

Supplementary Materials: A Fluid Inclusion Study of the Brookbank Deposit, Northwestern Ontario: A Transition from Mesothermal to Epithermal Gold Deposition

Barbara Kowalski and Stephen Kissin *

Department of Geology, Lakehead University, Thunder Bay, ON P7B 5E1, Canada

* Correspondence: sakissin@lakeheadu.ca; Tel.: +1-807-343-8220

Table S1. Fluid inclusion data: Brookbank Stage 1A.

Sample No.	Depth (m)	Inclusion Type	Te	Tm Ice	Th	Homog. Phase
BSK-B43-1007	306.9	3	−22.0	−5.9	220.1	V
BSK-B43-1035	315.5	1	−22.3	−0.5	221.3	L
BSK-B49-507	154.5	3	−22.4	−0.9	220.4	V
BSK-B49-512	156.7	3	−22.8	−1.1	221.3	V
BSK-B49-535	163.1	1	−22.1	−0.8	231.2	L
BSK-B49-552	168.3	3	−22.5	−0.7	232.2	V
BSK-B49-558	170.1	3	−22.3	−0.6	234.1	V
BSK-B49-561	171.0	3	−22.8	−0.7	233.2	V
BSK-B49-570	173.7	3	−22.3	−0.8	233.1	V
BSK-B49-610	185.9	3	−22.3	−0.8	233.4	V
BSK-B49-613	186.8	3	−22.4	−0.8	233.5	V
BSK-B49-617	188.1	3	−22.6	−0.7	235.3	V
BSK-B50-1309	399.0	3	−22.4	−0.7	221.9	V
BSK-B50-1348	410.9	1	−22.4	−0.8	220.3	L
BSK-B50-1369	417.3	3	−22.4	−0.7	220.5	L
BSK-B53-917	279.5	3	−22.2	−0.7	220.3	V
BSK-B53-920	280.4	3	−22.3	−0.6	221.1	V
BSK-B53-924	281.6	3	−22.1	−0.7	220.1	V
BSK-B53-947	288.7	3	−22.2	−0.7	222.2	V
BSK-B53-677	206.4	1	−22.0	−0.1	230.4	L
BSK-B56-702	214.0	3	−22.4	−0.3	232.5	V
BSK-B56-738	224.9	3	−22.0	−2.3	230.5	V
BSK-B58-792	241.4	3	−22.0	−0.1	266.8	V
BSK-B58-823	258.9	3	−22.4	−0.1	229.3	V
BSK-B58-862	262.7	3	−22.6	−0.1	225.7	V
BSK-B58-867	264.3	3	−22.9	−0.2	222.2	V
BSK-B58-869	264.9	1	−22.9	−0.3	231.1	L
BSK-B58-869	264.9	1	−22.9	−6.3	230.1	V
BSK-B61-1923	586.1	1	−22.8	−6.6	229.4	V

All inclusions hosted in quartz or calcite.

Table S2. Fluid inclusion data: Cherbourg Zone Stage 1A.

Sample No.	Inclusion Type	Te	Tm Ice	Tm* Clath	Th	Homog. Phase
BSK-1	1	−22.3	−0.5	10.5	220.3	L
BSK-2	1	−22.3	−0.4	10.6	220.9	L
BSK-3	1	−22.2	−0.5	10.5	221.1	L
BSK-4	3	−22.1	−0.4	10.4	220.3	V
BSK-4	1	−22.1	−0.5	-	221.7	L
BSK-4	1	−22.0	−0.5	-	221.9	L
BSK-7	3	−21.9	−0.5	10.5	221.3	L
BSK-7	3	−21.7	−0.5	10.4	221.4	L
BSK-7	3	−21.4	−0.5	-	221.4	V
BSK-8	3	−22.6	−0.5	10.5	221.9	V
BSK-8	1	−22.9	−0.5	10.6	221.5	L
BSK-8	1	−22.4	−0.4	10.6	221.8	L
BSK-11	3	−22.1	−0.5	10.5	221.3	L
BSK-11	3	−22.4	−0.4	10.4	220.9	V
BSK-11	1	−21.0	−0.5	10.6	220.6	L
BSK-11	1	−21.8	−0.4	10.5	221.8	L
BSK-11	3	−21.1	−0.4	10.4	221.7	L
BSK-11	3	−22.1	−0.5	-	222.0	L
BSK-11	3	−22.4	−0.4	-	221.4	L
BSK-11	3	−21.0	−0.5	-	221.3	L
BSK-11	3	−21.8	−0.5	-	221.9	V
BSK-11	3	−21.1	−0.5	-	221.4	L
BSK-12	1	−21.3	−0.4	-	221.3	L
BSK-15	1	−22.0	−0.4	-	221.9	L
BSK-C-31-1	3	−22.0	−0.5	10.6	221.9	L
BSK-C-31-5	1	−22.1	−0.5	-	221.1	L
BSK-C-31-13	1	−22.2	−0.4	10.6	221.3	L
BSK-C-31-14	3	−22.1	−0.5	10.5	221.9	L
BSK-C-31-18	1	−22.1	−0.4	10.4	221.2	L
BSK-C-0+43-5	1	−22.0	−0.5	10.6	221.3	L
BSK-C-0+43-8	1	−22.5	−0.5	-	221.7	L
BSK-C-0+43-11	3	−22.4	−0.5	10.6	221.3	L
BSK-C-0+43-11	1	−22.4	−0.4	10.5	222.0	V
BSK-C-0+43-11	3	−22.3	−0.5	10.6	221.8	L
BSK-C-0+43-11	3	−22.2	−0.4	10.5	221.8	L
BSK-C-0+43-11	3	−22.4	−0.4	10.5	221.6	L
BSK-C-0+60E-2	1	−22.3	−0.4	10.6	221.1	L
BSK-C-0+60E-5	1	−22.1	−0.5	10.6	221.1	L
BSK-C-0+94E-2	1	−22.1	−0.5	10.4	221.3	L
BSK-C-0+94E-3	1	−22.0	−0.5	10.4	221.9	L
BSK-C-0+94E-4	1	−21.9	−0.4	10.5	222.1	L
BSK-C-0+95E-2	3	−21.8	−0.4	10.5	221.4	L

* Dash indicates not observed.

All inclusions hosted in quartz

Table S3. Fluid inclusion data: Brookbank Stage 1B.

Sample No.	Depth(m)	Inclusion Type	Te	Tm Ice	Th	Homog. Phase
BSK-B53-905	275.8	3	−52.3	−0.4	230.1	V
BSK-B53-908	276.8	3	−52.6	−0.3	231.2	V
BSK-B53-914	278.6	3	−52.4	−0.5	230.9	V
BSK-B53-917	279.5	3	−52.1	−0.4	230.1	V
BSK-B53-927	282.6	3	−52.3	−0.4	230.6	V
BSK-B53-930	283.5	3	−52.1	−0.4	235.2	V
BSK-B53-933	284.4	3	−52.8	−0.5	234.3	V
BSK-B56-687	209.4	3	−52.5	−0.7	235.4	V
BSK-B56-697	212.5	3	−52.4	−0.8	234.8	V
BSK-B58-818	249.3	3	−52.3	−0.6	237.4	V
BSK-B58-820	249.9	3	−52.6	−0.3	238.1	V
BSK-B58-877	267.3	3	−52.8	−0.3	235.9	V
BSK-B58-882	268.8	3	−52.3	−0.4	232.2	V
BSK-B61-1920	585.2	3	−52.6	−0.4	266.4	V
BSK-B61-1923	586.1	3	−52.4	−0.4	265.4	V

All inclusions hosted in quartz.

Table S4. Fluid inclusion data: Cherbourg Zone Stage 1B.

Sample No.	Inclusion Type	Te	Tm Ice	Tm * Clath	Th	Homog. Phase
BSK-5	3	−52.9	−0.5	-	230.5	V
BSK-5	3	−52.4	−0.4	-	230.6	L
BSK-5	3	−50.1	−0.5	-	230.6	L
BSK-5	1	−52.4	−0.5	-	230.9	L
BSK-13	1	−52.4	−0.5	-	230.5	L
BSK-13	1	−52.7	−0.5	-	230.7	L
BSK-14	3	−53.1	−0.5	-	230.8	L
BSK-19	3	−51.9	−0.4	-	230.5	L
BSK-C-31-2	3	−52.2	−0.4	-	230.8	L
BSK-C-31-3	3	−52.1	−0.5	-	230.6	V
BSK-C-31-8	1	−52.4	−0.4	-	231.1	L
BSK-C-31-9	1	−52.4	−0.4	-	230.1	L
BSK-C-31-10	1	−52.1	−0.5	-	229.8	L
BSK-C-31-15	1	−52.3	−0.5	-	229.3	L
BSK-C-31-16	3	−52.2	−0.5	-	229.9	V
BSK-C-0+43-6	1	−52.3	−0.5	-	230.1	L
BSK-C-0+43-7	1	−51.9	−0.4	-	230.8	L
BSK-C-0+43-7	3	−53.4	−0.5	-	230.6	V
BSK-C-0+43-7	1	−52.3	−0.4	-	231.0	L
BSK-C-0+43-7	1	−53.4	−0.5	-	230.9	L
BSK-C-0+95E-1	1	−52.4	−0.5	-	230.4	L
BSK-C-0+95E-1	3	−52.1	−0.5	-	230.7	L
BSK-C-0+95E-3	3	−51.8	−0.5	-	230.1	L
BSK-C-0+95E-3	3	−51.2	−0.5	-	230.5	V
BSK-C-0+95E-3	3	−52.1	−0.5	-	229.8	V
BSK-C-0+95E-4	3	−51.9	−0.4	-	230.3	L
BSK-C-0+95E-4	1	−51.9	−0.4	-	230.7	L
BSK-C-1+05E-1	1	−51.9	−0.5	-	229.7	L
BSK-C-1+05E-3	3	−52.0	−0.5	-	230.1	V
BSK-C-1+05E-4	1	−52.1	−0.5	-	230.2	L
BSK-C-1+60E-1	1	−52.2	−0.4	-	230.7	L
BSK-C-2+78E-3	1	−52.1	−0.5	-	230.5	L
BSK-C-2+78E-4	3	−52.4	−0.5	-	230.6	L
BSK-C-2+78E-5	3	−52.1	−0.5	-	230.1	L
BSK-C-2+94E-5	3	−52.6	−0.5	-	230.5	L

* Dash indicates not observed.

All inclusions hosted in quartz or clinochlore.

Table S5. Fluid inclusion data: Brookbank Stage 1C.

Sample No.	Depth (m)	Inclusion Type	Te	Tm Ice	Th	Homog. Phase
BSK-B43-1010	307.8	3	−55.1	−0.9	356.9	V
BSK-B43-1013	308.8	3	−55.4	−0.8	356.7	V
BSK-B43-1017	310.0	3	−55.1	−0.9	356.9	V
BSK-B43-1023	311.8	1	−55.3	−0.8	356.6	L
BSK-B43-1055	321.6	1	−55.3	−0.7	356.6	V
BSK-B43-1058	322.5	3	−55.1	−0.4	356.6	V
BSK-B43-1060	323.1	3	−55.6	−0.7	356.7	V
BSK-B43-1062	323.7	3	−55.0	−0.5	356.6	V
BSK-B46-2450	746.8	3	−55.3	−0.6	356.2	V
BSK-B46-2453	747.7	1	−55.1	−0.7	357.1	V
BSK-B46-2456	748.6	1	−55.3	−0.8	356.8	V
BSK-B46-2469	752.6	1	−53.1	−0.3	357.1	L
BSK-B46-2481	756.2	1	−55.4	−0.8	356.3	V
BSK-B46-2484	757.1	1	−55.9	−0.7	355.9	V
BSK-B46-2490	759.0	3	−55.1	−0.7	355.8	V
BSK-B46-2493	759.9	3	−54.8	−0.9	354.9	V
BSK-B46-2496	760.8	3	−55.3	−0.8	356.1	V
BSK-B46-2499	761.7	3	−55.6	−0.7	358.3	V
BSK-B46-2502	762.6	3	−54.9	−0.8	356.7	V
BSK-B46-2505	763.5	1	−55.4	−0.6	357.6	V
BSK-B46-2508	764.4	1	−55.6	−0.8	356.2	V
BSK-B46-2511	765.4	3	−55.3	−0.7	356.9	V
BSK-B46-2512	765.7	3	−55.6	−0.8	356.7	V
BSK-B49-512	156.1	3	−55.2	−0.6	357.6	V
BSK-B49-558	170.1	1	−55.2	−0.5	358.1	V
BSK-B49-579	176.5	1	−55.4	−0.4	356.2	L
BSK-B49-581	177.1	1	−55.7	−0.5	356.1	V
BSK-B50-1297	395.3	1	−55.4	−0.6	356.8	V
BSK-B50-1306	398.1	1	−55.6	−0.7	356.8	L
BSK-B50-1327	404.5	1	−55.3	−0.8	356.4	V
BSK-B50-1333	406.3	1	−55.9	−0.9	356.5	V
BSK-B50-1342	409.0	3	−55.3	−0.5	356.7	V
BSK-B50-1345	410.0	3	−55.6	−0.2	356.3	V
BSK-B50-1357	413.6	3	−55.3	−0.2	356.4	V
BSK-B53-890	271.3	3	−55.3	−0.4	356.4	V
BSK-B53-893	272.2	3	−55.2	−0.5	356.8	V
BSK-B53-950	289.6	1	−55.3	−0.4	356.4	V
BSK-B53-959	292.3	1	−55.4	−0.3	356.8	L
BSK-B53-962	293.2	1	−55.1	−0.2	358.1	V
BSK-B53-967	294.7	1	−55.3	−0.3	357.9	L
BSK-B53-983	299.6	3	−55.4	−0.5	357.1	L
BSK-B53-986	300.9	3	−55.3	−0.4	356.9	L
BSK-B53-989	301.5	3	−55.1	−0.3	356.3	V
BSK-B53-995	303.3	3	−55.2	−0.3	356.9	V
BSK-B53-997	303.9	3	−55.4	−0.4	357.4	V
BSK-B54-1677	511.2	3	−55.3	−0.4	356.6	V
BSK-B54-1680	512.1	3	−55.8	−0.4	357.5	V
BSK-B56-732	223.1	3	−55.1	−0.5	356.8	V
BSK-B56-735	224.0	3	−55.7	−0.5	357.3	V

BSK-B58-816	248.7	3	−55.1	−0.6	353.4	V
BSK-B58-838	255.4	3	−55.3	−0.6	356.9	V
BSK-B58-847	258.2	3	−55.9	−0.7	355.4	V
BSK-B58-852	259.7	3	−55.4	−0.6	354.9	V
BSK-B61-1907	581.3	3	−55.3	−0.8	359.9	V
BSK-B61-1915	583.7	3	−55.3	−0.7	361.7	V
BSK-B61-1918	584.6	3	−55.8	−0.6	359.9	V
BSK-B61-1927	587.3	3	−55.8	−1.2	364.2	V

Table S6. Fluid inclusion data: Brookbank Stage 2.

Sample No.	Depth (m)	Inclusion Type	Te	Tm Ice	Th	Homog. Phase
BSK-B43-1020	310.9	4B	−35.1	−0.5	266.3	V
BSK-B43-1026	312.7	4A	−35.0	−0.4	266.1	L
BSK-B43-1029	313.6	4A	−35.2	−0.5	266.4	L
BSK-B43-1032	314.6	4B	−35.3	−0.4	266.3	L
BSK-B43-1037	316.1	4A	−35.4	−0.6	266.2	V
BSK-B43-1040	317.0	4B	−35.7	−0.4	266.3	V
BSK-B43-1043	317.9	4A	−35.5	−0.5	266.5	L
BSK-B43-1046	318.8	4A	−35.1	−0.6	266.6	V
BSK-B43-1049	319.7	4B	−35.1	−0.6	266.6	V
BSK-B43-1052	320.6	4B	−35.3	−0.5	266.1	V
BSK-B46-2459	749.5	4A	−35.2	−0.2	267.2	V
BSK-B46-2462	750.4	4B	−35.3	−0.1	266.8	V
BSK-B46-2466	751.6	4B	−34.9	−0.2	266.7	V
BSK-B46-2472	753.5.	4A	−34.8	−0.5	266.6	L
BSK-B46-2472	753.5	4B	−34.5	−0.9	267.3	V
BSK-B46-2475	754.4	4B	−35.8	−0.3	266.4	L
BSK-B46-2478	755.3	4B	−34.8	−0.3	266.4	L
BSK-B46-2487	758.0	4A	−35.4	−0.2	266.8	L
BSK-B49-526	160.3	4A	−35.4	−0.2	266.4	V
BSK-B49-538	164.0	4A	−35.6	−0.1	267.3	V
BSK-B49-542	165.2	4A	−35.4	−0.2	267.4	V
BSK-B49-564	171.9	4A	−35.3	−0.2	266.3	V
BSK-B49-589	179.5	4A	−35.2	−0.2	266.5	L
BSK-B49-595	181.4	4A	−35.7	−0.2	268.1	V
BSK-B49-598	182.3	4A	−35.4	−0.3	268.4	L
BSK-B50-1303	397.2	4A	−35.5	−0.3	267.8	V
BSK-B50-1312	399.9	4A	−35.1	−0.2	267.5	V
BSK-B50-1315	400.8	4A	−35.4	−0.3	267.3	V
BSK-B50-1318	401.7	4B	−35.6	−0.4	267.1	V
BSK-B50-1324	403.6	4B	−35.3	−0.3	268.2	L
BSK-B50-1351	411.8	4B	−35.2	−0.3	268.3	V
BSK-B50-1354	412.7	4B	−35.4	−0.2	268.6	V
BSK-B50-1363	415.4	4A	−35.4	−0.2	267.4	V
BSK-B50-1366	416.4	4B	−35.6	−0.4	267.9	V
BSK-B50-1366	416.4	4A	−34.1	−1.1	265.3	L
BSK-B53-896	273.1	4B	−35.4	−0.2	268.3	V
BSK-B53-899	274.0	4B	−35.2	−0.2	268.1	V
BSK-B53-902	274.9	4B	−35.8	−0.3	267.0	V
BSK-B53-956	291.4	4B	−35.4	−0.3	268.3	V
BSK-B53-970	295.7	4B	−35.4	−0.3	268.9	V
BSK-B53-973	296.6	4A	−35.2	−0.3	267.4	V
BSK-B53-976	297.5	4A	−35.4	−0.2	266.9	V
BSK-B54-1632	497.4	4A	−35.5	−8.3	265.3	L
BSK-B54-1637	499.0	4A	−35.4	−7.4	266.8	L

BSK-B54-1639	499.6	4A	−35.2	−0.3	267.9	V
BSK-B54-1644	501.1	4B	−35.6	−8.1	265.4	L
BSK-B54-1647	502.0	4B	−35.7	−7.5	266.9	L
BSK-B54-1647	502.0	4A	−34.9	−8.1	265.1	L
BSK-B54-1650	502.9	4A	−35.4	−0.3	268.1	V
BSK-B54-1653	503.8	4A	−36.3	−0.3	267.9	V
BSK-B54-1657	505.1	4B	−35.5	−0.3	268.4	V
BSK-B54-1660	506.0	4B	−35.4	−8.3	265.9	L
BSK-B54-1663	506.9	4B	−35.7	−8.9	265.4	L
BSK-B54-1667	508.1	4A	−35.6	−0.3	267.2	V
BSK-B54-1670	509.0	4A	−35.0	−8.8	260.2	V
BSK-B54-1675	510.4	4A	−35.8	−7.5	266.6	V
BSK-B56-667	203.3	4B	−35.7	−0.1	266.5	L
BSK-B56-677	206.3	4A	−35.3	−0.1	266.2	L
BSK-B56-714	217.6	4A	−35.4	−0.4	266.5	V
BSK-B56-717	218.5	4B	−34.8	−0.4	265.9	V
BSK-B56-720	219.5	4B	−33.9	−0.4	266.2	V
BSK-B56-723	220.4	4A	−34.8	−0.5	265.5	V
BSK-B56-726	221.3	4A	−35.4	−0.3	266.1	V
BSK-B56-729	222.2	4B	−35.4	−0.4	267.3	V
BSK-B58-797	242.9	4B	−35.2	−0.5	266.8	V
BSK-B58-800	243.8	4A	−35.8	−0.6	266.2	V
BSK-B58-800	243.8	4B	−35.3	−0.5	266.6	V
BSK-B58-803	244.8	4B	−35.6	−0.3	266.9	L
BSK-B58-806	245.7	4B	−35.2	−0.4	267.4	L
BSK-B58-818	249.5	4B	−35.8	−0.6	265.1	L
BSK-B58-826	251.7	4A	−35.4	−0.5	268.2	V
BSK-B58-826	251.7	4A	−35.8	−0.4	266.4	V
BSK-B58-829	252.7	4A	−35.4	−0.3	269.4	V
BSK-B58-832	253.6	4A	−35.8	−0.4	267.8	V
BSK-B58-857		4B	−35.4	−0.4	268.3	V
BSK-B58-872	265.8	4B	−35.5	−0.4	269.1	V
BSK-B61-1909	581.9	4B	−35.5	−0.4	255.9	V
BSK-B58-1912	582.8	4B	−35.1	−0.5	258.3	V

All inclusions hosted in quartz.

Table S7. Fluid inclusion data: Cherbourg Zone Stage 2.

Sample No.	Inclusion Type	Te	Tm Ice	Tm * Clath	Th	Homog. Phase
BSK-9	4A	−35.7	−0.1	-	266.7	L
BSK-10	4B	−35.0	−0.1	-	266.6	L
BSK-12	4A	−35.4	−0.1	10.5	266.3	L
BSK-19	4A	−35.8	−0.1	-	266.5	L
BSK-19	4B	−35.8	−0.1	-	266.8	L
BSK-C-0+43-7	4B	−36.9	−0.1	-	266.4	L
BSK-C-0+43-7	4A	−34.4	−0.1	-	266.8	V
BSK-C-0+43-7	4B	−34.4	−0.1	-	265.9	L
BSK-C-0+43-8	4B	−34.8	−0.2	10.5	266.7	L
BSK-C-0+43-9	4B	−35.8	−0.4	-	266.5	L
BSK-C-0+43-9	4A	−35.7	−0.4	-	266.3	V
BSK-C-0+43-9	4A	−35.9	−0.5	-	266.1	L
BSK-C-0+95E-1	4B	−35.4	−0.1	-	266.2	L
BSK-C-0+95E-2	4A	−35.1	−0.1	-	266.1	V
BSK-C-0+95E-2	4A	−35.2	−0.1	-	266.3	V
BSK-C-0+95E-2	4A	−35.3	−0.1	-	266.2	V
BSK-C-0+95E-5	4A	−35.8	−0.1	-	266.4	L
BSK-C-0+95E-5	4B	−35.8	−0.1	-	266.1	V
BSK-C-0+95E-5	4A	−35.8	−0.1	-	265.8	L
BSK-C-0+95E-5	4A	−35.8	−0.1	-	265.9	L
BSK-C-1+05E-2	4A	−35.8	−0.1	-	265.7	L
BSK-C-1+05E-5	4B	−35.7	−0.1	-	266.4	L
BSK-C-1+05E-6	4B	−35.9	−0.1	-	266.8	L
BSK-C-1+60E-3	4B	−35.6	−0.1	-	266.3	L
BSK-C-1+60E-4	4A	−35.4	−0.1	-	266.5	L
BSK-C-1+94E-1	4A	−35.5	−0.1	-	266.4	L
BSK-C-2+78E-1	4A	−35.4	−0.1	-	266.4	L
BSK-C-2+78E-2	4B	−35.9	−0.1	-	266.1	L
BSK-C-2+78E-6	4B	−35.3	−0.1	-	267.1	V
BSK-C-31-6	4B	−35.9	−0.1	-	266.3	L
BSK-C-31-7	4B	−35.7	−0.1	-	266.9	L
BSK-C-31-11	4A	−35.7	−0.1	-	266.9	L
BSK-C-31-12	4B	−35.9	−0.1	-	266.8	L
BSK-C-31-17	4B	−35.8	−0.1	-	267.1	L

*Dash indicates not observed.

All inclusions hosted in quartz or calcite

Table S8. Fluid inclusion data: Brookbank Stage 3A.

Sample No.	Depth (m)	Inclusion Type	Te	Tm Ice	Th	Homog. Phase
BSK-B43-1043	317.9	3	−56.7	−0.9	32.5	L
BSK-B46-1043	317.9	3	−56.8	−0.9	32.3	V
BSK-B46-2447	745.9	3	−56.3	−0.9	32.5	V
BSK-B46-2447	745.9	3	−56.8	−0.9	32.5	L
BSK-B46-2472	753.5	3	−56.5	−0.9	32.9	V
BSK-B46-2472	753.5	3	−56.2	−0.7	32.6	V
BSK-B46-2513	766.0	3	−56.7	−0.7	32.4	V
BSK-B46-2513	766.0	3	−56.6	−0.8	32.4	V
BSK-B49-520	158.5	3	−56.6	−0.7	32.3	V
BSK-B49-523	159.4	3	−56.3	−0.8	32.8	V
BSK-B49-532	162.2	3	−56.7	−0.8	32.6	V
BSK-B49-545	166.1	3	−56.5	−0.8	32.4	V
BSK-B49-561	171.0	3	−56.6	−0.9	32.5	V
BSK-B49-567	172.8	3	−56.6	−0.9	32.5	V
BSK-B49-573	174.7	3	−56.6	−0.8	32.6	V
BSK-B49-576	175.6	3	−56.8	−0.9	32.4	V
BSK-B49-601	182.2	3	−56.6	−0.9	32.4	V
BSK-B49-604	184.1	3	−56.8	−0.8	32.5	V
BSK-B49-607	185.0	3	−56.3	−0.7	32.4	V
BSK-B49-622	189.6	3	−56.6	−0.9	32.6	V
BSK-B49-623	189.9	3	−56.5	−0.8	32.4	V
BSK-B50-1312	399.9	3	−56.6	−1.3	32.5	V
BSK-B50-1321	402.6	3	−56.6	−1.0	32.6	V
BSK-B50-1330	405.4	3	−56.7	−1.2	32.9	V
BSK-B50-1336	407.2	3	−56.5	−0.8	32.3	V
BSK-B50-1360	419.5	3	−56.6	−1.4	32.5	L
BSK-B53-936	285.3	3	−56.6	−1.2	32.4	V
BSK-B53-950	289.6	3	−56.5	−1.4	32.6	V
BSK-B53-997	303.9	3	−56.6	−1.4	32.6	V
BSK-B54-1647	502.0	3	−56.6	−8.1	32.7	L
BSK-B54-1670	509.0	3	−56.6	−0.7	32.4	V
BSK-B54-1677	511.2	3	−56.6	−0.7	32.3	V
BSK-B54-1680	512.1	3	−56.5	−1.1	32.7	V
BSK-B56-742	226.2	3	−56.6	−1.8	32.7	V
BSK-B58-800	243.8	3	−56.6	−4.3	32.8	V
BSK-B58-800	243.8	3	−56.5	−1.5	32.2	V
BSK-B58-818	249.3	3	−56.5	−0.6	32.8	V
BSK-B58-826	251.8	3	−56.6	−4.3	32.9	V
BSK-B58-887	270.4	3	−56.6	−8.3	32.8	L
BSK-B58-892	271.9	3	−56.6	−6.8	32.5	L

All inclusions hosted in calcite.

Table S9. Fluid inclusion data: Cherbourg Zone Stage 3A.

Sample No.	Inclusion Type	Te	Tm Ice	Tm * Clath	Th	Homog. Phase
BSK-2	3	−56.6	−0.9	-	32.1	V
BSK--14	3	−55.6	−0.9	-	55.9	V
BSK-14	3	−55.6	−0.9	-	38.6	L
BSK-15	3	−54.9	−0.9	10.4	44.8	L
BSK-C-0+43-2	3	−56.6	−0.9	-	32.4	L
BSK-C-0+43-2	3	−56.6	−0.9	-	32.0	L
BSK-C-0+43-5	3	−56.6	−0.9	-	32.4	L
BSK-C-0+43-12	3	−56.6	−0.9	-	32.1	L

* Dash indicates not observed.

All inclusions hosted in quartz.

Table S10. Fluid inclusion data: Cherbourg Zone Stage 3B.

Sample No.	Inclusion Type	Te	Tm Ice	Tm * Clath	Th	Homog. Phase
BSK-C-0+43-1	3	−14.3	−1.2	-	44.3	L
BSK-C-0+43-1	3	−15.0	−1.2	-	66.1	L
BSK-C-0+43-1	3	−15.4	−1.1	-	68.1	L
BSK-C-0+43-1	3	−15.8	−1.1	-	68.9	V
BSK-C-0+43-1	3	−14.4	−1.2	-	66.1	L
BSK-C-0+43-1	3	−14.4	−1.2	-	69.8	L
BSK-C-0+43-2	3	−15.4	−1.2	-	21.6	L
BSK-C-0+43-2	3	−15.3	−1.1	-	42.3	L
BSK-C-0+43-2	3	−15.2	−1.1	-	40.1	V
BSK-C-0+43-2	3	−15.8	−1.2	-	21.6	L
BSK-C-0+43-2	3	−15.4	−1.1	-	21.8	L
BSK-C-0+43-3	3	−15.6	−1.1	-	58.8	L
BSK-C-0+43-3	3	−14.5	−1.2	-	23.6	V
BSK-C-0+43-3	3	−15.1	−1.2	-	62.9	L
BSK-C-0+43-3	3	−15.9	−1.2	-	58.1	L
BSK-C-0+43-4	3	−15.2	−1.2	-	44.8	L
BSK-C-0+43-10	3	−15.8	−1.2	-	51.9	L
BSK-C-0+43-10	3	−15.8	−1.2	-	38.9	L
BSK-C-0+43-10	3	−15.9	−1.1	-	42.5	L
BSK-C-0+43-12	3	−14.1	−1.1	-	29.2	V
BSK-C-0+43-12	3	−14.9	−1.1	-	31.2	L
BSK-C-0+43-12	3	−18.6	−1.2	-	46.3	L
BSK-C-0+95E-2	3	−15.9	−1.1	-	66.6	L

* Dash indicates not observed.

All inclusions hosted in quartz.