

Introduction

Formed in 1892, the Lake Superior & Ishpeming hauls Magnetite and Hematite pellets from the Empire and Tilden Mines to the ore docks at Presque Isle, Michigan. With a combination of first and second generation Alco and GE motive power, the LS&I is a unique look at modern day iron ore railroading on the Michigan Ore Range.

Michigan Iron Ore, contains over 40 miles of short line operations with an interesting mix of motive power, including the ALCO RSD-12 and the RSD-15 "Alligator". Later LS&I motive power, such as former BN U30C and C30-7's are also included. With these locomotives, you will pull 100 car ore trains from the mines to the docks. With this kind of tonnage, we can assure you that you will be challenged every step of the way down the step hill to the docks.



Knowing Your Train

One of the most important elements involved in running a train is knowing the controls like the back of your hand. We have included control diagrams below to help you familiarize yourself with the cabs which are used on the locomotives in Michigan Iron Ore.

GE U23C, U30C, C30-7



GE Locomotives:

- 1. Speed Recorder
- 2. Load Meter
- 3. Brake Gauges
- 4. Horn
- 5. Train Brake
- 6. Sander
- 7. Bell
- 8. Engine Brake
- 9. Headlights
- 10. Reverser
- 11. Throttle
- 12. Dynamic Brake
- 13. Alerter



ALCO RSD-12, RSD-15



ALCO locomotives:

- 1. Load Meter
- 2. Speed Recorder
- 3. Brake Gauges
- 4. Horn
- 5. Dynamic Brake
- 6. Throttle
- 7. Train Brake
- 8. Engine Brake
- 9. Bell
- 10. Sander
- 11. Headlights
- 12. Reverser



Ore Subdivision Timetable

	Milepost	Siding Capacity	Stations
LS&I 55.20	(CTC)	Yard	Marquette 0.07
LS&I 55.27	(CTC)		Co. Rd. 550 9.33
LS&I 64.60	(CTC)		Co. Rd. 492 0.70
LS&I 65.30	(CTC)	Yard	Eagle Mills 0.57
LS&I Q65.87			Hwy.M-35 (South) 1.63
LS&I Q67.50		49	Queens 0.63
LS&I Q68.13	(CTC)		Eagle Mills JCT. 0.53
LS&I Q68.63	(CTC)		Palmer Line JCT. 0.42
LS&I Q69.05	(CTC)		Empire JCT. 1.73
LS&I Q70.78		Yard	Empire Mine Siding 0.55
LS&I Q71.23			Tilden JCT. 1.67
LS&I Q73.00		135	Tilden Mine



Signals

Signal Aspect	Name	Indication
(with or without A plate)	Stop	Stop before any part of train or engine passes the signal.
(with number plate)	Stop and Proceed	Stop before any part of train or engine passes the signal, then proceed at restricted speed through entire block.
(with or without A plate or number plate)	Approach	Proceed, prepared to stop before any part of train or engine passes the next signal.
(with or without A plate or number plate)	Clear	Proceed.
(with or without A plate)	Restricting	Proceed en route indicated at restricted speed. Speed through turnout must not exceed 15 mph.
(with number plate)	Permissive	Proceed at restricted speed through entire block.
(with or without A plate or number plate)	Diverging Approach	Proceed on diverging route, prepared to stop at next signal, not exceeding prescribed speed through turnout.
(with or without A plate or number plate)	Diverging Clear	Proceed on diverging route, not exceeding prescribed speed through turnout.





Trackside Signs

	Restricted Clearance Sign - Meant for snowplows and trains carrying wide loads. Warns of impending clearance restrictions.
Y.M.	Yard Limit Advance Warning - Placed approximately 1 mile from yard limits.
YARD LIMIT	Yard Limit Sign - defines yard limits and switching zones.
	Snowplow/Flanger Warning - Warns crews of snowplows and flangers to clear their equipment of an upcoming obstruction such as a bridge or grade crossing.
70	Speed Sign - Displays current speed limit in Miles per Hour (MPH)
90 .	Milepost - Displays current subdivision mileage. Usually •used for communications and to aid train crews in •knowing current location on the line.
BEGIN CTC CTC	Begin/End CTC - Sign telling train crew that they are•entering or leaving Centralized Traffic Control Territory.
W	Whistle Post - Sign telling train crew that they must blow whistle and ring bell for upcoming grade crossing or obstruction.



Credits

Development Team

Andy Hockin - Route design, train physics, 3d artwork, activities, logic programming Jason Dilworth - Route design, 3d artwork, sounds, documentation, activities Colin Graham - Product Testing and QA Danny Beck - 3d artwork and locomotive cabviews

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