Table 1: Background MC Summary

Sample Name	xSec(pb)	NEvt	Lumi(pb^{-1})	k Factor	Weight
SingleTs	3.362	622990	35866.9	1	0.193558
SingleTatW	35.6	6.93309e+06	35866.9	1	0.184169
SingleTtW	35.6	6.95283e+06	35866.9	1	0.183646
SingleTat	80.95	3.83031e+07	35866.9	1	0.0758015
SingleTt	136.02	6.62407e+07	35866.9	1	0.0736499
TTJets	831.76	7.70812e+07	35866.9	1	0.387029
WJets	**61526.7**	**8.57726e+07**	**35866.9**	**1**	**25.7282**
W1Jets	9493	4.49549e+07	35866.9	1.23	9.31591
W2Jets	3120	6.00398e+07	35866.9	1.23	2.29253
W3Jets	942.3	5.90675e+07	35866.9	1.23	0.703784
W4Jets	524.2	2.99953e+07	35866.9	1.23	0.77098
DYJetsToLL10to50	**18610**	**3.52916e+07**	**35866.9**	**1**	**18.9134**
DY1JetsToLL10to50	725	3.98408e+07	35866.9	1.33	0.868073
DY2JetsToLL10to50	394.5	1.94429e+07	35866.9	1.33	0.967902
DY3JetsToLL10to50	96.47	4.9642e+06	35866.9	1.33	0.92702
DY4JetsToLL10to50	34.84	2.08785e+06	35866.9	1.33	0.796022
DYJetsToLL50toInf	5765.4	1.45803e+08	35866.9	1	1.41826
DY1JetsToLL50toInf	1016	6.18057e+07	35866.9	1.19	0.701627
DY2JetsToLL50toInf	331.4	1.99706e+07	35866.9	1.19	0.708278
DY3JetsToLL50toInf	96.36	5.85611e+06	35866.9	1.19	0.70231
DY4JetsToLL50toInf	51.4	4.19787e+06	35866.9	1.19	0.522607
TGJets	2.967	368562	35866.9	1	0.288736
TTGJets	3.697	1.57783e+06	35866.9	1	0.0840393
TTWJetslnu	0.2043	1.60353e+06	35866.9	1	0.00456969
TTZJets2l2nu	0.2529	679262	35866.9	1	0.0133538
WW2l2nu	12.178	1.999e+06	35866.9	1	0.218503
WWlnu2q	49.997	8.9978e+06	35866.9	1	0.199298
WZ	47.13	3.99583e+06	35866.9	1	0.423043
ZZ	16.523	1.9881e+06	35866.9	1	0.298089
WWW	0.2086	210538	35866.9	1	0.0355368
WWZ	0.1651	221468	35866.9	1	0.0267381
WZZ	0.05565	216366	35866.9	1	0.00922509
ZZZ	0.01398	213197	35866.9	1	0.00235191
QCDPt80To120EMEnr	**350000**	**3.58418e+07**	**35866.9**	**1**	**350.246**
QCDPt120To170EMEnr	**62964**	**3.58173e+07**	**35866.9**	**1**	**63.0513**
QCDPt170To300EMEnr	**18810**	**1.15402e+07**	**35866.9**	**1**	**58.4617**
QCDPt300ToInfEMEnr	1350	7.37363e+06	35866.9	1	6.56669
QCDPt20ToInfMuEnr	**302672**	**2.20941e+07**	**35866.9**	**1**	**491.35**