Mechanical Damage Detection - Existing Technology

	Coating holidays, disbondment	Confidence Level	**Denting** smooth dents, sharp dents, rerounding, top side-bottom side	Confidence Level	**Metal Loss** associated corrosion, removed metal	Confidence Level	**Metal Deformation** smeared metal, scrapes, pipewall creasing	Confidence Level	**Cracking** sheer cracks, ductile tearing, fatigue cracks, SCC	Confidence Level
Liquid	1 AC current attenuation	M	1 ILI w/ geometry tool	H	1 ILI w/ Hi-Res MFL tool	H	1 Direct visual examination	H	1 liquid coupled UT ILI	H
	2 DCVG/ACVG surveys	M	2 ILI w/ geometry tool (rerounding)	L	2 ILI w/ Lo-Res MFL tool	M	2 ILI w/ Lo-Res MFL tool	M	2 Direct exam w/ mag prtcl	H
	3 Pearson surveys	M	3		3 ILI w/ Hi-Res MFL tool (removed metal)	M	3 Nonlinear Harmonics	M	3 ILI w/ TFI	M
	4 Close Interval Survey	M	4		4 Compression UT ILI	M	4		4 ILI w/ EMAT	L
	5		5		5		5		5	
Gas Transmission	1 AC current attenuation	M	1 ILI w/ geometry tool	H	1 ILI w/ Hi-Res MFL tool	H	1 Direct visual examination	H	1 Direct exam w/ mag prtcl	H
	2 DCVG/ACVG surveys	M	2		2 ILI w/ Lo-Res MFL tool	M	2		2 Wheel coupled UT ILI	M
	3 Pearson surveys	M	3		3		3		3 ILI w/ TFI	M
	4 Close Interval Survey	M	4		4		4		4 ILI w/ EMAT	L
	5		5		5		5		5	
Gas Distribution (Steel)	1 AC current attenuation	M	1 ILI w/ geometry tool	H	1 ILI w/ Hi-Res MFL tool	H	1 Direct visual examination	H	1 Direct exam w/ mag prtcl	H
	2 DCVG/ACVG surveys	M	2		2 ILI w/ Lo-Res MFL tool	M	2		2 Wheel coupled UT ILI	M
	3 Pearson surveys	M	3		3		3		3 ILI w/ TFI	M
	4 Close Interval Survey	M	4		4		4		4 ILI w/EMAT	L
	5		5		5		5		5	

This Matrix is considered a guide and represents only those who participated.