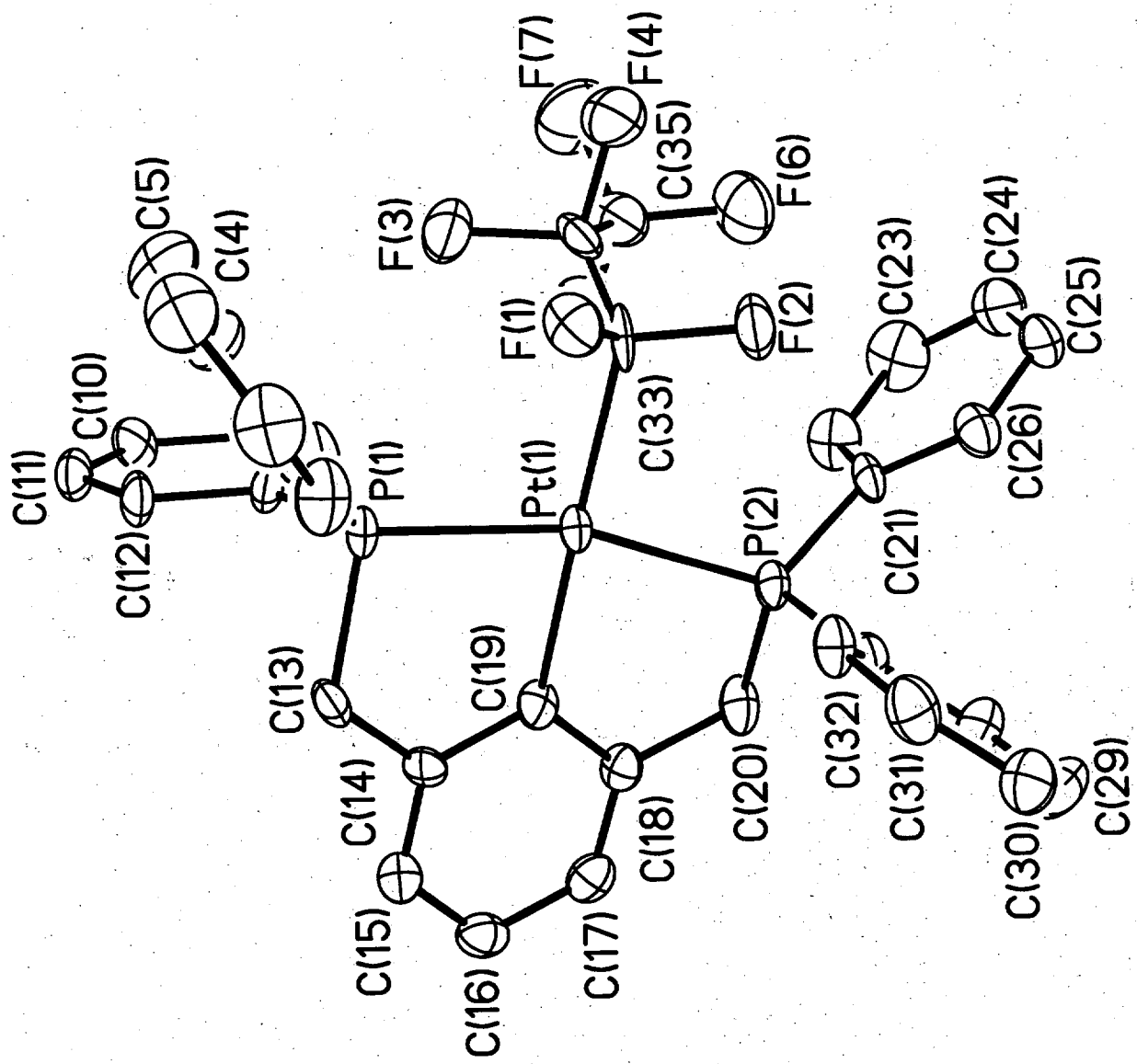

**Table 1. Crystal data and structure refinement for 6.**

| | |
|---|---|
| Identification code | rph146 |
| Empirical formula | $C_{35}H_{27}F_7P_2Pt$ |
| Formula weight | 837.60 |
| Temperature | 251(2) K |
| Wavelength | 0.71073 Å |
| Crystal system, space group | Monoclinic, P2(1)/c |
| Unit cell dimensions | a = 10.192(3) A alpha = 90 deg.<br>b = 18.106(8) A beta = 91.008(17) deg.<br>c = 17.018(3) A gamma = 90 deg. |
| Volume | 3140.0(17) $Å^3$ |
| Z, Calculated density | 4, 1.772 $Mg/m^3$ |
| Absorption coefficient | 4.637 $mm^{-1}$ |
| F(000) | 1632 |
| Crystal size | 0.50 x 0.40 x 0.30 mm |
| Theta range for data collection | 2.25 to 23.99 deg. |
| Limiting indices | $-11 \le h \le 11$, $0 \le k \le 20$, $0 \le l \le 19$ |
| Reflections collected / unique | 5671 / 4569 [R(int) = 0.0585] |
| Completeness to theta = 23.99 | 92.7 % |
| Absorption correction | DIFABS |
| Max. and min. transmission | 1.00 and 0.580 |
| Refinement method | Full-matrix least-squares on $F^2$ |
| Data / restraints / parameters | 4569 / 0 / 406 |
| Goodness-of-fit on $F^2$ | 1.036 |
| Final R indices [I>2sigma(I)] | R1 = 0.0395, wR2 = 0.1003 |
| R indices (all data) | R1 = 0.0517, wR2 = 0.1074 |
| Largest diff. peak and hole | 0.932 and -0.943 $e.Å^{-3}$ |

**Table 2. Atomic coordinates (x $10^4$) and equivalent isotropic displacement parameters ($Å^2$ x $10^3$) for 6.**
**U(eq) is defined as one third of the trace of the orthogonalized Uij tensor.**

| | x | y | z | U(eq) |
|---|---|---|---|---|
| Pt(1) | 2892(1) | 8291(1) | 7282(1) | 32(1) |
| P(1) | 4314(2) | 8327(1) | 8332(1) | 36(1) |
| P(2) | 1033(2) | 8321(1) | 6521(1) | 38(1) |
| F(1) | 4839(4) | 7264(3) | 6711(3) | 61(1) |
| F(2) | 3521(4) | 7605(3) | 5767(3) | 63(1) |
| F(3) | 6089(5) | 8572(4) | 6712(3) | 77(2) |
| F(4) | 6001(5) | 7956(4) | 5585(3) | 84(2) |
| F(5) | 4224(7) | 9479(4) | 6115(4) | 94(2) |
| F(6) | 4166(6) | 8883(4) | 5031(3) | 92(2) |
| F(7) | 5970(7) | 9387(5) | 5433(4) | 129(3) |
| C(1) | 5598(7) | 7638(4) | 8439(4) | 39(2) |
| C(2) | 5224(9) | 6915(5) | 8547(6) | 63(2) |
| C(3) | 6204(11) | 6374(5) | 8582(6) | 71(3) |
| C(4) | 7498(11) | 6546(6) | 8534(7) | 82(3) |
| C(5) | 7846(9) | 7252(6) | 8395(6) | 73(3) |
| C(6) | 6899(8) | 7798(5) | 8355(5) | 61(2) |
| C(7) | 5085(6) | 9209(4) | 8533(4) | 39(2) |
| C(8) | 4810(9) | 9811(5) | 8065(5) | 63(2) |
| C(9) | 5347(11) | 10493(5) | 8249(5) | 78(3) |
| C(10) | 6123(8) | 10575(5) | 8901(5) | 59(2) |
| C(11) | 6393(7) | 9993(5) | 9379(5) | 51(2) |
| C(12) | 5884(7) | 9307(5) | 9208(4) | 49(2) |
| C(13) | 3220(7) | 8213(4) | 9149(4) | 42(2) |
| C(14) | 1921(7) | 8579(4) | 8933(4) | 37(2) |
| C(15) | 1073(8) | 8827(5) | 9484(5) | 52(2) |
| C(16) | -137(8) | 9122(5) | 9282(5) | 51(2) |
| C(17) | -496(7) | 9167(4) | 8495(5) | 48(2) |
| C(18) | 342(7) | 8924(4) | 7919(4) | 40(2) |
| C(19) | 1593(6) | 8630(4) | 8133(4) | 38(2) |
| C(20) | -26(7) | 8964(5) | 7054(4) | 50(2) |
| C(21) | 1069(7) | 8652(4) | 5506(4) | 40(2) |
| C(22) | 1356(9) | 9378(5) | 5356(6) | 66(2) |
| C(23) | 1485(10) | 9626(6) | 4592(6) | 81(3) |
| C(24) | 1342(9) | 9150(7) | 3977(6) | 72(3) |
| C(25) | 1058(8) | 8432(6) | 4112(5) | 60(2) |
| C(26) | 901(8) | 8175(5) | 4876(5) | 52(2) |
| C(27) | 184(7) | 7446(4) | 6496(4) | 43(2) |
| C(28) | -1108(7) | 7383(5) | 6228(5) | 57(2) |
| C(29) | -1745(9) | 6710(5) | 6231(7) | 71(3) |
| C(30) | -1092(9) | 6083(6) | 6492(5) | 65(2) |
| C(31) | 180(9) | 6138(5) | 6756(5) | 62(2) |
| C(32) | 826(8) | 6816(4) | 6756(5) | 46(2) |
| C(33) | 4230(7) | 7875(4) | 6395(4) | 41(2) |
| C(34) | 5213(8) | 8320(5) | 6118(4) | 57(3) |
| C(35) | 4885(10) | 9048(6) | 5682(6) | 71(3) |

**Table 3. Bond lengths [Å] and angles [deg] for 6.**

| | |
|---|---|
| Pt(1)-C(19) | 2.072(7) |
| Pt(1)-C(33) | 2.186(8) |
| Pt(1)-P(2) | 2.2770(18) |
| Pt(1)-P(1) | 2.2818(18) |
| P(1)-C(13) | 1.810(8) |
| P(1)-C(7) | 1.811(7) |
| P(1)-C(1) | 1.814(7) |
| P(2)-C(27) | 1.805(8) |
| P(2)-C(21) | 1.829(7) |
| P(2)-C(20) | 1.839(8) |
| F(1)-C(33) | 1.374(8) |
| F(2)-C(33) | 1.370(7) |
| F(3)-C(34) | 1.412(9) |
| F(4)-C(34) | 1.388(9) |
| F(5)-C(35) | 1.274(11) |
| F(6)-C(35) | 1.351(11) |
| F(7)-C(35) | 1.340(11) |
| C(1)-C(6) | 1.367(10) |
| C(1)-C(2) | 1.377(12) |
| C(2)-C(3) | 1.399(13) |
| C(3)-C(4) | 1.359(14) |
| C(4)-C(5) | 1.348(15) |
| C(5)-C(6) | 1.381(12) |
| C(7)-C(8) | 1.377(11) |
| C(7)-C(12) | 1.406(9) |
| C(8)-C(9) | 1.384(12) |
| C(9)-C(10) | 1.361(12) |
| C(10)-C(11) | 1.356(12) |
| C(11)-C(12) | 1.375(11) |
| C(13)-C(14) | 1.520(10) |
| C(14)-C(15) | 1.363(10) |
| C(14)-C(19) | 1.399(9) |
| C(15)-C(16) | 1.382(11) |
| C(16)-C(17) | 1.386(11) |
| C(17)-C(18) | 1.383(10) |
| C(18)-C(19) | 1.423(9) |
| C(18)-C(20) | 1.515(10) |
| C(21)-C(22) | 1.372(11) |
| C(21)-C(26) | 1.385(10) |
| C(22)-C(23) | 1.385(13) |
| C(23)-C(24) | 1.362(14) |
| C(24)-C(25) | 1.351(14) |
| C(25)-C(26) | 1.393(12) |
| C(27)-C(32) | 1.383(10) |
| C(27)-C(28) | 1.391(10) |
| C(28)-C(29) | 1.381(12) |
| C(29)-C(30) | 1.386(13) |
| C(30)-C(31) | 1.369(11) |
| C(31)-C(32) | 1.394(11) |
| C(33)-C(34) | 1.376(12) |
| C(34)-C(35) | 1.547(13) |

| | |
|---|---|
| C(19)-Pt(1)-C(33) | 177.1(3) |
| C(19)-Pt(1)-P(2) | 81.67(19) |
| C(33)-Pt(1)-P(2) | 97.96(16) |
| C(19)-Pt(1)-P(1) | 81.35(19) |
| C(33)-Pt(1)-P(1) | 98.89(16) |
| P(2)-Pt(1)-P(1) | 162.89(8) |
| C(13)-P(1)-C(7) | 103.1(3) |
| C(13)-P(1)-C(1) | 107.3(3) |
| C(7)-P(1)-C(1) | 106.1(3) |
| C(13)-P(1)-Pt(1) | 101.9(2) |
| C(7)-P(1)-Pt(1) | 116.2(2) |
| C(1)-P(1)-Pt(1) | 120.5(2) |
| C(27)-P(2)-C(21) | 106.5(3) |
| C(27)-P(2)-C(20) | 106.4(4) |
| C(21)-P(2)-C(20) | 106.3(3) |
| C(27)-P(2)-Pt(1) | 112.7(2) |
| C(21)-P(2)-Pt(1) | 121.0(2) |
| C(20)-P(2)-Pt(1) | 102.9(2) |
| C(6)-C(1)-C(2) | 119.1(7) |
| C(6)-C(1)-P(1) | 122.9(6) |
| C(2)-C(1)-P(1) | 117.8(6) |
| C(1)-C(2)-C(3) | 118.2(9) |
| C(4)-C(3)-C(2) | 122.0(10) |
| C(5)-C(4)-C(3) | 119.1(9) |
| C(4)-C(5)-C(6) | 120.1(9) |
| C(1)-C(6)-C(5) | 121.4(9) |
| C(8)-C(7)-C(12) | 118.8(7) |
| C(8)-C(7)-P(1) | 120.4(5) |
| C(12)-C(7)-P(1) | 120.6(6) |
| C(7)-C(8)-C(9) | 119.9(7) |
| C(10)-C(9)-C(8) | 120.3(9) |
| C(11)-C(10)-C(9) | 120.9(8) |
| C(10)-C(11)-C(12) | 120.2(7) |
| C(11)-C(12)-C(7) | 119.8(7) |
| C(14)-C(13)-P(1) | 108.1(5) |
| C(15)-C(14)-C(19) | 120.3(7) |
| C(15)-C(14)-C(13) | 122.5(6) |
| C(19)-C(14)-C(13) | 117.2(6) |
| C(14)-C(15)-C(16) | 122.0(7) |
| C(15)-C(16)-C(17) | 118.9(7) |
| C(16)-C(17)-C(18) | 120.7(7) |
| C(17)-C(18)-C(19) | 120.0(7) |
| C(17)-C(18)-C(20) | 121.8(6) |
| C(19)-C(18)-C(20) | 118.2(6) |
| C(14)-C(19)-C(18) | 118.1(6) |
| C(14)-C(19)-Pt(1) | 121.0(5) |
| C(18)-C(19)-Pt(1) | 120.9(5) |
| C(18)-C(20)-P(2) | 108.2(5) |
| C(22)-C(21)-C(26) | 118.5(8) |
| C(22)-C(21)-P(2) | 119.8(6) |
| C(26)-C(21)-P(2) | 121.5(6) |
| C(21)-C(22)-C(23) | 120.6(9) |
| C(24)-C(23)-C(22) | 120.4(10) |
| C(25)-C(24)-C(23) | 119.9(9) |
| C(24)-C(25)-C(26) | 120.6(9) |
| C(21)-C(26)-C(25) | 119.9(8) |
| C(32)-C(27)-C(28) | 118.6(7) |

| | |
|---|---|
| C(32)-C(27)-P(2) | 119.5(5) |
| C(28)-C(27)-P(2) | 121.9(6) |
| C(29)-C(28)-C(27) | 120.8(8) |
| C(28)-C(29)-C(30) | 120.1(9) |
| C(31)-C(30)-C(29) | 119.5(9) |
| C(30)-C(31)-C(32) | 120.6(8) |
| C(27)-C(32)-C(31) | 120.4(7) |
| F(2)-C(33)-F(1) | 104.2(6) |
| F(2)-C(33)-C(34) | 108.6(7) |
| F(1)-C(33)-C(34) | 106.2(6) |
| F(2)-C(33)-Pt(1) | 109.6(5) |
| F(1)-C(33)-Pt(1) | 106.9(5) |
| C(34)-C(33)-Pt(1) | 120.2(5) |
| C(33)-C(34)-F(4) | 112.3(8) |
| C(33)-C(34)-F(3) | 113.5(6) |
| F(4)-C(34)-F(3) | 104.8(6) |
| C(33)-C(34)-C(35) | 120.7(7) |
| F(4)-C(34)-C(35) | 102.3(7) |
| F(3)-C(34)-C(35) | 101.3(8) |
| F(5)-C(35)-F(7) | 110.5(10) |
| F(5)-C(35)-F(6) | 108.9(9) |
| F(7)-C(35)-F(6) | 106.3(8) |
| F(5)-C(35)-C(34) | 110.9(8) |
| F(7)-C(35)-C(34) | 111.7(9) |
| F(6)-C(35)-C(34) | 108.4(8) |

Symmetry transformations used to generate equivalent atoms:

**Table 4. Anisotropic displacement parameters ($Å^2$ x $10^3$) for 6. The anisotropic displacement factor exponent takes the form: $-2\ pi^2\ [h^2\ a^{*2}\ U11 + ... + 2\ h\ k\ a^*\ b^*\ U12\ ]$**

| | U11 | U22 | U33 | U23 | U13 | U12 |
|---|---|---|---|---|---|---|
| Pt(1) | 35(1) | 35(1) | 26(1) | -2(1) | -11(1) | 1(1) |
| P(1) | 39(1) | 38(1) | 29(1) | -1(1) | -13(1) | -1(1) |
| P(2) | 39(1) | 40(1) | 35(1) | -2(1) | -15(1) | 5(1) |
| F(1) | 69(3) | 56(3) | 56(3) | 4(2) | -5(2) | 23(2) |
| F(2) | 65(3) | 77(4) | 47(3) | -21(3) | -18(2) | 2(3) |
| F(3) | 55(3) | 112(4) | 65(3) | 6(3) | -14(2) | -13(3) |
| F(4) | 59(3) | 127(5) | 66(4) | 8(4) | 5(3) | 30(3) |
| F(5) | 142(5) | 64(4) | 75(4) | 2(3) | 15(4) | -7(4) |
| F(6) | 100(4) | 110(5) | 66(4) | 16(3) | -14(3) | 11(4) |
| F(7) | 108(5) | 149(7) | 131(6) | 46(6) | 16(4) | -50(5) |
| C(1) | 50(4) | 38(4) | 29(4) | -6(3) | -17(3) | 5(3) |
| C(2) | 77(6) | 42(5) | 70(6) | 0(5) | -19(5) | -2(4) |
| C(3) | 99(8) | 41(5) | 74(7) | 5(5) | -14(6) | 14(5) |
| C(4) | 82(8) | 70(8) | 94(9) | 4(6) | -5(6) | 32(6) |
| C(5) | 57(5) | 61(7) | 102(8) | 19(6) | -3(5) | 17(5) |
| C(6) | 46(5) | 59(6) | 78(6) | 4(5) | -8(4) | 4(4) |
| C(7) | 36(4) | 45(4) | 34(4) | -4(4) | -8(3) | -2(3) |
| C(8) | 100(7) | 45(5) | 42(5) | 2(4) | -35(5) | -15(5) |
| C(9) | 130(9) | 48(6) | 56(6) | 6(5) | -23(6) | -18(6) |
| C(10) | 69(5) | 56(6) | 51(5) | -13(5) | -8(4) | -20(4) |
| C(11) | 47(4) | 57(6) | 49(5) | -13(4) | -16(4) | -3(4) |
| C(12) | 46(4) | 60(5) | 40(4) | 1(4) | -18(4) | -1(4) |
| C(13) | 50(4) | 45(5) | 29(4) | 0(3) | -12(3) | -8(3) |
| C(14) | 44(4) | 36(4) | 31(4) | 5(3) | -1(3) | -12(3) |
| C(15) | 55(5) | 66(6) | 36(4) | -2(4) | -4(4) | -4(4) |
| C(16) | 54(5) | 52(5) | 46(5) | -5(4) | 14(4) | -7(4) |
| C(17) | 43(4) | 41(5) | 61(6) | 2(4) | 0(4) | -2(3) |
| C(18) | 48(4) | 36(4) | 34(4) | 5(3) | -3(3) | -2(3) |
| C(19) | 36(4) | 37(4) | 40(4) | -4(4) | 0(3) | -1(3) |
| C(20) | 50(4) | 53(5) | 47(5) | -5(4) | -17(4) | 11(4) |
| C(21) | 43(4) | 46(5) | 31(4) | -1(3) | -12(3) | 9(3) |
| C(22) | 78(6) | 53(6) | 66(6) | 13(5) | -12(5) | -4(5) |
| C(23) | 102(8) | 70(7) | 71(7) | 32(6) | -11(6) | 3(6) |
| C(24) | 64(6) | 103(9) | 48(6) | 22(6) | -11(5) | 9(6) |
| C(25) | 62(5) | 82(7) | 37(5) | 0(5) | -14(4) | -1(5) |
| C(26) | 59(5) | 57(5) | 40(5) | -5(4) | -13(4) | 10(4) |
| C(27) | 43(4) | 48(5) | 37(4) | -3(4) | -12(3) | 0(3) |
| C(28) | 44(4) | 60(6) | 66(6) | -2(5) | -15(4) | 0(4) |
| C(29) | 41(5) | 77(8) | 97(8) | -12(6) | 0(5) | -11(5) |
| C(30) | 71(6) | 61(6) | 64(6) | -11(5) | -1(5) | -17(5) |
| C(31) | 85(6) | 49(5) | 50(5) | -8(4) | -7(5) | -2(5) |
| C(32) | 50(4) | 44(5) | 44(5) | 0(4) | -15(4) | -2(4) |
| C(33) | 54(4) | 32(4) | 36(4) | -1(3) | -36(4) | 5(3) |
| C(34) | 58(5) | 90(7) | 24(4) | -7(4) | -6(4) | 33(5) |
| C(35) | 77(6) | 76(7) | 60(6) | -6(6) | 8(6) | -8(6) |

**Table 5. Hydrogen coordinates (x $10^4$) and isotropic displacement parameters ($A^2$ x $10^3$) for 6.**

| | x | y | z | U(eq) |
|---|---|---|---|---|
| H(2A) | 4335 | 6788 | 8596 | 76 |
| H(3A) | 5960 | 5877 | 8640 | 86 |
| H(4A) | 8142 | 6178 | 8597 | 99 |
| H(5A) | 8733 | 7374 | 8326 | 88 |
| H(6A) | 7155 | 8289 | 8267 | 73 |
| H(8A) | 4257 | 9759 | 7620 | 76 |
| H(9A) | 5174 | 10901 | 7921 | 94 |
| H(10A) | 6477 | 11041 | 9023 | 71 |
| H(11A) | 6929 | 10058 | 9828 | 62 |
| H(12A) | 6069 | 8905 | 9540 | 59 |
| H(13A) | 3084 | 7687 | 9255 | 50 |
| H(13B) | 3599 | 8442 | 9622 | 50 |
| H(15A) | 1320 | 8797 | 10018 | 62 |
| H(16A) | -707 | 9289 | 9673 | 61 |
| H(17A) | -1319 | 9364 | 8350 | 58 |
| H(20A) | 97 | 9468 | 6859 | 60 |
| H(20B) | -950 | 8828 | 6975 | 60 |
| H(22A) | 1467 | 9710 | 5777 | 79 |
| H(23A) | 1672 | 10126 | 4496 | 97 |
| H(24A) | 1441 | 9319 | 3459 | 86 |
| H(25A) | 966 | 8104 | 3687 | 73 |
| H(26A) | 681 | 7677 | 4964 | 62 |
| H(28A) | -1553 | 7805 | 6042 | 68 |
| H(29A) | -2622 | 6678 | 6056 | 86 |
| H(30A) | -1520 | 5623 | 6487 | 78 |
| H(31A) | 622 | 5714 | 6940 | 74 |
| H(32A) | 1703 | 6846 | 6934 | 56 |