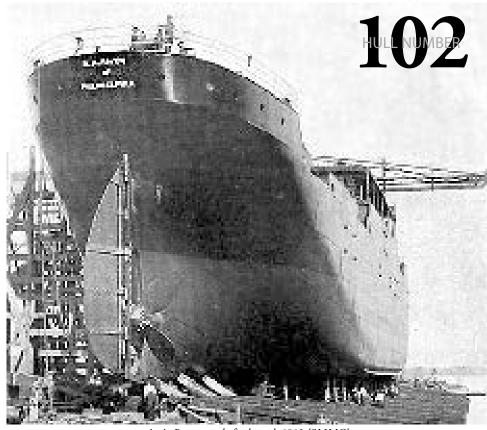


Robert M. Thompson [SMMC]

Lake-built Ocean Freighter built at the Ecorse yard 1912 as a) ROBERT **THOMPSON** (US. 210287). Launched June 29, 1912 for the American Transportation Co., New York, NY. Dimensions were: 261'loa, 254'kl x 43' x 28'5"; 2294 GRT, 1666 NRT. Powered by a 1,442 ihp triple expansion steam engine and two Scotch marine boilers. She entered service in August, 1912 and departed the Lakes and was one of three "Three Island Type" ocean freighters built for this owner. During the period from August, 1918 to February, 1919, the THOMPSON entered into

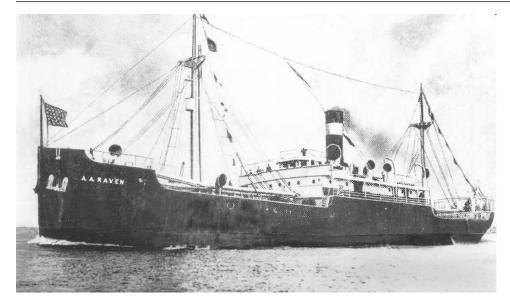
contract business under service #3319 for the US Navy-Naval Overseas Transportation. Sold to George Hall Coal Corp., Ogdensburg, NY in 1924. Sold November 25, 1927 to Smith's Dock Co., Ltd., Middlesborough, England and credited towards the purchase price of vessels they were building for Hall's Canadian affiliate and left the Great Lakes. Smith's Dock built five canal size vessels for Hall in 1928 and seven all together from 1927 to 1929. Broken up in early 1928 by Wards at Inverkeithing, Scotland, arriving there February 24, 1928.

Lake-built Ocean Freighter built at the Ecorse yard in 1912 as a) A.A. RAVEN (US.210368). Launched July 17, 1912 for the American Transportation Co., New York, NY. Dimensions were: 261'loa, 254'kl x 43' x 28'5"; 2294 GRT, 1666 NRT. Powered by a 1,442 ihp triple expansion steam engine and two Scotch marine boilers. entered She service August, 1912 and departed the Lakes and was one of three "Three Island Type" ocean freighters built for this owner. Torpedoed and sunk by German submarine UB-55 16 miles SSW of Wolf Rock Light, Scilly Islands, Great Britain on March 14, 1918. (49.41N-05.50W) Seven of thirty-eight crewmen were



A. A. Raven ready for launch 1912 [SMMC]

lost. Mr. Anthony A. Raven was president of the American Bureau of Shipping from 1898 to 1916.

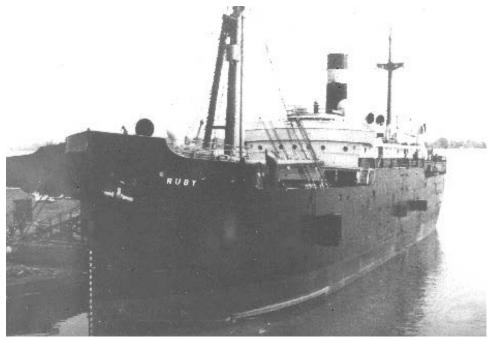


A. A. Raven [SMMC]

Lake-built Ocean Freighter built at the Ecorse yard in 1912 as a) RUBY (US. 210550). Launched August 21, 1912 for the American Transportation Co., NY, NY. Dimensions were: 261'loa, 254'kl x 43' x 28'5"; 2294 GRT, 1666 NRT. Powered by a 1,442 ihp triple expansion steam engine and two Scotch marine boilers. She entered service in September, 1912 and departed the Lakes and was one of three "Three Island Type" ocean freighters built for this owner. Sold to George Hall Coal Corp.,



Ruby launch 08/21/1912 [SMMC]



Ruby in American colors departing the shipyard 09/1912 [RR]

Ogdensburg, NY in 1924 and returned to the Great Lakes. Sold to Smith's Dock Co., Ltd., Middlesborough, England on November 25, 1927, and credited towards the purchase price of vessels they were building for Hall's Canadian affiliate and left the Great Lakes. Smith's Dock built five canal size vessels for Hall in 1928 and seven all together from 1927 to 1929. RUBY arrived at Inverkeithing, Scotland on February 18, 1928 and was broken up by Ward's early that year.



Edison Light fitting out at Ashtabula 09/02/1912 [RR]

Lake-built Ocean Freighter built in 1912 at the Ashtabula yard as a) EDISON LIGHT Launched (US.210661). August 28, 1912 for the Boston & Virginia Transportation Co., Boston, MA. Built as one of the cabins and engine room aft class (sometimes called "stemwinders") as well as the second built for this fleet by GLEW. Dimensions: 261' loa, 253' kl x 43'6" x 30'; 2549 GRT, 1699 NRT. Powered by a 1,400 ihp triple expansion steam engine and two Scotch marine boilers. First registration at Detroit, MI on October 18, 1912.

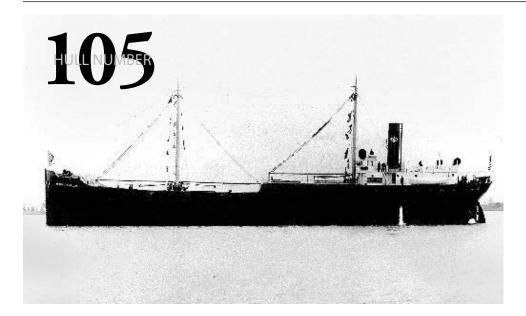
Owned briefly by the Oriental Navigation Co., Uruguay and then to the Soc. Nationale d'Affretements, LeHavre, France in 1916 and renamed b) P.L.M. 1. Departed Cardiff, Wales with a cargo of coal bound for Marseilles, France on October 31, 1916. Reported missing with all hands November 2, 1916. Probably torpedoed by a German submarine in the Bay of Biscay.



Edison Light on sea trials 10/1912 [DC]



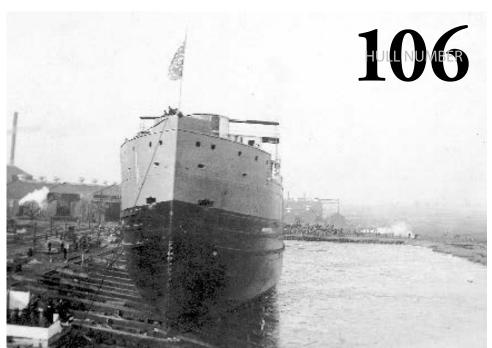
Edison Light [DC]



George Hawley [DC]

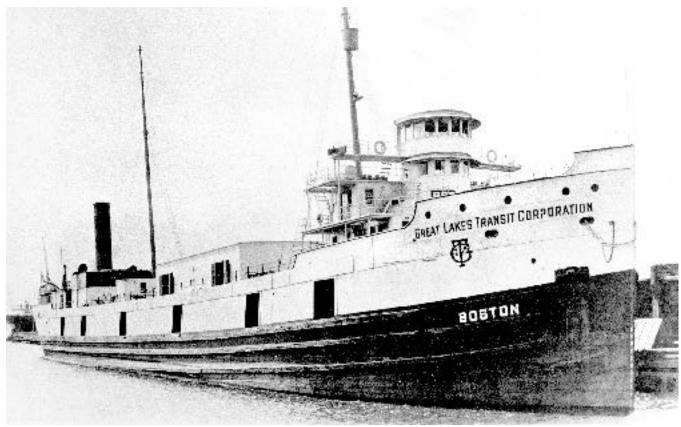
Lake-built Ocean Freighter built in 1912 at the Ashtabula yard as a) GEORGE HAWLEY (US.210735). Launched September 28, 1912 for the Boston & Virginia Transportation Co., Boston, MA. Dimensions: 261' loa, 253' kl - 43'6" x 30'; 2549 GRT, 1699 NRT. Powered by a 1,400 ihp triple expansion steam engine and two Scotch marine boilers. Built as one of the cabins and engine room aft class (sometimes called "stemwinders") as well as the second built for this fleet by GLEW. Sold to the Sinclair Navigation Co., New York, NY. Converted to a tanker in 1917 and lengthened to 318'7" loa, 310'7" lbp: 3184 GRT, 2488 NRT. Returned to service as b) GENE CRAWLEY in 1917 owned by the Sinclair Navigation Co., New York, NY. Sold to the Sabine Transportation Co., Baltimore, MD and reduced to a barge in 1933 with the name of c) PURE VAN. Sold to Cornelius Kroll & Co., Houston, TX in 1947 and renamed d) SEA MARE the following year. US documentation surrendered in 1950 as abandoned.

Package Freighter built at the Ecorse yard in 1913 as a) BOSTON (US.210990). Launched December 1912 for the Western Transportation Co., Buffalo, NY. Dimensions: 370'loa-48'1"-30'9": 4184 GRT, 3283 NRT. Powered by 1,760 quadruple expansion steam engine and two coalfired Scotch marine boilers. Entered service in April 22, 1913. Sold to the Great Lakes Transportation Corp., Buffalo on March 22, 1916. The railroads were required under the provisions the Panama Canal Act of 1912 to divest themselves of



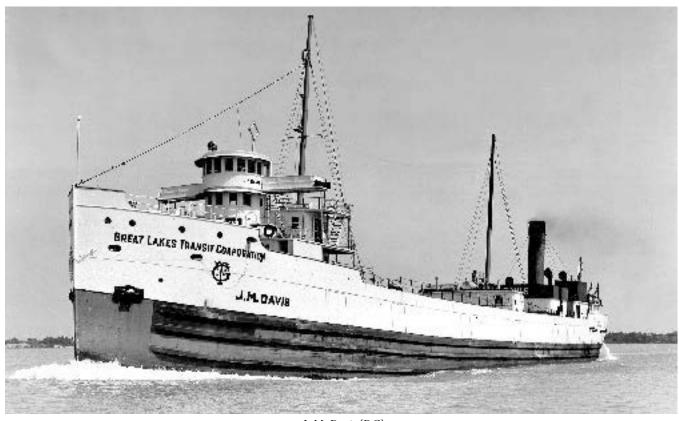
Boston sliding down launch ways [SMMC]

competing vessels. Great Lakes Transit Corporation was organized to own and operate these vessels. Renamed b) J.M. DAVIS in 1925. Conscripted by the United States Maritime Commission, Washington, DC in July, 1942 for wartime duty. Taken to the Gulf of Mexico via the Chicago River and the Mississippi River to avoid the German submarine menace on the East Coast. Converted to a repair ship in 1942 by the Gulf Engineering



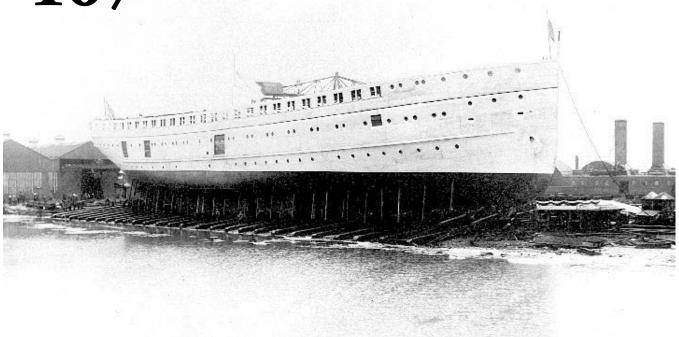
Boston [PW]

Co., Inc., New Orleans, LA. The DAVIS reportedly was used on the Alaska-California run during the war and then in 1945 housed the 805th Army Ship Repair Unit in Japan. After the war, the DAVIS was returned to G.L.T. in September, 1947 who in turn sold her to the Pratt Steamship Co., Los Angeles, CA later that same year. She was purchased by Cia. Argentina De Transportes Maritimas S.R.L., Buenos Aires, Argentina in 1949 and renamed c) CANOPUS. Sold to Acenaz Bragado, LaPlata, Argentina in December, 1972 for scrap. Demolition began at LaPlata December, 1976.



J. M. Davis [DC]

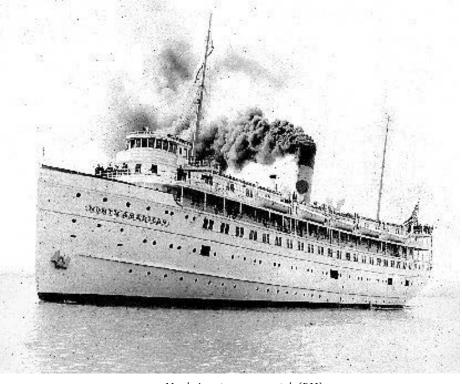
HULDIMBEX



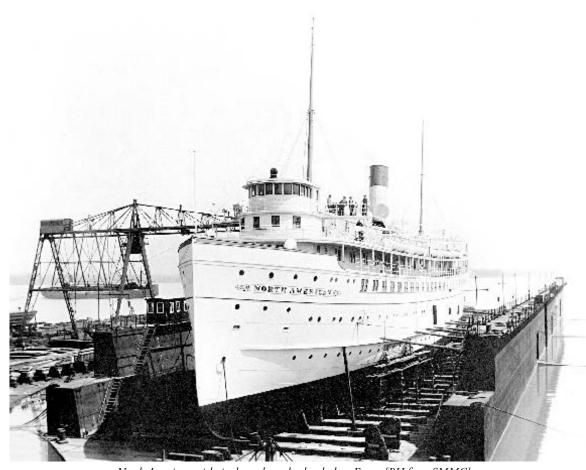
North American on the ways at Ecorse 1913 [PL]

Lake Passenger Cruise Steamer built at the Ecorse yard in 1913 as a) NORTH AMERICAN (US.211076). Launched January 16, 1913 for the Chicago, Duluth & Georgian Bay Transit Co., Detroit, MI. Dimensions: 280'loa-266'lbp-47'-17'6"; 2317 GRT, 1262 NRT. Powered by a 2,200 ihp quadruple expansion steam engine and three coal-fired Scotch marine boilers. Built with 243 staterooms and 488 berths. Entered service in May 31, 1913. Converted to oil-fired boilers and a second stack was added in 1923 at Detroit. Sold to the Canadian Holiday Co. Inc., Erie, PA in 1963 and ran between Erie and Port Burwell/Port Dover, ON. Retired from service in 1964, when Canadian Holiday failed. Sold at US Marshall's sale to the Security People's Trust Co. at Erie on July 30, 1964. Traded to Harold D. Caldwell of Chicago, IL for 5,000 acres of Tennessee woodland

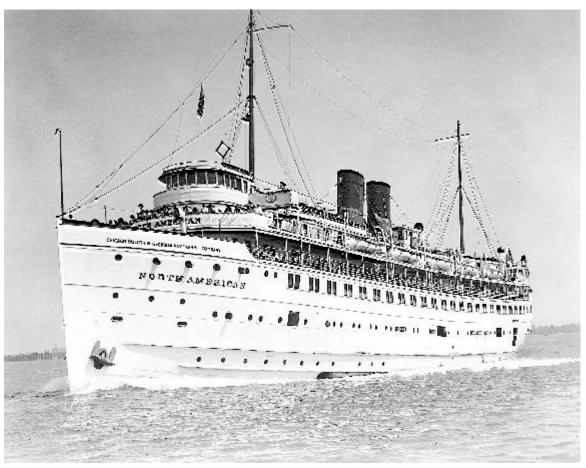
in 1965. Litigation followed and the NORTH was returned to the Security People's Trust Co. in 1965. Sold to Al Kerr (Agent for the Seafarer's International Union, Piney Point, MD) at a public auction for \$32,000 on July 28, 1967. Passed downbound at Port Colborne, ON in tow of the US deep sea tug MICHAEL J. McALLISTER assisted by the GLT tug AMERICA on September 4, 1967. While being towed to Norfolk, VA, the NORTH sank in 400 feet of water at 40°46'N by 68°53'W, 25 miles northeast of the Nantucket Light at 4:00 a.m. on September 13, 1967. Document surrendered April, 1968.



North American on sea trials [BH]



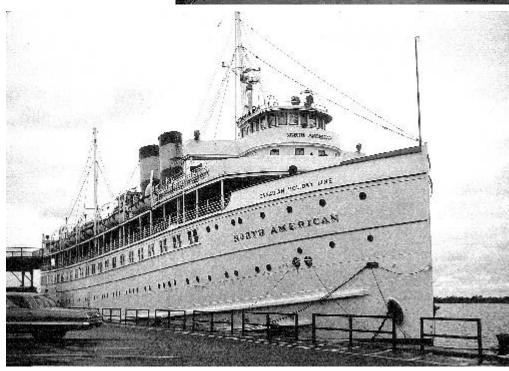
North American with single stack on the dry dock at Ecorse [BH from SMMC]



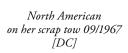
North American on the Detroit River 1937 Note: two stacks [KK]



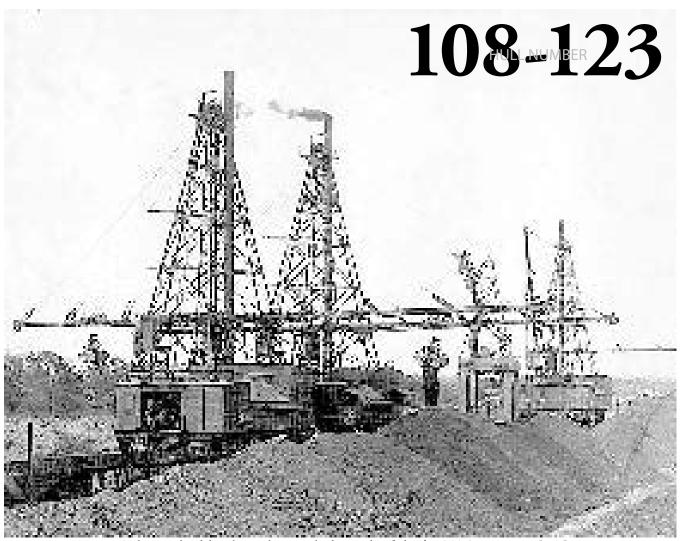
North American at Mackinac Island 05/18/1963 [SM]



North American in Canadian Holiday fleet colors at Erie 10/10/1965 [SM]



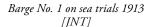




Coal terminal and derrick at Violet, LA unloading unidentified A.&N.O.T. Co. Barge 1918 [JNT]

In 1912, a shipyard was organized and opened on December 14, 1912, twelve miles south of New Orleans at Violet, LA by the Great Lakes Engineering Works in order to build gas-powered canal barges for the Alabama & New Orleans Transportation Co., primarily, to haul coal from the Black Warrior Coal Basin in Alabama to New Orleans. These self-propelled barges, the first of their kind in the United States, cost \$30,000 to build and were designed by John H. Bernhard, a Holland barge expert, to navigate the Lake Borgne Canal to the Mississippi River near New Orleans as well as the locks and river systems of the Black Warrior, Tombigbee and Mobile Rivers in Alabama. They could transit a lock in one-third the time that a contemporary steamboat packet and consort barge could simply motor into the lock unaided and depart after one cycle, while the packet had to drop the barge off let it lock through and then follow up another cycle for itself. These barges were built to compete with the railroads that had a virtual monopoly transporting coal from this vast bituminous coal field (largest in the South). In fact, the US Government, through the US Army Corps of Engineers, appropriated nearly \$8 million between 1900 and 1926 for dams, locks, dredging, and channel maintenance to keep these rivers and Mobile Bay navigable. Conditions of the rivers were constantly changing due to spring snow melt in the Cumberland Plateau, southern Appalachian Mountains, and caused water levels to vary due to volume, silting, and clogging with debris. Early attempts at dredging and snagging proved ineffective, so a series of locks and dams were erected between 1915 and 1917 so the entire system could be navigated by vessels up to 280 feet long, 50 wide, drawing six feet of water when loaded. The self-propelled barges were driven by twin counter-rotating screws, two Fairbanks 75 HP 3-cylinder gas engines and a gas producer (the first of their design in the US), and attained a speed of seven miles per hour loaded at 300 RPMs. The fuel used was coke breeze, waste from coke ovens, which was in plentiful supply at very low cost and was converted to combustible fuel in an onboard gas producer. These engines required only 15 tons of coal for the journey between Alabama and New Orleans. Cargo, up to 1000 tons, was carried on an open deck contained by five foot sides. Crew's quarters were located below deck in the forecastle and were spacious enough to accommodate six crewmembers

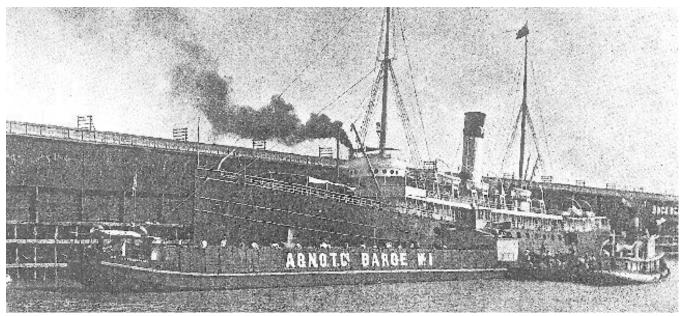
who operated the barges 24 hours a day, on two shifts. The aft consisted of the below deck engine room, above which was the galley, bridge and wheelhouse. A typical route for these "Tin Lizzies", as they were nicknamed, started by loading coal from the Gilmore Mines seven miles above Tuscaloosa, AL transiting down the Black Warrior, Warrior, Tombigbee, and Mobile Rivers into Mobile Bay. The course then turned west into the Mississippi Sound, a channel between the Mississippi coast and a series of barrier islands that serve as protection from the Gulf of Mexico. The 515 mile course continued into Lake Borgne (near Lake Pontchartrain) and finally into the Lake Borgne Canal (present day Violet Canal which was dug and constructed by this firm to alleviate the difficult course required to enter the Mississippi) and terminated at Violet on the Mississippi River where an unloading terminal was constructed with derricks to handle the stockpiling of coal. This trip took 72 hours. Once the coal was deposited, back haul cargoes of scrap iron, steel pipe, steel rails and other general cargo were carried to communities along the return route to as far as Mobile. These barges were the first to regularly transport coal on this Alabama river system year long. Bernard resigned in December, 1914 to form his own shipyard that effectively ended the GLEW relationship with the Violet yard. The self-propelled barges were commandeered early in 1919 by the Federal Barge Line, a US government backed corporation (Inland Waterways Corporation) supervised initially by the US Railroad Administration and then by the Secretary of War, that was designed to improve the efficiency of rail and barge shipping during WWI. The A.&N.O.T Co., having lost its barge fleet, was ordered by the US District Count to sell its yard, which it did to the National Shipbuilding Company in September, 1919, which ended its existence. However, this Alabama to New Orleans barge service continued unchanged until 1920 when the US government ordered new self-propelled barges built and subsequently assigned the GLEW barges to bunkering duties fueling steamers and the US Naval fleet in the New Orleans-Lake Borgne-Gulf of Mexico region. The older barges proved to have one serious design flaw. Though their engines were economical, they were so underpowered that they were unable to transport cargo upstream, forcing them to back haul cargoes only as far as Mobile and then operate empty from Mobile to Tuscaloosa on the return trip to the coal fields. The new barges that entered service in October, 1920, were more powerful (800 BHP) self-propelled steel barges built by the St. Louis Boat and Engineering Co. of the Federal Barge Line for \$244,000 each that were capable of hauling cargoes 50% larger than the GLEW barges (1500 tons vs 1000 tons). Attempts to use the GLEW built barges on the Mississippi River failed which forced them all to be abandoned between 1924 and 1927.





HULL 108

Twin Screw Gas-Propelled Canal Barge built at the Violet, LA yard in 1913 as a) A.&N.O.T. Co. BARGE No. 1 (US 211358) for the Alabama & New Orleans Transportation Co., New Orleans, LA. Dimensions: 220'loa-200'lbp-32'-8'; 416 GRT, 316 NRT, 1000 dwt. Powered by two Fairbanks 3-cylinder 75 hp gas engines. Keel laid the week of December 14, 1912 and launched May 28, 1913. The No. 1 entered service under the command of Captain Frank M. Saddler in a special way when it took a contingent of dignitaries from Violet arriving at Mobile on June 1, 1913 and then proceeded up into Alabama to load coal for New Orleans. Its second trip concluded on June 28, 1913 when it carried 2500 barrels of rosin from Pensacola, FL to New Orleans in 32 hours, off loading there into a Mallory Lines steamer. Sold to the Federal Barge Line, New Orleans on January 13, 1919-a division of the US Railroad Administration's Inland Waterways Corporation. In fact, W.G. McAdoo, Director General of Railroads for the United States was named on the transfer of

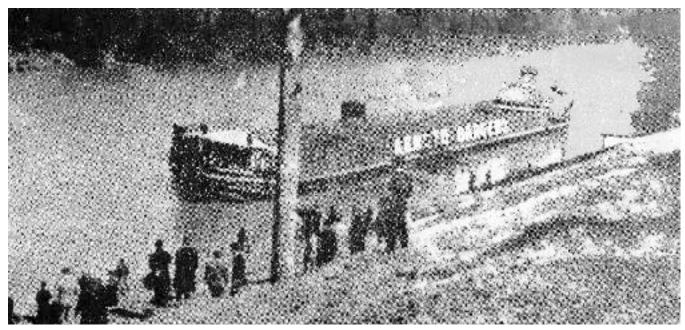


A.&N.O.T. Co. BARGE No. 1 at New Orleans unloading rosin barrels c1913 [JNT]

ownership document. Renamed b) US GORGAS on April 7, 1920. Ownership transferred to the US War Department on December 16, 1920 and assigned to bunkering duties in the New Orleans area. Sources show this vessel had the engines removed and renamed c) URBAN. Removed from documentation at New Orleans on August 13, 1924 as abandoned and dismantled in the New Orleans area.

HULL 109

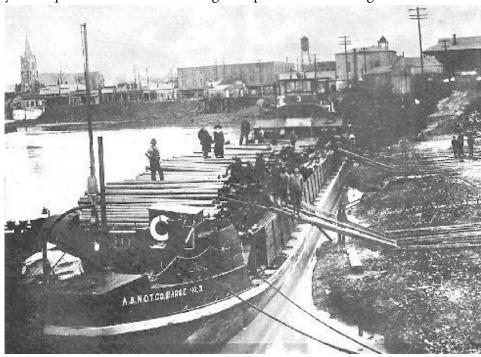
Twin Screw Gas-Propelled Canal Barge built at the Violet, LA yard in 1913 as a) A.&N.O.T. Co. BARGE No. 2 (US 211359) for the Alabama & New Orleans Transportation Co., New Orleans, LA. Dimensions: 240'loa-220'lbp-32'-8'; 476 GRT, 376 NRT, 1000 dwt. Powered by two Fairbanks 3-cylinder 75 hp gas engines. Launched during the week of July 4, 1913. Entered service a few weeks later in July, 1913, though enrollment wasn't completed until August 29, 1913. Made a trip up the Mississippi River from New Orleans to St. Paul, MN and back as an experiment to increase market possibilities. Sold to the Federal Barge Line, New Orleans February 12, 1919, a division of the US Railroad Administration's Inland Waterways Corporation. In fact, W.G. McAdoo, Director General of Railroads for the United States, was named on the transfer of ownership document. Renamed b) US EUTAH on April 7, 1920. Ownership transferred to the US War Department on December 16, 1920 and assigned to bunkering duties in the New Orleans area. Removed from documentation at New Orleans on August 13, 1924 as abandoned and dismantled.



A.&N.O.T. Co. Barge No. 2; crowd gathers on bank of Black Warrior River to see the new barge c1913 [JNT]

HULL 110

Twin Screw Gas-Propelled Canal Barge built at the Violet, LA yard in 1913 as a) A.&N.O.T. Co. BARGE No. 3 (US 211360) for the Alabama & New Orleans Transportation Co., New Orleans, LA. Dimensions: 220'loa-200'lbp-32'-8'; 416 GRT, 316 NRT, 1000 dwt. Powered by two Fairbanks 3-cylinder 75 hp gas engines. Launched in early October, 1913. Enrolled October 20, 1913. Used for the first time on a 635 mile course to carry 650 tons of steel pipe from Holt, AL to Plaquemine, LA in six days, experienced difficult maneuvering in the Plaquemine locks and Bayou Plaquemine. This was the longest trip to date these barges had taken since



Barge No. 3 unloading steel pipe at Plaquemine, LA 1913 [JNT]

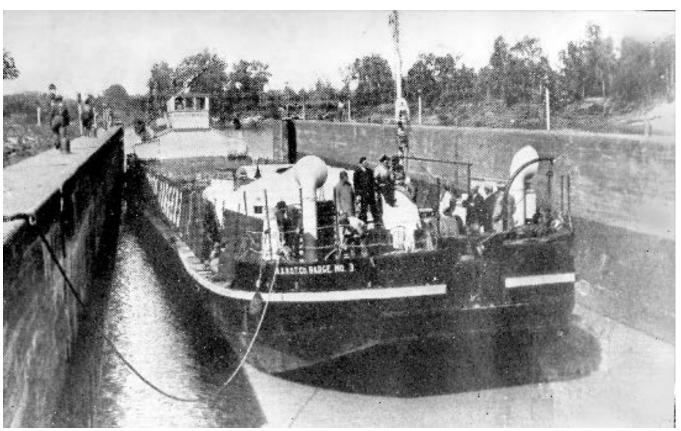
the New Orleans to St. Paul route the previous summer. Sold on November 3, 1919 to the Federal Barge Line, New Orleans – a division of the US Railroad Administration's Inland Waterways Corporation. In fact, Walker D. Hines, successor to W.G. McAdoo, Director General of Railroads for the United States was named on the transfer of ownership document. Renamed b) US HOLT on April 7, 1920. Ownership transferred to the US War Department on December 16, 1920 and assigned to bunkering duties in the New Orleans area. Removed from documentation at New Orleans on August 13, 1924 as abandoned and dismantled.

HULL 111

Twin Screw Gas-Propelled Canal Barge built at the Violet, LA yard in 1913 as a) A.&N.O.T. Co. BARGE No. 4 (US 211896) for the Alabama & New Orleans Transportation Co., New Orleans, LA. Dimensions: 220'loa-200'lbp-32'-8'; 416 GRT, 316 NRT, 1000 dwt. Powered by two Fairbanks 3-cylinder 75 hp gas engines. Launched in September, 1913. Entered service as a collier in the New Orleans area when enrolled on January 5, 1914. Sold to the Federal Barge Line, New Orleans on January 15, 1920 – a division of the US Railroad Administration's Inland Waterways Corporation. Further, Walker D. Hines, successor to W.G. McAdoo, Director General of Railroads for the United States was named on the transfer of ownership document. Renamed b) US UNLOADER in April 7, 1920. Ownership transferred to the US War Department on December 16, 1920 and assigned to bunkering duties in the New Orleans area. Removed from documentation at New Orleans on February 3, 1927 as abandoned and dismantled.

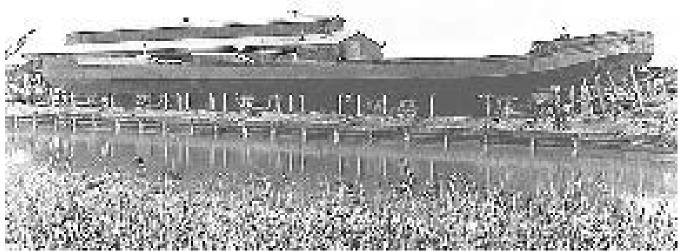
HULL 112

Twin Screw Gas-Propelled Canal Barge built at the Violet, LA yard in 1914 as a) A.&N.O.T. Co. BARGE No. 5 (US 211935) for the Alabama & New Orleans Transportation Co., New Orleans, LA. Dimensions: 240'loa-200'lbp-32'-8'; 555 GRT, 454 NRT, 1500 dwt. Powered by two Fairbanks 3-cylinder 75 hp gas engines. Passed inspection for service on January 31, 1914. Entered service early in 1914. All five barges built to date were in operation between New Orleans and Alabama by February 14, 1914. On July 11, 1914, Bernard departed New Orleans on the No. 5 on a 54 day trip up the Mississippi to St. Paul, MN on what became a



Barge No. 3 transiting lock on the Black Warrior River c1917 [JNT]

spectacle for many communities along the way. He carried lumber, coffee, 90 tons of sugar and rice up the river to various ports. The point of the trip, which was widely followed in the newspapers, was to draw attention to the need for a dramatic improvement in dock terminals along the way. Most docks were either owned by the monopolistic railroads, which charged outrageous prices for their use or in disrepair, making them nearly impossible to use. He wanted the government and the press to build consensus to improve the facilities. Most Mississippi ports hadn't upgraded their docks since the heydays of steamboats in the last quarter of the 1800s. In a diplomatic gesture, he even carried 100 pound bags of "delta" dirt that he said he was returning to their origin and rightful owners, which he presented to Mayors along the way. It was reported that when Bermard skipped a port, the locals became enraged and disappointed. In fact, people came out in droves and lined the banks of the Mississippi to see the barge. The scheduled return cargo was supposed to be flour from St. Paul, but before the No. 5 arrived there, WWI broke out and the flour was diverted to the east, bound for Europe. Sold to the Federal Barge Line, New Orleans on December 20, 1918-a division of the US Railroad

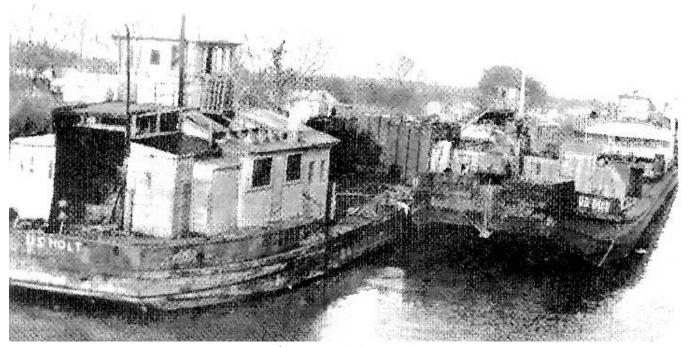


One of the barges on the building ways March 3, 1913 [JNT]

Administration's Inland Waterways Corporation. In fact, W.G. McAdoo, Director General of Railroads for the United States was named on the transfer of ownership document. Renamed b) US BILOXI on April 7, 1920. Ownership transferred to the US War Department on December 16, 1920 and assigned to bunkering duties in the New Orleans area. Removed from documentation at New Orleans on February 3, 1927 as abandoned and dismantled.

HULL 113

Twin Screw Gas-Propelled Canal Barge built at the Violet, LA yard in 1914 as a) A.&N.O.T. Co. BARGE No. 6 (US 212180) for the Alabama & New Orleans Transportation Co., New Orleans, LA. Dimensions: 220'loa-200'lbp-32'-8'; 516 GRT, 406 NRT, 1000 dwt. Powered by two Fairbanks 3-cylinder 75 hp gas engines. Entered service in March 15, 1914. Arrived at St. Louis on March 25, 1914 to inaugurate new service between there and New Orleans, which didn't last long because of the poor dock terminals at that port. Sold to



US HOLT & US BILOXI laid up at Violet, LA [JNT]

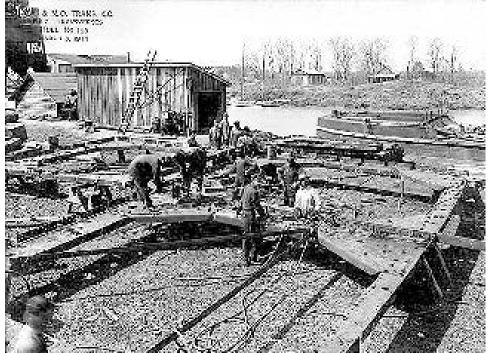
the Federal Barge Line, New Orleans on August 7, 1919-a division of the US Railroad Administration's Inland Waterways Corporation. In fact, Walker D. Hines, successor to W.G. McAdoo, Director General of Railroads for the United States was named on the transfer of ownership document. Renamed b) US JACKSON on April 7, 1920. Ownership transferred to the US War Department on December 16, 1920 and assigned to bunkering duties in the New Orleans area. Reportedly sold in 1920 to Captain Josh Baker who converted the Jackson to a sand and gravel barge by removing all of her above deck superstructures. Removed from documentation at New Orleans on August 13, 1924 as abandoned and dismantled.

HULLS 114-122

Hull numbers were set aside on speculation for this endeavor, but were never built. Their registered dimensions were going to be 236'-32'-8'. In fact, at one time optimism was so prevalent, plans were formulated for building 3000 ton capacity gas-propelled barges to ply up the Mississippi River as far north as St. Louis, experience gained when BARGE No. 5 journeyed to St. Paul and back to New Orleans. Further, four steel, self-propelled barges, the BIRMINGHAM, TUSCALOOSA, MOBILE, and GULFPORT, were built by a competing shipyard in St. Louis, MO in 1920-21 by the Federal Barge Line that replaced the other six which were confined primarily to the Mississippi River from this time forward. These four barges cost \$244,000 each (nearly eight times what one of the original six cost) and were larger in every aspect, but had many similarities in design to their predecessors. They were 280'loa-49'-9', could carry 1500 tons of coal, and were powered by an 800 BHP Fairbanks engine. They were likewise destined to fail, as by 1923 they were removed from this operation and placed on express barge service between St. Louis and New Orleans until 1938 when the four St. Louis barges met the scrapper's torch.

HULL 123

Triple Screw Gas-Propelled Canal Fuel Lighter built at the Violet, LA yard in 1914 as a) NEW ORLEANS (US 212009) for the Alabama & New Orleans Transportation Co., New Orleans, LA. Dimensions: 240'loa-200'lbp-32'-8'; 711 GRT, 568 NRT, 1500 dwt. Powered by three Fairbanks 3-cylinder 75 hp gas engines. Equipped with a conveyor belt and elevator long enough to discharge coal into a fueling-steamer's bunker. It was felt that



A.&N.O.T. Co. Barge No.6 being built at Violet, LA. March 3, 1914 [JNT]

the third propeller would help navigation upstream or in current while fueling ships. Enrolled March 3, 1914. Sold to the Federal Barge Line, New Orleans April 11, 1919-a division of the US Railroad Administration's Inland Waterways Corporation. In fact, Walker D. Hines, successor to W.G. McAdoo, Director General of Railroads for the United States was named on the transfer of ownership document. Ownership transferred to the US War Department on December 13, 1920 and assigned to bunkering duties in the New Orleans area. Removed from documentation at New Orleans on June 20, 1922 as dismantled.



New Orleans loading coal to bunker vessels [JNT]

HULL NOW PER



Multnomah in the Portland District 1913 [USACE]

Non-propelled hydraulic pipeline dredge hull built at the Ecorse yard early in 1913 as a) MULTNOMAH for the United States Army Corps of Engineers (USACE). The vessel was one of two identical dredges, the other was hull 125-WAHKIAKUM, which were designed for eventual completion by the Portland Iron Works (P.I.W.) in Portland OR. Records indicate that the MULTNOMAH was assembled in 1913 at the Ecorse yard. Then it was disassembled and shipped to the Portland Iron Works for reassembly and completion. Hull Dimensions: 193'1-1/2"loa-38'-9'6"; 1135 long tons displacement. The dredge had an overall length of 269'41/2" that included a structural "ladder" which held the spiral dredging "cutter" head. The Portland Iron Works had previous success in building sawmill machinery, but no experience with shipbuilding which the USACE augmented by contracting GLEW to provide the expertise to build the hull for this massive dredge. Contract cost for building the two dredges totaled \$500,000 and was the largest undertaking for P.I.W. to date. MULTNOMAH, which took 17 months to build, was delivered May 16, 1914 and began its designed task of dredging the 100 mile stretch of the Lower Columbia River from Portland to the Pacific Ocean. The project initiated by the USACE and Congress in 1913 provided for a channel to be deepened by five feet to an average depth of thirty feet, six inches (at low water) and widened to three hundred feet. This would allow the largest vessels of the time to navigate the river in order to ship grain from the interior to ports as far away as Great Britain through the newly opened Panama Canal in 1914. The dredge was manned by a crew of 48 and was equipped with a 24 inch discharge pipe, 80 pipe pontoons, 2400 feet of pontoon pipe and 800 feet of shore pipe. The tug initially assigned to move and locate the dredge was the H. M. ADAMS. MULTNOMAH was a real workhorse most often dredging an average of 20 hours per day 187 days per year before retiring in 1967 and finally being auctioned off to Art Reidel in July, 1977. The MULTNOMAH was eventually stripped of her equipment and was abandoned along the banks of the Columbia River near Ranier, OR and was still there as of 2008.



Wahkiakum in the Portland District [USACE]

Non-propelled hydraulic pipeline dredge hull built at the Ecorse yard early in 1913 as a) WAHKIAKUM for the United States Army Corps of Engineers (USACE). The vessel was one of two identical dredges, the other was hull 124-MULTNOMAH, which were designed for eventual completion by the Portland Iron Works (P.I.W.) in Portland, OR. Records indicate that the WAHKIAKUM was assembled in 1913 at the Ecorse yard. Then it was disassembled and shipped to the Portland Iron Works for reassembly and completion. Hull Dimensions: 193'1-1/2"loa-38'-9'6"; 1135 long tons displacement. The dredge had an overall length of 269'4½" that included a structural "ladder" which held the spiral dredging "cutter" head. The Portland Iron Works had previous success in building sawmill machinery, but no experience with shipbuilding which the USACE augmented by contracting GLEW to provide the expertise to build the hull for this massive dredge. Contract cost for building the two dredges totaled \$500,000 and was the largest undertaking for P.I.W. to date. WAHKIAKUM, which took 17 months to build, was delivered May 21, 1914 and began its designed task of dredging the 100 mile stretch of the Lower Columbia River from Portland to the Pacific Ocean. The project initiated by the USACE and Congress in 1913 provided for a channel to be deepened by five feet to an average depth of thirty feet, six inches (at low water) and widened to three hundred feet that would allow the largest vessels of the time to navigate the river in order to ship grain from the interior to ports as far away as Great Britain through the newly opened Panama Canal in 1914. The dredge was manned by a crew of 48 and was equipped with a 24 inch discharge pipe, 80 pipe pontoons, 2400 feet of pontoon pipe and 800 feet of shore pipe. The tug initially assigned to move and locate the dredge was the J. C. POST. WAHKIAKUM was a real workhorse most often dredging an average of 20 hours per day, 187 days per year before receiving a reprieve in 1962. The US Army Corps of Engineers began a fourteen-year project that deepened the same 100 mile Columbia River channel to 40 feet and doubled its width to 600 feet. As a result, Wahkiakum was repowered from steam to diesel pump engines and was completely modernized by Willamette Iron and Steel in 1967. This extended her life until a tragic fire consumed WAHKIAKUM on September 9, 1972 while she was working in the Columbia River ship channel at Fisher Island Light 5. The fire burned for 10 hours leaving only a hulk of twisted metal and a nuclear density gauge that required careful remediation by the Atomic Energy Commission, predecessor to the Nuclear Regulatory Commission. WAHKIAKUM was stripped of its equipment and sold to Art Reidel in June, 1977 who converted her to a space barge. New dimensions: 213'-38'-9.5'; 645 GRT, 645 NRT. The barge was documented for the first time as US.691560 and taken to Los Angeles, CA at that time. In 1989 ownership transferred to the Manson Construction Company of Seattle, WA and moved to San Francisco Bay as a work platform for the Bay Bridge damaged in the 1989 earthquake. The WAHKIAKUM is still being used in this capacity and shown registered to Manson through November 30, 2008.

HULLINUMBER

NO PHOTO

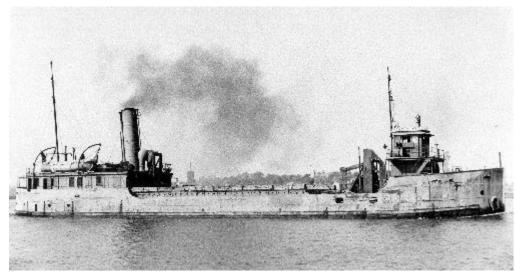
Non-powered Grain Lighter built at the Ashtabula yard in 1913 as a) T. & C. NO. 2 (US.165325) for the Thornton & Chester Milling Co., Buffalo, NY. Dimensions: 115'loa-114'lbp-25'-12'6"; 351 GRT, 351 NRT. Sold to Mann Brothers Co., Buffalo in 1929 and renamed b) MANN BROTHERS CO. NO. 2. Dismantled in 1951.



Charles Heiden in the Rouge River [DC]

Twin Screw Self-unloading Sand sucker built at the Ashtabula yard in 1913 as a) CHARLES HEIDEN (US.211352). Launched April 29, 1913 for the United Fuel & Supply Co., Detroit, MI. Dimensions: 165'loa-35'2"-14'6": 717 GRT, 446 NRT, 600 cu. yard capacity. Powered by two 200 ihp steeple compound steam engines and one coal-fired Scotch marine boiler. Entered service July 17, 1913. Sold to the Detroit Materials & Transportation Co., Detroit in 1927. Sold to the Pine Ridge Coal Co., Detroit in 1932. Renamed b) PINE RIDGE in 1934. Converted to a self-unloading fuel lighter at the GLEW River Rouge yard in 1935. The Nicholson Universal Steamship Co., Detroit purchased her in 1941. It sailed on the Great Lakes until its gear was removed at the GLEW River Rouge yard in 1941. Sold to Overlakes Freight Corp., Detroit in 1942 and chartered to the US Army during

WWII. Sold off Lakes to Honduras Shipping Co., Tegucigalpa, Honduras in 1945 and sailed under Honduran registry PINE RIDGE. Sold to Demar Shipping, Puerto Cortes, Honduras. Sold to Cia. de Nav. Santense Ltda., Santos, Brazil and renamed c) SANTA ANGELA in 1952. Broken up in Brazil, 1964.



Pine Ridge on the St. Clair River c1934 [DC]



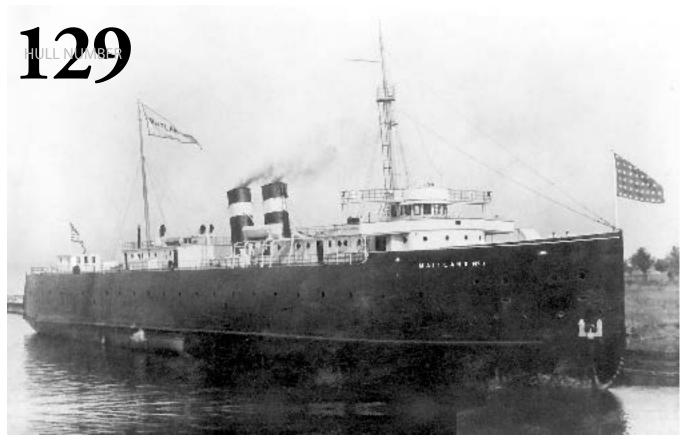
Pine Ridge on Lake St. Clair as a self-unloading fuel lighter [DC]



Pine Ridge [DC]

NO PHOTO

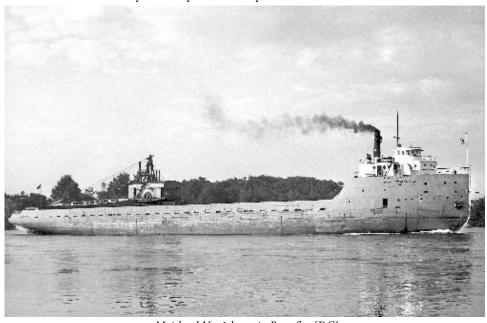
Non-powered Steel Scow built at the Ecorse yard in 1913 as a) HIBERNIA (US.165395) for the Dunbar &Sullivan Co., Buffalo, NY. Dimensions: 125'loa-32'-8'7"; 316 GRT, 316 NRT. Entered service on August 15, 1913. HIBERNIA was identical to the five 1909 built scows ordered by Dunbar & Sullivan and operated for them its entire career until 1956, and was out of documentation in 1957.



Maitland No. 1 [DC]

Twin Screw Lake Rail Car Ferry built at the Ecorse yard in 1916 as a) MAITLAND NO. 1 (US.214213) at a cost of \$362,800. Keel laid 03/13/1913. Launched 11/08/1913 for the Toronto, Hamilton & Buffalo Navigation Co., Ashtabula, OH, an affiliate of the Toronto, Hamilton & Buffalo Railroad, which in turn was jointly owned by New York Central and Canadian Pacific Railways. Delayed at the yard because her Lake Erie terminal

facilities were incomplete. Ann Arbor Railroad leased the MAITLAND NO. 1 for three months. Departed the yard August 14, 1916 for service in Ann Arbor's Lake Michigan trade. Dimensions: 350'loa, 338'lbp x 56'x 20'6"; 2757 GRT, 1653 NRT. Her carrying capacity was 32 standard freight cars on four tracks. She had no passenger accommodations. Powered by two 1,250 ihp triple expansion steam engines and four coal-fired Scotch marine boilers. Rated service speed: 14 mph. The MAITLAND



Maitland No. 1 barge in Roen fleet[DC]

NO.1 finally made her maiden voyage for her intended trade on November 1, 1916 from Ashtabula to Port Maitland, ON transporting rail cars with coal for the steel mills at Hamilton, ON. During her service on the Lake Erie, the MAITLAND NO.1 had only one serious incident. On March 25, 1927 heavy ice caused her to run off course and she grounded on Tecumseh Shoal on her way to Port Maitland. Eighteen hull plates were damaged which required repairs at Ashtabula. After 16 years of service between Ashtabula and Port Maitland, she was laid up at Ashtabula on June 28, 1932 due to a combination of re-routing coal by an all-rail system

to Hamilton, the Depression, and the opening of the enlarged Welland Canal which allowed larger ships to make the coal run directly into Hamilton. On November 29, 1935 she was chartered by the Nicholson-Universal Steamship Co., Ecorse, MI to transport automobiles on Lake Michigan between Milwaukee, WI and Muskegon, MI. This service was stopped after 16 months of operation because of her Canadian affiliation, which forbid her to trade between two US ports, therefore on December 15, 1937 she returned to lay-up at Ashtabula. Her five year layup cost nearly \$13,500. In August, 1942 the US War Shipping Administration requisitioned the MAITLAND NO.1. Her two triple expansion steam engines were removed and placed one each in the LAKE SAPOR and LAKE PLEASANT to power these newly rebuilt Ford Motor Company "World War One Laker" barges. MAITLAND's hull was sold to the Roen Steamship Co., Sturgeon Bay, WI in 1943 and was reduced to a self-unloading pulpwood barge with a 25 ton diesel powered crane with a 90 foot boom. New tonnage was 2850 GRT, 2850 NRT. On May 6, 1944 the MAITLAND NO.1 and the barge HILDA (2) started the rescue operation of freighter GEORGE M. HUMPHREY (1) which sank in a collision with the D.M. CLEMSON (2) in the Straits of Mackinac. After many years of valuable and versatile service and following the death of Captain John Roen on December 7, 1970, the company's equipment was sold off. In November, 1973, MAITLAND NO.1 was purchased by Eder Barge & Towing Co., Milwaukee. In 1978 the barge was sold to the Bultema Marine Transportation Co., Muskegon, which soon merged with the Canonie Transportation Co. of Muskegon. MAITLAND NO.1 was loaded with scrap in December, 1980 at Holland, MI for her farewell trip from the Lakes, and she departed in the tow of the tug JOHN ROEN V bound for a Mexican port. At Quebec City she was assigned Honduran registry and a new name, b) TRIO TRADO by her new owners, the Trio Shipping Group. It was questionable, however, that her new name was ever painted on the barge. Her crew was taken off and she continued as a "dead ship" tow from Quebec City to the Strait of Canso at Nova Scotia where she began to ice up badly in the Gulf of St. Lawrence. The Roen tug which had been renamed TRIO BRAVO was considered too light for the tow and was replaced by a heavier salt water tug at Port Hawkesbury, NS. In heavy weather on January 10, 1981 while being towed still loaded with scrap iron in the Gulf of Maine, between Yarmouth, NS and Rockland, ME, a list developed and TRIO TRADO rolled over and sank. There was no loss of life.



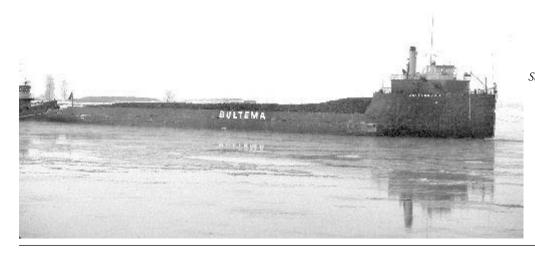
Maitland No. 1 loading logs [RR]



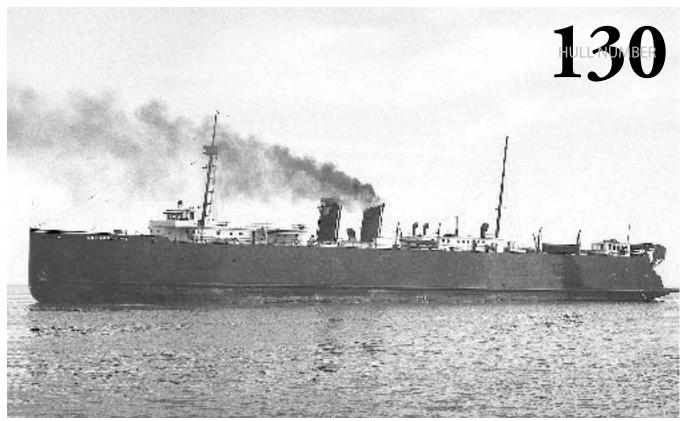
Maitland No. 1 in Eder fleet on the Welland Canal 04/29/1976 [SM]



Maitland No. 1 in Bultema colors at Muskegon 08/01/1980 [SM]

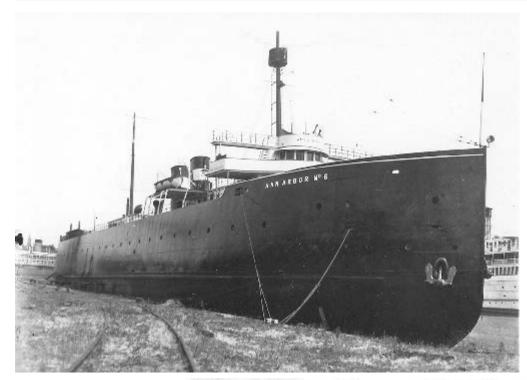


Maitland No. 1 on the Seaway leg of scrap tow 12/07/1980 [RB]

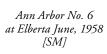


Ann Arbor No. 6 [DC]

Twin Screw Railroad Car Ferry built at the Ecorse yard in 1916 as a) ANN ARBOR NO. 6 (US. 214656). Keel laid March 21, 1913. Launched January 6, 1916 for the Ann Arbor Boat Co. (A.A.RR.), Frankfort, MI. Dimensions: 350'loa-338'lbp-56'-18'; 2757 GRT, 1653 NRT. Powered by two 1250 ihp triple expansion steam engines and four coal-fired Scotch marine boilers. This car ferry was one of two originally contracted by Hamilton, Toronto & Buffalo Railroad Co. (H.T. & B.), Toronto, ON as the MAITLAND NO. 2 but was purchased by the Ann Arbor Boat Co. while still on the launch-ways on January 5, 1916. A.A.RR. had a positive experience with H.T.&B's first ferry, MAITLAND NO. 1, because H.T.&B.'s Lake Erie docks had not been completed, therefore chartered the NO. 1 for a few months to A.A. due to their needs on Lake Michigan. The ANN ARBOR NO. 6 was first documented on January 12, 1917 and departed the shipyard January 15, 1917 on her cold maiden voyage battling ice-clogged rivers finally arriving at Frankfort on February 1st after an excruciating 16 day trip that included major damage to both propellers. Five days later on February 6th, she departed with her first load of railcars bound for Kewaunee, WI. Tonnage was remeasured on October 7, 1922 as: 2716 GRT, 1679 NRT. On December 3, 1923, the ANN ARBOR NO. 6 rescued 27 crewmembers from lifeboats of the steamer LAKELAND which had sunk in a northwest gale loaded with automobiles about nine miles off Sturgeon Bay, WI. Ownership changed to the Ann Arbor Railroad Co. on May 24, 1943. NO. 6 arrived at Manitowoc Shipbuilding, Manitowoc, WI on June 1, 1958 to receive a \$2.3 million rebuild. The car ferry was lengthened 34', the spar deck raised 3' to accommodate taller freight cars, received a new pilothouse, a single new stack and was repowered with two 2,750 BHP 12 cylinder Nordberg non-reversing diesel engines. Dimensions: 384'loa-372'lbp; 3241 GRT, 1826 NRT. She was renamed b) ARTHUR K. ATKINSON on March 14, 1959 and emerged from the shipyard March 18, 1959; the first car ferry powered by diesel engines. Laid up, primarily at Frankfort, with engine trouble from 1973 until August 17, 1980 when year long repairs were completed and she was rechristened at a special Frankfort ceremony returning the ATKINSON to service between Frankfort and Manitowoc. This was short lived because car ferry service from Frankfort to Manitowoc ceased in April, 1982 and she laid up again at Frankfort. The ATKINSON was sold to Peterson Builders, Inc. Kewaunee, WI and towed to Sturgeon Bay on April 25, 1984. Remaining there until 1994, she was sold to Contessa Cruise Lines, Lafayette, LA in 1994 for use as a casino ship, which never transpired. The ATKINSON was towed out of Sturgeon Bay to Ludington, MI for Contessa on September 2, 1994, for what was intended to be a "short time". She remained there until November 26, 2003 when once again towed out, this time to DeTour, MI, where she still was as of 2008.



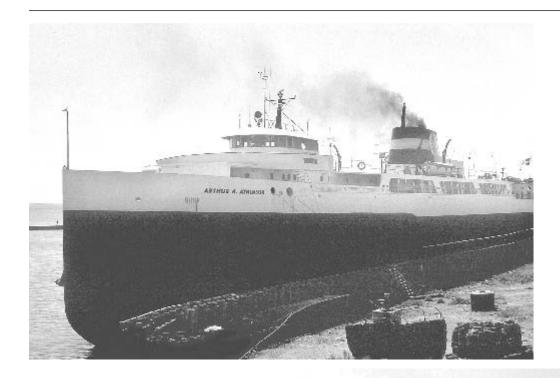
Ann Arbor No. 6 [SMMC]



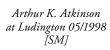




Arthur K. Atkinson at Frankfort 06/28/1965 [DC]



Arthur K. Atkinson at Manitowoc 08/1981 [WG]



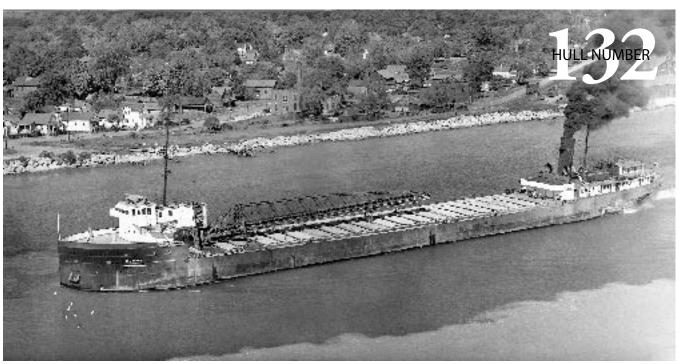




Arthur K. Atkinson at DeTour 01/03/2004 [MN]

HULL RUMBER

Hull number assigned, but not built. The vessel was to be the car ferry MAITLAND NO.3 for the Toronto, Hamilton & Buffalo Railroad Company.



Huron downbound under the newly completed Blue Water Bridge 1938 [DC]

Self-Unloading Bulk Freighter built at the Ecorse yard in 1914 as a) HURON (US.212080). Launched February 7, 1914 for the Wyandotte Transportation Co., Wyandotte, MI. Dimensions: 439'3"loa, 424'lbp x 56'x 30'; 4810 GRT, 3051 NRT, 3720 dwt. Powered by a 1,775 ihp quadruple expansion steam engine and two coal-fired Scotch marine boilers. The HURON entered service on April 23, 1914 upbound light from Detroit to Alpena to load limestone. The HURON became the third of four self-unloaders that sailed for Wyandotte Transportation, which was the pioneer in self-unloaders on the Great Lakes. These boats were very efficient carriers for the fleet. Quick turn arounds and short hauls characterized the cargo carrying abilities of the fleet. Each boat carried an average of 130 plus cargoes per year compared to 30 to 50 cargoes carried by most



Huron upbound at Sarnia/Port Huron 06/1964 [SM]

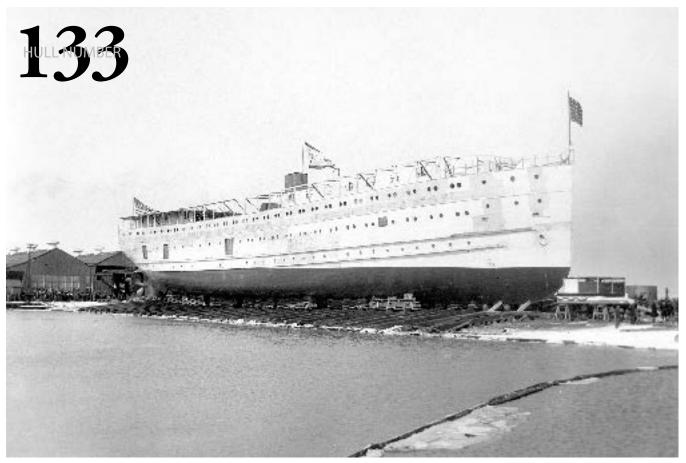


Huron in Columbia colors passing the William Clay Ford at Detroit 06/1966 [SM]

straight deck bulk carriers of the era. A new tank top was fitted in April, 1961. The HURON was sold in 1966 to the Columbia Transportation Division, Oglebay Norton Co., Cleveland, OH. She was laid up for the last time at the end of the 1968 season at Toledo and never sailed again. Sold to Marine Salvage, Port Colborne, ON for scrap on July 10, 1973, the HURON and her former fleetmate WYANDOTTE (2) were towed to Port Colborne on August 29th to be welded up for the trip overseas. The HURON passed downbound in tow at Beauharnois, QC, September 1lth bound for Montreal, QC. The HURON departed there towed by the German tug DOLPHIN X on September 27, 1973 arriving at Santander, Spain October 25, 1973 in consort with the WYANDOTTE (2). Both self-unloaders were scrapped by the Spanish shipbreakers Recuperaciones Submarinas. The HURON was removed from documentation in July/August, 1973.

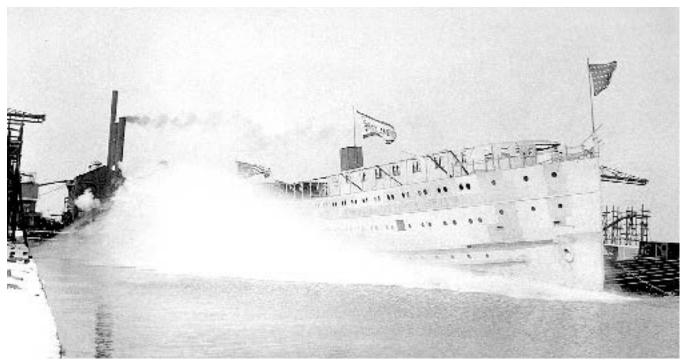


Huron awaiting scrap tow at Montreal 09/1973 [RB]



South American ready for launch Ecorse 02/21/1914 [PL]

Lake Passenger Cruise Steamer built at the Ecorse yard in 1914 as a) SOUTH AMERICAN, (US.212244). Launched February 21, 1914 for the Chicago, Duluth & Georgian Bay Transit Co., Detroit, MI for a cost of \$600,000. Dimensions: 314'loa-291'lbp-47'-18'; 2662 GRT, 1427 NRT. Powered by a 2,500 ihp quadruple expansion steam engine and three coal-fired Scotch marine boilers. Built with 267 staterooms and 538 berths. The SOUTH AMERICAN departed Detroit on her maiden voyage June 13, 1914 witnessed by a large crowd becoming the second such passenger steamer built by GLEW for these owners; the first being the NORTH AMERICAN. This vessel could accommodate 540 passengers and 160 crewmembers with the main dining room to seat 276 at a time. Her hull and three lower decks were constructed with steel, while her two upper decks were made of wood. Converted to oil-fired boilers during the winter of 1922-23 at Detroit. Burned at her winter lay-up berth at Holland, MI on September 9, 1924 and was completely rebuilt. The fire reportedly had started in a linen closet near the engine room, which had ignited 560 gallons of fuel oil causing numerous explosions that tore into the SOUTH's hull destroying most of her cabins. The blaze became so violent that several summer homes caught fire from flying embers. Rebuilding took place at GLEW's Ecorse yard over the winter of 1924-25 and was ready the following June for the cruise season. A second stack was added during her rebuild. She continued her service to Buffalo, Cleveland, Detroit, Mackinac Island, Chicago and Duluth. On June 7, 1962, the SOUTH grounded in the St. Clair River near Harsens Island. She was released with no apparent damage. She made the Seaway run 18 times carrying 10,000 passengers from the Great Lakes to Montreal's Expo 67 Fair in her final year. Because of new safety rules prohibiting wooden superstructures on passenger vessels, the SOUTH AMERICAN was sold at the end of the 1967 season to the Seafarers International Union, Piney Point, MD for \$111,111.11 to replace the NORTH AMERICAN, which sank off the East Coast of the United States during her delivery tow to Piney Point. The SOUTH departed Detroit October 16, 1967 on her one-way "Bon Voyage" cruise to Montreal where she was given an emotional farewell salute by her skipper, owners and special guests. The SOUTH was towed out of Montreal on October 27, 1967 by the deep-sea tug SPARROWS POINT to Norfolk, VA for dry-docking. She was to be used as a dormitory and classroom for the Union's Lundeberg School of Seamanship at Piney Point but she couldn't pass Coast Guard inspection because of her wooden upper works, the same reason that ended her career on the Great Lakes. Her engines and boilers were removed at the Colonna Dry Dock Co., Norfolk in 1968. She was sold

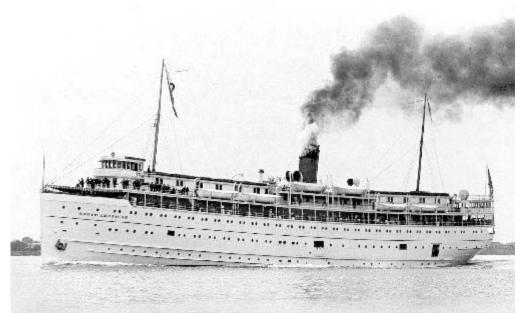


South American launch Ecorse 02/21/1914 [PL]

to Ships, Inc., Camden, NJ and was towed to the old New York Shipbuilding yard in the Spring of 1974. She laid idle at Camden for many years while efforts were attempted to bring her back to the Great Lakes for use as a "flotel". She was neglected, sitting on the bottom in her slip ravaged by the tides and eventually rotted away beyond repair. She was towed to the former Maryland Ship facility at Baltimore, MD and was dry docked in late summer, 1988 in a last ditch effort by Detroit interests to bring her back to the Great Lakes. When it was determined she was beyond saving, she finally was scrapped there by Kurt Iron Works starting August 18, 1992.

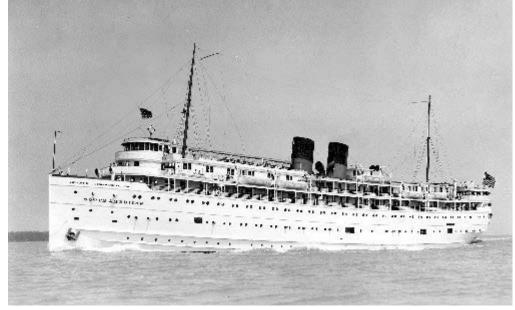


South American staterooms off Grand Salon [BH]



South American with single stack c1916



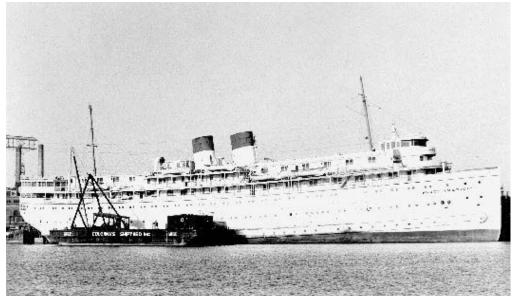




South American grounded in the lower St. Clair River 06/07/1962 [SM]



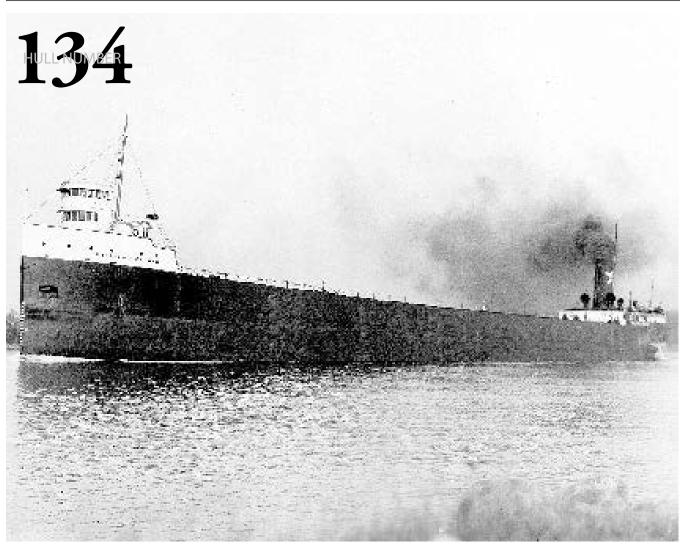
South American passing under the Ambassador Bridge Detroit [DC]



South American Colonna's Shipyard 1968





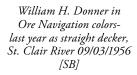


William H. Donner in Hanna fleet colors, St. Marys River c1920 [PW]

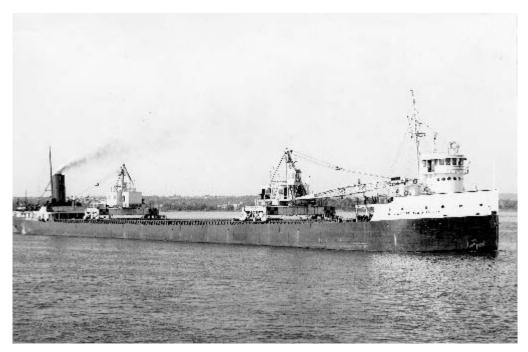
Lake Bulk Freighter built at the Ashtabula yard in 1914 as a) WILLIAM H. DONNER (US.212354). Launched May 7, 1914 for the Mahoning Steamship Co. (M. A. Hanna Co., Mgr.), Cleveland, OH. Dimensions: 524'loa-504'lbp-54'-30'; 6311 GRT, 4843 NRT, 10,000 dwt. Powered by a 1,760 ihp triple expansion steam engine and two coal-fired Scotch marine boilers. The DONNER departed the shipyard July 7, 1914 bound for Toledo, OH to load her first cargo of coal destined for Superior, WI. The freighter was ordered by the Mahoning Steamship Company to take the place of the Charles S. Price, which was overturned and lost on Lake Huron in the great storm of 1913. In 1929, Mahoning managed their own vessels. The following year, in 1930, Mahoning contracted the Bethlehem Transportation Co., Cleveland to manage their vessels, an arrangement that lasted until 1949 when Bethlehem Transportation assumed ownership while still managing the DONNER. Ownership changed again in 1956 to the Ore Navigation Co., Cleveland (a Bethlehem Steel subsidiary) with management changing to Boland & Cornelius, Buffalo, NY. The DONNER was then converted to a crane ship with two 75 foot revolving, traveling cranes at American Ship Building, Lorain, OH also in 1956 (6423 GRT, 4995 NRT). She operated as a crane ship through the 1969 season laying up at Toledo for the last time as an active steamer. Sold over the winter of 1969-70 to the Miller Compressing Co., Milwaukee, WI for use as a floating dock. The DONNER was towed out of Toledo by the Roen tug JOHN PURVIS, arriving at Milwaukee on April 25, 1970 and put to use storing scrap metal and using her cranes to transfer it into foreign vessels. This lasted until 1992 when sold to K. & K. Warehousing, Menominee, MI and towed out of Milwaukee on November 14th by the tug CARL WILLIAM SELVICK to the Marinette Fuel & Dock for use as a storage and transfer dock. Her pilothouse was removed March 19, 2002 and is still operating as of 2008 primarily unloading pig iron from salties.



William H. Donner in Bethlehem colors on the lower St. Clair River [PW]



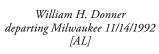




William H. Donner 1st season with cranes in the St. Marys River 1957 [DC]



William H. Donner still looking good after more than a decade as a transfer dock, Milwaukee 05/10/1982 [MN]





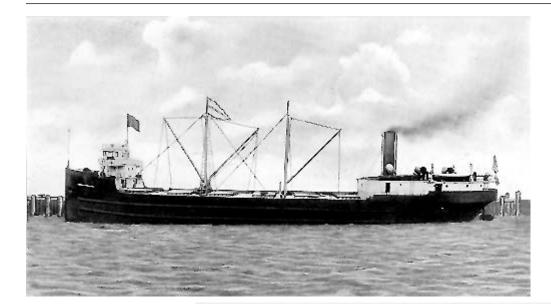


William H. Donner without pilothouse at Marinette 08/31/2003 [JH]



International launch at Ecorse 1914 [DC]

Lake-built Ocean Freighter built in 1914 at the Ecorse yard as a) INTERNATIONAL (1) (US.212420). Launched June 20, 1914 for the Atlantic Coast Steamship Co., New York, NY (J.L. Crosthwaite). This ship and GLEW Hull No. 146 also named INTERNATIONAL (1) (US.213783) were nearly identical in configuration, both had pilothouses forward and engines aft patterned after the Great Lakes bulk freighters of the time. Dimensions: 256'loa, 244'kl-43'-19'; 1815 GRT, 1343 NRT. Powered by a 750 ihp triple expansion steam engine and two coal-fired Scotch marine boilers. Equipped with three 1.5 ton cargo booms. Entered service July 29, 1914. The Crosthwaite fleet carried pulpwood from upper lakes ports to the plant of the Niagara Falls Paper Company which was located on the Niagara River about two miles above the Falls. Sold to the Clinchfield Navigation Co., NY (Moore & McCormack Co., Inc., Mgrs.) in 1916. Sold to the Soc. Nationale d'Affretements, LeHavre, France later in 1916 and renamed b) S.N.A. 1. Sold in October, 1921 to the Port Colborne & St. Lawrence Navigation Co., Ltd., Toronto, ON, a subsidiary of Maple Leaf Milling Co. Ltd., Toronto, and renamed c) BENMAPLE under Canadian registry (C.146135). Her trade most often included hauling grain down the Seaway from Port Colborne, where grain was trans-shipped from larger upper lake bulkers that couldn't transit, the then, too small Welland Canal. The BENMAPLE was sunk in a collision with the French Liner LAFAYETTE on August 31, 1936 near Rimouski 165 miles below Quebec City in the St. Lawrence River. She had been enroute to Halifax with flour in a dense fog when struck and sunk in water too deep for salvage.



International [SMMC]





HULL-RUMBER

NO PHOTO

Non-powered steel Dump Scow built at the Ashtabula yard in 1914 as a) NO. 62 (US.167982) for the Gillen Dredge & Dock Co., Milwaukee, WI. Dimensions: 150.6'loa-32.2'-11.1'; 493 GRT, 493 NRT. Sold to Great Lakes Dredge & Dock, Chicago, IL in 1921. Renamed b) 19 in 1936. Sold to the United States Government in 1947. Disposition unknown.

HULL BYBER

NO PHOTO

Scow built in 1914 at the Ecorse yard as a) KERRY GOW (undocumented) for the Cedar Point Resort Co., Sandusky, OH. Dimensions: 60'loa-28'-5'7"; 86 GRT, 86 NRT. Operated for Cedar Point as an undocumented scow during a period when Cedar Point built the Chaussee (or Cedar Point Road) along a causeway to the amusement park in 1914. First enrolled, US.172450, in 1936 when Dunbar & Sullivan Co., Buffalo, NY became owner. In service for D&S until being dropped from documentation in 1956. No further information available.



New Egyptian Portland Cement Plant on Silver Lake. Pump station on far right [FM]

This group of hulls was built under a single contract between GLEW and the New Egyptian Portland Cement Co. of Fenton, MI. "The fleet", five barges and a tug, was used for hauling marl dredged from the bottom of Marl Lake and Silver Lake in Genesse County for the purpose of manufacturing Portland cement, a type of hydraulic cement that utilizes a mixture of calcium (lime), silicon (clay or sand), and sulfate (gypsum). Marl, a lime rich mud that was abundant in this area, in the form of a slurry was dredged from the shallow lake bottoms, pumped into the barges and towed to a pumping station dock at the New Egyptian cement plant on the north shore of Silver Lake. There, the marl slurry was removed from the barges by a suction tube that pumped the marl by pipeline under the Silver Lake road to the plant for processing. The plant crushed the raw slurry into fine grains during a "wet grind" process. Other ingredients, including clay were added and the mixture pumped into a large rotary kiln. This dried the mixture that emerged from the kiln in the form of clinkers, to which gypsum was added and ground into cement. The cement was bagged and shipped by rail for distribution. The "Egyptian Plant", as it is referred to by local residents, was built by the Egyptian Portland Cement Co, which was incorporated at Fenton on July 30, 1900. The company paid \$45,000 for the factory site and built a sizeable plant there for \$300,000. They had a private rail spur off of the mainline of the Detroit, Grand Haven and Milwaukee Railroad (later Grand Trunk) that was used for bringing in coal and shipping product out. The Egypt plant opened during the summer of 1903, and lasted until its assets were ordered sold in 1911 because of financial difficulties. The plant closed and it seemed clear, no substantive offers were received until late in 1913 when the original management came up with capital to reorganize the company. The company emerged as the New Egyptian Portland Cement Company and ordered "the fleet" from the Great Lakes Engineering Works. Workers from GLEW travelled to Silver Lake and not only completed construction of the tug and barges onsite, but they also built a dredge equipped with skids so that it could be mounted on one of the barges for dredging marl. The plant reopened when the ice left the lakes in the spring of 1915. This mirrored the operation of the Aetna Portland Cement Company on Lake Ponemah, also near Fenton, that had its own fleet, which included the tug OSCAR I. Cement from these Fenton plants was used in 1908 to pave Woodward Avenue in Detroit between Seven Mile and Eight Mile roads, the first completed mile of paved highway in the United States. New Egyptian operated from 1915 to 1920 when it ceased operation for the last time due to a shortage of coal, scarcity of labor and a shift to using more economical limestone in the manufacture of Portland cement. Aetna, at this time, took over New Egyptian's assets including the fleet, shifting all of its assets to Silver Lake. Aetna operated through 1937 when they closed, leaving the Silver Lake plant idle until May, 1941 when they attempted to open and operate the Egyptian Plant again. The fleet (now consisting of just one tug) was put back into operation, but it lasted for only a year when it closed for the last time in 1942. It is understood the OSCAR I and an undetermined number of the barges were sold to Harold Phillips after WWII ended and were trucked to Port Huron, MI. The OSCAR I (Aetna's original tug) found its way to the West Coast where it was rebuilt and was in Vallejo, CA as of 2006. The Harry J (New Egypt's tug

that became BIRMCO) is still operating in the Detroit area as of 2007. Some of the barges may have been sold for scrap to support the War effort. Both plants were progressively demolished between the 1940s and 1990s, though one solidly-built concrete building still remains on Silver Lake road as of 2007.

HULL 138

Bulk Cement Barge built in 1914attheEcorseyard,broken down and shipped by rail to Fenton, MI for reassembly on site for the New Egyptian Portland Cement Co. No name or vessel identification number was assigned and therefore not documented. Dimensions: 60'loa-28'-5.6'. Towed by the tug HARRY J, it was used to haul marl for the manufacture of Portland cement on Marl and Silver Lakes to New Egyptian's



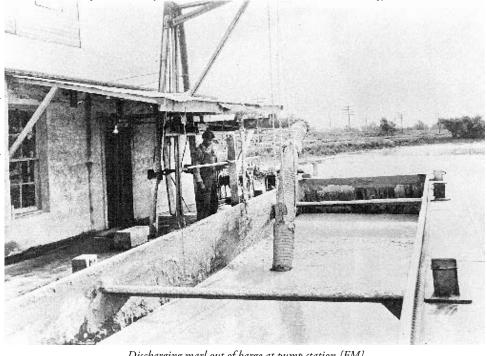
New Egyptian dock and pump station on the right with tug & barges [FM]

cement plant on the north shore of Silver Lake. Owned by New Egyptian until they went out of business in 1920, when the Aetna Portland Cement Company, Fenton assumed ownership of New Egyptian's assets, including this barge. The barge operated until about 1937 when Aetna folded leaving this barge idle at the closed Silver Lake cement plant. Aetna re-opened the Silver Lake plant in 1941 with little success as they closed again for the last time in 1942. This barge may have been put back into service for this short period of time. Final disposition is uncertain as scrapping could have occurred in 1942 during a national scrap drive or taken to Port Huron, MI by Harold Phillips in 1945, when he bought the remnants of the Aetna fleet. No further information available.

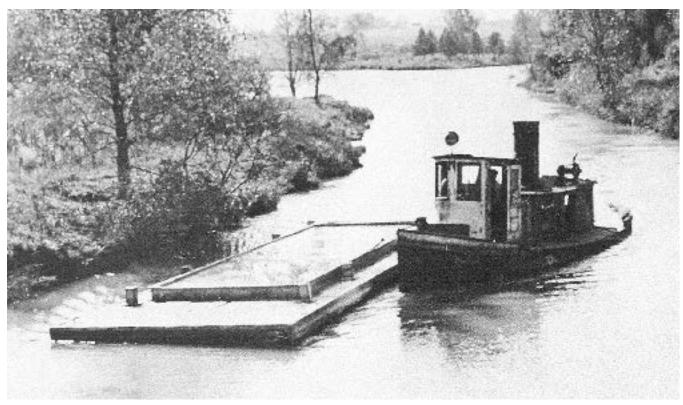
HULL 139

Inland Lakes Tug partially built in 1915 at the Ecorse yard with no name and no documentation for the New Egyptian Portland Cement Co., Fenton, MI. Dimensions: 45'loa-42'9"lbp-11'-5'1"; 14 GRT, 9 NRT. Powered by a fore & aft compound steam engine and a single coal-fired upright fire box boiler. This vessel was originally built, shipped by rail to Fenton where assembly was completed onsite as an undocumented tug; documentation

would not have been required on an inland lake. Soon after it arrived, the tug was named the a) HARRY J (Some sources say HARRY V). Along with the HARRY J, five barges of various sizes were also built in 1915-16, "knocked down" and reassembled by a crew of GLEW workers at Fenton to haul marl and stone on Marl Lake and Silver Lake to the New Egyptian plant on the north shore of Silver Lake. The tug had been built with extra strength to crush ice so it could be utilized year round. It is unclear whether this was successful, as most

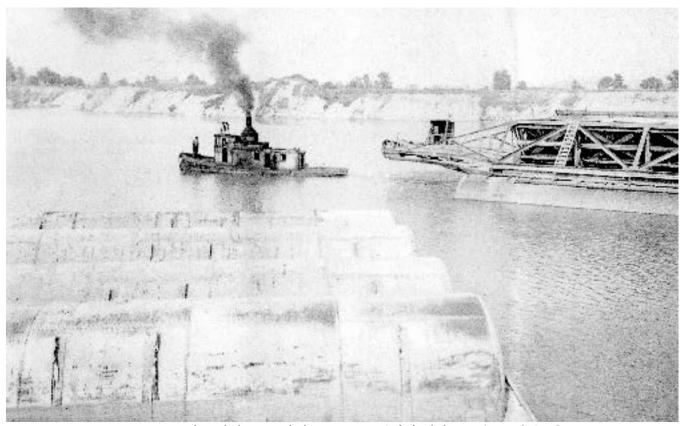


Discharging marl out of barge at pump station [FM]



Harry J at the Narrows entering Silver Lake with marl barge in tow c1935 [FM]

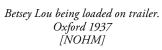
accounts state that operation ceased during the winter months. The HARRY J typically made four trips per day with a barge loaded with the marl slurry, dropped it off at the pump station near the plant. The tug returned an empty barge to the dredge site, then picked up another loaded barge. There were many independent "Portland Cement" plants set up throughout the State of Michigan, including the better known Huron Portland Cement plant at Alpena in 1908 as well as the Aetna Portland Cement plant in 1902, also at Fenton, on Lake Ponemah. Portland cement refers to a type of hydraulic cement that became widely used at this time for construction of roads and bridges. For comparison sakes, the Aetna plant had



Betsey Lou with new boiler towing dredge equipment on Oxford Lake late 1936 Runge [RCML]



Betsey Lou at Oxford in field before being transferred 1937 [NOHM]







Betsey Lou at the Ward Yard. Oxford 1937 [NOHM]

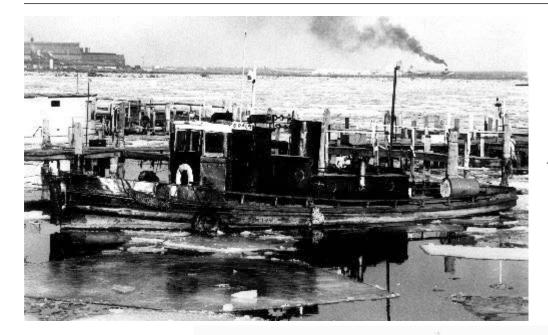


Birmco being repowered c1946 in the Rouge River [DC]

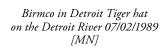
similar vessels built (a small tug, three barges and a marl dredge) between 1911-1913 at Johnston Brothers' Ferrysburg yard, "knocked down", shipped by rail, and reassembled on site. The "New Egyptian" entity lasted until 1920 when the HARRY J (as well as all of the New Egyptian assets) was taken over by the Aetna Portland Cement Company. The HARRY J came under the ownership of Ward Sand & Gravel Co., Oxford, MI in the mid-1930s and was taken to Crescent Lake (present day Oxford Lake) where she was renamed b) BETSEY LOU. There she was employed towing sand and gravel barges. It is apparent from the photo of her on Crescent Lake (Oxford Lake) that she had a different boiler installed as it protrudes through the top of her cabins. The BETSEY LOU operated on Crescent Lake until 1937 when evidence seems to point to her being trucked away. The Treasury Department shows ownership transferred to the following companies after New Egyptian's ownership, but no dates were provided: besides Ward Sand & Gravel Co., American Aggregates Corporation,



Birmco in Dunbar & Sullivan colors. [PW]



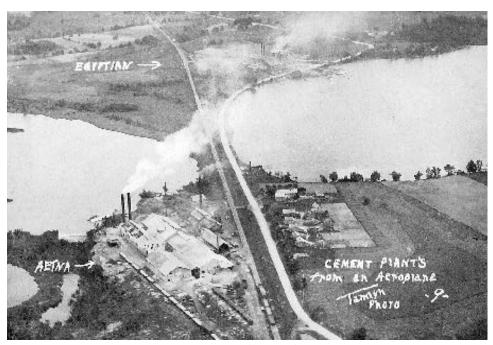
Birmco at Ecorse Creek on the Detroit River in 1971 [HCGL]







Birmco at Toledo Beach Marina 02/02/1906 [MN]



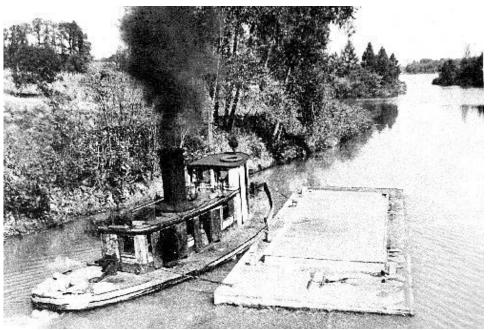
New Egyptian Plant Aerial [FM]

Oxford Asphalt of Detroit, and Arthur J Rooks are all shown as subsequent owners. On June 20, 1946 this tug was documented for the first time and renamed c) BIRMCO (US.249901) owned by the Birmingham Marine Corp., Birmingham, MI, operating then on the Detroit River and surrounding area. The ownership was renamed Candler & Bass Inc., Birmingham on June 26, 1947. BIRMCO was repowered prior to documentation with a 100 BHP four cylinder semi-diesel Kahlenberg (which had been built in 1929)

at Candler & Bass' Detroit River yard where the old steam engine was stored for many years. Candler relocated its corporate headquarters to Detroit in 1950. Sold to Dunbar & Sullivan, Detroit on September 24, 1951. D&S used BIRMCO primarily as a dredge tender until November 1, 1968 when sold to Lyons Marine Service, Detroit for use in the dock construction business. Repowered again with a 160 BHP GM6-71 Detroit Diesel at this time. Sold to Inland Waters Pollution Control, Detroit in March, 1973. The BIRMCO owners, apparently Detroit sports fans, adorned the BIRMCO with a large Detroit Tiger baseball cap during the summer of 1987 when the Tigers won the American League Eastern Division pennant and to honor Detroit's professional baseball team. Again in a sporting spirit, the BIRMCO was bedecked with a Detroit Red Wing cap during the summers of 1998, 1999, and 2000 to honor their two Stanley Cup wins and Detroit's professional hockey team. Sold to Michigan Waterways Marine Construction, Monroe, MI in 2002. Documentation expired in 2005. Laid up at Toledo Beach Marina in Erie, MI as of 2008.

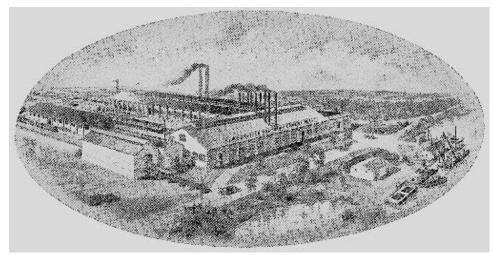
HULL 140

Bulk Cement Barge built in 1914 at the Ecorse yard, broken down and shipped by rail to Fenton, MI for reassembly on site for the New Egyptian Portland Cement Co., Fenton. No name or vessel identification number was assigned and therefore not documented. 50'loa-16'-5'. Dimensions: Towed by the tug HARRY J, it was used to haul marl for the manufacture of Portland cement on Marl and Silver Lakes to New Egyptian's cement plant on the north shore of Silver Lake. Owned



Marl barge and tug in the Narrows c1935 [FM]

by New Egyptian until they went out of business in 1920, when the Aetna Portland Cement Company, Fenton assumed ownership of New Egyptian's assets, including this barge. The barge operated until about 1937 when Aetna folded leaving this barge idle at the closed Silver Lake cement plant. Aetna re-opened the Silver Lake plant in



Company Letterhead in 1917

1941 with little success as they closed again for the last time in 1942. This barge may have been put back into service for this short period of time. Final disposition is uncertain as scrapping could have occurred in 1942 during a national scrap drive or taken to Port Huron by Harold Phillips in 1945, when he bought the remnants of the Aetna fleet. No further information available.

HULL 141

Bulk Stone Scow built in 1914 at the Ecorse yard, broken down and shipped by rail to Fenton, MI for reassembly on site for the New Egyptian Portland Cement Co. Fenton. No name or vessel identification number was assigned and therefore not documented. Dimensions: 58'loa-16'-6'. Towed by the tug HARRY J, it was used to haul marl for the manufacture of Portland cement on Marl and Silver Lakes to New Egyptian's cement plant on the north shore of Silver Lake. Owned by New Egyptian until they went out of business in 1920, when the Aetna Portland Cement Company, Fenton assumed ownership of New Egyptian's assets, including this barge. The barge operated until about 1937 when Aetna folded leaving this barge idle at the closed Silver Lake cement plant. Aetna re-opened the Silver Lake plant in 1941 with little success as they closed again for the last time in 1942. This barge may have been put back into service for this short period of time. Final disposition is uncertain as scrapping could have occurred in 1942 during a national scrap drive or taken to Port Huron by Harold Phillips in 1945, when he bought the remnants of the Aetna fleet. No further information available.

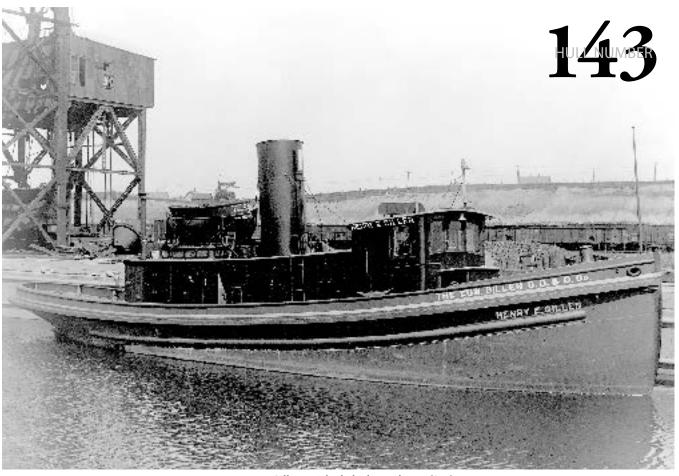
HULL 142

Bulk Stone Scow built in 1914 at the Ecorse yard, broken down and shipped by rail to Fenton, MI for reassembly on site for the New Egyptian Portland Cement Co. Fenton. No name or vessel identification number were assigned and therefore not documented. Dimensions: 58'loa-16'-6'. Towed by the tug HARRY J, it was used to haul marl for the manufacture of Portland cement on Marl and Silver Lakes to New Egyptian's cement plant on the north end of Silver Lake. Owned by New Egyptian until they went out of business in 1920, when the Aetna Portland Cement Company, Fenton assumed ownership of New Egyptian's assets, including this barge. The barge operated until about 1937 when Aetna folded leaving this barge



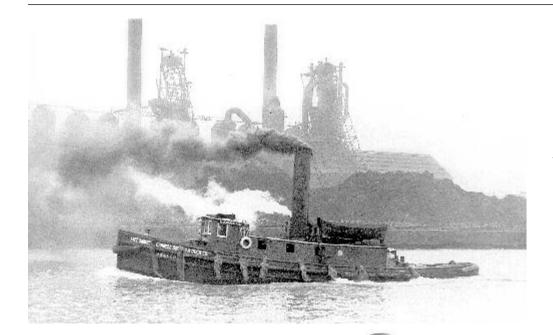
New Egyptian Cement bag [SM]

idle at the closed Silver Lake cement plant. Aetna re-opened the Silver Lake plant in 1941 with little success as they closed again for the last time in 1942. This barge may have been put back into service for this short period of time. Final disposition is uncertain as scrapping could have occurred in 1942 during a national scrap drive or taken to Port Huron by Harold Phillips in 1945, when he bought the remnants of the Aetna fleet. No further information available.



Henry E. Gillen at Ashtabula shipyard 1915 [SM]

Harbor tug built at the Ashtabula yard in 1915 as a) HENRY E. GILLEN (US.213149) for the Gillen Dock, Dredge & Construction Co., Racine, WI. Dimensions: 75'loa-20'-12'5"; 96 GRT, 49 NRT. Powered by a 380 ihp two cylinder fore & aft compound steam engine and a coal-fired fire box boiler; the engine taken out of the 1892 built tug, JOHN LEATHEM. Enrolled for the first time May 5, 1915. Sold January 11, 1917 to the Tidewater Co., Boston, MA. Sold January 14, 1918 to Castner, Curran & Bullitt, Inc., Boston. Sold June 28, 1920 to Wood Towing, Norfolk, VA. Renamed b) LASALLE on May 27, 1922. Sold to Fitz Simons & Connell Dredge & Dock Co., Chicago, IL on June 2, 1922. Repowered with a 500 ihp triple expansion steam engine sometime between 1921 and 1930. Renamed c) JOHN J. ROCHE on July 10, 1939. Transferred on June 7, 1955 to Merritt-Chapman & Scott Corp., Cleveland, OH when Merritt-Chapman bought the Fitz Simons fleet. Sold again on June 4, 1959 to Bultema Dock & Dredge Co., Muskegon, MI and renamed d) BARNEY NELSON. Having been idle at Ludington, MI for several years, she was sold to George Kingshott, Muskegon on July 2, 1964. Renamed e) GAYLE K on March 8, 1965 and repowered with a 500 BHP six cylinder inline GM diesel at Grand Haven, MI by owner; new tonnage: 102 GRT, 59 NRT. (Engine taken from a wooden tug bought by Kingshott at same time as the BARNEY NELSON). The prop from the replaced steam engine was placed at the New Buffalo Yacht Club. Sold to Crocker Engineering Inc., Muskegon on March 27, 1970 and was renamed f) RAVEN on January 4, 1971. Sold to JOMI Enterprises, Inc., Merchantville, NJ on December 30, 1974. Documentation expired on December 14, 1979. Reportedly involved with the Mariel Boatlift carrying a boat load of refugees. (The Mariel boatlift was a mass exodus of refugees who departed for the United States from Cuba's Mariel Harbor between April 15 and October 31, 1980.). Subsequently sold to Russell and Sandra Barnes, Miami, FL on January 12, 1982. Documentation renewed on February 3, 1984. Sold foreign on August 6, 1990 into Honduran registry and renamed q) MIRAMAR EXPRESS. Reportedly seized at Miami in a drug raid. Belzona, Inc. Miami acquired MIRAMAR EXPRESS for use as an artificial reef. Unofficially renamed BELZONA TWO, she was sunk on February 21, 1991 in 60 feet of water in the Key Biscayne Artificial Reef (located at N25° 41.76' W80° 05.26') along with two other Belzona acquisitions. The three Belzona vessels form what is known locally as the Belzona Triangle artificial reef. Hurricane Andrew heavily damaged much of the pilothouse in August, 1992.



LaSalle on the Detroit River [PW]



Barney Nelson at Ludington c1960 [RR]



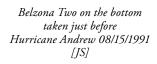
Gayle K at Muskegon [PW]



Belzona Two at Miami being towed to Key Biscayne Artificial Reef 1991 [JS]



Belzona Two being sunk for dive habitat on the Key Biscayne Artificial Reef 02/21/1991 [JS]





HULMUNER

NO PHOTO

Dump Scow built in 1915 at the Ashtabula yard as a) 14 (US.166286) for the Dunbar & Sullivan, Co., Buffalo, NY. Dimensions: 130'loa-30'-11'; 397 GRT, 397 NRT. Owned by Dunbar & Sullivan until abandoned in 1974.

145

NO PHOTO

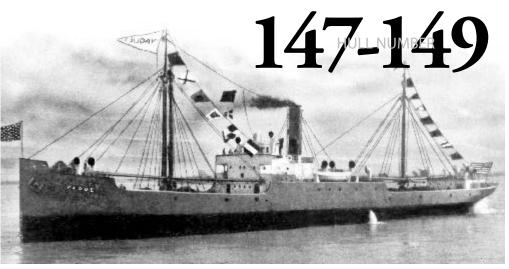
Dump Scow built in 1914 at the Ashtabula yard as a) 15 (US.166287) for the Dunbar & Sullivan, Co., Buffalo, NY. Dimensions: 130'loa-30'-11'; 397 GRT, 397 NRT. Owned by Dunbar & Sullivan until abandoned in 1974.

TULLES

NO PHOTO

Lake-built Ocean Freighter built in 1915 at the Ecorse yard as a) INTERNATIONAL (2) (US.213738). Launched June 17, 1915 for J.S. Crosthwaite, (Atlantic Coast Steamship Co.) New York, NY. This ship and GLEW Hull No. 135 also named INTERNATIONAL (1) (US.212420) were nearly identical in configuration. Both had pilothouses forward and engines aft patterned after the Great Lakes bulk freighters of the time. Dimensions: 256'loa, 244'kl-43'-19'; 1709 GRT, 1146 NRT. Powered by a 700 ihp triple expansion steam engine and two coal-fired Scotch marine boilers. Entered service in July, 1915. The Crosthwaite fleet carried pulpwood from upper lakes' ports to the Niagara Falls Paper Company plant, which was located on the Niagara River about two miles above the Falls. Sold to the Clinchfield Navigation Co., New York and renamed b) CLINCHFIELD. Sold French to Societe Nationale d'Affretements, LeHavre in 1916 and renamed c) S.N.A. 3 in 1916. Sold Norwegian November 20, 1916. Loaded with coal from Tynemouth, England bound for Rouen, France, she was torpedoed and sunk by the German submarine U-30 in the North Sea ten miles East of Hornsea, England on September 26, 1917. (Another source states sunk September 16, 1917.)

Three Lake-built Ocean Freighters were built as Hull Nos. 147, 148, and 149 at the Ecorse yard in 1915 under the same order contract for the Clyde Steam Ship Co., New York, NY, for the West Indies trade. They were single decked ships with forecastle and bridge but no poop deck of the "Two Island Class." Their dimensions were: 258'6"loa, 246'kl-38'3"-

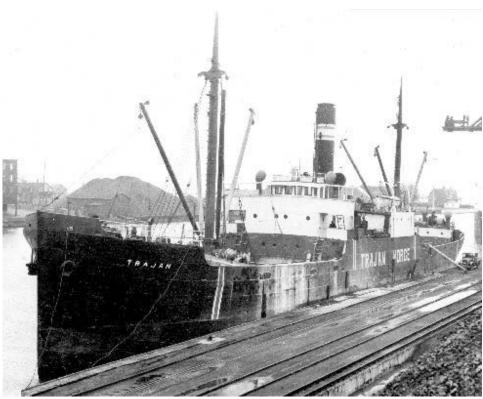


Yaque on sea trials [DC]

18': 1414 GRT, 948 NRT. Powered by a 900 ihp triple expansion steam engine and two coal-fired Scotch marine boilers. Boilers were built by American Ship Building, Lorain, OH. All three entered service November, 1915. Their individual histories follow.

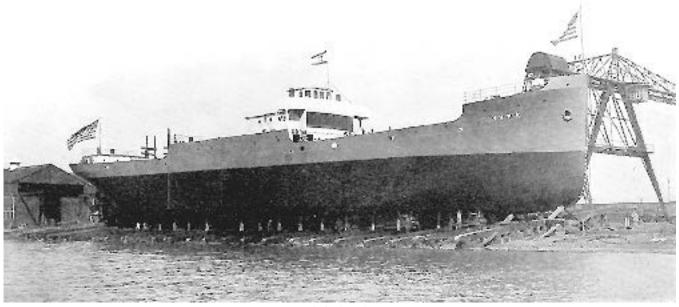
HULL 147

Lake-built Ocean Freighter launched August 25, 1915 as a) YAQUE. Sold to Skibs (D/S) A/S Inca, Bergen, Norway 1929/30 and renamed DORIS. Purchased b) Skibs A/S Trajan, Bergen in 1930/1931 and renamed c) TRAJAN. Visited the Great Lakes regularly as TRAJAN in the 1930s. Was attacked in the North Sea by German aircraft late on May 3, 1941 while on convoy from Blyth, Northumberland, England to London, England with coal. The crew, including several that were wounded, had to abandon ship and all were picked up by a British destroyer on May 4th and were dropped



Trajan [DC]

off at Harwich, England. The hull lies in 59 feet of water 14.5 miles northeast of Blakeney, Norfolk, England (53.10N-01.13E).



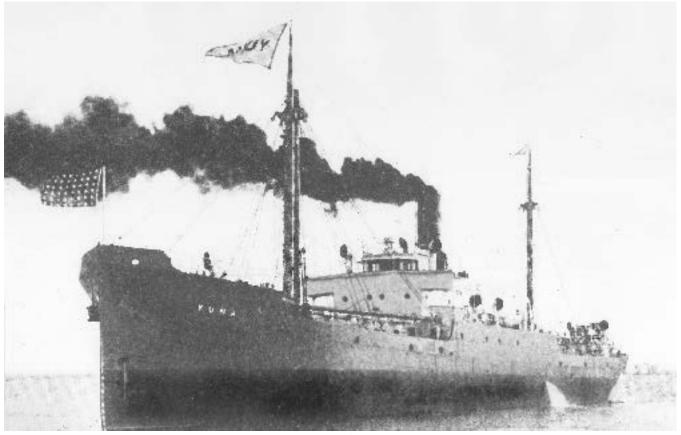
Yuna ready for launch [SMMC]

HULL 148

Lake-built Ocean Freighter launched September 28, 1915 as a) YUNA (US.213734). Her career was short lived. She stranded on Mouchoir Bank southeast of the Turks Isles in the Bahama Islands on January 10, 1919. As a result sixty-four of 127 passengers perished. Yuna had been hauling sugar from Santo Domingo to New York when she wrecked. Disposition of the ship is not known.



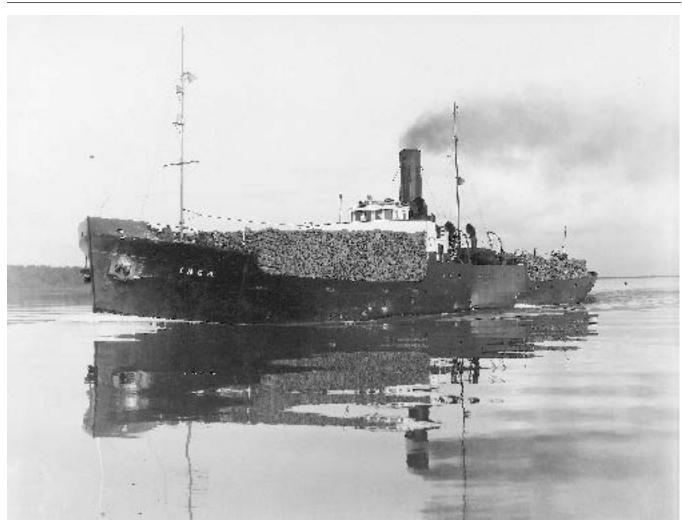
Yuna launch [SMMC]



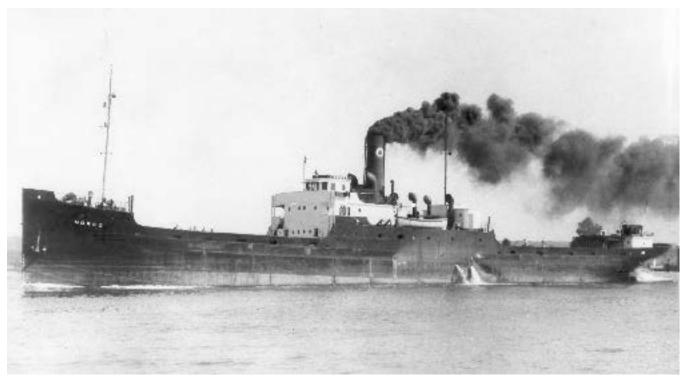
Yuna sea trials [DC]

HULL 149

Lake-built Bulk Freighter launched October 25, 1915 as a) INCA (US.213730). Entered East Coast service in November, 1915 for the Clyde Steamship Co. New York. Sold to the General Transit Co., Cleveland, OH October 3, 1928 and returned to the Great Lakes that year. Sold to the Valley Camp Steamship Co., Cleveland in 1930. Sold to General Paper Mills, Wilmington, DE in 1936. Sold Canadian to Northern Paper Mills Ltd, Coppell, ON and renamed b) NORCO (C.158168) in 1938 and used in the pulp wood trade. Sold to the Marathon Corporation of Canada Ltd, Toronto, ON in 1956. Sold to Kelley Shipping Ltd, Montreal, QC in 1957 and traded off the Lakes. Sold to J.M. Chabot of Nassau, BWI in 1962. Sold to Dods Shipping Ltd, Nassau in 1963. While bound from Tampa to Puerto Limon, Costa Rica with a load of phosphate, NORCO stranded on Little Corn Island, off the east coast of Nicaragua on April 19, 1964 and was declared a constructive total loss.



Inca on the St. Marys River 1930s [DC]



Norco on the St. Marys River [DC]



Morris Adler ready for launch 09/12/1915 [HCGL]

Lake-built Ocean Freighter built at the Ashtabula yard in 1915. Launched September 12, 1915 as a) MORRIS ADLER (US.213747) (Stemwinder class) for the Harper Transit Co., Boston, MA. Immediately assigned to the Passolt & Company of Norway. Dimensions: 261'loa, 253'kl-43'6"-27'6": 2481 GRT, 1494 NRT. Powered by a 1350 ihp triple expansion steam engine and two Scotch marine boilers. Entered service in November, 1915. In 1916 the ADLER was purchased by Akties Jotunfiell, Oslo, Norway and renamed b) JOTUNFJELL and sailed under Norwegian registry. Sold to A/S Luksefiell in 1919. In 1934 she was renamed c) VARANGFJELL. In 1939 A/S Malmfart, Oslo became owners and renamed her d) VARANGBERG. Survived a German naval attack while running in a 19 ship convoy on January 30, 1941. On September 25, 1941 the VARANGBERG was attacked by German submarines and was sunk by two torpedoes from the U203 about 900 miles west of Vigo, Spain. She was sailing in a convoy from Melilla, Morocco to Belfast, Ireland loaded with iron ore. The convoy was attacked first by Italian subs without much damage. Later German subs attacked and sank the VARANGBERG at 47.50N-24.50W. The escort vessels were able to rescue the crew only after the sub attack was driven off by the next morning. The captain and an ordinary seaman were injured in the attack. Only the ordinary seaman required hospitalization when the vessels landed at Milford Haven in Wales.



Morris Adler launch [DC]