

## REPORT ON OIL ENGINE MACHINERY.

No. 46230

12 JAN 1927

Received at London Office

Date of writing Report 30th Dec. 1926 When handed in at Local Office 31st Dec. 1926 Port of GLASGOW.

No. in Survey held at

Reg. Book.

S.P.P.T.

9662

on the

Twin

Screw vessels

Master

Engines made at

Donkey Boilers made at

Brake Horse Power

Horse Power as per Rule

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Date, First Survey 15th Feb 1926 Last Survey 24th Dec. 1926

Number of Visits 96

Tons Gross 4372

Tons Net 2281

Built at Glasgow

By whom built Harland &amp; Wolff Ltd.

Engine No. 728 When made 1926-12.

Boiler No. 728 When made 1926-12.

Owners Western Australian Government

Port belonging to Fremantle

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Is Electric Light fitted

Type of Engines Vertical Reciprocating Diesel

2 or 4 stroke cycle 4 Single or double acting Single

Mean pressure in cylinders 500 lb./in.<sup>2</sup>

No. of cylinders 16

No. of cranks 16

Diameter of cylinders 590 mm.

of stroke 1200 mm.

Revolutions per minute 140

Means of ignition Compression

Kind of fuel used Diesel oil.

Span of bearings (Page 92, Section 2, par. 7 of Rules) 820 mm.

Is a flywheel fitted

Diameter of crank shaft journals as per Rule 384 mm.

as fitted 390 mm.

Breadth of crank webs as per Rule 720 mm.

as fitted 740 mm.

Thickness of ditto as per Rule 240 mm.

as fitted 250 mm.

Diameter of tunnel shaft as per Rule 10.86

as fitted 10.98

Diameter of thrust shaft as per Rule 11.4

as fitted 11.4

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

If the liner is in more than one length are the joints burned

If without liners, is the shaft arranged to run in oil

Length of stern bush 4'-6"

Diameter of propeller 11'-4"

Total surface 40 (each) square feet

Thickness of cylinder liners 34.3 mm. top

32.5 mm. bottom

Is a governor or other arrangement fitted to prevent racing of the engine when decelerated

Are the exhaust pipes and silencers water cooled or lagged with

ducting material

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

No. of cooling water pumps four

Is the sea suction provided with an efficient strainer which can be cleared

No. of bilge pumps fitted to the main engines none

Diameter of ditto 4'-6"

Stroke 4'-6"

How driven Motor

No. of auxiliary pumps connected to the main bilge lines 4

In engine room 203"

No. and sizes of suction pipes connected to both main bilge pumps and auxiliary bilge pumps

No. of ballast pumps one

How driven Motor

State size 4'-6"

Is a separate auxiliary pump suction fitted in

Room and size 203" Emerg. Bilge

Are all the bilge suction pipes fitted with roses

Are the roses in Engine Room always accessible

Are all connections with the sea direct on the skin of the ship

Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates

Are they each fitted with a discharge valve always accessible on the plating of the vessel

Are the bilge suction pipes, cocks and valves arranged so as to prevent any

Is the screw shaft tunnel watertight

Is it fitted with a watertight door

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

No. of stages 3

Diameters 750, 675+150 mm. Stroke 420 mm.

Driven by Main Engines

No. of stages 3

Diameters 400, 350+82 mm. Stroke 290 mm.

Driven by Auxiliary Engines

No. of stages 2

Diameters 120+35 mm. Stroke 126 mm.

Driven by Purifier Motor

Diameter 179 mm.

Stroke 185 mm.

Are the air compressors and their coolers made so as to be easy of access

Internal diameter 13 1/2"-295 mm.

Cubic capacity of each 500-230 litres

3 1/2"-88 litres

Range of tensile strength 28-32 tons.

Internal diameter 5'-0" 2'-6" 0'-6"

Riveted

Is each receiver, which can be isolated,

Type of Engines Vertical Reciprocating Diesel

2 or 4 stroke cycle 4 Single or double acting Single

Mean pressure in cylinders 500 lb./in.<sup>2</sup>

No. of cylinders 16

No. of cranks 16

Diameter of cylinders 590 mm.

of stroke 1200 mm.

Revolutions per minute 140

Means of ignition Compression

Kind of fuel used Diesel oil.

Span of bearings (Page 92, Section 2, par. 7 of Rules) 820 mm.

Is a flywheel fitted

Diameter of crank shaft journals as per Rule 384 mm.

as fitted 390 mm.

Breadth of crank webs as per Rule 720 mm.

as fitted 740 mm.

Thickness of ditto as per Rule 240 mm.

as fitted 250 mm.

Diameter of tunnel shaft as per Rule 10.86

as fitted 10.98

Diameter of thrust shaft as per Rule 11.4

as fitted 11.4

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

If the liner is in more than one length are the joints burned

If without liners, is the shaft arranged to run in oil

Length of stern bush 4'-6"

Diameter of propeller 11'-4"

Total surface 40 (each) square feet

Thickness of cylinder liners 34.3 mm. top

32.5 mm. bottom

Is a governor or other arrangement fitted to prevent racing of the engine when decelerated

Are the exhaust pipes and silencers water cooled or lagged with

ducting material

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

No. of cooling water pumps four

Is the sea suction provided with an efficient strainer which can be cleared

No. of bilge pumps fitted to the main engines none

Diameter of ditto 4'-6"

Stroke 4'-6"

How driven Motor

No. of auxiliary pumps connected to the main bilge lines 4

In engine room 203"

No. and sizes of suction pipes connected to both main bilge pumps and auxiliary bilge pumps

No. of ballast pumps one

How driven Motor

State size 4'-6"

Is a separate auxiliary pump suction fitted in

Room and size 203" Emerg. Bilge

Are all the bilge suction pipes fitted with roses

Are the roses in Engine Room always accessible

Are all connections with the sea direct on the skin of the ship

Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates

Are they each fitted with a discharge valve always accessible on the plating of the vessel

Are the bilge suction pipes, cocks and valves arranged so as to prevent any

Is the screw shaft tunnel watertight

Is it fitted with a watertight door

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

No. of stages 3

Diameters 750, 675+150 mm. Stroke 420 mm.

Driven by Main Engines

No. of stages 3

Diameters 400, 350+82 mm. Stroke 290 mm.

Driven by Auxiliary Engines

No. of stages 2

Diameters 120+35 mm. Stroke 126 mm.

Driven by Purifier Motor

Diameter 179 mm.

Stroke 185 mm.

Are the air compressors and their coolers made so as to be easy of access

Internal diameter 13 1/2"-295 mm.

Cubic capacity of each 500-230 litres

3 1/2"-88 litres

Range of tensile strength 28-32 tons.

Internal diameter 5'-0" 2'-6" 0'-6"

Riveted

Is each receiver, which can be isolated,



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

## HYDRAULIC TESTS:—

| DESCRIPTION.               | DATE OF TEST.     | WORKING PRESSURE.                    | TEST PRESSURE.             | STAMPED.        | REMARKS.                                    |
|----------------------------|-------------------|--------------------------------------|----------------------------|-----------------|---|
| ENGINE CYLINDERS           |                   |                                      |                            |                 |   |
| COVERS                     | 25. 28+29-6-26    | 15 lbs./in. <sup>2</sup>             | 50 lbs./in. <sup>2</sup>   | L.D. & H.Y.B.   |   |
| JACKETS                    | 13+14-7-26.       |                                      |                            |                 |   |
| PISTON WATER PASSAGES      | 3, 7, 8+20-9-26   | 15 lbs./in. <sup>2</sup>             | 50 lbs./in. <sup>2</sup>   | H.Y.B. & H.M.C. |   |
| MAIN COMPRESSORS—1st STAGE | 20-8-26           | 60 lbs./in. <sup>2</sup>             | 500 lbs./in. <sup>2</sup>  | H.Y.B.          |   |
| 2nd                        | 16-9-26           | 210 lbs./in. <sup>2</sup>            | 500 lbs./in. <sup>2</sup>  | J.D.B.          |   |
| 3rd                        | 20-9-26 + 6-10-26 | 1000 lbs./in. <sup>2</sup>           | 2000 lbs./in. <sup>2</sup> | H.M.C. & J.D.B. |   |
| AIR RECEIVERS—STARTING     | 17-9-26           | 356 lbs./in. <sup>2</sup>            | 585 lbs./in. <sup>2</sup>  | R.L.C.          | Bel. Rpt. 9609.                             |
| INJECTION                  | 19-7-26           | 1000 lbs./in. <sup>2</sup>           | 2000 lbs./in. <sup>2</sup> | H.M.C.          | N <sup>o</sup> s. AV. 852, 3, 4, 5, 6, 7, 8 |
| AIR PIPES                  | 16+8-10-26        | 356 lbs./in. <sup>2</sup>            | 712 lbs./in. <sup>2</sup>  | J.D.B.          |   |
| FUEL PIPES                 | 4-12-26           | 25 lbs./in. <sup>2</sup> (s.v. set). | 50 lbs./in. <sup>2</sup>   |                 |   |
| FUEL PUMPS                 | 30-11-26          |                                      |                            |                 |   |
| SILENCER                   |                   |                                      |                            |                 |   |
| WATER JACKET               |                   |                                      |                            |                 |   |
| SEPARATE FUEL TANKS        | 12-7-26           |                                      | 15 lbs./in. <sup>2</sup>   | H.M.C.          |   |

PLANS. Are approved plans forwarded herewith for shafting

(If not, state date of approval)

Receivers Belfast Rpt. 9609. Separate Tanks

SPARE GEAR

As per attached list.

The foregoing is a correct description,  
For HARLAND & WOLFF, LTD.

J. C. Green

Manufacturer.

MANAGER FINNIESTON WORKS

|                                |                                   |  |
|--------------------------------|-----------------------------------|--|
| Dates of Survey while building | During progress of work in shops— | 1926 Feb. 15 Mar. 5-16-14-30 Apr. 6-13-14-15-16-23-26-28 May 3-5-10-12-14-17-20-21-24-26-27-28 June 1-2-3-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30 July 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30 Aug 2-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30 Sep 1-3-6-7-8-9-13-14-16-17-20-23-30 Oct 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30 |
| Total No. of visits            |                                   | 96   |

|   |                |                                    |            |  |                 |                             |        |                 |        |
|---|----------------|------------------------------------|------------|--|-----------------|-----------------------------|--------|-----------------|--------|
| Dates of Examination of principal parts—Cylinders     | 25, 28+29-6-26 | Covers                             | 13+14-7-26 | Pistons                                | 3, 7, 8+20-9-26 | Rods                        | 9-9-26 | Connecting rods | 9-9-26 |
| Crank shaft   | 14-6-26        | Thrust shaft                       | 9-8-26     | Tunnel shafts                          | 9-8-26          | Screw shaft                 | 9-8-26 | Propeller       | 9-8-26 |
| Engines holding down bolts                            | 24-11-26       | Completion of pumping arrangements | 16-12-26   | Engines tried under working conditions | 22-12-26        |                             |        |                 |        |
| Completion of fitting sea connections                 | 19-8-26        | Stern tube                         | 19-8-26    | Screw shaft and propeller              | 19-8-26         |                             |        |                 |        |
| Material of crank shaft                               | steel          | Identification Mark on Do.         | H.Y.B.     | Material of thrust shaft               | steel           | Identification Mark on Do.  | H.Y.B. |                 |        |
| Material of tunnel shafts                             | steel          | Identification Marks on Do.        | H.Y.B.     | Material of screw shafts               | steel           | Identification Marks on Do. | H.Y.B. |                 |        |
| Is the flash point of the oil to be used over 150° F. | yes            |                                    |            |  |                 |                             |        |                 |        |
| Is this machinery duplicate of a previous case        | no             | If so, state name of vessel        |            |  |                 |                             |        |                 |        |

General Remarks (State quality of workmanship, opinions as to class, &amp;c.)

|                    |           |                       |        |      |                       |      |                       |      |                       |      |                       |      |                       |      |                       |      |                       |      |                       |      |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |       |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |                       |        |  |
|--------------------|-----------|-----------------------|--------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|--|
| Marks on shafting: | P. Thrust | 440 YD'S<br>1261 T.H. | Tunnel | No 1 | 440 YD'S<br>1256 T.H. | No 2 | 440 YD'S<br>1275 T.H. | No 3 | 440 YD'S<br>1262 T.H. | No 4 | 440 YD'S<br>1265 T.H. | No 5 | 440 YD'S<br>1266 T.H. | No 6 | 440 YD'S<br>1267 T.H. | No 7 | 440 YD'S<br>1268 T.H. | No 8 | 440 YD'S<br>1269 T.H. | No 9 | 440 YD'S<br>1270 T.H. | No 10 | 440 YD'S<br>1271 T.H. | No 11 | 440 YD'S<br>1272 T.H. | No 12 | 440 YD'S<br>1273 T.H. | No 13 | 440 YD'S<br>1274 T.H. | No 14 | 440 YD'S<br>1275 T.H. | No 15 | 440 YD'S<br>1276 T.H. | No 16 | 440 YD'S<br>1277 T.H. | No 17 | 440 YD'S<br>1278 T.H. | No 18 | 440 YD'S<br>1279 T.H. | No 19 | 440 YD'S<br>1280 T.H. | No 20 | 440 YD'S<br>1281 T.H. | No 21 | 440 YD'S<br>1282 T.H. | No 22 | 440 YD'S<br>1283 T.H. | No 23 | 440 YD'S<br>1284 T.H. | No 24 | 440 YD'S<br>1285 T.H. | No 25 | 440 YD'S<br>1286 T.H. | No 26 | 440 YD'S<br>1287 T.H. | No 27 | 440 YD'S<br>1288 T.H. | No 28 | 440 YD'S<br>1289 T.H. | No 29 | 440 YD'S<br>1290 T.H. | No 30 | 440 YD'S<br>1291 T.H. | No 31 | 440 YD'S<br>1292 T.H. | No 32 | 440 YD'S<br>1293 T.H. | No 33 | 440 YD'S<br>1294 T.H. | No 34 | 440 YD'S<br>1295 T.H. | No 35 | 440 YD'S<br>1296 T.H. | No 36 | 440 YD'S<br>1297 T.H. | No 37 | 440 YD'S<br>1298 T.H. | No 38 | 440 YD'S<br>1299 T.H. | No 39 | 440 YD'S<br>1300 T.H. | No 40 | 440 YD'S<br>1301 T.H. | No 41 | 440 YD'S<br>1302 T.H. | No 42 | 440 YD'S<br>1303 T.H. | No 43 | 440 YD'S<br>1304 T.H. | No 44 | 440 YD'S<br>1305 T.H. | No 45 | 440 YD'S<br>1306 T.H. | No 46 | 440 YD'S<br>1307 T.H. | No 47 | 440 YD'S<br>1308 T.H. | No 48 | 440 YD'S<br>1309 T.H. | No 49 | 440 YD'S<br>1310 T.H. | No 50 | 440 YD'S<br>1311 T.H. | No 51 | 440 YD'S<br>1312 T.H. | No 52 | 440 YD'S<br>1313 T.H. | No 53 | 440 YD'S<br>1314 T.H. | No 54 | 440 YD'S<br>1315 T.H. | No 55 | 440 YD'S<br>1316 T.H. | No 56 | 440 YD'S<br>1317 T.H. | No 57 | 440 YD'S<br>1318 T.H. | No 58 | 440 YD'S<br>1319 T.H. | No 59 | 440 YD'S<br>1320 T.H. | No 60 | 440 YD'S<br>1321 T.H. | No 61 | 440 YD'S<br>1322 T.H. | No 62 | 440 YD'S<br>1323 T.H. | No 63 | 440 YD'S<br>1324 T.H. | No 64 | 440 YD'S<br>1325 T.H. | No 65 | 440 YD'S<br>1326 T.H. | No 66 | 440 YD'S<br>1327 T.H. | No 67 | 440 YD'S<br>1328 T.H. | No 68 | 440 YD'S<br>1329 T.H. | No 69 | 440 YD'S<br>1330 T.H. | No 70 | 440 YD'S<br>1331 T.H. | No 71 | 440 YD'S<br>1332 T.H. | No 72 | 440 YD'S<br>1333 T.H. | No 73 | 440 YD'S<br>1334 T.H. | No 74 | 440 YD'S<br>1335 T.H. | No 75 | 440 YD'S<br>1336 T.H. | No 76 | 440 YD'S<br>1337 T.H. | No 77 | 440 YD'S<br>1338 T.H. | No 78 | 440 YD'S<br>1339 T.H. | No 79 | 440 YD'S<br>1340 T.H. | No 80 | 440 YD'S<br>1341 T.H. | No 81 | 440 YD'S<br>1342 T.H. | No 82 | 440 YD'S<br>1343 T.H. | No 83 | 440 YD'S<br>1344 T.H. | No 84 | 440 YD'S<br>1345 T.H. | No 85 | 440 YD'S<br>1346 T.H. | No 86 | 440 YD'S<br>1347 T.H. | No 87 | 440 YD'S<br>1348 T.H. | No 88 | 440 YD'S<br>1349 T.H. | No 89 | 440 YD'S<br>1350 T.H. | No 90 | 440 YD'S<br>1351 T.H. | No 91 | 440 YD'S<br>1352 T.H. | No 92 | 440 YD'S<br>1353 T.H. | No 93 | 440 YD'S<br>1354 T.H. | No 94 | 440 YD'S<br>1355 T.H. | No 95 | 440 YD'S<br>1356 T.H. | No 96 | 440 YD'S<br>1357 T.H. | No 97 | 440 YD'S<br>1358 T.H. | No 98 | 440 YD'S<br>1359 T.H. | No 99 | 440 YD'S<br>1360 T.H. | No 100 | 440 YD'S<br>1361 T.H. | No 101 | 440 YD'S<br>1362 T.H. | No 102 | 440 YD'S<br>1363 T.H. | No 103 | 440 YD'S<br>1364 T.H. | No 104 | 440 YD'S<br>1365 T.H. | No 105 | 440 YD'S<br>1366 T.H. | No 106 | 440 YD'S<br>1367 T.H. | No 107 | 440 YD'S<br>1368 T.H. | No 108 | 440 YD'S<br>1369 T.H. | No 109 | 440 YD'S<br>1370 T.H. | No 110 | 440 YD'S<br>1371 T.H. | No 111 | 440 YD'S<br>1372 T.H. | No 112 | 440 YD'S<br>1373 T.H. | No 113 | 440 YD'S<br>1374 T.H. | No 114 | 440 YD'S<br>1375 T.H. | No 115 | 440 YD'S<br>1376 T.H. | No 116 | 440 YD'S<br>1377 T.H. | No 117 | 440 YD'S<br>1378 T.H. | No 118 | 440 YD'S<br>1379 T.H. | No 119 | 440 YD'S<br>1380 T.H. | No 120 | 440 YD'S<br>1381 T.H. | No 121 | 440 YD'S<br>1382 T.H. | No 122 | 440 YD'S<br>1383 T.H. | No 123 | 440 YD'S<br>1384 T.H. | No 124 | 440 YD'S<br>1385 T.H. | No 125 | 440 YD'S<br>1386 T.H. | No 126 | 440 YD'S<br>1387 T.H. | No 127 | 440 YD'S<br>1388 T.H. | No 128 | 440 YD'S<br>1389 T.H. | No 129 | 440 YD'S<br>1390 T.H. | No 130 | 440 YD'S<br>1391 T.H. | No 131 | 440 YD'S<br>1392 T.H. | No 132 | 440 YD'S<br>1393 T.H. | No 133 | 440 YD'S<br>1394 T.H. | No 134 | 440 YD'S<br>1395 T.H. | No 135 | 440 YD'S<br>1396 T.H. | No 136 | 440 YD'S<br>1397 T.H. | No 137 | 440 YD'S<br>1398 T.H. | No 138 | 440 YD'S<br>1399 T.H. | No 139 | 440 YD'S<br>1400 T.H. | No 140 | 440 YD'S<br>1401 T.H. | No 141 | 440 YD'S<br>1402 T.H. | No 142 | 440 YD'S<br>1403 T.H. | No 143 | 440 YD'S<br>1404 T.H. | No 144 | 440 YD'S<br>1405 T.H. | No 145 | 440 YD'S<br>1406 T.H. | No 146 | 440 YD'S<br>1407 T.H. | No 147 | 440 YD'S<br>1408 T.H. | No 148 | 440 YD'S<br>1409 T.H. | No 149 | 440 YD'S<br>1410 T.H. | No 150 | 440 YD'S<br>1411 T.H. | No 151 | 440 YD'S<br>1412 T.H. | No 152 | 440 YD'S<br>1413 T.H. | No 153 | 440 YD'S<br>1414 T.H. | No 154 | 440 YD'S<br>1415 T.H. | No 155 | 440 YD'S<br>1416 T.H. | No 156 | 440 YD'S<br>1417 T.H. | No 157 | 440 YD'S<br>1418 T.H. | No 158 | 440 YD'S<br>1419 T.H. | No 159 | 440 YD'S<br>1420 T.H. | No 160 | 440 YD'S<br>1421 T.H. | No 161 | 440 YD'S<br>1422 T.H. | No 162 | 440 YD'S<br>1423 T.H. | No 163 | 440 YD'S<br>1424 T.H. | No 164 | 440 YD'S<br>1425 T.H. | No 165 | 440 YD'S<br>1426 T.H. | No 166 | 440 YD'S<br>1427 T.H. | No 167 | 440 YD'S<br>1428 T.H. | No 168 | 440 YD'S<br>1429 T.H. | No 169 | 440 YD'S<br>1430 T.H. | No 170 | 440 YD'S<br>1431 T.H. | No 171 | 440 YD'S<br>1432 T.H. | No 172 | 440 YD'S<br>1433 T.H. | No 173 | 440 YD'S<br>1434 T.H. | No 174 | 440 YD'S<br>1435 T.H. | No 175 | 440 YD'S<br>1436 T.H. | No 176 | 440 YD'S<br>1437 T.H. | No 177 | 440 YD'S<br>1438 T.H. | No 178 | 440 YD'S<br>1439 T.H. | No 179 | 440 YD'S<br>1440 T.H. | No 180 | 440 YD'S<br>1441 T.H. | No 181 | 440 YD'S<br>1442 T.H. | No 182 | 440 YD'S<br>1443 T.H. | No 183 | 440 YD'S<br>1444 T.H. | No 184 | 440 YD'S<br>1445 T.H. | No 185 | 440 YD'S<br>1446 T.H. | No 186 | 440 YD'S<br>1447 T.H. | No 187 | 440 YD'S<br>1448 T.H. | No 188 | 440 YD'S<br>1449 T.H. | No 189 | 440 YD'S<br>1450 T.H. | No 190 | 440 YD'S<br>1451 T.H. | No 191 | 440 YD'S<br>1452 T.H. | No 192 | 440 YD'S<br>1453 T.H. | No 193 | 440 YD'S<br>1454 T.H. | No 194 | 440 YD'S<br>1455 T.H. | No 195 | 440 YD'S<br>1456 T.H. | No 196 | 440 YD'S<br>1457 T.H. | No 197 | 440 YD'S<br>1458 T.H. | No 198 | 440 YD'S<br>1459 T.H. | No 199 | 440 YD'S<br>1460 T.H. | No 200 | 440 YD'S<br>1461 T.H. | No 201 | 440 YD'S<br>1462 T.H. | No 202 | 440 YD'S<br>1463 T.H. | No 203 | 440 YD'S<br>1464 T.H. | No 204 | 440 YD'S<br>1465 T.H. | No 205 | 440 YD'S<br>1466 T.H. | No 206 | 440 YD'S<br>1467 T.H. | No 207 | 440 YD'S<br>1468 T.H. | No 208 | 440 YD'S<br>1469 T.H. | No 209 | 440 YD'S<br>1470 T.H. | No 210 | 440 YD'S<br>1471 T.H. | No 211 | 440 YD'S<br>1472 T.H. | No 212 | 440 YD'S<br>1473 T.H. | No 213 | 440 YD'S<br>1474 T.H. | No 214 | 440 YD'S<br>1475 T.H. | No 215 | 440 YD'S<br>1476 T.H. | No 216 | 440 YD'S<br>1477 T.H. | No 217 | 440 YD'S<br>1478 T.H. | No 218 | 440 YD'S<br>1479 T.H. | No 219 | 440 YD'S<br>1480 T.H. | No 220 | 440 YD'S<br>1481 T.H. | No 221 | 440 YD'S<br>1482 T.H. | No 222 | 440 YD'S<br>1483 T.H. | No 223 | 440 YD'S<br>1484 T.H. | No 224 | 440 YD'S<br>1485 T.H. | No 225 | 440 YD'S<br>1486 T.H. | No 226 | 440 YD'S<br>1487 T.H. | No 227 | 440 YD'S<br>1488 T.H. | No 228 | 440 YD'S<br>1489 T.H. | No 229 | 440 YD'S<br>1490 T.H. | No 230 | 440 YD'S<br>1491 T.H. | No 231 | 440 YD'S<br>1492 T.H. | No 232 | 440 YD'S<br>1493 T.H. | No 233 | 440 YD'S<br>1494 T.H. | No 234 | 440 YD'S<br>1495 T.H. | No 235 | 440 YD'S<br>1496 T.H. | No 236 | 440 YD'S<br>1497 T.H. | No 237 | 440 YD'S<br>1498 T.H. | No 238 | 440 YD'S<br>1499 T.H. | No 239 | 440 YD'S<br>1500 T.H. | No 240 | 440 YD'S<br>1501 T.H. | No 241 | 440 YD'S<br>1502 T.H. | No 242 | 440 YD'S<br>1503 T.H. | No 243 | 440 YD'S<br>1504 T.H. | No 244 | 440 YD'S<br>1505 T.H. | No 245 | 440 YD'S<br>1506 T.H. | No 246 | 440 YD'S<br>1507 T.H. | No 247 | 440 YD'S<br>1508 T.H. | No 248 | 440 YD'S<br>1509 T.H. | No 249 | 440 YD'S<br>1510 T.H. | No 250 | 440 YD'S<br>1511 T.H. | No 251 | 440 YD'S<br>1512 T.H. | No 252 | 440 YD'S<br>1513 T.H. | No 253 | 440 YD'S<br>1514 T.H. | No 254 | 440 YD'S<br>1515 T.H. | No 255 | 440 YD'S<br>1516 T.H. | No 256 | 440 YD'S<br>1517 T.H. | No 257 | 440 YD'S<br>1518 T.H. | No 258 | 440 YD'S<br>1519 T.H. | No 259 | 440 YD'S<br>1520 T.H. | No 260 | 440 YD'S<br>1521 T.H. | No 261 | 440 YD'S<br>1522 T.H. | No 262 | 440 YD'S<br>1523 T.H. | No 263 | 440 YD'S<br>1524 T.H. | No 264 | 440 YD'S<br>1525 T.H. | No 265 | 440 YD'S<br>1526 T.H. | No 266 | 440 YD'S<br>1527 T.H. | No 267 | 440 YD'S<br>1528 T.H. | No 268 | 440 YD'S<br>1529 T.H. | No 269 | 440 YD'S<br>1530 T.H. | No 270 | 440 YD'S<br>1531 T.H. | No 271 | 440 YD'S<br>1532 T.H. | No 272 | 440 YD'S<br>1533 T.H. | No 273 | 440 YD'S<br>1534 T.H. | No 274 | 440 YD'S<br>1535 T.H. | No 275 | 440 YD'S<br>1536 T.H. | No 276 | 440 YD'S<br>1537 T.H. | No 277 | 440 YD'S<br>1538 T.H. | No 278 | 440 YD'S<br>1539 T.H. | No 279 | 440 YD'S<br>1540 T.H. | No 280 | 440 YD'S<br>1541 T.H. | No 281 | 440 YD'S<br>1542 T.H. | No 282 | 440 YD'S<br>1543 T.H. | No 283 | 440 YD'S<br>1544 T.H. | No 284 | 440 YD'S<br>1545 T.H. | No 285 | 440 YD'S<br>1546 T.H. | No 286 | 440 YD'S<br>1547 T.H. | No 287 | 440 YD'S<br>1548 T.H. | No 288 | 440 YD'S<br>1549 T.H. | No 289 | 440 YD'S<br>1550 T.H. | No 290 | 440 YD'S<br>1551 T.H. | No 291 | 440 YD'S<br>1552 T.H. | No 292 | 440 YD'S<br>1553 T.H. | No 293 | 440 YD'S<br>1554 T.H. | No 294 | 440 YD'S<br>1555 T.H. | No 295 | 440 YD'S<br>1556 T.H. | No 296 | 440 YD'S<br>1557 T.H. | No 297 | 440 YD'S<br>1558 T.H. | No 298 | 440 YD'S<br>1559 T.H. | No 299 | 440 YD'S<br>1560 T.H. | No 300 | 440 YD'S<br>1561 T.H. | No 301 | 440 YD'S<br>1562 T.H. | No 302 | 440 YD'S<br>1563 T.H. | No 303 | 440 YD'S<br>1564 T.H. | No 304 | 440 YD'S<br>1565 T.H. | No 305 | 440 YD'S<br>1566 T.H. | No 306 | 440 YD'S<br>1567 T.H. | No 307 | 440 YD'S<br>1568 T.H. | No 308 | 440 YD'S<br>1569 T.H. | No 309 | 440 YD'S<br>1570 T.H. | No 310 | 440 YD'S<br>1571 T.H. | No 311 | 440 YD'S<br>1572 T.H. | No 312 | 440 YD'S<br>1573 T.H. | No 313 | 440 YD'S<br>1574 T.H. | No 314 | 440 YD'S<br>1575 T.H. | No 315 | 440 YD'S<br>1576 T.H. | No 316 | 440 YD'S<br>1577 T.H. | No 317 | 440 YD'S<br>1578 T.H. | No 318 | 440 YD'S<br>1579 T.H. | No 319 | 440 YD'S<br>1580 T.H. | No 320 | 440 YD'S<br>1581 T.H. | No 321 | 440 YD'S<br>1582 T.H. | No 322 | 440 YD'S<br>1583 T.H. | No 323 | 440 YD'S<br>1584 T.H. | No 324 | 440 YD'S<br>1585 T.H. | No 325 | 440 YD'S<br>1586 T.H. | No 326 | 440 YD'S<br>1587 T.H. | No 327 | 440 YD'S<br>1588 T.H. | No 328 | 440 YD'S<br>1589 T.H. | No 329 | 440 YD'S<br>1590 T.H. | No 330 | 440 YD'S<br>1591 T.H. | No 331 | 440 YD'S<br>1592 T.H. | No 332 | 440 YD'S<br>1593 T.H. | No 333 | 440 YD'S<br>1594 T.H. | No 334 | 440 YD'S<br>1595 T.H. | No 335 | 440 YD'S<br>1596 T.H. | No 336 | 440 YD'S<br>1597 T.H. | No 337 | 440 YD'S<br>1598 T.H. | No 338 | 440 YD'S<br>1599 T.H. | No 339 | 440 YD'S<br>1600 T.H. | No 340 | 440 YD'S<br>1601 T.H. | No 341 | 440 YD'S<br>1602 T.H. | No 342 | 440 YD'S<br>1603 T.H. | No 343 | 440 YD'S<br>1604 T.H. | No 344 | 440 YD'S<br>1605 T.H. | No 345 | 440 YD'S<br>1606 T.H. | No 346 | 440 YD'S<br>1607 T.H. | No 347 | 440 YD'S<br>1608 T.H. | No 348 | 440 YD'S<br>1609 T.H. | No 349 | 440 YD'S<br>1610 T.H. | No 350 | 440 YD'S<br>1611 T.H. | No 351 | 440 YD'S<br>1612 T.H. | No 352 | 440 YD'S<br>1613 T.H. | No 353 | 440 YD'S<br>1614 T.H. | No 354 | 440 YD'S<br>1615 T.H. | No 355 | 440 YD'S<br>1616 T.H. | No 356 | 440 YD'S<br>1617 T.H. | No 357 | 440 YD'S<br>1618 T.H. | No 358 | 440 YD'S<br>1619 T.H. | No 359 | 440 YD'S<br>1620 T.H. | No 360 | 440 YD'S<br>1621 T.H. | No 361 | 440 YD'S<br>1622 T.H. | No 362 | 440 YD'S<br>1623 T.H. | No 363 | 440 YD'S<br>1624 T.H. | No 364 | 440 YD'S<br>1625 T.H. | No 365 | 440 YD'S<br>1626 T.H. | No 366 | 440 YD'S<br>1627 T.H. | No 367 | 440 YD'S<br>1628 T.H. | No 368 | 440 YD'S<br>1629 T.H. | No 369 | 440 YD'S<br>1630 T.H. | No 370 | 440 YD'S<br>1631 T.H. | No 371 | 440 YD'S<br>1632 T.H. | No 372 | 440 YD'S<br>1633 T.H. | No 373 | 440 YD'S<br>1634 T.H. | No 374 | 440 YD'S<br>1635 T.H. | No 375 | 440 YD'S<br>1636 T.H. | No 376 | 440 YD'S<br>1637 T.H. | No 377 | 440 YD'S<br>1638 T.H. | No 378 | 440 YD'S<br>1639 T.H. | No 379 | 440 YD'S<br>1640 T.H. | No 380 | 440 YD'S<br>1641 T.H. | No 381 | 440 YD'S<br>1642 T.H. | No 382 | 440 YD'S<br>1643 T.H. | No 383 | 440 YD'S<br>1644 T.H. | No 384 | 440 YD'S<br>1645 T.H. | No 385 | 440 YD'S<br>1646 T.H. | No 386 | 440 YD'S<br>1647 T.H. | No 387 | 440 YD'S<br>1648 T.H. | No 388 | 440 YD'S<br>1649 T.H. | No 389 | 440 YD'S<br>1650 T.H. | No 390 | 440 YD'S<br>1651 T.H. | No 391 | 440 YD'S<br>1652 T.H. | No 392 | 440 YD'S<br>1653 T.H. | No 393 | 440 YD'S<br>1654 T.H. | No 394 | 440 YD'S<br>1655 T.H. | No 395 | 440 YD'S<br>1656 T.H. | No 396 | 440 YD'S<br>1657 T.H. | No 397 | 440 YD'S<br>1658 T.H. | No 398 | 440 YD'S<br>1659 T.H. | No 399 | 440 YD'S<br>1660 T.H. | No 400 | 440 YD'S<br>1661 T.H. | No 401 | 440 YD'S<br>1662 T.H. | No 402 | 440 YD'S<br>1663 T.H. | No 403 | 440 YD'S<br>1664 T.H. | No 404 | 440 YD'S<br>1665 T.H. | No 405 | 440 YD'S<br>1666 T.H. | No 406 | 440 YD'S<br>1667 T.H. | No 407 | 440 YD'S<br>1668 T.H. | No 408 | 440 YD'S<br>1669 T.H. | No 409 | 440 YD'S<br>1670 T.H. | No 410 | 440 YD'S<br>1671 T.H. | No 411 | 440 YD'S<br>1672 T.H. | No 412 | 440 YD'S<br>1673 T.H. | No 413 | 440 YD'S<br>1674 T.H. | No 414 | 440 YD'S<br>1675 T.H. | No 415 | 440 YD'S<br>1676 T.H. | No 416 | 440 YD'S<br>1677 T.H. | No 417 | 440 YD'S<br>1678 T.H. | No 418 | 440 YD'S<br>1679 T.H. | No 419 | 440 YD'S<br>1680 T.H. | No 420 | 440 YD'S<br>1681 T.H. | No 421 | 440 YD'S<br>1682 T.H. | No 422 | 440 YD'S<br>1683 T.H. | No 423 | 440 YD'S<br>1684 T.H. | No 424 | 440 YD'S<br>1685 T.H. | No 425 | 440 YD'S<br>1686 T.H. | No 426 | 440 YD'S<br>1687 T.H. | No 427 | 440 YD'S<br>1688 T.H. | No 428 | 440 YD'S<br>1689 T.H. | No 429 | 440 YD'S<br>1690 T.H. | No 430 | 440 YD'S<br>1691 T.H. | No 431 | 440 YD'S<br>1692 T.H. | No 432 | 440 YD'S<br>1693 T.H. | No 433 | 440 YD'S<br>1694 T.H. | No 434 | 440 YD'S<br>1695 T.H. | No 435 | 440 YD'S<br>1696 T.H. | No 436 | 440 YD'S<br>1697 T.H. | No 437 | 440 YD'S<br>1698 T.H. | No 438 | 440 YD'S<br>1699 T.H. | No 439 | 440 YD'S<br>1700 T.H. | No 440 | 440 YD'S<br>1701 T.H. | No 441 | 440 YD'S<br>1702 T.H. | No 442 | 440 YD'S<br>1703 T.H. | No 443 | 440 YD'S<br>1704 T.H. | No 444 | 440 YD'S<br>1705 T.H. | No 445 |  |
|--------------------|-----------|-----------------------|--------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|--|