Process	$1\ell + 2\tau_h$	$2\ell ss$	$2\ell ss + 1\tau_h$
$t\bar{t}H$	5.8 ± 1.9	53.8 ± 17.0	9.4 ± 2.8
$t\bar{t}Z/\gamma^*$	6.3 ± 1.1	80.9 ± 10.4	9.2 ± 1.2
$t\bar{t}W + t\bar{t}WW$	0.5 ± 0.1	150.0 ± 16.9	9.1 ± 1.0
$WZ + ZZ$	2.1 ± 1.6	16.5 ± 13.1	3.9 ± 3.0
tH	0.4 ± 0.1	2.7 ± 0.2	0.5 ± 0.04
Conversions	< 0.02	12.1 ± 5.8	1.4 ± 0.5
Sign flip	—	27.5 ± 8.0	0.5 ± 0.1
Misidentified leptons	195.7 ± 13.6	94.2 ± 21.2	8.6 ± 2.1
Rare backgrounds	1.4 ± 0.7	39.0 ± 21.2	3.1 ± 1.5
Total expected background	206.3 ± 14.0	423.0 ± 38.0	36.1 ± 4.2
Observed	212	507	49

Process	3ℓ	$3\ell + 1\tau_h$	4ℓ
$t\bar{t}H$	18.5 ± 6.0	2.1 ± 0.7	0.9 ± 0.3
$t\bar{t}Z/\gamma^*$	49.0 ± 6.9	3.4 ± 0.5	2.1 ± 0.4
$t\bar{t}W + t\bar{t}WW$	35.2 ± 4.2	0.4 ± 0.04	$< 2 \times 10^{-3}$
$WZ + ZZ$	9.9 ± 2.4	0.3 ± 0.05	0.1 ± 0.1
tH	1.2 ± 0.2	0.1 ± 0.01	$< 4 \times 10^{-4}$
Conversions	5.3 ± 2.9	< 0.02	< 0.02
Misidentified leptons	22.7 ± 6.7	0.9 ± 0.2	< 0.04
Rare backgrounds	8.2 ± 13.8	0.2 ± 0.1	0.1 ± 0.2
Total expected background	131.4 ± 18.2	5.3 ± 0.5	2.4 ± 0.4
Observed	148	7	3