

Table SI 1 Concentration of metals and As leached from the sulphide zone at pH 2

Pit	No.	Final pH	Metal and As concentrations (mg.L ⁻¹)							
			As	Co	Cu	Fe	Pb	Mn	Ni	Zn
SP1	CS2	6.30 ± 0.46	0.0016 ± 0.0009	0.0126 ± 0.0019	0.0454 ± 0.0236	0.7364 ± 0.3262	0.0004 ± 0.0005	1.1608 ± 0.2689	0.0104 ± 0.0025	0.7731 ± 0.2924
	CS3	6.58 ± 0.05	0.0008 ± 0.0008	0.0289 ± 0.0052	0.2629 ± 0.1344	1.7217 ± 0.3262	0.0036 ± 0.0060	1.6920 ± 0.4632	0.0108 ± 0.0032	0.3209 ± 0.0550
SP2	CS1	5.75 ± 0.46	0.0133 ± 0.0072	0.0080 ± 0.0006	0.0178 ± 0.0255	6.3175 ± 3.1714	0.0020 ± 0.0022	0.5818 ± 0.1629	0.0095 ± 0.0017	0.4974 ± 0.1839
	CS2	6.59 ± 0.27	0.0013 ± 0.0011	0.0119 ± 0.0010	0.0083 ± 0.0032	0.1538 ± 0.0639	0.0001 ± 0.0000	0.9429 ± 0.2182	0.0099 ± 0.0021	0.5047 ± 0.1263
	CS8	6.26 ± 0.02	0.0039 ± 0.0009	0.0257 ± 0.0021	0.0860 ± 0.0102	0.6620 ± 0.5577	0.0003 ± 0.0003	1.0071 ± 0.2844	0.0106 ± 0.0032	0.2900 ± 0.1479
	CS3	6.54 ± 0.02	0.0021 ± 0.0014	0.0189 ± 0.0008	0.0075 ± 0.0031	0.2327 ± 0.0996	0.0001 ± 0.0000	0.8865 ± 0.2203	0.0076 ± 0.0019	0.3019 ± 0.0153
SP3	CS1	6.83 ± 0.29	0.0025 ± 0.0009	0.0076 ± 0.0022	0.0117 ± 0.0041	0.3689 ± 0.2789	0.0009 ± 0.0013	0.8013 ± 0.1918	0.0072 ± 0.0022	0.4784 ± 0.1401
	CS2	6.64 ± 0.21	0.0017 ± 0.0008	0.0145 ± 0.0013	0.0157 ± 0.0021	0.3162 ± 0.0521	0.0014 ± 0.0018	1.2637 ± 0.2074	0.0095 ± 0.0019	0.3554 ± 0.1013
	CS3	6.52 ± 0.24	0.0010 ± 0.0017	0.0204 ± 0.0036	0.0736 ± 0.0342	0.6648 ± 0.5623	0.0004 ± 0.0001	1.5170 ± 0.3385	0.0110 ± 0.0029	0.8993 ± 0.6631
SP4	CS1	6.60 ± 0.33	0.0009 ± 0.0010	0.0154 ± 0.0053	0.0225 ± 0.0092	0.3373 ± 0.1763	0.0171 ± 0.0237	0.8638 ± 0.1921	0.0122 ± 0.0032	0.5612 ± 0.2579
	CS2	6.54 ± 0.19	0.0017 ± 0.0008	0.0180 ± 0.0061	0.0172 ± 0.0085	0.2555 ± 0.1087	0.0005 ± 0.0006	1.3165 ± 0.4630	0.0121 ± 0.0046	0.7025 ± 0.0377
	CS6	7.04 ± 0.16	0.0030 ± 0.0013	0.0177 ± 0.0064	0.0201 ± 0.0179	0.4673 ± 0.3105	0.0007 ± 0.0005	0.7308 ± 0.1349	0.0100 ± 0.0016	0.4459 ± 0.0482

Data are shown as the mean ± 1SD, derived from 3 repeats.

Table SI 2 - Concentration of metals and As leached from the sulphide zone at pH 4

Pit	No.	Final pH	Metal and As concentration (mg.L ⁻¹)							
			As	Co	Cu	Fe	Pb	Mn	Ni	Zn
SP1	CS2	7.43 ± 0.06	0.0033 ± 0.0003	0.0010 ± 0.0004	0.0028 ± 0.0003	0.0357 ± 0.0009	0.0002 ± 0.0003	0.0262 ± 0.0025	0.0005 ± 0.0000	0.1098 ± 0.0026
	CS3	7.39 ± 0.03	0.0005 ± 0.0000	0.0035 ± 0.0003	0.0098 ± 0.0109	0.0257 ± 0.0195	0.0002 ± 0.0002	0.0948 ± 0.0180	0.0018 ± 0.0001	0.1560 ± 0.0302
SP2	CS1	7.65 ± 0.04	0.0013 ± 0.0005	0.0005 ± 0.0000	0.0018 ± 0.0001	0.0988 ± 0.0630	0.0005 ± 0.0004	0.0032 ± 0.0055	0.0034 ± 0.0000	0.1083 ± 0.0207
	CS2	7.73 ± 0.02	0.0019 ± 0.0005	0.0016 ± 0.0001	0.0025 ± 0.0003	0.0532 ± 0.0047	0.0001 ± 0.0000	0.0000 ± 0.0000	0.0034 ± 0.0000	0.1197 ± 0.0205
	CS8	6.57 ± 0.12	0.0021 ± 0.0022	0.0083 ± 0.0013	0.0165 ± 0.0202	0.0315 ± 0.0268	0.0000 ± 0.0000	0.1345 ± 0.0559	0.0034 ± 0.0002	0.4106 ± 0.0390
	CS3	7.68 ± 0.03	0.0019 ± 0.0002	0.0061 ± 0.0007	0.0028 ± 0.0004	0.0192 ± 0.0037	0.0000 ± 0.0000	0.0351 ± 0.0608	0.0035 ± 0.0004	0.1541 ± 0.0090
SP3	CS1	7.68 ± 0.01	0.0027 ± 0.0008	0.0005 ± 0.0000	0.0021 ± 0.0008	0.0303 ± 0.0109	0.0001 ± 0.0000	0.0124 ± 0.0012	0.0003 ± 0.0005	0.0968 ± 0.0076
	CS2	7.44 ± 0.27	0.0019 ± 0.0001	0.0049 ± 0.0013	0.0031 ± 0.0009	0.0365 ± 0.0292	0.0005 ± 0.0004	0.0322 ± 0.0018	0.0005 ± 0.0000	0.1892 ± 0.1479
	CS3	7.60 ± 0.09	0.0011 ± 0.0005	0.0040 ± 0.0006	0.0072 ± 0.0091	0.0520 ± 0.0302	0.0001 ± 0.0002	0.0613 ± 0.0027	0.0005 ± 0.0000	0.1259 ± 0.0202
SP4	CS1	7.60 ± 0.09	0.0005 ± 0.0000	0.0011 ± 0.0005	0.0031 ± 0.0040	0.0202 ± 0.0137	0.0007 ± 0.0006	0.0282 ± 0.0012	0.0005 ± 0.0000	0.1216 ± 0.0027
	CS2	7.64 ± 0.04	0.0013 ± 0.0009	0.0024 ± 0.0004	0.0021 ± 0.0005	0.0086 ± 0.0031	0.0002 ± 0.0002	0.0741 ± 0.0040	0.0025 ± 0.0001	0.1183 ± 0.0264
	CS6	7.18 ± 0.08	0.0020 ± 0.0002	0.0076 ± 0.0006	0.0027 ± 0.0003	0.0183 ± 0.0052	0.0001 ± 0.0000	0.0555 ± 0.0026	0.0041 ± 0.0002	0.1070 ± 0.0136

Data are shown as the mean ± 1SD, derived from 3 repeats.

Table SI 3 - Concentration of metals and As leached from the sulphide zone at pH 6.5

Pit	No.	Final pH	Metal and As concentration (mg.L ⁻¹)							
			As	Co	Cu	Fe	Pb	Mn	Ni	Zn
SP1	CS2	7.78 ± 0.05	0.0031 ± 0.0003	0.0024 ± 0.0002	0.0012 ± 0.0006	0.0470 ± 0.0075	0.0000 ± 0.0000	0.0272 ± 0.0014	0.0005 ± 0.0000	0.0505 ± 0.0064
	CS3	7.61 ± 0.09	0.0016 ± 0.0018	0.0068 ± 0.0005	0.0035 ± 0.0016	0.0828 ± 0.0221	0.0010 ± 0.0015	0.1139 ± 0.0110	0.0015 ± 0.0005	0.0824 ± 0.0236
SP2	CS1	7.76 ± 0.05	0.0010 ± 0.0003	0.0014 ± 0.0004	0.0005 ± 0.0000	0.0178 ± 0.0022	0.0003 ± 0.0004	0.0269 ± 0.0012	0.0005 ± 0.0000	0.0502 ± 0.0030
	CS2	7.79 ± 0.02	0.0015 ± 0.0006	0.0021 ± 0.0002	0.0011 ± 0.0005	0.0537 ± 0.0052	0.0000 ± 0.0000	0.0184 ± 0.0002	0.0005 ± 0.0000	0.0470 ± 0.0073
	CS8	7.63 ± 0.04	0.0009 ± 0.0008	0.0081 ± 0.0004	0.0069 ± 0.0038	0.1072 ± 0.1107	0.0005 ± 0.0008	0.0890 ± 0.0065	0.0027 ± 0.0004	0.0729 ± 0.0061
	CS3	7.49 ± 0.01	0.0017 ± 0.0013	0.0126 ± 0.0009	0.0032 ± 0.0007	0.2028 ± 0.0788	0.0000 ± 0.0000	0.1546 ± 0.0143	0.0040 ± 0.0009	0.0818 ± 0.0084
SP3	CS1	7.54 ± 0.35	0.0023 ± 0.0001	0.0020 ± 0.0003	0.0026 ± 0.0012	0.0330 ± 0.0111	0.0020 ± 0.0029	0.0190 ± 0.0040	0.0005 ± 0.0000	0.0595 ± 0.0081
	CS2	7.67 ± 0.01	0.0016 ± 0.0006	0.0049 ± 0.0005	0.0026 ± 0.0005	0.0597 ± 0.0177	0.0000 ± 0.0000	0.0449 ± 0.0031	0.0005 ± 0.0000	0.0667 ± 0.0018
	CS3	7.67 ± 0.09	0.0011 ± 0.0004	0.0058 ± 0.0004	0.0028 ± 0.0005	0.1465 ± 0.0492	0.0004 ± 0.0006	0.0897 ± 0.0052	0.0019 ± 0.0003	0.0671 ± 0.0068
SP4	CS1	7.68 ± 0.03	0.0018 ± 0.0007	0.0025 ± 0.0001	0.0005 ± 0.0000	0.0294 ± 0.0026	0.0000 ± 0.0000	0.0306 ± 0.0013	0.0005 ± 0.0000	0.0561 ± 0.0016
	CS2	7.55 ± 0.06	0.0011 ± 0.0008	0.0057 ± 0.0003	0.0022 ± 0.0003	0.0392 ± 0.0056	0.0000 ± 0.0000	0.1194 ± 0.0051	0.0033 ± 0.0003	0.0803 ± 0.0077
	CS6	7.47 ± 0.04	0.0021 ± 0.0009	0.0126 ± 0.0005	0.0029 ± 0.0001	0.0649 ± 0.0071	0.0000 ± 0.0000	0.0753 ± 0.0017	0.0038 ± 0.0004	0.0774 ± 0.0051

Data are shown as the mean ± 1SD, derived from 3 repeats.

Table SI 4 - Concentration of metals and As leached from the mixing zone at pH 2, 4 and 6.5

Pit	No.	Final pH	Metal and As concentration (mg.L ⁻¹)							
			As	Co	Cu	Fe	Pb	Mn	Ni	Zn
<i>pH 2.0</i>										
SP1	CS4	3.24 ± 0.25	0.0413 ± 0.0173	0.3933 ± 0.0464	0.6856 ± 0.2293	1.5430 ± 0.5718	0.0327 ± 0.0117	12.8873 ± 4.7656	0.0672 ± 0.0255	0.8065 ± 0.2671
SP2	CS4	4.56 ± 1.71	0.0492 ± 0.0276	0.3340 ± 0.0446	1.1352 ± 0.4032	3.2273 ± 1.5797	0.0455 ± 0.0238	13.8800 ± 4.2217	0.0910 ± 0.0334	0.8549 ± 0.2315
SP3	CS4	3.57 ± 0.04	0.1124 ± 0.0288	0.2418 ± 0.0917	0.4616 ± 0.0829	0.9972 ± 0.2412	0.0108 ± 0.0016	8.0343 ± 1.6478	0.1507 ± 0.1987	0.6475 ± 0.1552
SP4	CS3	2.89 ± 0.10	0.2059 ± 0.0635	0.6536 ± 0.1927	2.9337 ± 0.5675	5.5793 ± 1.2123	2.2510 ± 0.4423	23.3333 ± 4.9338	0.1315 ± 0.0327	1.0741 ± 0.3023
<i>pH 4.0</i>										
SP1	CS4	7.44 ± 0.01	0.0034 ± 0.0001	0.0080 ± 0.0007	0.0040 ± 0.0015	0.0962 ± 0.0678	0.0004 ± 0.0005	0.0174 ± 0.0042	0.0014 ± 0.0006	0.1669 ± 0.1050
SP2	CS4	7.78 ± 0.04	0.0060 ± 0.0006	0.0092 ± 0.0018	0.0087 ± 0.0073	0.3894 ± 0.6180	0.0006 ± 0.0003	0.0332 ± 0.0569	0.0011 ± 0.0005	0.1217 ± 0.0124
SP3	CS4	7.72 ± 0.02	0.0097 ± 0.0012	0.0050 ± 0.0012	0.0196 ± 0.0257	0.0728 ± 0.0477	0.0009 ± 0.0015	0.0307 ± 0.0034	0.0005 ± 0.0000	0.1198 ± 0.0466
SP4	CS3	7.83 ± 0.03	0.0070 ± 0.0003	0.0090 ± 0.0007	0.0054 ± 0.0004	0.0410 ± 0.0139	0.0007 ± 0.0002	0.0389 ± 0.0021	0.0011 ± 0.0006	0.1061 ± 0.0311
<i>pH 6.5</i>										
SP1	CS4	7.53 ± 0.12	0.0028 ± 0.0004	0.0121 ± 0.0008	0.0043 ± 0.0005	0.0820 ± 0.0355	0.0000 ± 0.0000	0.0222 ± 0.0040	0.0010 ± 0.0003	0.0844 ± 0.0203
SP2	CS4	7.39 ± 0.24	0.0039 ± 0.0002	0.0096 ± 0.0003	0.0051 ± 0.0008	0.1687 ± 0.0894	0.0002 ± 0.0001	0.0744 ± 0.0014	0.0005 ± 0.0000	0.0816 ± 0.0076
SP3	CS4	7.52 ± 0.31	0.0125 ± 0.0015	0.0046 ± 0.0004	0.0067 ± 0.0003	0.1354 ± 0.0248	0.0001 ± 0.0001	0.0240 ± 0.0029	0.0005 ± 0.0000	0.0604 ± 0.0069
SP4	CS3	8.05 ± 0.30	0.0086 ± 0.0010	0.0079 ± 0.0005	0.0104 ± 0.0037	0.1247 ± 0.0888	0.0016 ± 0.0015	0.0277 ± 0.0024	0.0003 ± 0.0004	0.0660 ± 0.0259

Data are shown as the mean ± 1SD, derived from 3 repeats.

Table SI 5 - Concentration of metals and As leached from the oxide zone at pH 2

Pit	No.	Final pH s	Metal and As concentration (mg.L ⁻¹)							
			As	Co	Cu	Fe	Pb	Mn	Ni	Zn
SP1	CS5	3.28 ± 0.24	0.0621 ± 0.0260	0.1868 ± 0.0090	3.3983 ± 1.0578	5.0093 ± 0.7144	0.0022 ± 0.0007	2.3200 ± 0.7865	0.0382 ± 0.0131	0.3560 ± 0.1353
	CS7	2.91 ± 0.10	0.0241 ± 0.0076	0.1725 ± 0.0183	0.7352 ± 0.1968	1.5425 ± 0.5914	0.0029 ± 0.0012	3.2930 ± 0.9408	0.0201 ± 0.0058	0.5544 ± 0.1326
	CS8	5.59 ± 2.06	0.0150 ± 0.0052	0.0264 ± 0.0046	0.0217 ± 0.0175	0.1834 ± 0.0563	0.0001 ± 0.0002	1.2819 ± 0.3291	0.0060 ± 0.0018	0.4033 ± 0.2971
	CS6	6.68 ± 0.35	0.0643 ± 0.0253	0.0282 ± 0.0029	0.0209 ± 0.0092	0.3102 ± 0.1028	0.0004 ± 0.0004	1.2952 ± 0.5158	0.0070 ± 0.0032	0.2987 ± 0.1153
SP2	CS7	5.77 ± 0.20	0.0143 ± 0.0046	0.0518 ± 0.0065	0.3864 ± 0.1246	3.4457 ± 0.3549	0.0085 ± 0.0115	2.5373 ± 0.6623	0.0140 ± 0.0040	0.2393 ± 0.2395
	CS5	6.44 ± 0.06	0.1133 ± 0.1029	0.1406 ± 0.0337	0.0296 ± 0.0265	0.2070 ± 0.0767	0.0005 ± 0.0003	1.1519 ± 0.3652	0.0063 ± 0.0019	0.6715 ± 0.1245
	CS6	6.46 ± 0.02	0.0179 ± 0.0039	0.0380 ± 0.0087	0.0208 ± 0.0102	0.1218 ± 0.0825	0.0046 ± 0.0071	0.9980 ± 0.2160	0.0090 ± 0.0018	0.2749 ± 0.1102
SP3	CS6	6.51 ± 0.69	0.0074 ± 0.0006	0.0863 ± 0.0259	0.0889 ± 0.0388	0.3365 ± 0.0305	0.0007 ± 0.0008	1.6953 ± 0.1967	0.0103 ± 0.0017	0.4593 ± 0.0806
	CS7	3.05 ± 0.08	0.0981 ± 0.0130	0.1376 ± 0.0243	2.1283 ± 0.1619	1.6477 ± 0.2204	0.0025 ± 0.0003	3.7913 ± 0.3565	0.0224 ± 0.0029	1.0658 ± 0.6746
	CS5	6.63 ± 0.14	0.1650 ± 0.0539	0.0204 ± 0.0056	0.0164 ± 0.0046	0.1772 ± 0.1290	0.0001 ± 0.0002	0.5941 ± 0.2173	0.0054 ± 0.0014	0.3837 ± 0.1992
SP4	CS4	2.72 ± 0.04	0.5696 ± 0.1303	0.0536 ± 0.0048	2.1417 ± 0.3867	12.3800 ± 0.3503	0.0089 ± 0.0005	1.4117 ± 0.2425	0.0384 ± 0.0090	0.9718 ± 0.2177
	CS7	5.73 ± 0.13	0.0451 ± 0.0120	0.0617 ± 0.0097	0.3200 ± 0.1336	0.3593 ± 0.2099	0.0086 ± 0.0139	3.9333 ± 0.8022	0.0148 ± 0.0035	0.4784 ± 0.0991
	CS8	3.09 ± 0.11	0.1664 ± 0.0328	0.1287 ± 0.0300	1.3037 ± 0.1634	1.8937 ± 0.1920	0.0066 ± 0.0014	3.7687 ± 0.7764	0.0214 ± 0.0047	0.5348 ± 0.1100
	CS5	6.75 ± 0.16	0.2871 ± 0.0848	0.0515 ± 0.0133	0.0284 ± 0.0067	0.5508 ± 0.1713	0.0043 ± 0.0039	1.5943 ± 0.4582	0.0063 ± 0.0015	0.5080 ± 0.0921

Data are shown as the mean ± 1SD, derived from 3 repeats.

Table SI 6 - Concentration of metals and As leached from the oxide zone at pH 4

Pit	No.	Final pH	Metal and As concentration (mg.L ⁻¹)							
			As	Co	Cu	Fe	Pb	Mn	Ni	Zn
SP1	CS5	7.36 ± 0.01	0.0127 ± 0.0019	0.0041 ± 0.0011	0.0068 ± 0.0016	0.0333 ± 0.0045	0.0004 ± 0.0002	0.0047 ± 0.0035	0.0017 ± 0.0001	0.1109 ± 0.0031
	CS7	7.63 ± 0.09	0.0253 ± 0.0324	0.0119 ± 0.0097	0.0060 ± 0.0017	0.3820 ± 0.3633	0.0005 ± 0.0002	0.0059 ± 0.0057	0.0005 ± 0.0005	0.1259 ± 0.0160
	CS8	7.53 ± 0.06	0.0179 ± 0.0020	0.0057 ± 0.0016	0.0064 ± 0.0004	0.0577 ± 0.0210	0.0003 ± 0.0003	0.0065 ± 0.0060	0.0005 ± 0.0000	0.1139 ± 0.0373
	CS6	7.49 ± 0.01	0.0421 ± 0.0318	0.0095 ± 0.0114	0.0074 ± 0.0017	0.0412 ± 0.0092	0.0003 ± 0.0003	0.0057 ± 0.0079	0.0005 ± 0.0005	0.1057 ± 0.0230
SP2	CS7	7.57 ± 0.05	0.0041 ± 0.0008	0.0063 ± 0.0005	0.0033 ± 0.0009	0.0192 ± 0.0115	0.0000 ± 0.0000	0.0822 ± 0.1423	0.0028 ± 0.0008	0.1492 ± 0.0057
	CS5	7.78 ± 0.03	0.0570 ± 0.0015	0.0938 ± 0.0102	0.0063 ± 0.0004	0.0671 ± 0.0742	0.0003 ± 0.0004	0.0019 ± 0.0027	0.0005 ± 0.0000	0.1125 ± 0.0279
	CS6	7.55 ± 0.06	0.0338 ± 0.0011	0.0130 ± 0.0006	0.0058 ± 0.0014	0.0230 ± 0.0085	0.0001 ± 0.0002	0.0068 ± 0.0118	0.0015 ± 0.0006	0.1545 ± 0.0447
SP3	CS6	7.54 ± 0.02	0.0034 ± 0.0005	0.0187 ± 0.0046	0.0055 ± 0.0012	0.0294 ± 0.0122	0.0000 ± 0.0000	0.0085 ± 0.0020	0.0005 ± 0.0000	0.1134 ± 0.0098
	CS7	7.72 ± 0.07	0.0207 ± 0.0018	0.0070 ± 0.0005	0.0111 ± 0.0015	0.3466 ± 0.2705	0.0005 ± 0.0003	0.0030 ± 0.0006	0.0000 ± 0.0000	0.1136 ± 0.0097
	CS5	7.61 ± 0.07	0.0832 ± 0.0093	0.0093 ± 0.0019	0.0052 ± 0.0009	0.0329 ± 0.0096	0.0001 ± 0.0002	0.0138 ± 0.0152	0.0005 ± 0.0000	0.1172 ± 0.0208
SP4	CS4	7.84 ± 0.04	0.0858 ± 0.0022	0.0067 ± 0.0000	0.0038 ± 0.0013	0.0582 ± 0.0535	0.0004 ± 0.0002	0.0005 ± 0.0005	0.0003 ± 0.0005	0.0851 ± 0.0158
	CS7	7.53 ± 0.02	0.0543 ± 0.0027	0.0033 ± 0.0002	0.0069 ± 0.0029	0.0408 ± 0.0253	0.0047 ± 0.0073	0.0104 ± 0.0012	0.0011 ± 0.0006	0.0871 ± 0.0153
	CS8	7.59 ± 0.05	0.0175 ± 0.0015	0.0042 ± 0.0005	0.0043 ± 0.0004	0.0434 ± 0.0063	0.0005 ± 0.0002	0.0028 ± 0.0002	0.0009 ± 0.0016	0.0806 ± 0.0081
	CS5	7.16 ± 0.23	0.1345 ± 0.0079	0.0267 ± 0.0004	0.0066 ± 0.0004	0.0638 ± 0.0453	0.0001 ± 0.0000	0.0119 ± 0.0009	0.0005 ± 0.0000	0.1256 ± 0.0443

Data are shown as the mean ± 1SD, derived from 3 repeats.

Table SI 7 - Concentration of metals and As leached from the oxide zone at pH 6.5

Pit	No.	Final pH	Metal and As concentration (mg.L ⁻¹)							
			As	Co	Cu	Fe	Pb	Mn	Ni	Zn
SP1	CS5	7.80 ± 0.27	0.0062 ± 0.0012	0.0063 ± 0.0003	0.0044 ± 0.0003	0.0324 ± 0.0168	0.0000 ± 0.0000	0.0063 ± 0.0013	0.0012 ± 0.0006	0.0618 ± 0.0026
	CS7	8.03 ± 0.11	0.0073 ± 0.0007	0.0171 ± 0.0010	0.0071 ± 0.0009	0.0827 ± 0.0577	0.0001 ± 0.0001	0.0025 ± 0.0003	0.0003 ± 0.0004	0.0403 ± 0.0121
	CS8	7.73 ± 0.13	0.0162 ± 0.0011	0.0067 ± 0.0008	0.0064 ± 0.0010	0.1372 ± 0.1028	0.0000 ± 0.0000	0.0084 ± 0.0015	0.0005 ± 0.0000	0.0640 ± 0.0056
	CS6	7.48 ± 0.31	0.0511 ± 0.0029	0.0043 ± 0.0004	0.0086 ± 0.0003	0.0612 ± 0.0260	0.0000 ± 0.0000	0.0145 ± 0.0013	0.0005 ± 0.0000	0.0701 ± 0.0019
SP2	CS7	7.49 ± 0.07	0.0047 ± 0.0009	0.0085 ± 0.0000	0.0030 ± 0.0003	0.0320 ± 0.0223	0.0001 ± 0.0001	0.3515 ± 0.0120	0.0028 ± 0.0003	0.1118 ± 0.0328
	CS5	8.25 ± 0.09	0.0647 ± 0.0023	0.0708 ± 0.0027	0.0058 ± 0.0003	0.0211 ± 0.0016	0.0000 ± 0.0000	0.0061 ± 0.0023	0.0005 ± 0.0000	0.0549 ± 0.0083
	CS6	7.61 ± 0.09	0.0388 ± 0.0034	0.0143 ± 0.0002	0.0045 ± 0.0004	0.0466 ± 0.0161	0.0001 ± 0.0001	0.0250 ± 0.0013	0.0015 ± 0.0005	0.0713 ± 0.0105
SP3	CS6	7.81 ± 0.14	0.0037 ± 0.0002	0.0177 ± 0.0008	0.0070 ± 0.0009	0.1209 ± 0.0950	0.0000 ± 0.0000	0.0114 ± 0.0012	0.0010 ± 0.0003	0.0655 ± 0.0231
	CS7	8.09 ± 0.29	0.0210 ± 0.0012	0.0055 ± 0.0004	0.0105 ± 0.0018	0.1095 ± 0.0680	0.0000 ± 0.0000	0.0022 ± 0.0004	0.0003 ± 0.0004	0.0515 ± 0.0167
	CS5	7.85 ± 0.14	0.0996 ± 0.0039	0.0091 ± 0.0005	0.0052 ± 0.0003	0.0602 ± 0.0218	0.0000 ± 0.0000	0.0053 ± 0.0010	0.0005 ± 0.0000	0.0551 ± 0.0154
SP4	CS4	8.47 ± 0.11	0.0624 ± 0.0100	0.0068 ± 0.0006	0.0024 ± 0.0005	0.0279 ± 0.0140	0.0000 ± 0.0000	0.0001 ± 0.0001	0.0003 ± 0.0004	0.0561 ± 0.0121
	CS7	7.95 ± 0.29	0.0578 ± 0.0023	0.0035 ± 0.0005	0.0064 ± 0.0001	0.0666 ± 0.0127	0.0000 ± 0.0000	0.0086 ± 0.0003	0.0005 ± 0.0000	0.0475 ± 0.0114
	CS8	8.30 ± 0.37	0.0161 ± 0.0042	0.0052 ± 0.0005	0.0042 ± 0.0004	0.0314 ± 0.0038	0.0000 ± 0.0000	0.0042 ± 0.0010	0.0000 ± 0.0000	0.0523 ± 0.0034
	CS5	7.65 ± 0.39	0.1320 ± 0.0067	0.0217 ± 0.0015	0.0075 ± 0.0006	0.0782 ± 0.0559	0.0000 ± 0.0000	0.0116 ± 0.0015	0.0000 ± 0.0000	0.0383 ± 0.0168

Data are shown as the mean ± 1SD, derived from 3 repeats.