Minimum Internal Diameter Listing (ID < 90% OD)

Client: Enbridge Energy Limited Partnership | Run Date: July 30, 2013 | Projection: UTM | Zone: 16

Project: NPS 20 GEOPIG Geometry Inspection | Location: Line 5 Straights of Mackinac - West Loop | Datum: WGS 84 | C.M.: -87

BAKER HUGHES

Feature Identifier	Absolute Chainage (ft)	Enbridge Chainage (ft)	Nearest U/S GWD	Dist to U/S GWD (ft)	Dist to D/S GWD (ft)	Internal Diameter (in)	Internal Diameter (%OD)	Length (in)	Northing (m)	Easting (m)	Height (m)	Comments
IDR 1	577.89	479.22	300	14.97	9.82	17.99	89.9	179.81	5,078,893.84	674,218.09	140.40	On bend
IDR 2	605.94	507.66	310	18.23	6.97	18.01	90.0	18.50	5,078,892.36	674,209.75	140.38	On bend
IDR 3	15,478.82	15,260.00	6080	14.24	6.82	17.35	86.8	68.91	5,074,486.51	673,176.79	116.22	On ovality
IDR 4	15,529.32	15,310.07	6100	17.41	2.83	17.81	89.1	39.42	5,074,471.82	673,172.52	117.93	On ovality
IDR 5	20,938.06	20,665.92	8190	14.79	11.78	17.94	89.7	51.72	5,072,867.48	672,797.73	148.72	On bend
IDR 6	21,218.65	20,943.88	8300	11.25	14.99	17.94	89.7	86.39	5,072,784.54	672,777.72	153.27	On bend
IDR 7	21,248.27	20,973.34	8310	14.63	14.08	17.98	89.9	90.52	5,072,775.85	672,777.04	155.58	On bend
IDR 8	21,274.36	20,998.26	8320	12.01	12.12	17.97	89.9	171.60	5,072,768.52	672,778.92	157.81	On bend
IDR 9	21,300.08	21,023.74	8330	13.60	13.26	17.95	89.8	198.51	5,072,762.68	672,783.68	159.79	On bend
IDR 10	21,841.24	21,559.38	8620	7.69	13.96	17.98	89.9	75.04	5,072,723.15	672,943.50	160.41	On bend
IDR 11	21,880.67	21,599.46	8640	15.48	2.80	17.98	89.9	14.26	5,072,720.41	672,954.97	162.61	On bend