

C(39)-C(38)-C(37)	108.4(19)	C(39)-C(38)-W(1)	71.6(12)
C(37)-C(38)-W(1)	73.1(13)	C(38)-C(39)-C(40)	108.3(18)
C(38)-C(39)-W(1)	72.9(12)	C(40)-C(39)-W(1)	73.1(13)
C(39)-C(40)-C(41)	107.3(18)	C(39)-C(40)-W(1)	71.5(12)
C(41)-C(40)-W(1)	74.6(13)	C(37)-C(41)-C(40)	108.8(20)
C(37)-C(41)-W(1)	71.1(12)	C(40)-C(41)-W(1)	70.3(13)
O(1)-C(42)-W(1)	174.5(19)	O(2)-C(43)-W(1)	174.5(21)
O(3)-C(44)-W(1)	177.5(20)		

Table 6. Bond angles [$^{\circ}$] for Bert*GeWCp(CO)₃.

C(44)-W(1)-C(42)	74.7(9)	C(44)-W(1)-C(43)	82.4(9)
C(42)-W(1)-C(43)	102.2(9)	C(44)-W(1)-C(39)	146.2(8)
C(42)-W(1)-C(39)	110.9(8)	C(43)-W(1)-C(39)	126.1(8)
C(44)-W(1)-C(38)	111.1(8)	C(42)-W(1)-C(38)	101.9(8)
C(43)-W(1)-C(38)	154.8(9)	C(39)-W(1)-C(38)	35.5(3)
C(44)-W(1)-C(40)	138.8(8)	C(42)-W(1)-C(40)	143.9(7)
C(43)-W(1)-C(40)	96.7(8)	C(39)-W(1)-C(40)	35.5(3)
C(38)-W(1)-C(40)	59.0(7)	C(44)-W(1)-C(37)	89.4(9)
C(42)-W(1)-C(37)	124.2(8)	C(43)-W(1)-C(37)	128.7(9)
C(39)-W(1)-C(37)	59.2(8)	C(38)-W(1)-C(37)	35.4(3)
C(40)-W(1)-C(37)	59.1(8)	C(44)-W(1)-C(41)	104.1(8)
C(42)-W(1)-C(41)	158.5(8)	C(43)-W(1)-C(41)	98.9(9)
C(39)-W(1)-C(41)	58.2(7)	C(38)-W(1)-C(41)	57.9(8)
C(40)-W(1)-C(41)	35.1(3)	C(37)-W(1)-C(41)	34.8(3)
C(44)-W(1)-Ge(1)	134.8(7)	C(42)-W(1)-Ge(1)	75.4(6)
C(43)-W(1)-Ge(1)	71.8(6)	C(39)-W(1)-Ge(1)	76.9(5)
C(38)-W(1)-Ge(1)	107.7(5)	C(40)-W(1)-Ge(1)	81.8(5)
C(37)-W(1)-Ge(1)	135.6(6)	C(41)-W(1)-Ge(1)	115.9(5)
C(1)-Ge(1)-W(1)	114.7(6)	C(6)-C(1)-C(2)	121.4(21)
C(6)-C(1)-Ge(1)	121.4(16)	C(2)-C(1)-Ge(1)	115.4(16)
C(3)-C(2)-C(1)	117.1(20)	C(3)-C(2)-C(7)	124.1(20)
C(1)-C(2)-C(7)	118.7(21)	C(4)-C(3)-C(2)	121.4(21)
C(3)-C(4)-C(5)	119.1(22)	C(6)-C(5)-C(4)	123.4(22)
C(5)-C(6)-C(1)	117.4(22)	C(5)-C(6)-C(13)	120.7(21)
C(1)-C(6)-C(13)	121.8(19)	C(8)-C(7)-C(2)	121.0(21)
C(8)-C(7)-C(12)	117.5(19)	C(2)-C(7)-C(12)	121.5(20)
C(9)-C(8)-C(7)	119.5(21)	C(9)-C(8)-C(31)	120.0(19)
C(7)-C(8)-C(31)	120.5(19)	C(8)-C(9)-C(10)	121.4(20)
C(11)-C(10)-C(9)	118.9(19)	C(11)-C(10)-C(34)	120.1(21)
C(9)-C(10)-C(34)	121.0(20)	C(10)-C(11)-C(12)	123.1(22)
C(11)-C(12)-C(7)	119.3(20)	C(11)-C(12)-C(28)	120.7(21)
C(7)-C(12)-C(28)	119.9(19)	C(14)-C(13)-C(18)	115.9(19)
C(14)-C(13)-C(6)	122.3(21)	C(18)-C(13)-C(6)	121.8(19)
C(15)-C(14)-C(13)	123.9(23)	C(15)-C(14)-C(19)	117.6(20)
C(13)-C(14)-C(19)	117.9(19)	C(14)-C(15)-C(16)	120.9(23)
C(15)-C(16)-C(17)	117.4(21)	C(15)-C(16)-C(22)	123.7(21)
C(17)-C(16)-C(22)	118.9(22)	C(18)-C(17)-C(16)	120.7(22)
C(17)-C(18)-C(13)	120.8(20)	C(17)-C(18)-C(25)	119.3(22)
C(13)-C(18)-C(25)	119.2(20)	C(14)-C(19)-C(21)	111.4(18)
C(14)-C(19)-C(20)	110.7(18)	C(21)-C(19)-C(20)	109.2(19)
C(23)-C(22)-C(16)	111.8(20)	C(23)-C(22)-C(24)	109.4(18)
C(16)-C(22)-C(24)	111.6(18)	C(27)-C(25)-C(26)	111.4(21)
C(27)-C(25)-C(18)	110.8(19)	C(26)-C(25)-C(18)	107.5(20)
C(30)-C(28)-C(12)	114.3(19)	C(30)-C(28)-C(29)	112.6(18)
C(12)-C(28)-C(29)	107.4(18)	C(8)-C(31)-C(32)	107.7(16)
C(8)-C(31)-C(33)	110.6(18)	C(32)-C(31)-C(33)	109.4(17)
C(10)-C(34)-C(35)	114.4(18)	C(10)-C(34)-C(36)	111.6(19)
C(35)-C(34)-C(36)	109.2(19)	C(41)-C(37)-C(38)	107.0(20)
C(41)-C(37)-W(1)	74.1(12)	C(38)-C(37)-W(1)	71.5(13)

C(38)	39(19)	41(15)	64(20)	12(14)	-14(16)	-17(14)
C(39)	45(19)	43(15)	34(16)	-5(12)	9(14)	10(14)
C(40)	23(16)	85(19)	27(14)	8(13)	11(12)	-18(15)
C(41)	32(19)	85(22)	67(21)	-29(16)	-33(16)	21(16)
C(42)	19(9)	25(9)	30(8)	0(7)	13(7)	1(8)
C(43)	21(9)	31(9)	29(9)	-2(7)	10(8)	-7(8)
C(44)	39(17)	34(13)	34(15)	-8(11)	10(13)	-8(13)

Table 8. Hydrogen coordinates ($\times 10^4$) and isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for Bert*GeWCp(CO)₃.

	x	y	z	U(eq)
H(3)	-2241(28)	1142(10)	524(9)	42
H(4)	-3491(27)	2012(9)	82(10)	43
H(5)	-2202(25)	2971(11)	125(9)	43
H(9)	1578(26)	-18(9)	2097(10)	39
H(11)	3683(27)	124(9)	575(10)	42
H(15)	834(29)	4646(10)	1228(10)	41
H(17)	3028(25)	4093(9)	-225(9)	32
H(19)	-1000(26)	3209(10)	1420(10)	38
H(20A)	902(100)	3583(45)	2235(26)	70
H(20B)	-779(53)	3804(62)	2383(15)	70
H(20C)	352(153)	4292(23)	2106(16)	70
H(21A)	-2782(109)	3904(55)	841(39)	104
H(21B)	-2003(37)	4498(16)	1205(78)	104
H(21C)	-2962(90)	3999(65)	1552(41)	104
H(22)	3467(27)	5124(9)	115(10)	44
H(23A)	2551(46)	6044(10)	541(71)	83
H(23B)	1483(139)	5634(39)	934(35)	83
H(23C)	1125(108)	5647(41)	200(40)	83
H(24A)	5096(102)	4779(43)	1016(43)	91
H(24B)	3980(33)	5123(74)	1440(11)	91
H(24C)	4965(115)	5528(37)	1011(44)	91
H(25)	1628(29)	2507(11)	-267(10)	52
H(26A)	3851(45)	2579(42)	-776(54)	83
H(26B)	4305(29)	2881(67)	-109(13)	83
H(26C)	3912(50)	3325(29)	-696(60)	83
H(27A)	-160(54)	3192(70)	-892(14)	88
H(27B)	840(148)	2737(29)	-1271(30)	88
H(27C)	1317(100)	3460(46)	-1179(38)	88
H(28)	1740(26)	1471(10)	-36(9)	33
H(29A)	877(114)	830(47)	-905(13)	69
H(29B)	-186(34)	737(53)	-366(38)	69
H(29C)	1094(98)	222(13)	-476(49)	69
H(30A)	4396(46)	1266(53)	35(39)	70
H(30B)	3639(39)	1164(61)	-662(24)	70
H(30C)	4071(73)	572(14)	-226(62)	70
H(31)	-1098(25)	1268(9)	1753(9)	32
H(32A)	-1486(39)	-71(11)	1879(53)	51
H(32B)	-2379(99)	348(39)	1340(15)	51
H(32C)	-2766(72)	427(33)	2030(42)	51
H(33A)	-900(39)	973(61)	2843(10)	67
H(33B)	768(111)	1201(45)	2687(12)	67
H(33C)	414(147)	468(23)	2744(16)	67
H(34)	4774(28)	-522(9)	1336(10)	43

H(35A)	5569(72)	-709(62)	2325(14)	73
H(35B)	3838(90)	-751(57)	2506(12)	73
H(35C)	4597(161)	-81(11)	2401(20)	73
H(36A)	2481(172)	-1305(41)	1766(43)	108
H(36B)	3883(35)	-1508(20)	1398(83)	108
H(36C)	2383(166)	-1165(26)	1046(44)	108
H(37)	5602(29)	1994(11)	3433(10)	75
H(38)	3963(29)	1131(10)	2865(9)	60
H(39)	4504(26)	1127(9)	1757(9)	48
H(40)	6519(25)	1968(10)	1634(9)	53
H(41)	7322(26)	2452(11)	2688(9)	78

Table 1. Crystal data for Jeff*GeWCp(CO)₂.

Identification code	sth27
Empirical formula	C ₃₁ H ₃₀ GeO ₂ W
Formula weight	690.99
Crystal size	0.20 x 0.10 x 0.06 mm
Crystal habit	fragment from block
Crystal color	deep red
Crystal system	Monoclinic
Space group	I2/a
Unit cell dimensions	$a = 17.2849(14) \text{ \AA}$ $\alpha = 90^\circ$ $b = 16.5583(13) \text{ \AA}$ $\beta = 103.864(7)^\circ$ $c = 19.8218(15) \text{ \AA}$ $\gamma = 90^\circ$
Volume	5507.9(7) $\text{\AA}^3$
Z	8
Density (calculated)	1.667 $\text{Mg}\cdot\text{cm}^{-3}$
Absorption coefficient	9.137 mm^{-1}
F(000)	2704
Absorption correction ¹	Empirical
Max. and min. transmission	0.63 and 0.41

- 1) XABS2: an empirical absorption correction program. Parkin, S.; Moezzi, B.; Hope, H. J. *Appl. Cryst.* 1995, 28, 53-56.

Table 2. Data collection for Jeff*GeWCp(CO)₂.

Diffractionmeter	Siemens P4RA
Temperature	130(2) K
Radiation source	rotating Cu anode
Wavelength	1.54178 Å (CuK α)
Monochromator	nickel filter
θ range for data collection	3.52 to 56.47°
Scan type	2 θ -w
Index ranges	-18 $\leq h \leq$ 18, 0 $\leq k \leq$ 17, 0 $\leq l \leq$ 21
Reflections collected	3943
Independent reflections	3653 ($R_{int} = 0.0695$)
Standard reflections	2
Percent decay of standards	none

Table 3. Solution and refinement of Jeff*GeWCp(CO)₂.

System for solution	SHELXS-86 (Sheldrick, 1990)
Structure solution	direct
System for refinement	SHELXL-93 (Sheldrick, 1993)
Refinement method	Full-matrix least-squares on F^2
Hydrogen atoms	mixed
Data / restraints / parameters	3647 / 0 / 322
Goodness-of-fit on F^2	1.066
Weighting scheme	$w^{-1} = \sigma^2(F_o^2) + (0.0668P)^2 + 37.04P$, where $P = (F_o^2 + 2F_c^2)/3$
R indices (all data)	R1 = 0.0764, wR2 = 0.1528
R indices calcd from obsd data	R1 = 0.0551, wR2 = 0.1259
Observed data (>2 $\sigma(I)$)	2830
Largest diff. peak and hole	1.098 and -1.485 eÅ ⁻³

$$1) \quad R1 = \sum ||F_o - F_c| | / \sum |F_o|$$

$$wR2 = [\sum [w(F_o^2 - F_c^2)^2] / \sum [w(F_o^2)^2]]^{1/2}$$

$$2) \quad \text{Goodness-of-Fit} = [\sum [w(F_o^2 - F_c^2)^2] / (M - N)]^{1/2}$$

where M is the number of reflections

and N is the number of parameters refined.

- 3) Refinement is based on F^2 for ALL reflections except for those with very negative F^2 or flagged by the user for potential systematic errors. Weighted R-factors wR and all goodnesses of fit S are based on F^2 , conventional R-factors R are based on F, with F set to zero for negative F^2 . The observed criterion of $F^2 > 2\sigma(F^2)$ is used only for calculating R indices for observed data and is not relevant to the choice of reflections for refinement. R-factors based on F^2 are statistically about twice as large as those based on F, and R-factors based on ALL data will be even larger.

Table 4. Atomic coordinates [$\times 10^4$] and equivalent isotropic displacement parameters [$\text{\AA}^2 \times 10^3$] for Jeff*GeWCp(CO)₂.

U(eq) is defined as one third of the trace of the orthogonalized U_{ij} tensor.

	x	y	z	U(eq)
W(1)	356(1)	3050(1)	493(1)	37(1)
C(1)	-674(6)	1645(7)	1797(5)	31(3)
O(1)	1364(7)	3619(8)	1927(5)	97(4)
Ge(2)	-285(1)	2277(1)	1138(1)	35(1)
O(2)	-757(7)	4519(7)	531(7)	109(5)
C(2)	-237(6)	944(7)	2071(6)	36(3)
C(3)	-504(7)	476(7)	2539(6)	39(3)
C(4)	-1212(7)	690(7)	2733(6)	43(3)
C(5)	-1618(7)	1395(7)	2472(6)	41(3)
C(6)	-1351(6)	1863(6)	2010(6)	32(3)
C(7)	522(6)	762(6)	1849(6)	30(3)
C(8)	1230(7)	1123(8)	2191(6)	42(3)
C(9)	1920(6)	997(8)	1941(6)	45(3)
C(10)	1894(7)	514(8)	1365(6)	45(3)
C(11)	1191(7)	162(7)	1048(6)	44(3)
C(12)	489(6)	275(7)	1278(6)	39(3)
C(13)	-1727(6)	2649(7)	1752(6)	34(3)
C(14)	-1387(7)	3380(7)	2060(6)	39(3)
C(15)	-1711(7)	4108(7)	1804(7)	45(3)
C(16)	-2329(8)	4169(8)	1246(7)	48(3)
C(17)	-2677(7)	3472(9)	948(6)	52(4)
C(18)	-2385(7)	2688(8)	1189(6)	46(3)
C(19)	-269(7)	-124(8)	906(6)	51(3)
C(20)	2635(8)	404(11)	1097(8)	76(5)
C(21)	1276(7)	1660(9)	2825(7)	61(4)
C(22)	-2779(8)	1913(9)	875(8)	69(4)
C(23)	-2664(10)	4979(9)	944(8)	83(5)
C(24)	-691(8)	3372(8)	2692(7)	56(4)
C(25)	-341(9)	3950(9)	513(7)	62(4)
C(26)	960(9)	3414(10)	1400(8)	66(4)
C(27)	1086(10)	2205(10)	-75(8)	68(4)
C(28)	1492(12)	2938(13)	71(11)	98(6)
C(29)	379(9)	2385(9)	-535(7)	60(4)
C(30)	299(13)	3209(11)	-676(8)	88(6)
C(31)	1025(12)	3543(11)	-290(8)	77(5)

Table 5. Bond lengths [Å] for Jeff*GeWCp(CO)₂.

W(1)-C(25)	1.92 (2)	W(1)-C(26)	1.946 (15)
W(1)-Ge(2)	2.2767 (14)	W(1)-C(31)	2.296 (14)
W(1)-C(30)	2.310 (14)	W(1)-C(28)	2.32 (2)
W(1)-C(29)	2.324 (13)	W(1)-C(27)	2.343 (13)
C(1)-C(6)	1.383 (14)	C(1)-C(2)	1.420 (15)
C(1)-Ge(2)	1.916 (11)	O(1)-C(26)	1.16 (2)
O(2)-C(25)	1.19 (2)	C(2)-C(3)	1.37 (2)
C(2)-C(7)	1.510 (14)	C(3)-C(4)	1.413 (15)
C(4)-C(5)	1.40 (2)	C(5)-C(6)	1.36 (2)
C(6)-C(13)	1.490 (15)	C(7)-C(12)	1.38 (2)
C(7)-C(8)	1.385 (15)	C(8)-C(9)	1.41 (2)
C(8)-C(21)	1.53 (2)	C(9)-C(10)	1.39 (2)
C(10)-C(11)	1.36 (2)	C(10)-C(20)	1.51 (2)
C(11)-C(12)	1.408 (15)	C(12)-C(19)	1.49 (2)
C(13)-C(18)	1.39 (2)	C(13)-C(14)	1.42 (2)
C(14)-C(15)	1.37 (2)	C(14)-C(24)	1.52 (2)
C(15)-C(16)	1.35 (2)	C(16)-C(17)	1.37 (2)
C(16)-C(23)	1.53 (2)	C(17)-C(18)	1.43 (2)
C(18)-C(22)	1.52 (2)	C(27)-C(29)	1.37 (2)
C(27)-C(28)	1.40 (2)	C(28)-C(31)	1.37 (2)
C(29)-C(30)	1.39 (2)	C(30)-C(31)	1.42 (2)

Table 6. Bond angles [$^{\circ}$] for Jeff*GeWCp(CO)₂.

C(25)-W(1)-C(26)	86.6(6)	C(25)-W(1)-Ge(2)	91.8(4)
C(26)-W(1)-Ge(2)	83.1(4)	C(25)-W(1)-C(31)	99.1(7)
C(26)-W(1)-C(31)	105.6(6)	Ge(2)-W(1)-C(31)	166.3(4)
C(25)-W(1)-C(30)	93.2(6)	C(26)-W(1)-C(30)	140.9(7)
Ge(2)-W(1)-C(30)	135.9(6)	C(31)-W(1)-C(30)	35.8(6)
C(25)-W(1)-C(28)	131.2(7)	C(26)-W(1)-C(28)	92.6(7)
Ge(2)-W(1)-C(28)	136.6(6)	C(31)-W(1)-C(28)	34.7(6)
C(30)-W(1)-C(28)	58.9(7)	C(25)-W(1)-C(29)	121.8(6)
C(26)-W(1)-C(29)	147.0(6)	Ge(2)-W(1)-C(29)	109.8(4)
C(31)-W(1)-C(29)	57.3(5)	C(30)-W(1)-C(29)	35.0(5)
C(28)-W(1)-C(29)	56.8(6)	C(25)-W(1)-C(27)	152.2(6)
C(26)-W(1)-C(27)	113.4(6)	Ge(2)-W(1)-C(27)	108.9(4)
C(31)-W(1)-C(27)	58.1(6)	C(30)-W(1)-C(27)	59.0(6)
C(28)-W(1)-C(27)	34.9(5)	C(29)-W(1)-C(27)	34.2(5)
C(6)-C(1)-C(2)	120.4(10)	C(6)-C(1)-Ge(2)	121.8(8)
C(2)-C(1)-Ge(2)	117.8(8)	C(1)-Ge(2)-W(1)	170.9(3)
C(3)-C(2)-C(1)	119.2(10)	C(3)-C(2)-C(7)	122.7(10)
C(1)-C(2)-C(7)	118.1(10)	C(2)-C(3)-C(4)	119.7(10)
C(5)-C(4)-C(3)	120.0(11)	C(6)-C(5)-C(4)	120.2(11)
C(5)-C(6)-C(1)	120.3(10)	C(5)-C(6)-C(13)	122.5(10)
C(1)-C(6)-C(13)	117.0(10)	C(12)-C(7)-C(8)	120.7(10)
C(12)-C(7)-C(2)	119.2(9)	C(8)-C(7)-C(2)	120.0(10)
C(7)-C(8)-C(9)	119.1(11)	C(7)-C(8)-C(21)	121.3(10)
C(9)-C(8)-C(21)	119.6(11)	C(10)-C(9)-C(8)	120.7(11)
C(11)-C(10)-C(9)	118.5(11)	C(11)-C(10)-C(20)	121.7(13)
C(9)-C(10)-C(20)	119.7(12)	C(10)-C(11)-C(12)	122.6(12)
C(7)-C(12)-C(11)	118.3(11)	C(7)-C(12)-C(19)	121.5(10)
C(11)-C(12)-C(19)	120.2(11)	C(18)-C(13)-C(14)	118.7(11)
C(18)-C(13)-C(6)	121.5(10)	C(14)-C(13)-C(6)	119.8(9)
C(15)-C(14)-C(13)	120.1(11)	C(15)-C(14)-C(24)	119.0(11)
C(13)-C(14)-C(24)	120.9(10)	C(16)-C(15)-C(14)	122.8(12)
C(15)-C(16)-C(17)	118.2(12)	C(15)-C(16)-C(23)	122.7(13)
C(17)-C(16)-C(23)	119.1(13)	C(16)-C(17)-C(18)	122.5(11)
C(13)-C(18)-C(17)	117.7(11)	C(13)-C(18)-C(22)	119.4(12)
C(17)-C(18)-C(22)	122.9(11)	O(2)-C(25)-W(1)	178.4(13)
O(1)-C(26)-W(1)	175.6(14)	C(29)-C(27)-C(28)	105.8(16)
C(29)-C(27)-W(1)	72.1(8)	C(28)-C(27)-W(1)	71.6(9)
C(31)-C(28)-C(27)	108.8(18)	C(31)-C(28)-W(1)	71.8(9)
C(27)-C(28)-W(1)	73.6(9)	C(27)-C(29)-C(30)	112.1(15)
C(27)-C(29)-W(1)	73.7(8)	C(30)-C(29)-W(1)	72.0(8)
C(29)-C(30)-C(31)	104.0(15)	C(29)-C(30)-W(1)	73.0(8)
C(31)-C(30)-W(1)	71.5(8)	C(28)-C(31)-C(30)	109.3(16)
C(28)-C(31)-W(1)	73.5(9)	C(30)-C(31)-W(1)	72.6(9)

Table 7. Anisotropic displacement parameters [$\text{\AA}^2 \times 10^3$]for Jeff*GeWCp(CO)₂.

The anisotropic displacement factor exponent takes the form:

$$-2\pi^2 [(ha^*)^2 U_{11} + \dots + 2hka^* b^* U_{12}]$$

	U11	U22	U33	U23	U13	U12
W(1)	38(1)	36(1)	37(1)	1(1)	9(1)	-10(1)
C(1)	26(5)	34(6)	32(6)	1(5)	3(5)	7(5)
O(1)	96(8)	127(11)	53(7)	2(7)	-13(6)	-59(8)
Ge(2)	32(1)	38(1)	34(1)	1(1)	6(1)	-5(1)
O(2)	116(10)	82(9)	152(12)	59(8)	79(9)	51(8)
C(2)	40(6)	35(7)	31(6)	-7(5)	6(5)	2(5)
C(3)	52(7)	27(6)	44(7)	12(5)	21(6)	16(6)
C(4)	44(7)	40(7)	49(8)	5(6)	19(6)	5(6)
C(5)	50(7)	37(7)	41(7)	-2(6)	19(6)	-4(6)
C(6)	30(6)	26(6)	39(6)	-3(5)	9(5)	4(5)
C(7)	25(6)	18(6)	48(7)	13(5)	8(5)	11(5)
C(8)	42(7)	59(8)	25(6)	8(6)	11(5)	-10(6)
C(9)	26(6)	60(9)	47(8)	12(7)	3(5)	-1(6)
C(10)	36(7)	53(8)	45(8)	15(6)	8(6)	4(6)
C(11)	45(7)	54(8)	37(7)	17(6)	17(6)	23(6)
C(12)	38(6)	37(7)	40(7)	3(6)	8(5)	8(5)
C(13)	37(6)	35(7)	33(6)	0(5)	18(5)	3(5)
C(14)	37(6)	39(7)	44(7)	1(6)	15(5)	10(6)
C(15)	47(7)	31(7)	62(9)	8(6)	26(7)	0(6)
C(16)	58(8)	42(8)	55(8)	5(7)	38(7)	7(7)
C(17)	37(7)	79(10)	42(7)	18(7)	12(6)	23(7)
C(18)	43(7)	56(8)	41(7)	-12(6)	14(6)	-9(6)
C(19)	54(8)	49(8)	48(8)	-1(6)	8(6)	13(7)
C(20)	44(8)	121(14)	68(10)	31(10)	22(7)	17(9)
C(21)	46(8)	90(11)	43(8)	-9(8)	4(6)	-14(8)
C(22)	43(8)	82(11)	74(10)	-14(9)	1(7)	3(8)
C(23)	98(12)	74(11)	90(12)	44(10)	49(10)	24(10)
C(24)	63(9)	38(7)	64(9)	-10(7)	6(7)	3(7)
C(25)	69(9)	57(10)	60(9)	33(8)	13(7)	-5(8)
C(26)	69(10)	73(10)	50(9)	-1(8)	5(8)	-11(8)
C(27)	85(11)	62(10)	73(11)	-18(8)	53(10)	3(9)
C(28)	82(13)	123(18)	113(16)	-28(14)	71(12)	-22(13)
C(29)	78(10)	63(10)	36(8)	-9(7)	8(7)	-15(8)
C(30)	139(17)	88(14)	44(9)	22(9)	37(10)	41(12)
C(31)	116(15)	78(13)	56(10)	-28(9)	56(10)	-36(12)

Table 8. Hydrogen coordinates ($\times 10^4$) and isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for Jeff*GeWCp(CO)₂.

	x	y	z	U(eq)
H(3)	-220 (7)	20 (7)	2728 (6)	47
H(4)	-1408 (7)	361 (7)	3034 (6)	51
H(5)	-2073 (7)	1545 (7)	2613 (6)	49
H(9)	2397 (6)	1241 (8)	2165 (6)	54
H(11)	1173 (7)	-166 (7)	664 (6)	53
H(15)	-1493 (7)	4579 (7)	2027 (7)	53
H(17)	-3120 (7)	3509 (9)	575 (6)	63
H(19A)	-171 (13)	-453 (42)	537 (29)	77
H(19B)	-658 (18)	280 (8)	717 (39)	77
H(19C)	-464 (28)	-457 (42)	1226 (12)	77
H(20A)	2936 (35)	-47 (43)	1328 (43)	114
H(20B)	2955 (32)	884 (27)	1187 (51)	114
H(20C)	2487 (8)	304 (67)	606 (13)	114
H(21A)	1823 (8)	1774 (47)	3041 (29)	91
H(21B)	1034 (49)	1387 (24)	3149 (22)	91
H(21C)	998 (47)	2156 (24)	2682 (9)	91
H(22A)	-2389 (15)	1571 (28)	746 (49)	103
H(22B)	-3192 (41)	2038 (10)	470 (31)	103
H(22C)	-3006 (53)	1640 (31)	1209 (19)	103
H(23A)	-3194 (27)	4904 (14)	661 (47)	125
H(23B)	-2330 (39)	5198 (34)	665 (49)	125
H(23C)	-2679 (63)	5346 (23)	1316 (8)	125
H(24A)	-201 (8)	3343 (54)	2546 (7)	85
H(24B)	-733 (29)	2912 (31)	2976 (24)	85
H(24C)	-697 (31)	3858 (26)	2956 (26)	85
H(27)	1259 (10)	1699 (10)	103 (8)	81
H(28)	1995 (12)	3006 (13)	364 (11)	118
H(29)	-3 (9)	2002 (9)	-730 (7)	72
H(30)	-132 (13)	3478 (11)	-958 (8)	105
H(31)	1164 (12)	4086 (11)	-283 (8)	93