Table 1. List of the lines used in the analysis

$\omega_{\rm lab}$ ($\rm cm^{-1}$)	$\log gf$	χ ($\rm cm^{-1}$)	Identification			$\log(W/\omega)_{\rm obs}$
^{12}CO			TX Psc			
5638.523	−5.907	15275.761	8 - 5	*P*	51	−4.808
5687.107	−5.481	18765.170	12 - 9	*R*	15	−5.036
5710.900	−4.731	24403.104	11 - 8	*R*	67	−5.075
5713.094	−4.700	26702.920	10 - 7	*R*	83	−5.384
5713.599	−5.963	13746.350	8 - 5	*P*	42	−4.766
5721.447	−5.970	13594.018	8 - 5	*P*	41	−4.788
5751.850	−6.000	13020.187	8 - 5	*P*	37	−4.879
5752.324	−5.851	16568.918	11 - 8	*R*	9	−4.966
5756.158	−5.929	13642.582	9 - 6	*P*	25	−4.830
5766.906	−5.588	16892.938	11 - 8	*R*	16	−4.985
5767.474	−4.986	20398.848	11 - 8	*R*	47	−4.807
5770.641	−5.014	20072.211	11 - 8	*R*	45	−4.907
5785.691	−6.006	13226.055	9 - 6	*P*	20	−4.861
5794.457	−6.055	12266.553	8 - 5	*P*	31	−4.827
5806.188	−6.204	11436.174	7 - 4	*P*	40	−4.760
5807.482	−6.086	12957.687	9 - 6	*P*	16	−4.880
5807.863	−6.076	12044.069	8 - 5	*P*	29	−4.763
5829.963	−5.026	19935.352	10 - 7	*R*	55	−5.004
5838.585	−4.984	24760.523	8 - 5	*R*	89	−5.459
5846.130	−6.353	12594.601	9 - 6	*P*	8	−4.819
5881.386	−7.123	8590.822	4 - 1	*P*	58	−4.917
5903.762	−6.752	8487.232	5 - 2	*P*	47	−4.843
5908.691	−6.174	12627.299	9 - 6	*R*	9	−4.918
5910.203	−6.422	10694.341	8 - 5	*P*	11	−4.810
5919.522	−6.501	10617.327	8 - 5	*P*	9	−4.832
5923.756	−5.910	12957.687	9 - 6	*R*	16	−4.746
5930.003	−5.798	13226.055	9 - 6	*R*	20	−4.837
5972.568	−7.171	6590.108	4 - 1	*P*	48	−4.720
5994.419	−6.238	10738.339	8 - 5	*R*	12	−4.736
6008.272	−5.459	20623.514	6 - 3	*R*	88	−5.209
6030.567	−7.213	5405.607	4 - 1	*P*	41	−4.723
6041.411	−7.796	4673.539	3 - 0	*P*	49	−4.854
6062.447	−5.556	14682.344	7 - 4	*R*	58	−4.792
6069.885	−5.581	17362.152	6 - 3	*R*	77	−4.990
6296.521	−6.497	9260.835	4 - 1	*R*	61	−4.740
6312.072	−8.353	172.978	3 - 0	*P*	9	−4.668
6319.232	−6.618	7347.152	4 - 1	*R*	52	−4.657

Table 1. – Continued

$\omega_{\rm lab}$ (cm^{-1})	$\log gf$	χ (cm^{-1})	Identification			$\log(W/\omega)_{\rm obs}$
^{12}CO			V Aql			
5687.107	−5.481	18765.170	12 - 9	R	15	−5.065
5749.619	−6.158	12562.677	7 - 4	P	47	−4.879
5751.850	−6.000	13020.187	8 - 5	P	37	−5.005
5752.328	−5.851	16568.918	11 - 8	R	9	−5.114
5766.906	−5.588	16892.938	11 - 8	R	16	−5.140
5770.641	−5.014	20072.211	11 - 8	R	45	−4.916
5778.848	−5.137	18902.707	11 - 8	R	37	−4.928
5794.461	−6.055	12266.553	8 - 5	P	31	−4.892
5806.188	−6.204	11436.174	7 - 4	P	40	−4.808
5807.482	−6.086	12957.687	9 - 6	P	16	−4.939
5807.863	−6.076	12044.069	8 - 5	P	29	−4.850
5881.386	−7.123	8590.822	4 - 1	P	58	−4.959
5934.522	−5.703	13552.088	9 - 6	R	24	−4.755
5983.794	−6.818	6901.839	5 - 2	P	37	−4.777
5989.984	−5.379	16046.187	8 - 5	R	55	−4.887
5994.419	−6.238	10738.339	8 - 5	R	12	−4.774
6041.411	−7.796	4673.539	3 - 0	P	49	−4.945

Table 1. – Continued

$\omega_{\rm lab}$ (cm^{-1})	$\log gf$	χ (cm^{-1})	Identification			$\log(W/\omega)_{\rm obs}$
^{12}CO			BL Ori			
5557.147	−5.516	18284.086	11 - 8	P	32	−5.095
5638.523	−5.907	15275.761	8 - 5	P	51	−5.079
5687.107	−5.481	18765.170	12 - 9	R	15	−5.108
5718.006	−6.364	12893.862	6 - 3	P	59	−5.044
5721.447	−5.970	13594.018	8 - 5	P	41	−4.913
5747.203	−5.957	16508.342	11 - 8	R	7	−5.103
5749.619	−6.158	12562.677	7 - 4	P	47	−4.911
5751.850	−6.000	13020.187	8 - 5	P	37	−4.968
5752.328	−5.851	16568.918	11 - 8	R	9	−5.169
5752.845	−4.891	21648.797	11 - 8	R	54	−4.981
5756.158	−5.929	13642.582	9 - 6	P	25	−4.942
5757.027	−5.762	16643.727	11 - 8	R	11	−5.074
5770.641	−5.014	20072.211	11 - 8	R	45	−5.065
5785.691	−6.006	13226.055	9 - 6	P	20	−4.871
5794.461	−6.055	12266.553	8 - 5	P	31	−4.875
5798.404	−6.196	11586.397	7 - 4	P	41	−4.798
5806.188	−6.204	11436.174	7 - 4	P	40	−4.772
5807.482	−6.086	12957.687	9 - 6	P	16	−4.922
5829.963	−5.026	19935.352	10 - 7	R	55	−5.010
5850.809	−6.252	10610.318	7 - 4	P	34	−4.749
5864.884	−6.270	10363.919	7 - 4	P	32	−4.762
5881.386	−7.123	8590.822	4 - 1	P	58	−5.004
5902.309	−5.102	21528.371	8 - 5	R	78	−5.152
5908.691	−6.174	12627.299	9 - 6	R	9	−4.997
5910.203	−6.422	10694.341	8 - 5	P	11	−4.752
5923.756	−5.910	12957.687	9 - 6	R	16	−4.826
5924.026	−6.547	10584.314	8 - 5	P	8	−4.834
5925.479	−5.880	13019.363	9 - 6	R	17	−4.814
5930.003	−5.798	13226.055	9 - 6	R	20	−4.848
5934.523	−5.703	13552.088	9 - 6	R	24	−4.784
5958.594	−7.755	6507.444	3 - 0	P	58	−4.981
5992.125	−6.277	10694.341	8 - 5	R	11	−4.750
5994.419	−6.238	10738.339	8 - 5	R	12	−4.753
6013.570	−5.893	11551.038	8 - 5	R	24	−4.727
6058.741	−7.807	4306.139	3 - 0	P	47	−4.794
6062.447	−5.556	14682.344	7 - 4	R	58	−4.825
6134.318	−5.772	13335.614	6 - 3	R	61	−4.850
6212.187	−6.073	11539.679	5 - 2	R	62	−4.707
6312.072	−8.353	172.978	3 - 0	P	9	−4.822
6319.232	−6.618	7347.152	4 - 1	R	52	−4.784

Table 1. – Continued

$\omega_{\rm lab}$ ($\rm cm^{-1}$)	$\log gf$	χ ($\rm cm^{-1}$)	Identification			$\log(W/\omega)_{\rm obs}$
$^{12}C^{12}C$			TX Psc			
4591.285	−2.954	3821.775	0 - 2	P	10	−5.255
4615.807	−2.508	3903.308	0 - 2	Q	12	−4.940
4623.441	−2.583	3821.775	0 - 2	Q	10	−5.018
4639.257	−2.561	4370.653	0 - 2	R	20	−5.000
4645.824	−2.602	4232.677	0 - 2	R	18	−5.080
$^{12}C^{12}C$			V Aql			
4376.775	−2.615	5765.005	1 - 3	P	14	−4.634
4399.665	−2.159	5996.193	1 - 3	Q	18	−4.588
4437.691	−2.401	5589.696	1 - 3	Q	10	−4.603
4453.395	−2.379	6132.686	1 - 3	R	20	−4.656
4507.848	−2.637	4370.653	0 - 2	P	20	−4.605
4561.854	−2.797	3998.982	0 - 2	P	14	−4.588
4634.276	−3.904	3637.329	0 - 2	P	2	−5.007
4639.257	−2.561	4370.653	0 - 2	R	20	−4.609
$^{12}C^{12}C$			BL Ori			
4399.665	−2.159	5996.193	1 - 3	Q	18	−5.291
4437.691	−2.401	5589.696	1 - 3	Q	10	−5.167
4453.395	−2.379	6132.686	1 - 3	R	20	−5.338
4615.807	−2.508	3903.308	0 - 2	Q	12	−5.111
4623.441	−2.583	3821.775	0 - 2	Q	10	−5.077
4639.257	−2.561	4370.653	0 - 2	R	20	−5.243
4645.824	−2.602	4232.677	0 - 2	R	18	−5.245

Table 1. – Continued

$\omega_{\rm lab}$ ($\rm cm^{-1}$)	$\log gf$	χ ($\rm cm^{-1}$)	Identification			$\log(W/\omega)_{\rm obs}$
^{12}CN			TX Psc			
4162.184	−1.337	13962.059	2 - 4	Q_1	57	−4.837
4325.213	−3.236	12087.464	2 - 4	P_{21}	47	−5.374
4327.453	−1.672	13125.513	0 - 2	Q_2	70	−4.855
4327.795	−3.186	9591.107	2 - 4	P_{12}	29	−5.331
4377.012	−1.659	13559.769	2 - 4	R_1	55	−4.798
4385.982	−1.668	13559.384	2 - 4	R_2	55	−4.801
4386.621	−1.876	9993.309	1 - 3	P_2	46	−4.704
4390.005	−1.666	13363.727	2 - 4	R_1	54	−4.876
4393.067	−3.071	9826.656	1 - 3	Q_{12}	45	−5.041
4431.321	−2.085	9515.067	0 - 2	P_1	54	−4.712
4457.466	−1.699	11438.805	0 - 2	Q_1	63	−4.717
4461.697	−1.709	12259.443	2 - 4	R_1	48	−4.733
4464.777	−1.695	13357.692	1 - 3	R_1	63	−4.834
4467.505	−1.507	10879.092	1 - 3	Q_2	51	−4.646
4472.857	−1.703	13357.270	1 - 3	R_2	63	−4.894
4479.562	−1.918	14163.666	0 - 2	R_1	74	−4.869
4497.067	−3.334	10514.643	1 - 3	P_{21}	49	−5.498
4498.169	−1.922	13899.287	0 - 2	R_1	73	−4.843
4499.937	−1.618	9812.023	2 - 4	Q_1	31	−4.605
4504.397	−1.618	9927.506	2 - 4	Q_2	32	−4.620
4508.390	−3.084	8448.398	2 - 4	P_{12}	15	−4.996
4508.911	−1.633	9699.882	2 - 4	Q_1	30	−4.596
4509.991	−1.711	12692.036	1 - 3	R_1	60	−4.763
4515.796	−2.118	8749.948	0 - 2	P_2	50	−4.681
4522.595	−1.761	11279.733	2 - 4	R_1	42	−4.741
4522.847	−3.680	7235.725	0 - 2	P_{12}	41	−5.167
4537.617	−1.728	10548.955	0 - 2	Q_2	59	−4.631
4552.534	−1.729	12056.949	1 - 3	R_1	57	−4.772
4553.458	−3.308	9826.968	1 - 3	P_{21}	45	−5.421
4553.771	−1.556	9826.656	1 - 3	Q_2	45	−4.645
4554.473	−2.233	8633.753	2 - 4	P_2	18	−4.684
4555.021	−1.734	10335.184	0 - 2	Q_2	58	−4.676
4588.974	−1.747	9918.000	0 - 2	Q_2	56	−4.650
4595.493	−3.639	6655.523	0 - 2	P_{12}	37	−5.020
4598.017	−2.031	7982.673	1 - 3	P_2	32	−4.576
4601.078	−3.123	11452.675	1 - 3	Q_{21}	54	−5.365
4604.131	−3.569	8048.175	2 - 4	P_{12}	4	−4.905
4609.261	−2.162	7708.798	0 - 2	P_1	44	−4.587
4609.573	−3.342	7708.487	0 - 2	Q_{12}	44	−4.996
4612.298	−3.217	7061.238	1 - 3	P_{12}	23	−4.897
4623.736	−2.061	7752.620	1 - 3	P_2	30	−4.559

Table 1. – Continued

$\omega_{\rm lab}$ (cm^{-1})	$\log gf$	χ (cm^{-1})	Identification			$\log(W/\omega)_{\rm obs}$
^{12}CN			TX Psc			
4639.580	−1.993	9102.168	2 - 4	R_1	24	−4.671
4643.138	−2.012	9015.110	2 - 4	R_1	23	−4.504
4654.192	−2.095	8702.909	2 - 4	R_1	19	−4.654
4655.562	−2.511	8113.757	2 - 4	R_1	7	−4.763
4662.604	−1.795	10514.305	1 - 3	R_2	49	−4.641
4666.734	−3.279	8033.612	2 - 4	P_2	3	−5.057
4691.138	−3.468	11211.315	0 - 2	Q_{21}	62	−5.078
4694.248	−2.168	7149.134	1 - 3	P_2	24	−4.610
4697.732	−3.173	6547.925	1 - 3	P_{12}	16	−4.802
4703.712	−1.797	8388.986	0 - 2	Q_1	48	−4.597
4710.740	−3.224	10426.109	2 - 4	R_{21}	36	−5.174
4717.798	−1.805	8213.623	0 - 2	Q_1	47	−4.555
4718.129	−3.606	8213.291	0 - 2	R_{12}	47	−5.228
4721.603	−1.994	10766.169	0 - 2	R_2	60	−4.688
4722.365	−3.050	8142.885	2 - 4	R_{21}	8	−4.706
4728.567	−3.034	8212.047	2 - 4	R_{21}	10	−4.903
4754.163	−1.878	9046.299	1 - 3	R_2	40	−4.622
4755.792	−2.004	10125.261	0 - 2	R_1	57	−4.740
4832.792	−2.045	8936.236	0 - 2	R_1	51	−4.670
4852.350	−2.713	6103.521	1 - 3	R_1	5	−4.554
5074.261	−3.668	7708.798	0 - 2	R_{21}	44	−5.270

Table 1. – Continued

$\omega_{\rm lab}$ (cm^{-1})	$\log gf$	χ (cm^{-1})	Identification			$\log(W/\omega)_{\rm obs}$
^{12}CN			V Aql			
4327.453	−1.672	13125.513	0 - 2	Q_2	70	−4.758
4327.795	−3.186	9591.107	2 - 4	P_{12}	29	−5.071
4386.621	−1.876	9993.309	1 - 3	P_2	46	−4.571
4390.005	−1.666	13363.727	2 - 4	R_1	54	−4.677
4399.099	−1.675	13363.350	2 - 4	R_2	54	−4.747
4438.996	−1.694	12613.776	2 - 4	R_1	50	−4.706
4467.505	−1.507	10879.092	1 - 3	Q_2	51	−4.564
4499.189	−1.944	8900.855	1 - 3	P_2	39	−4.566
4504.397	−1.618	9927.506	2 - 4	Q_2	32	−4.523
4508.390	−3.084	8448.398	2 - 4	P_{12}	15	−4.815
4509.991	−1.711	12692.036	1 - 3	R_1	60	−4.674
4515.796	−2.118	8749.948	0 - 2	P_2	50	−4.599
4518.361	−1.720	12691.631	1 - 3	R_2	60	−4.683
4518.877	−3.085	8393.857	2 - 4	P_{12}	14	−4.779
4555.021	−1.734	10335.184	0 - 2	Q_2	58	−4.588
4609.261	−2.162	7708.798	0 - 2	P_1	44	−4.548
4612.298	−3.217	7061.238	1 - 3	P_{12}	23	−4.758
4636.885	−2.958	8015.420	2 - 4	R_1	1	−4.775
4655.562	−2.511	8113.757	2 - 4	R_1	7	−4.650
4662.604	−1.795	10514.305	1 - 3	R_2	49	−4.624
4697.732	−3.173	6547.925	1 - 3	P_{12}	16	−4.708
4721.603	−1.994	10766.169	0 - 2	R_2	60	−4.629
4754.163	−1.878	9046.299	1 - 3	R_2	40	−4.508
4817.087	−3.397	9318.628	0 - 2	Q_{21}	53	−5.027

Table 1. – Continued

$\omega_{\rm lab}$ (cm^{-1})	$\log gf$	χ (cm^{-1})	Identification			$\log(W/\omega)_{\rm obs}$
^{12}CN			BL Ori			
4327.453	−1.672	13125.513	0 - 2	Q_2	70	−4.805
4327.795	−3.186	9591.107	2 - 4	P_{12}	29	−5.205
4344.321	−1.901	10296.191	2 - 4	P_1	35	−4.678
4344.877	−1.649	14167.880	2 - 4	R_2	58	−4.901
4377.012	−1.659	13559.769	2 - 4	R_1	55	−4.815
4385.982	−1.668	13559.384	2 - 4	R_2	55	−4.827
4386.621	−1.876	9993.309	1 - 3	P_2	46	−4.712
4390.005	−1.666	13363.727	2 - 4	R_1	54	−4.792
4395.635	−1.472	11650.661	1 - 3	Q_1	55	−4.683
4402.211	−1.903	15253.969	0 - 2	R_1	78	−5.059
4457.466	−1.699	11438.805	0 - 2	Q_1	63	−4.674
4467.505	−1.507	10879.092	1 - 3	Q_2	51	−4.625
4490.659	−1.604	9927.729	2 - 4	Q_1	32	−4.605
4497.067	−3.344	10514.643	1 - 3	P_{21}	49	−5.420
4498.169	−1.922	13899.287	0 - 2	R_1	73	−4.920
4499.189	−1.944	8900.855	1 - 3	P_2	39	−4.636
4499.937	−1.618	9812.023	2 - 4	Q_1	31	−4.585
4504.397	−1.618	9927.506	2 - 4	Q_2	32	−4.624
4508.390	−3.084	8448.398	2 - 4	P_{12}	15	−4.989
4508.911	−1.633	9699.882	2 - 4	Q_1	30	−4.582
4509.991	−1.711	12692.036	1 - 3	R_1	60	−4.742
4515.796	−2.118	8749.948	0 - 2	P_2	50	−4.689
4517.581	−1.647	9591.312	2 - 4	Q_1	29	−4.587
4518.361	−1.720	12691.631	1 - 3	R_2	60	−4.762
4518.877	−3.085	8393.857	2 - 4	P_{12}	14	−4.940
4531.689	−1.770	11128.669	2 - 4	R_1	41	−4.593
4537.617	−1.728	10548.955	0 - 2	Q_2	59	−4.634
4552.229	−1.935	13125.997	0 - 2	R_1	70	−4.815
4553.458	−3.308	9826.968	1 - 3	P_{21}	45	−5.182
4555.021	−1.734	10335.184	0 - 2	Q_2	58	−4.658
4565.038	−1.812	10559.565	2 - 4	R_1	37	−4.640
4566.841	−3.298	9663.827	1 - 3	P_{21}	44	−5.210
4574.459	−3.189	8142.825	2 - 4	P_{12}	8	−4.835
4596.339	−2.038	7866.066	1 - 3	P_1	31	−4.561
4598.017	−2.031	7982.673	1 - 3	P_2	32	−4.600
4609.261	−2.162	7708.798	0 - 2	P_1	44	−4.646
4609.573	−3.342	7708.487	0 - 2	Q_{12}	44	−4.898
4611.016	−2.045	7865.846	1 - 3	P_2	31	−4.534
4612.298	−3.217	7061.238	1 - 3	P_{12}	23	−4.903
4621.785	−1.760	9514.688	0 - 2	Q_2	54	−4.612
4623.736	−2.061	7752.620	1 - 3	P_2	30	−4.590

Table 1. – Continued

$\omega_{\rm lab}$ ($\rm cm^{-1}$)	$\log gf$	χ ($\rm cm^{-1}$)	Identification			$\log(W/\omega)_{\rm obs}$
^{12}CN			BL Ori			
4636.885	−2.958	8015.420	2 - 4	R_1	1	−4.842
4639.580	−1.993	9102.168	2 - 4	R_1	24	−4.658
4643.138	−2.012	9015.110	2 - 4	R_1	23	−4.624
4647.941	−2.698	8048.207	2 - 4	R_1	4	−4.770
4655.562	−2.511	8113.757	2 - 4	R_1	7	−4.712
4662.604	−1.795	10514.305	1 - 3	R_2	49	−4.643
4666.734	−3.279	8033.612	2 - 4	P_2	3	−4.974
4697.732	−3.173	6547.925	1 - 3	P_{12}	16	−4.771
4703.712	−1.797	8388.986	0 - 2	Q_1	48	−4.550
4706.235	−1.829	9826.656	1 - 3	R_2	45	−4.599
4721.603	−1.994	10766.169	0 - 2	R_2	60	−4.699
4724.898	−1.844	9348.126	1 - 3	R_1	42	−4.629
4730.771	−2.246	6519.726	0 - 2	P_1	36	−4.563
4736.763	−3.150	9486.315	2 - 4	R_{21}	28	−5.080
4754.163	−1.878	9046.299	1 - 3	R_2	40	−4.649
4755.792	−2.004	10125.261	0 - 2	R_1	57	−4.735
4759.410	−1.885	8759.235	1 - 3	R_1	38	−4.599
4787.227	−1.923	8485.891	1 - 3	R_2	36	−4.570
4817.087	−3.397	9318.628	0 - 2	Q_{21}	53	−5.258
4832.792	−2.045	8936.236	0 - 2	R_1	51	−4.594
4878.131	−2.076	8213.623	0 - 2	R_1	47	−4.561
4904.401	−3.296	6070.423	1 - 3	R_{21}	3	−4.791
4912.997	−3.201	6103.521	1 - 3	R_{21}	5	−4.757
5022.120	−2.272	5668.673	0 - 2	R_1	29	−4.522
5057.609	−3.329	4114.210	0 - 2	P_2	5	−4.706
5059.489	−2.870	4162.503	0 - 2	R_1	7	−4.575