

t. 4b.

REPORT ON OIL ENGINE MACHINERY.

No 4004

of writing Report

19

When handed in at Local Office

19

Port of

Galveston

Received at London 30 JUN 1941

in Survey held at Hamburg

Date, First Survey

Last Survey

25/11/1940

Book, Gen Exam at Galveston

Number of Visits

306 on the Twin Screw vessel

"NUEVA ANDALUCIA"

Tons Gross 10044
Net 5786

It at Hamburg

By whom built Deutsche Werke-A.G.

Yard No. 232 When built 1940

Machines made at Augsburg

By whom made H. A. H.

Engine No. - When made 1939

Key Boilers made at Hamburg

By whom made Deutsche Werke-A.G.

Boiler No. - When made 1939-11.

Horse Power 5100

Owners The Texas Co. (Shoreway) A.S.

Port belonging to Oslo

Horse Power as per Rule 1167

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

Use for which vessel is intended Carrying Petroleum in bulk.

ENGINES, &c. Type of Engines Heavy Oil Engines 2 or 4 stroke cycle 2 Single or double acting S

Minimum pressure in cylinders 4.5 Kg./cm²

Diameter of cylinders 520 mm Length of stroke 900 mm No. of cylinders 8 x 2 No. of cranks 8 x 2

Indicated Pressure 5.5 Kg./cm²

Pitch of bearings, adjacent to the Crank, measured from inner edge to inner edge 680 mm

Is there a bearing between each crank Yes

Revolutions per minute 166

Flywheel dia. 1932 mm Weight 980 Kg.

Means of ignition Compression Kind of fuel used

Crank shaft, Solid forged

dia. of journals as per Rule

as fitted 350 mm

Crank pin dia. 350 mm

Crank Webs

Mid. length breadth 530

Thickens parallel to axis

Mid. length thickness 160

Thickens around eyehole

Wheel Shaft, diameter as per Rule

as fitted

Intermediate Shafts, diameter as per Rule

as fitted 260 mm

Thrust Shaft, diameter at collars as per Rule

as fitted 330 mm

Crank Shaft, diameter as per Rule

as fitted

Screw Shaft, diameter as per Rule

as fitted 282 mm

Is the shaft fitted with a continuous liner Yes

Liner thickness in way of bushes as per Rule

as fitted 22 mm aft

Thickens between bushes as per Rule

as fitted 16 mm

Is the after end of the liner made watertight in the

After boss Yes

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

If liners are fitted, is the shaft lapped or protected between the liners

Is an approved Oil Gland or other appliance fitted at the after end of the tube

If so, state type

Length of Bearing in Stern Bush next to and supporting propeller 1500 mm

Propeller, dia. 3800 mm

Pitch 2660 mm

No. of blades 3

Material Bronze

Whether Moveable No

Total Developed Surface 4413 sq. m.

Method of reversing Engines direct

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

Means of lubrication

Need Thickness of cylinder liners 49 mm

Are the cylinders fitted with safety valves Yes

Are the exhaust pipes and silencers water cooled or lagged with lead to funnel.

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

Sling Water Pumps, No. 4

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

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

Sewage Pumps worked from the Main Engines, No. 2

Diameter 250 mm

Stroke 200 mm

Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line

No. and Size 2 @ 50 m³/hr.

How driven Main Engine

1 @ 50 m³/hr.

Steam - duplex

1 (Ballast) @ 70 m³/hr.

Cooling water led to the bilges

No

If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

Fast Pumps, No. and size 1 @ 70 m³/hr.Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size One on each main eng. 90 m³/hr. One steam 75 m³/hr.

Two independent means arranged for circulating water through the Oil Cooler Yes

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Pumps, No. and size: - In Machinery Spaces 3 @ 90 m³/hr.2 @ 90 m³/hr.

In Copper dams.

In Pump Rooms. 6 @ 90 m³/hr.

Olds, &c. (Lumber)

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 to Bilge @ 110 mm; 1 to Ballast @ 125 mm; 1 to S.W. Circ @ 125 mm.

All the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes

Yes

Are the Bilge Suctions in the Machinery Spaces

From easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Yes

All Sea Connections fitted direct on the skin of the ship on chaps welded to hull side

Are they fitted with Valves or Cocks

Both

They fixed sufficiently high on the ship's side to be seen without lifting the platform plates

Yes

Are the Overboard Discharges above or below the deep water line

Above

They each fitted with a Discharge Valve always accessible on the plating of the vessel

Yes

Are the Blow Off Cocks fitted with a spigot and brass covering plate

Yes

Pipes pass through the bunkers

O.F. copperdam suction (frame 53/54)

Are they protected

Steel tube

6.5 mm

Thick.

Pipes pass through the deep tanks

Have they been tested as per Rule

All Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Yes

Arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one

Department to another

Yes

Is the Shaft Tunnel watertight mach. aft

Is it fitted with a watertight door

worked from

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

Air Compressors, No. 2

No. of stages

Diameters

Stroke

Driven by

Auxiliary Air Compressors, No. 2

No. of stages

Diameters

Stroke

Driven by

1 Steam Engine

1 Diesel engine

Auxiliary Air Compressors, No. none

No. of stages

Diameters

Stroke

Driven by

Provision is made for first Charging the Air Receivers

Steam driven compressors

Enging Air Pumps, No. 2

rotary blowers on each engine

Diameter 350 m³/hr.

Stroke

Driven by

Main engine

Auxiliary Engines crank shafts, diameter

as per Rule

as fitted 130 mm

No.

1 Diesel

1 Steam

Position

Port Side

Port Side forward

The Auxiliary Engines been constructed under special survey

Is a report sent herewith

Yes

Lloyd's Register Foundation

003640-003648-0183

Rep 40.
AIR RECEIVERS: — Have they been made under survey

Yes

State No. of Report or Certificate Cert No. 1431, 1, 5

Is each receiver, which can be isolated, fitted with a safety valve as per Rule

Yes

Can the internal surfaces of the receivers be examined and cleaned

Yes

Is a drain fitted at the lowest part of each receiver

Yes

~~Injection Air~~ Receivers, No. 0-0

Cubic capacity of each 0.5 m³

Internal diameter 700 mm. thickness 8 mm.

Seamless, lap welded or riveted longitudinal joint S.R. lap Material O.H. Steel

Range of tensile strength 41-47 Kg. Working pressure by Rules

Actual 8 Kg

Starting Air Receivers, No. 2

Total cubic capacity 20 m³

Internal diameter 1750 mm. thickness 24.5 mm.

Seamless, lap welded or riveted longitudinal joint T.R. lap Material O.H. Steel

Range of tensile strength 44-50 Kg. Working pressure by Rules

Actual 25 Kg

IS A DONKEY BOILER FITTED?

Yes

If so, is a report now forwarded?

Yes

Is the donkey boiler intended to be used for domestic purposes only

No

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval)

26-7-39

Receivers 9-6-39.

Separate Fuel Tanks 17-8-39

Donkey Boilers 29-10-38

General Pumping Arrangements 3-7-39

Pumping Arrangements in Machinery Space 20-7-39

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

Yes

State the principal additional spare gear supplied

2 screw shafts, 1 propeller for port & starb.

2 connecting rods, 3 tops & 3 bottom liners, 3 cylinder heads.

Aux Generator - 2 cylinder heads, 2 pistons.

also spares for all pumps in excess of rules.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops - -
During erection on board vessel - -
Total No. of visits

Dates of Examination of principal parts—Cylinders

Covers

Pistons

Rods

Connecting rods

Crank shaft

Flywheel shaft

Thrust shaft

Intermediate shafts

Tube shaft

Screw shaft

Propeller

Stern tube

Engine seatings

Engines holding down bolts

Completion of filling sea connections

Completion of pumping arrangements

Engines tried under working conditions

Crank shaft, Material

Steel

Identification Mark

Flywheel shaft, Material

Steel

Identification Mark

Thrust shaft, Material

Steel

Identification Mark

Intermediate shafts, Material

Steel

Identification Marks

Tube shaft, Material

-

Identification Mark

Screw shaft, Material

Steel

Identification Mark

Identification Marks on Air Receivers

AFT. - No 1432, Lloyd's test 39 atmos. WP 25 atmos. 9-10-39
FORD - No 1431, " 39 " WP 25 " 9-10-39

* Flywheel is on coupling between crank & thrust shafting.
INTER-SHAFTS - PORT, FORD G.H.H. S 232.90060.607/608, Lloyd's NB 14514 30-9-39. AFT 531. NB 14510. 30-9-39. STARB FORD S 232.90060.609/610, 486 Lloyd's NB 14511. 30-9-39. HR. 9-12-39. AFT 486, NB 14512. 30-9-39. AFT 486, NB 14513. 30-9-39. AFT 486, NB 14514. 30-9-39. AFT 486, NB 14515. 30-9-39. AFT 486, NB 14516. 30-9-39. AFT 486, NB 14517. 30-9-39. AFT 486, NB 14518. 30-9-39. AFT 486, NB 14519. 30-9-39. AFT 486, NB 14520. 30-9-39. AFT 486, NB 14521. 30-9-39. AFT 486, NB 14522. 30-9-39. AFT 486, NB 14523. 30-9-39. AFT 486, NB 14524. 30-9-39. AFT 486, NB 14525. 30-9-39. AFT 486, NB 14526. 30-9-39. AFT 486, NB 14527. 30-9-39. AFT 486, NB 14528. 30-9-39. AFT 486, NB 14529. 30-9-39. AFT 486, NB 14530. 30-9-39. AFT 486, NB 14531. 30-9-39. AFT 486, NB 14532. 30-9-39. AFT 486, NB 14533. 30-9-39. AFT 486, NB 14534. 30-9-39. AFT 486, NB 14535. 30-9-39. AFT 486, NB 14536. 30-9-39. AFT 486, NB 14537. 30-9-39. AFT 486, NB 14538. 30-9-39. AFT 486, NB 14539. 30-9-39. AFT 486, NB 14540. 30-9-39. AFT 486, NB 14541. 30-9-39. AFT 486, NB 14542. 30-9-39. AFT 486, NB 14543. 30-9-39. AFT 486, NB 14544. 30-9-39. AFT 486, NB 14545. 30-9-39. AFT 486, NB 14546. 30-9-39. AFT 486, NB 14547. 30-9-39. AFT 486, NB 14548. 30-9-39. AFT 486, NB 14549. 30-9-39. AFT 486, NB 14550. 30-9-39. AFT 486, NB 14551. 30-9-39. AFT 486, NB 14552. 30-9-39. AFT 486, NB 14553. 30-9-39. AFT 486, NB 14554. 30-9-39. AFT 486, NB 14555. 30-9-39. AFT 486, NB 14556. 30-9-39. AFT 486, NB 14557. 30-9-39. AFT 486, NB 14558. 30-9-39. AFT 486, NB 14559. 30-9-39. AFT 486, NB 14560. 30-9-39. AFT 486, NB 14561. 30-9-39. AFT 486, NB 14562. 30-9-39. AFT 486, NB 14563. 30-9-39. AFT 486, NB 14564. 30-9-39. AFT 486, NB 14565. 30-9-39. AFT 486, NB 14566. 30-9-39. AFT 486, NB 14567. 30-9-39. AFT 486, NB 14568. 30-9-39. AFT 486, NB 14569. 30-9-39. AFT 486, NB 14570. 30-9-39. AFT 486, NB 14571. 30-9-39. AFT 486, NB 14572. 30-9-39. AFT 486, NB 14573. 30-9-39. AFT 486, NB 14574. 30-9-39. AFT 486, NB 14575. 30-9-39. AFT 486, NB 14576. 30-9-39. AFT 486, NB 14577. 30-9-39. AFT 486, NB 14578. 30-9-39. AFT 486, NB 14579. 30-9-39. AFT 486, NB 14580. 30-9-39. AFT 486, NB 14581. 30-9-39. AFT 486, NB 14582. 30-9-39. AFT 486, NB 14583. 30-9-39. AFT 486, NB 14584. 30-9-39. AFT 486, NB 14585. 30-9-39. AFT 486, NB 14586. 30-9-39. AFT 486, NB 14587. 30-9-39. AFT 486, NB 14588. 30-9-39. AFT 486, NB 14589. 30-9-39. AFT 486, NB 14590. 30-9-39. AFT 486, NB 14591. 30-9-39. AFT 486, NB 14592. 30-9-39. AFT 486, NB 14593. 30-9-39. AFT 486, NB 14594. 30-9-39. AFT 486, NB 14595. 30-9-39. AFT 486, NB 14596. 30-9-39. AFT 486, NB 14597. 30-9-39. AFT 486, NB 14598. 30-9-39. AFT 486, NB 14599. 30-9-39. AFT 486, NB 14600. 30-9-39. AFT 486, NB 14601. 30-9-39. AFT 486, NB 14602. 30-9-39. AFT 486, NB 14603. 30-9-39. AFT 486, NB 14604. 30-9-39. AFT 486, NB 14605. 30-9-39. AFT 486, NB 14606. 30-9-39. AFT 486, NB 14607. 30-9-39. AFT 486, NB 14608. 30-9-39. AFT 486, NB 14609. 30-9-39. AFT 486, NB 14610. 30-9-39. AFT 486, NB 14611. 30-9-39. AFT 486, NB 14612. 30-9-39. AFT 486, NB 14613. 30-9-39. AFT 486, NB 14614. 30-9-39. AFT 486, NB 14615. 30-9-39. AFT 486, NB 14616. 30-9-39. AFT 486, NB 14617. 30-9-39. AFT 486, NB 14618. 30-9-39. AFT 486, NB 14619. 30-9-39. AFT 486, NB 14620. 30-9-39. AFT 486, NB 14621. 30-9-39. AFT 486, NB 14622. 30-9-39. AFT 486, NB 14623. 30-9-39. AFT 486, NB 14624. 30-9-39. AFT 486, NB 14625. 30-9-39. AFT 486, NB 14626. 30-9-39. AFT 486, NB 14627. 30-9-39. AFT 486, NB 14628. 30-9-39. AFT 486, NB 14629. 30-9-39. AFT 486, NB 14630. 30-9-39. AFT 486, NB 14631. 30-9-39. AFT 486, NB 14632. 30-9-39. AFT 486, NB 14633. 30-9-39. AFT 486, NB 14634. 30-9-39. AFT 486, NB 14635. 30-9-39. AFT 486, NB 14636. 30-9-39. AFT 486, NB 14637. 30-9-39. AFT 486, NB 14638. 30-9-39. AFT 486, NB 14639. 30-9-39. AFT 486, NB 14640. 30-9-39. AFT 486, NB 14641. 30-9-39. AFT 486, NB 14642. 30-9-39. AFT 486, NB 14643. 30-9-39. AFT 486, NB 14644. 30-9-39. AFT 486, NB 14645. 30-9-39. AFT 486, NB 14646. 30-9-39. AFT 486, NB 14647. 30-9-39. AFT 486, NB 14648. 30-9-39. AFT 486, NB 14649. 30-9-39. AFT 486, NB 14650. 30-9-39. AFT 486, NB 14651. 30-9-39. AFT 486, NB 14652. 30-9-39. AFT 486, NB 14653. 30-9-39. AFT 486, NB 14654. 30-9-39. AFT 486, NB 14655. 30-9-39. AFT 486, NB 14656. 30-9-39. AFT 486, NB 14657. 30-9-39. AFT 486, NB 14658. 30-9-39. AFT 486, NB 14659. 30-9-39. AFT 486, NB 14660. 30-9-39. AFT 486, NB 14661. 30-9-39. AFT 486, NB 14662. 30-9-39. AFT 486, NB 14663. 30-9-39. AFT 486, NB 14664. 30-9-39. AFT 486, NB 14665. 30-9-39. AFT 486, NB 14666. 30-9-39. AFT 486, NB 14667. 30-9-39. AFT 486, NB 14668. 30-9-39. AFT 486, NB 14669. 30-9-39. AFT 486, NB 14670. 30-9-39. AFT 486, NB 14671. 30-9-39. AFT 486, NB 14672. 30-9-39. AFT 486, NB 14673. 30-9-39. AFT 486, NB 14674. 30-9-39. AFT 486, NB 14675. 30-9-39. AFT 486, NB 14676. 30-9-39. AFT 486, NB 14677. 30-9-39. AFT 486, NB 14678. 30-9-39. AFT 486, NB 14679. 30-9-39. AFT 486, NB 14680. 30-9-39. AFT 486, NB 14681. 30-9-39. AFT 486, NB 14682. 30-9-39. AFT 486, NB 14683. 30-9-39. AFT 486, NB 14684. 30-9-39. AFT 486, NB 14685. 30-9-39. AFT 486, NB 14686. 30-9-39. AFT 486, NB 14687. 30-9-39. AFT 486, NB 14688. 30-9-39. AFT 486, NB 14689. 30-9-39. AFT 486, NB 14690. 30-9-39. AFT 486, NB 14691. 30-9-39. AFT 486, NB 14692. 30-9-39. AFT 486, NB 14693. 30-9-39. AFT 486, NB 14694. 30-9-39. AFT 486, NB 14695. 30-9-39. AFT 486, NB 14696. 30-9-39. AFT 486, NB 14697. 30-9-39. AFT 486, NB 14698. 30-9-39. AFT 486, NB 14699. 30-9-39. AFT 486, NB 14700. 30-9-39. AFT 486, NB 14701. 30-9-39. AFT 486, NB 14702. 30-9-39. AFT 486, NB 14703. 30-9-39. AFT 486, NB 14704. 30-9-39. AFT 486, NB 14705. 30-9-39. AFT 486, NB 14706. 30-9-39. AFT 486, NB 14707. 30-9-39. AFT 486, NB 14708. 30-9-39. AFT 486, NB 14709. 30-9-39. AFT 486, NB 14710. 30-9-39. AFT 486, NB 14711. 30-9-39. AFT 486, NB 14712. 30-9-39. AFT 486, NB 14713. 30-9-39. AFT 486, NB 14714. 30-9-39. AFT 486, NB 14715. 30-9-39. AFT 486, NB 14716. 30-9-39. AFT 486, NB 14717. 30-9-39. AFT 486, NB 14718. 30-9-39. AFT 486, NB 14719. 30-9-39. AFT 486, NB 14720. 30-9-39. AFT 486, NB 14721. 30-9-39. AFT 486, NB 14722. 30-9-39. AFT 486, NB 14723. 30-9-39. AFT 486, NB 14724. 30-9-39. AFT 486, NB 14725. 30-9-39. AFT 486, NB 14726. 30-9-39. AFT 486, NB 14727. 30-9-39. AFT 486, NB 14728. 30-9-39. AFT 486, NB 14729. 30-9-39. AFT 486, NB 14730. 30-9-39. AFT 486, NB 14731. 30-9-39. AFT 486, NB 14732. 30-9-39. AFT 486, NB 14733. 30-9-39. AFT 486, NB 14734. 30-9-39. AFT 486, NB 14735. 30-9-39. AFT 486, NB 14736. 30-9-39. AFT 486, NB 14737. 30-9-39. AFT 486, NB 14738. 30-9-39. AFT 486, NB 14739. 30-9-39. AFT 486, NB 14740. 30-9-39. AFT 486, NB 14741. 30-9-39. AFT 486, NB 14742. 30-9-39. AFT 486, NB 14743. 30-9-39. AFT 486, NB 14744. 30-9-39. AFT 486, NB 14745. 30-9-39. AFT 486, NB 14746. 30-9-39. AFT 486, NB 14747. 30-9-39. AFT 486, NB 14748. 30-9-39. AFT 486, NB 14749. 30-9-39. AFT 486, NB 14750. 30-9-39. AFT 486, NB 14751. 30-9-39. AFT 486, NB 14752. 30-9-39. AFT 486, NB 14753. 30-9-39. AFT 486, NB 14754. 30-9-39. AFT 486, NB 14755. 30-9-39. AFT 486, NB 14756. 30-9-39. AFT 486, NB 14757. 30-9-39. AFT 486, NB 14758. 30-9-39. AFT 486, NB 14759. 30-9-39. AFT 486, NB 14760. 30-9-39. AFT 486, NB 14761. 30-9-39. AFT 486, NB 14762. 30-9-39. AFT 486, NB 14763. 30-9-39. AFT 486, NB 14764. 30-9-39. AFT 486, NB 14765. 30-9-39. AFT 486, NB 14766. 30-9-39. AFT 486, NB 14767. 30-9-39. AFT 486, NB 14768. 30-9-39. AFT 486, NB 14769. 30-9-39. AFT 486, NB 14770. 30-9-39. AFT 486, NB 14771. 30-9-39. AFT 486, NB 14772. 30-9-39. AFT 486, NB 14773. 30-9-39. AFT 486, NB 14774. 30-9-39. AFT 486, NB 14775. 30-9-39. AFT 486, NB 14776. 30-9-39. AFT 486, NB 14777. 30-9-39. AFT 486, NB 14778. 30-9-39. AFT 486, NB 14779. 30-9-39. AFT 486, NB 14780. 30-9-39. AFT 486, NB 14781. 30-9-39. AFT 486, NB 14782. 30-9-39. AFT 486, NB 14783. 30-9-39. AFT 486, NB 14784. 30-9-39. AFT 486, NB 14785. 30-9-39. AFT 486, NB 14786. 30-9-39. AFT 486, NB 14787. 30-9-39. AFT 486, NB 14788. 30-9-39. AFT 486, NB 14789. 30-9-39. AFT 486, NB 14790. 30-9-39. AFT 486, NB 14791. 30-9-39. AFT 486, NB 14792. 30-9-39. AFT 486, NB 14793. 30-9-39. AFT 486, NB 14794. 30-9-39. AFT 486, NB 14795. 30-9-39. AFT 486, NB 14796. 30-9-39. AFT 486, NB 14797. 30-9-39. AFT 486, NB 14798. 30-9-39. AFT 486, NB 14799. 30-9-39. AFT 486, NB 14800. 30-9-39. AFT 486, NB 14801. 30-9-39. AFT 486, NB 14802. 30-9-39. AFT 486, NB 14803. 30-9-39. AFT 486, NB 14804. 30-9-39. AFT 486, NB 14805. 30-9-39. AFT 486, NB 14806. 30-9-39. AFT 486, NB 14807. 30-9-39. AFT 486, NB 14808. 30-9-39. AFT 486, NB 14809. 30-9-39. AFT 486, NB 14810. 30-9-39. AFT 486, NB 14811. 30-9-39. AFT 486, NB 14812. 30-9-39. AFT 486, NB 14813. 30-9-39. AFT 486, NB 14814. 30-9-39. AFT 486, NB 14815. 30-9-39. AFT 486, NB 14816. 30-9-39. AFT 486, NB 14817. 30-9-39. AFT 486, NB 14818. 30-9-39. AFT 486, NB 14819. 30-9-39. AFT 486, NB 14820. 30-9-39. AFT 486, NB 14821. 30-9-39. AFT 486, NB 14822. 30-9-39. AFT 486, NB 14823. 30-9-39. AFT 486, NB 14824. 30-9-39. AFT 486, NB 14825. 30-9-39. AFT 486, NB 14826. 30-9-39. AFT 486, NB 14827. 30-9-39. AFT 486, NB 14828. 30-9-39. AFT 486, NB 14829. 30-9-39. AFT 486, NB 14830. 30-9-39. AFT 486, NB 14831. 30-9-39. AFT 486, NB 14832. 30-9-39. AFT 486, NB 14833. 30-9-39. AFT 486, NB 14834. 30-9-39. AFT 486, NB 14835. 30-9-39. AFT 486, NB 14836. 30-9-39. AFT 486, NB 14837. 30-9-39. AFT 486, NB 14838. 30-9-39. AFT 486, NB 14839. 30-9-39. AFT 486, NB 14840. 30-9-39. AFT 486, NB 14841. 30-9-39. AFT 486, NB 14842. 30-9-39. AFT 486, NB 14843. 30-9-39. AFT 486, NB 14844. 30-9-39. AFT 486, NB 14845. 30-9-39. AFT 486, NB 14846. 30-9-39. AFT 486, NB 14847. 30-9-39. AFT 486, NB 14848. 30-9-39. AFT 486, NB 14849. 30-9-39. AFT 486, NB 14850. 30-9-39. AFT 486, NB 14851. 30-9-39. AFT 486, NB 14852. 30-9-39. AFT 486, NB 14853. 30-9-39. AFT 486, NB 14854. 30-9-39. AFT 486, NB 14855. 30-9-39. AFT 486, NB 14856. 30-9-39. AFT 486, NB 14857. 30-9-39. AFT 486, NB 14858. 30-9-39. AFT 486, NB 14859. 30-9-39. AFT 486, NB 14860. 30-9-39. AFT 486, NB 14861. 30-9-39. AFT 486, NB 14862. 30-9-39. AFT 486, NB 14863. 30-9-39. AFT 486, NB 14864. 30-9-39. AFT 486, NB 14865. 30-9-39. AFT 486, NB 14866. 30-9-39. AFT 486, NB 14867. 30-9-39. AFT 486, NB 14868. 30-9-39. AFT 486, NB 14869. 30-9-39. AFT 486, NB 14870. 30-9-39. AFT 486, NB 14871. 30-9-39. AFT 486, NB 14872. 30-9-39. AFT 486, NB 14873. 30-9-39. AFT 486, NB 14874. 30-9-39. AFT 486, NB 14875. 30-9-39. AFT 486, NB 14876. 30-9-39. AFT 486, NB 14877. 30-9-39. AFT 486, NB 14878. 3