

Leak Cause	Leak Classification	Record Count
Corrosion	Grade 1	1205
	Grade 2	1576
	Grade 3	1246
Subtotal		4027
Operator Personnel/Contractors Excavating	Grade 1	373
	Grade 2	48
	Grade 3	43
Subtotal		464
Other Third Party Excavators	Grade 1	6531
	Grade 2	367
	Grade 3	295
Subtotal		7193
Locator	Grade 1	4
	Grade 2	2
Subtotal		6
Vehicle (Auto/Truck/etc.)	Grade 1	286
	Grade 2	27
	Grade 3	38
Subtotal		351
Lightning	Grade 1	4
	Grade 2	1
	Grade 3	2
Subtotal		7
Washout	Grade 1	24
	Grade 2	3
	Grade 3	13
Subtotal		40
Ground Movement	Grade 1	453
	Grade 2	412
	Grade 3	221
Subtotal		1086
Ice	Grade 2	1
Subtotal		1
Static Electricity	Grade 1	3
	Grade 2	1
Subtotal		4
Vandalism	Grade 1	39
	Grade 2	18
	Grade 3	8
Subtotal		65
Fire/Explosion First	Grade 1	14

	Grade 2	1
	Grade 3	4
Subtotal		19
Excessive Strain	Grade 1	587
	Grade 2	237
	Grade 3	233
Subtotal		1057
Dent	Grade 1	39
	Grade 2	14
Subtotal		53
Gouge	Grade 1	30
	Grade 2	29
	Grade 3	7
Subtotal		66
Factory Defect	Grade 1	247
	Grade 2	154
	Grade 3	267
Subtotal		668
Wrinkle Bend	Grade 2	1
	Grade 3	1
Subtotal		2
Weld (Steel)	Grade 1	15
	Grade 2	81
	Grade 3	42
Subtotal		138
Fusion Defect (Plastic)	Grade 1	159
	Grade 2	108
	Grade 3	58
Subtotal		325
Equipment Malfunction	Grade 1	683
	Grade 2	331
	Grade 3	4635
Subtotal		5649
Gasket/O-Ring	Grade 1	815
	Grade 2	1235
	Grade 3	1848
Subtotal		3898
Packing	Grade 1	1634
	Grade 2	789
	Grade 3	4393
Subtotal		6816
Inadequate/Failure to Follow Procedures	Grade 1	223

	Grade 2	190
	Grade 3	313
Subtotal		726
Stripped Threads	Grade 1	535
	Grade 2	1697
	Grade 3	3034
Subtotal		5266
Backfill	Grade 1	42
	Grade 2	28
	Grade 3	20
Subtotal		90
Other	Grade 1	24
	Grade 2	41
	Grade 3	95
Subtotal		160
Not Excavated	Grade 1	71
	Grade 2	77
	Grade 3	70
Subtotal		218
Total		38395
