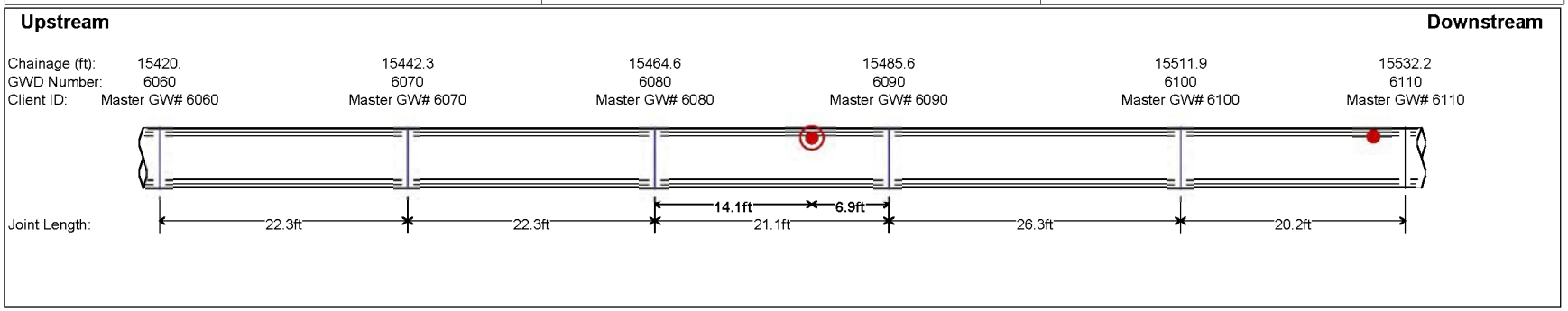
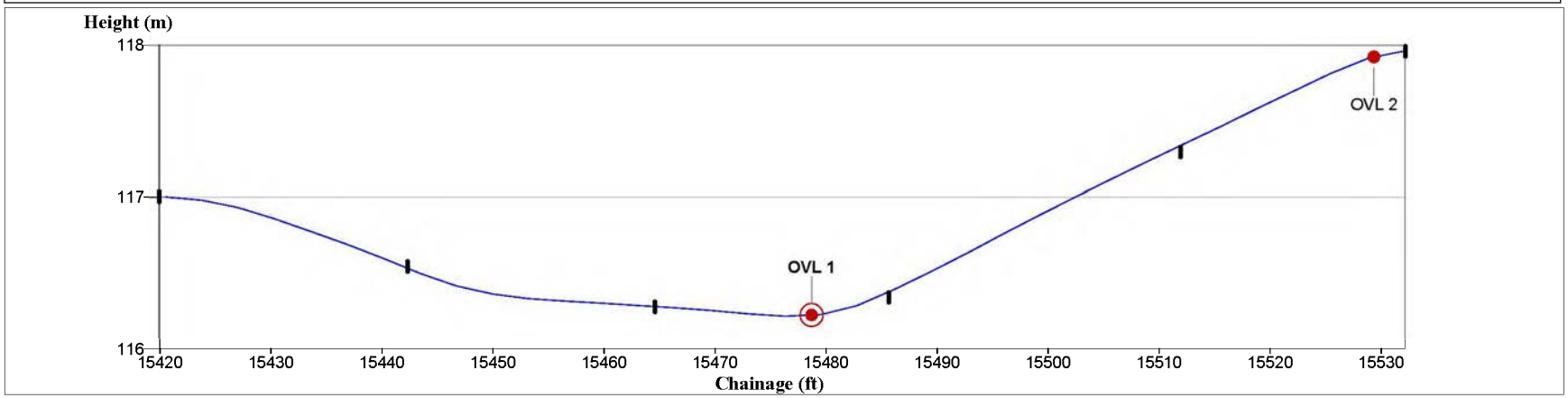
PipeWall Anomaly Inspection Sheet

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

Anomaly: **OVL # 1**

Location			Size			Reference Points		
Chainage:	15,478.71	ft	Size Definition:	CSAZ662 Ovality		U/S Weld Number:	6080	
Enbridge Area Number:	1		Depth:	1.750	in	Distance to U/S Weld:	14.14	ft
Enbridge Chainage:	15,259.83	ft	Depth %:	8.8	%OD	Distance to D/S Weld:	6.92	ft
Northing:	5,074,486.56	m	Length:	40.52	in	Joint Length:	21.06	ft
Easting:	673,176.81	m	Width:	10.44	in	U/S Ref.:	VALVE MP 1475.6	
Latitude:	45.80220369	deg.	Clock Position:	1:00	h:mm	Distance to U/S Ref.:	15,379.45	ft
Longitude:	-84.77141990	deg.	Wall Thickness:	.812	in	D/S Ref.:	VALVE MP 1479.5	
			Comments:			Distance to D/S Ref.:	6,353.03	ft



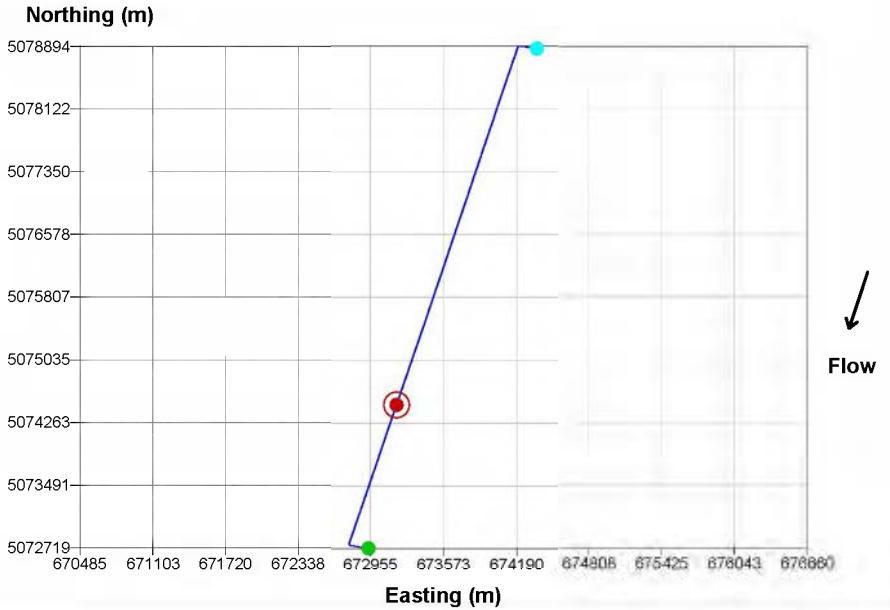


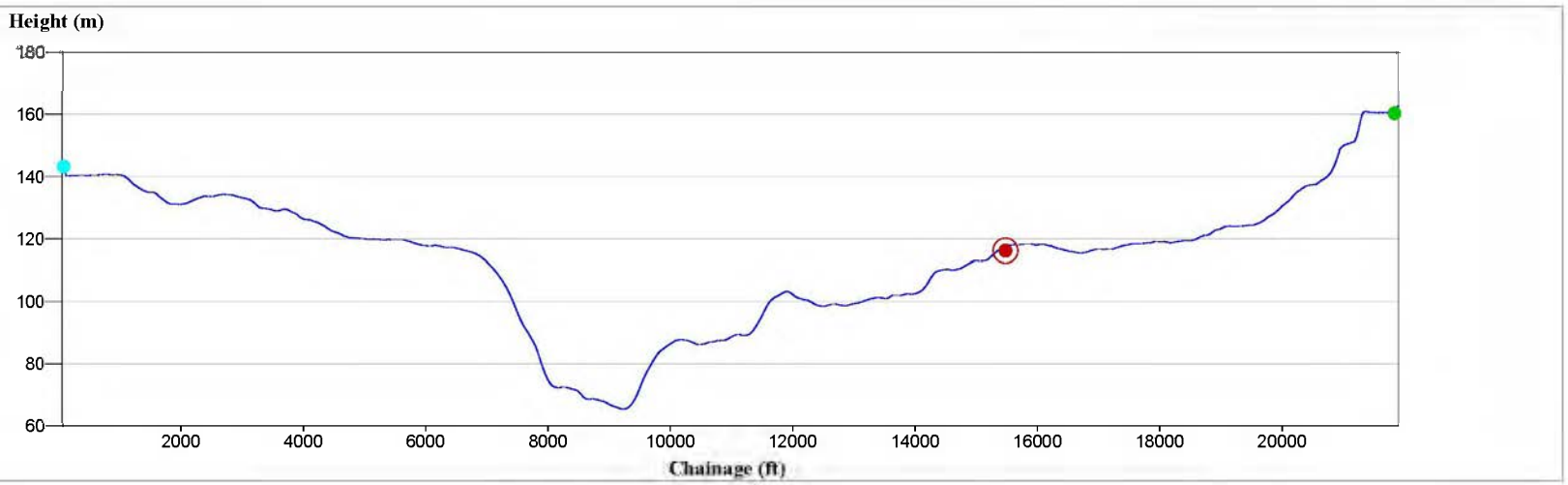
PipeWall Anomaly Inspection Sheet

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

Plan and Profile between U/S and D/S Reference Points

Anomaly:	**OVL 1**	
Chainage:	15,478.71	ft
Northing:	5,074,486.56	m
Easting:	673,176.81	m
Height:	116.22	m
U/S Ref.:	VALVE MP 1475.6	
Enbridge Chainage:	-.05	ft
Distance to U/S Ref.:	15,379.45	ft
D/S Ref.:	VALVE MP 1479.5	
Enbridge Chainage:	21,550.38	ft
Distance to D/S Ref.:	6,353.03	ft



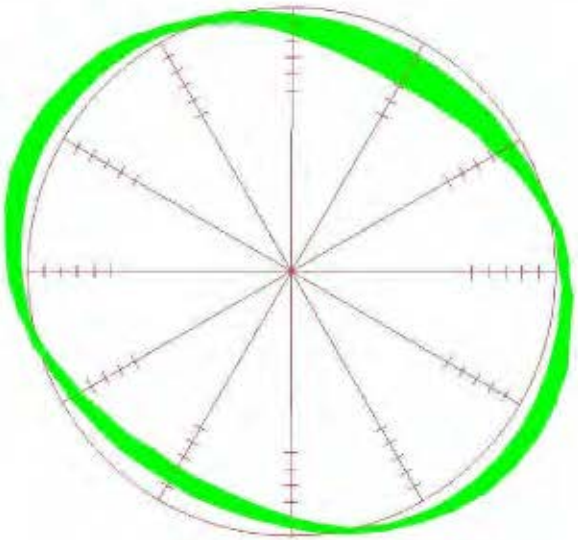


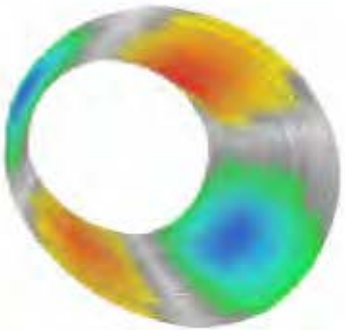
ENBDNR0005246

PipeWall Anomaly Inspection Sheet

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

Cross Section View - Each graticule represents 1% OD **Anomaly Size = 8.8%** **3D View - Exaggerated 3 times**





Pipe Internal Diameters at Different Clock Positions

