 443" 443 1/2" 444" 444 1/2" 445" 445 1/2" 446" 446 1/2" 447" 447 1/2" 448" 448 1/2" 449" 449 1/2" 450" 450 1/2" 451" 451 1/2" 452" 452 1/2" 453" 453 1/2" 454" 454 1/2" 455" 455 1/2" 456" 456 1/2" 457" 457 1/2" 458" 458 1/2" 459" 459 1/2" 460" 460 1/2" 461" 461 1/2" 462" 462 1/2" 463" 463 1/2" 464" 464 1/2" 465" 465 1/2" 466" 466 1/2" 467" 467 1/2" 468" 468 1/2" 469" 469 1/2" 470" 470 1/2" 471" 471 1/2" 472" 472 1/2" 473" 473 1/2" 474" 474 1/2" 475" 475 1/2" 476" 476 1/2" 477" 477 1/2" 478" 478 1/2" 479" 479 1/2" 480" 480 1/2" 481" 481 1/2" 482" 482 1/2" 483" 483 1/2" 484" 484 1/2" 485" 485 1/2" 486" 486 1/2" 487" 487 1/2" 488" 488 1/2" 489" 489 1/2" 490" 490 1/2" 491" 491 1/2" 492" 492 1/2" 493" 493 1/2" 494" 494 1/2" 495" 495 1/2" 496" 496 1/2" 497" 497 1/2" 498" 498 1/2" 499" 499 1/2" 500" 500 1/2" 501" 501 1/2" 502" 502 1/2" 503" 503 1/2" 504" 504 1/2" 505" 505 1/2" 506" 506 1/2" 507" 507 1/2" 508" 508 1/2" 509" 509 1/2" 510" 510 1/2" 511" 511 1/2" 512" 512 1/2" 513" 513 1/2" 514" 514 1/2" 515" 515 1/2" 516" 516 1/2" 517" 517 1/2" 518" 518 1/2" 519" 519 1/2" 520" 520 1/2" 521" 521 1/2" 522" 522 1/2" 523" 523 1/2" 524" 524 1/2" 525" 525 1/2" 526" 526 1/2" 527" 527 1/2" 528" 528 1/2" 529" 529 1/2" 530" 530 1/2" 531" 531 1/2" 532" 532 1/2" 533" 533 1/2" 534" 534 1/2" 535" 535 1/2" 536" 536 1/2" 537" 537 1/2" 538" 538 1/2" 539" 539 1/2" 540" 540 1/2" 541" 541 1/2" 542" 542 1/2" 543" 543 1/2" 544" 544 1/2" 545" 545 1/2" 546" 546 1/2" 547" 547 1/2" 548" 548 1/2" 549" 549 1/2" 550" 550 1/2" 551" 551 1/2" 552" 552 1/2" 553" 553 1/2" 554" 554 1/2" 555" 555 1/2" 556" 556 1/2" 557" 557 1/2" 558" 558 1/2" 559" 559 1/2" 560" 560 1/2" 561" 561 1/2" 562" 562 1/2" 563" 563 1/2" 564" 564 1/2" 565" 565 1/2" 566" 566 1/2" 567" 567 1/2" 568" 568 1/2" 569" 569 1/2" 570" 570 1/2" 571" 571 1/2" 572" 572 1/2" 573" 573 1/2" 574" 574 1/2" 575" 575 1/2" 576" 576 1/2" 577" 577 1/2" 578" 578 1/2" 579" 579 1/2" 580" 580 1/2" 581" 581 1/2" 582" 582 1/2" 583" 583 1/2" 584" 584 1/2" 585" 585 1/2" 586" 586 1/2" 587" 587 1/2" 588" 588 1/2" 589" 589 1/2" 590" 590 1/2" 591" 591 1/2" 592" 592 1/2" 593" 593 1/2" 594" 594 1/2" 595" 595 1/2" 596" 596 1/2" 597" 597 1/2" 598" 598 1/2" 599" 599 1/2" 600" 600 1/2" 601" 601 1/2" 602" 602 1/2" 603" 603 1/2" 604" 604 1/2" 605" 605 1/2" 606" 606 1/2" 607" 607 1/2" 608" 608 1/2" 609" 609 1/2" 610" 610 1/2" 611" 611 1/2" 612" 612 1/2" 613" 613 1/2" 614" 614 1/2" 615" 615 1/2" 616" 616 1/2" 617" 617 1/2" 618" 618 1/2" 619" 619 1/2" 620" 620 1/2" 621" 621 1/2"*