External Pipeline Inspection Form for L5 Straits of Mackinac

General Information			
Date:	08/29/2017	**Contractor:**	Ballard Marine Co
AFE / W.O.#:	20008990	**Company Rep / Inspector:**	Trish McClelland
Segment:	EAS-3	**Water Depth (ft):**	134
Longitude:	[redacted]	**Latitude:**	[redacted]

External Pipe Coating Inspection Results			
Coating Condition	☐ Disturbed Area ☐Dislodged Coating ☒Holiday	**Size of anomaly (ft^2):**	0.93 (8"x1.4')
	☐ Disturbed Area ☐Dislodged Coating ☐Holiday	**Size of anomaly (ft^2):**	
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	☐ Disturbed Area ☐Dislodged Coating ☐Holiday	**Size of anomaly (ft^2):**	
Corrosion present:	☐YES ☒NO	**Biota present:**	☒YES ☐ NO
Dislodged coating observed on the lake floor: ☐YES ☒NO		**Lake floor location wrt pipe:**	Pipe suspended

Comments/Issues/Discussion

East Additional Site #3 (South of E-22).

DFT measurements at the feature are below the minimum resolvable thickness of gauge.
The Polatrak CP gun was used to confirm the existence of bare metal:

Holiday 1 presented average CP reading of -848mV CSE (holiday confirmed).

No external corrosion was detected by dive team.

Contractor Signature	Enbridge Representative/ Inspector Signature

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Visual Inspection (General Coating Condition and Holiday 1)

For all sections of dislodged coating or holidays, provide pictures below.
Included the date and time stamps associated with video surveillance.





Date:	8/29/17	Frame(HH:MM:SS)	10:35:09	Date:	8/29/17	Frame(HH:MM:SS)	10:35:44

Coating Gauge Information

Manufacturer:	Elcometer Inspection Equip	**Product:**	211 Coating Thickness Gauge
Last Calibrated:	08/09/2017	**Next Calibration Due:**	08/09/2018
Gauge verified prior to use:	☒YES ☐ NO		

Coating Thickness Inspection Data

Thickness Measure (mil)	Area of Interest	Undisturbed Area (< 2 in.)	Undisturbed Area (> 5 ft.)
North End #1	105	85	130
#2	≤25	120	120
#3	115	115	130
South End #4	≤25	80	100
#5	≤25	80	100
#6	≤25	125	105
Average Thickness		101	114

Additional Coating Thickness Inspection Data (A/R)

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Cathodic Protection and Coating Measurements (if Holiday is found) - Holiday 1							
CP Reading #1 (mV)	-852 -886	CP Reading #2 (mV)	-804 -842	CP Reading #3 (mV)	-834 -875		
Temperature (°F)	44	DFT at Holiday (mil)	≤ 25	DFT Adjacent to Holiday (mil)	80, 80, 125		
For all sections of dislodged coating or holidays, provide pictures below. Included the date and time stamps associated with video surveillance.							





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