



# **Jefferson Lab Alignment Group**

## **Data Transmittal**

**TO:** J. Segal

**DATE:** 08 Jul 2005

**FROM:** J. Dahlberg

**Checked:**

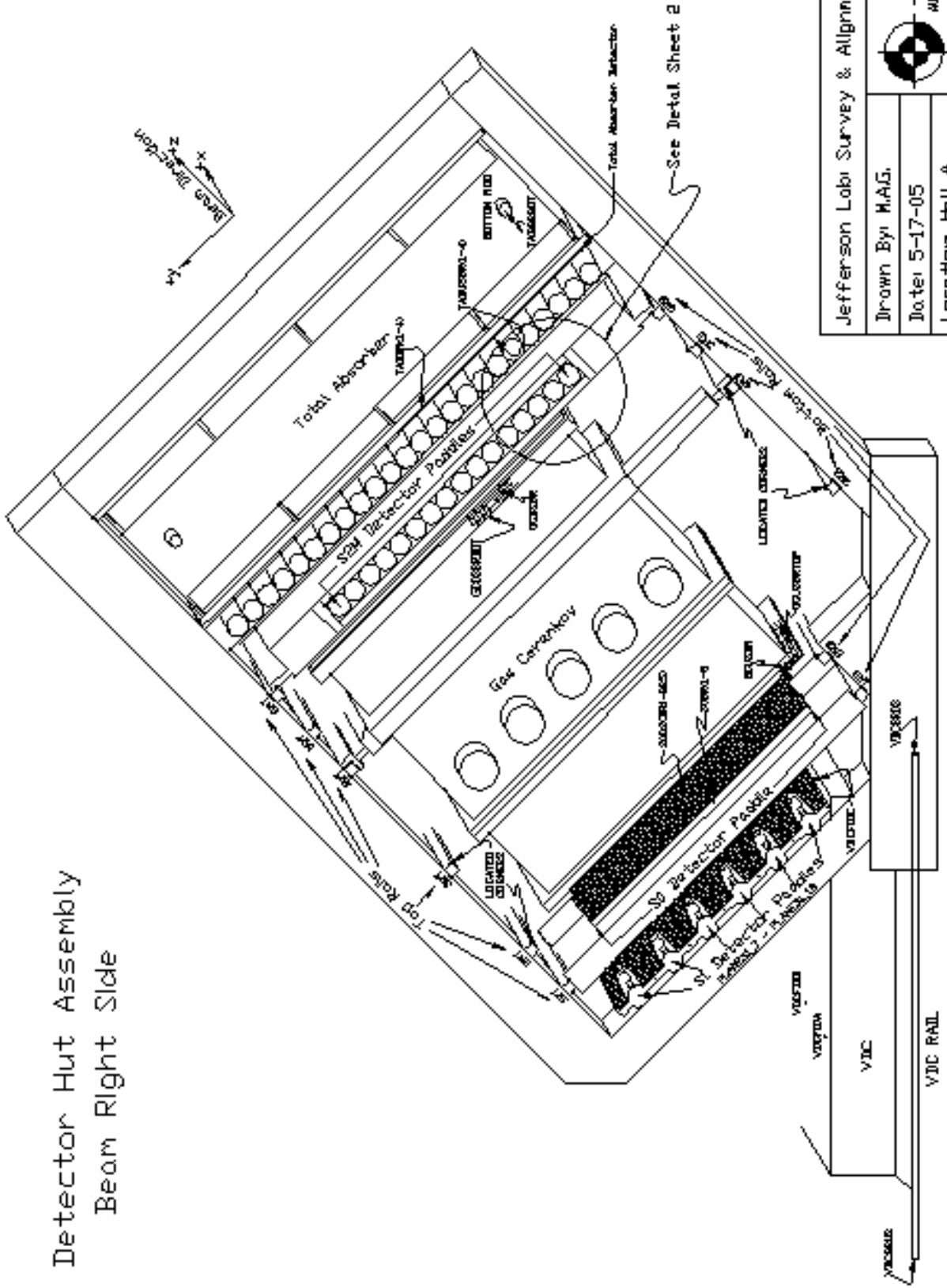
**# :** A1004


**DETAILS:**

Attached are the results of the survey performed on the Hadron spectrometer detectors inside the hut. A left handed coordinate system was centered on the top VDC chamber fiducial points and pitched 45 degrees to a beam following system. A +X is to the beam left, a +Z is downstream, and a +Y is up, (in millimeters).

# Hall A Right Arm Detector Assembly

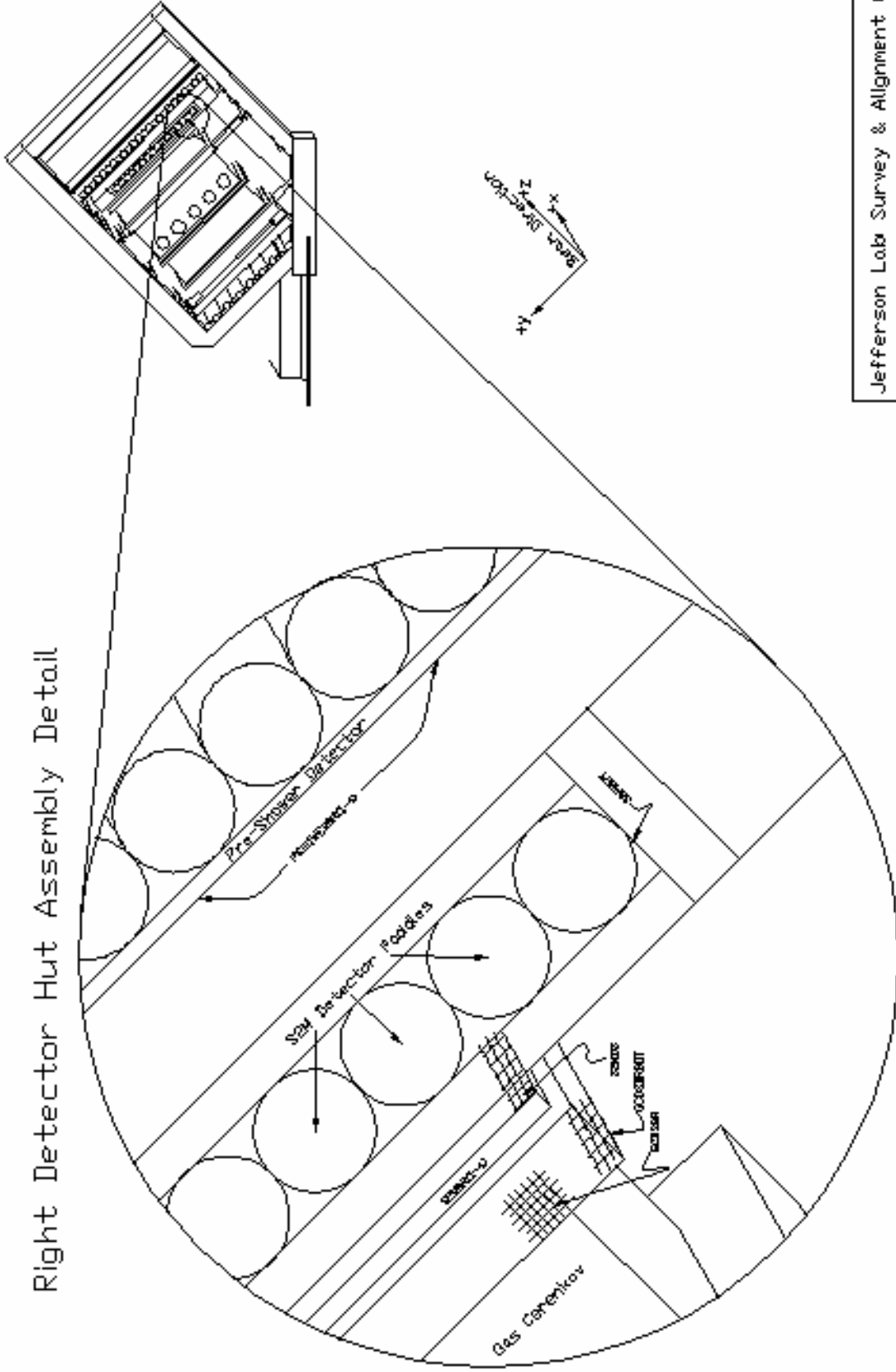
Detector Hut Assembly  
Beam Right Side



Jefferson Lab Survey & Alignment Grp.	
Drawn By: M.A.G.	 TJNAF Survey & Alignment Group
Date: 5-17-05	
Locations: Hall A	
Sheet 1 of 4	Scale: N/A

# Hall A Right Arm Detector Assembly

Right Detector Hut Assembly Detail



Jefferson Lab Survey & Alignment Grp.

Drawn By: M.A.G.

Date: 5-17-05

Location: Hall A

Sheet: 2 of 4



TJNAF  
Survey &  
Alignment Group

Scale: N/A



# Hall A Right Arm Detector Assembly

Jefferson Lab Survey & Alignment Grp.

Drawn By: M.A.G.

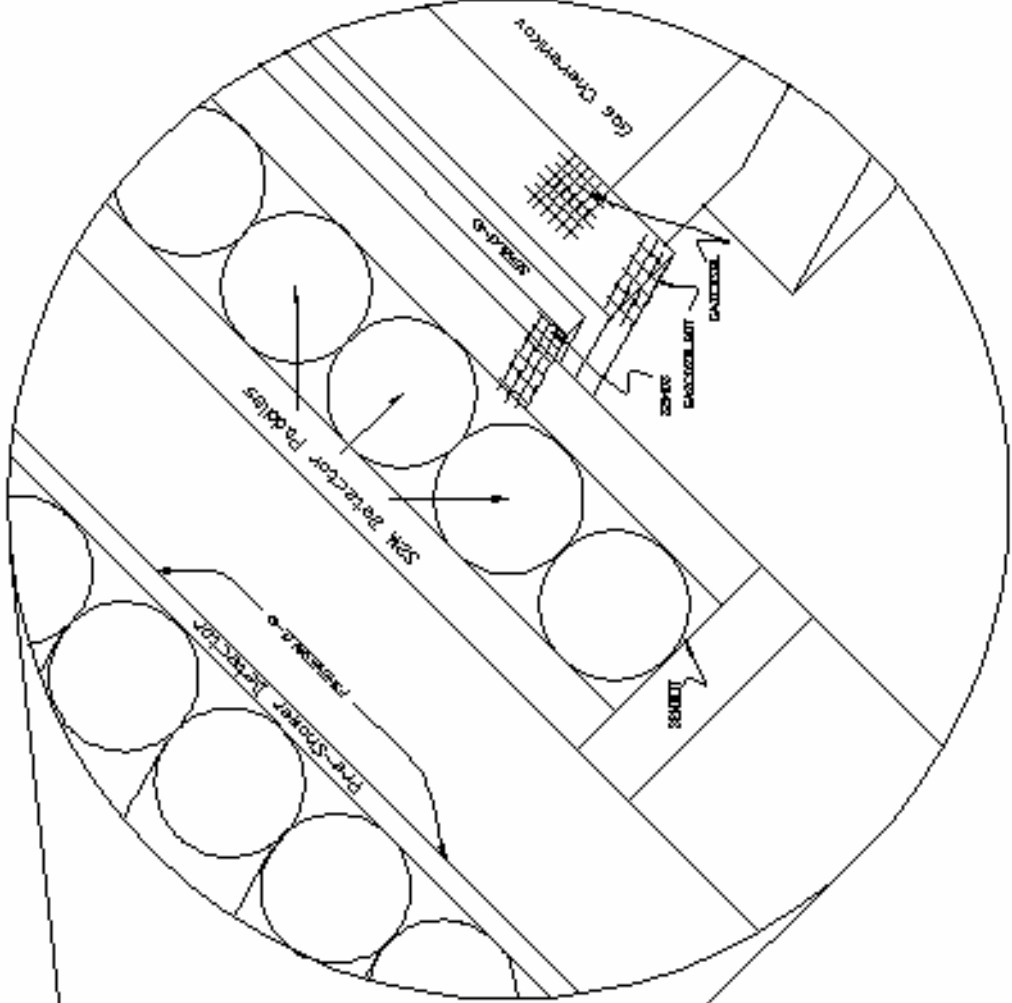
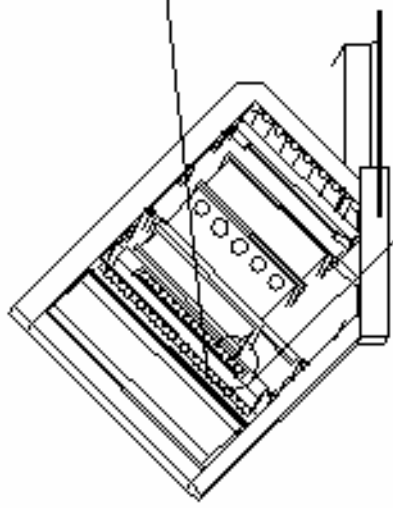
Date: 5-17-05

Location: Hall A

Sheet: 4 of 4

Scale: N/A

## Right Detector Hut Assembly Detail



<b>LOCATION</b>	<b>Z</b>	<b>X</b>	<b>Y</b>
POINT_VDCFIDA	0.00	-304.23	0.00
POINT_VDCFIDB	0.00	304.23	0.00
POINT_VDCFIDC	861.90	0.00	-861.90
	-		
CIRCLE_VDCBRUS	2003.48	-512.60	1293.49
CIRCLE_VDCBRDS	654.50	-512.73	-1366.02
CIRCLE_VDCBLDS	667.13	510.52	-1376.92
	-		
CIRCLE_VDCBLUS	2009.54	510.99	1299.19
PLANES1_7	778.43		
PLANES1_8	774.22		
PLANES1_9	777.18		
PLANES1_10	770.54		
PLANES1_11	772.08		
PLANES1_12	768.26		
POINT_S0BR1	1210.85	-127.67	-714.02
POINT_S0BR2	1208.73	-128.20	-433.21
POINT_S0BR3	1210.69	-129.46	-177.23
POINT_S0BR4	1209.56	-130.10	223.69
POINT_S0BR5	1210.62	-130.43	770.56
POINT_S0DSBR1	1215.24	-126.93	768.91
POINT_S0DSBR2	1212.55	-129.09	424.79
POINT_S0DSBR3	1214.69	-125.58	17.12
POINT_S0DSBR4	1214.75	-124.08	-375.58
POINT_S0DSBR5	1214.56	-123.76	-715.63
POINT_S0BL1	1209.18	118.52	760.67
POINT_S0BL2	1208.20	119.40	495.03
POINT_S0BL3	1210.32	120.41	166.73
POINT_S0BL4	1209.98	122.20	-217.52
POINT_S0BL5	1211.46	122.94	-659.64
POINT_S0DSBL1	1216.09	116.08	-645.02
POINT_S0DSBL2	1215.87	115.68	-273.32
POINT_S0DSBL3	1214.27	110.76	175.42
POINT_S0DSBL4	1212.98	115.60	471.01
POINT_S0DSBL5	1215.79	117.55	811.02

<b>LOCATION</b>	<b>Z</b>	<b>X</b>	<b>Y</b>
CORNER_1LB	1087.34	719.55	-1449.12
CORNER_2LB	1310.59	721.37	-1449.02
CORNER_3LB	1860.29	711.97	-1792.22
CORNER_4LB	2422.33	707.42	-1794.32
CORNER_5LB	2618.70	710.12	-1794.87
CORNER_6LB	2827.86	707.05	-1795.42
CORNER_1LT	1081.72	705.71	2011.06
CORNER_2LT	1305.05	708.64	2011.03
CORNER_3LT	1854.78	702.89	2011.30
CORNER_4LT	2416.66	701.97	2010.78

CORNER_5LT	2611.42	702.02	2010.86
CORNER_6LT	2816.71	719.19	2011.34
CORNER_1RB	1080.91	-718.20	-1453.69
CORNER_2RB	1303.31	-719.14	-1454.02
CORNER_3RB	1853.02	-724.51	-1796.66
CORNER_4RB	2416.57	-727.29	-1798.79
CORNER_5RB	2610.49	-727.69	-1798.90
CORNER_6RB	2817.95	-730.20	-1798.86
CORNER_1RT	1077.86	-730.64	2006.76
CORNER_2RT	1300.43	-731.26	2006.58
CORNER_3RT	1850.89	-733.92	2006.66
CORNER_4RT	2414.77	-735.38	2007.11
CORNER_5RT	2609.60	-735.49	2006.84
CORNER_6RT	2812.57	-717.49	2006.73

POINT_PSHOWERBR1	2919.36	-598.75	-1619.60
POINT_PSHOWERBR2	2915.58	-586.87	-1020.96
POINT_PSHOWERBR3	2912.37	-576.74	-424.39
POINT_PSHOWERBR4	2910.05	-579.83	281.61
POINT_PSHOWERBL1	2919.47	509.82	-872.68
POINT_PSHOWERBL2	2917.59	546.54	-433.25
POINT_PSHOWERBL3	2916.50	544.37	-8.04
POINT_PSHOWERBL4	2916.19	540.08	298.95

<b>LOCATION</b>	<b>Z</b>	<b>X</b>	<b>Y</b>
POINT_GASCBRDS1	2584.96	-500.91	-1067.70
POINT_GASCBRDS2	2584.74	-491.59	-614.69
POINT_GASCBRDS3	2585.04	-492.61	-262.83
POINT_GASCBRDS4	2585.64	-490.48	82.95
POINT_GASCBRDS5	2586.44	-497.54	416.85
POINT_GASCBRUS1	1844.59	-410.50	276.46
POINT_GASCBRUS2	1843.82	-415.50	-2.52
POINT_GASCBRUS3	1842.68	-417.38	-407.92
POINT_GASCBRUS4	1841.50	-414.17	-771.91
POINT_GASCBRUS5	1840.19	-415.29	-1118.76
POINT_GASCDSBL1	2588.55	455.93	-991.32
POINT_GASCDSBL2	2588.33	454.37	-599.42
POINT_GASCDSBL3	2588.23	451.49	-259.11
POINT_GASCDSBL4	2588.33	447.78	91.52
POINT_GASCDSBL5	2589.40	461.30	432.00
POINT_GASCUSBL1	1844.74	395.01	-923.16
POINT_GASCUSBL2	1846.43	394.56	-411.40
POINT_GASCUSBL3	1846.93	393.81	-57.46
POINT_GASCUSBL4	1848.08	393.88	272.30
POINT_GASCUSBL5	1848.78	400.70	558.14
PLANE_GASCDSBL		503.04	
PLANE_GASCDSBLBOTT	2595.19		
PLANE_GASCUSBL		369.69	
PLANE_GASCUSBLTOP	1853.12		
PLANE_GASCDSBR		-535.17	
PLANE_GASCDSBRBOT	2592.10		

PLANE_GASCUSBR		-394.45	
PLANE_GASCUSBRTOP	1849.02		
POINT_S2MBR1	2773.10	-322.56	-877.75
POINT_S2MBR2	2767.22	-323.41	-542.75
POINT_S2MBR3	2763.76	-324.74	-173.61
POINT_S2MBR4	2759.70	-326.48	298.82
PLANE_S2MDS	2756.83	-19.47	-384.96
POINT_S2MBRBOT1	2772.74	-377.03	-1019.87
POINT_S2MBRBOT2	2724.77	-414.87	-1021.11
POINT_S2MBLBOTT1	2833.93	296.06	-1004.34
POINT_S2MBLBOTT2	2791.87	293.92	-1005.38
POINT_S2MBL1	2776.54	287.40	-992.99
POINT_S2MBL2	2768.94	285.10	-579.68
POINT_S2MBL3	2757.02	283.60	-222.06
POINT_S2MBL4	2753.45	282.26	95.41

<b>LOCATION</b>	<b>Z</b>	<b>X</b>	<b>Y</b>
CIRCLE_TABBRBOTT	3298.61	-600.21	-1445.26
POINT_TABBR1	3069.55	-588.40	-1303.79
POINT_TABBR2	3070.13	-590.07	-801.32
POINT_TABBR3	3069.13	-591.09	-476.77
POINT_TABBR4	3067.38	-592.68	-18.55
POINT_TABUSBR1	3071.52	-626.38	-1309.77
POINT_TABUSBR2	3071.01	-617.24	-831.90
POINT_TABUSBR3	3070.81	-620.43	-424.25
POINT_TABUSBR4	3070.61	-640.63	-132.26
CIRCLE_TABBLBOTT	3304.59	585.23	-1440.52
POINT_TABBL1	3075.46	574.03	-1320.07
POINT_TABBL2	3076.38	572.97	-1014.00
POINT_TABBL3	3074.30	571.80	-644.42
POINT_TABBL4	3074.30	570.61	-267.04
POINT_TABBLUS1	3076.41	585.16	-211.42
POINT_TABBLUS2	3076.65	598.64	-655.11
POINT_TABBLUS3	3077.19	600.20	-1016.92
POINT_TABBLUS4	3077.07	594.07	-1319.75