Quarterly Activities Report

Three months ended 31 December 2017



31 January 2018

Frontier Diamonds Limited (ASX: FDX) (**Frontier** or **the Company**) is pleased to provide an overview of its key activities for the quarter (and half-year) ended 31 December 2017.

Highlights

- Acquisition of 100% of Sedi Star Diamonds Pty Ltd and 74% of Sedi Diamonds (Pty) Ltd completed on 22 December 2017, with economic ownership effective from 1 July 2017.
- Successful Initial Public Offering (IPO) of Frontier, raising gross proceeds of A\$4.1 million, with trading on the ASX commencing on 5 January 2018.
- December 2017 half-year diamond sales of 4,320 carats for total revenue of US\$1.5 million, achieving an average sale price of US\$338 per carat.
- Four exceptional stones recovered from Sedibeng during the half, including a 31.2 carat diamond that sold for US\$0.5 million (US\$15,942 per carat).
- Strong progress on underground development activity, planned refurbishment and upgrading of mine infrastructure at both Sedibeng and Star.
- Progressive move to more mechanised Sub Level Retreat mining at Sedibeng and Star to drive greater efficiencies and safety, although with near-term impact on FY2018 forecasts.
- Targeted ore throughput levels now expected to be reached at Sedibeng by June 2018 and Star by September 2018.
- Sedibeng tailings processing plant dry commissioned in December 2017 and expected to commence commercial operations in February 2018.



Operations

Consolidated operational results

The consolidated operating results continued to be restrained during the September and December 2017 quarters due to planned development and refurbishment activities at the Sedibeng and Star mines.

Mine production in the December 2017 quarter was also impacted by a decision to accelerate other safety and productivity initiative projects, including evaluation of the lower dilution and higher mechanisation Sub Level Retreat mining method at both operations.

Table 1: Frontier consolidated production (100% basis)

Diamond production		Mar Qtr 2017	Jun Qtr 2017	Sep Qtr 2017	Dec Qtr 2017
Primary tonnes processed	tonnes	16,407	13,163	8,694	16,709
Tailing tonnes processed	tonnes	8,066	8,512	1,020	-
Head grade – ROM	cpht	11.83	16.30	18.34	19.35
Head grade – Tailings	cpht	4.25	5.45	13.23	-
Carats recovered – ROM	carats	1,940	2,145	1,595	3,233
Carats recovered – Tailings	carats	343	464	135	-
Total output (100%)	carats	2,284	2,609	1,989	3,233
Attributable output (74%)	carats	1,690	1,931	1,472	2,393

Source: Frontier, January 2018

Processed tonnes and carats continued to be impacted through the September and December 2017 quarters as a function of concentrated shaft infrastructure improvements and repairs done earlier than anticipated, elevated underground development activities and consequently mining of lower grade areas of the mine. The significant additional improvement in shaft and ventilation infrastructure has now laid a strong foundation for increased mine safety and future sustainable production efficiencies at both mines.

Table 2: Frontier consolidated sales (100% basis)

Diamond sales		Mar Qtr 2017	Jun Qtr 2017	Sep Qtr 2017	Dec Qtr 2017
Diamond sales	carats	3,618	2,452	-	4,320
Average price achieved	US\$/ct	291	460	-	338
Sales revenue	US\$M	1,053	1,128	-	1,461

Source: Frontier, January 2018

The liquidity problems experienced by some buyers from India during the first tender of FY2018 contrasted with the strong process and outcomes achieved with the December tender. The demand for > 2ct gem stones remains strong underpinning the revenue generated with special stones sold.



Sedibeng mine

As previously highlighted, and in-line with the mine plan, Sedibeng output (throughput and carats) continued to be impacted through the September and December 2017 quarters as a function of the intensity of underground development activity (heavily utilising existing production hoisting capacity) and consequent mining of lower grade areas of the mine.

The Company also took the opportunity to accelerate replacement of all steelwork at the West Subvertical Shaft and associated ore loading stations, including inserting additional buntings between existing ones. Although the decision to bring forward these planned future works further negatively impacted production during the quarter, the additional work has laid a strong foundation for increased mine safety and future production efficiencies at Sedibeng.

Table 3: Sedibeng mine production (100% basis)

Diamond production		Mar Qtr 2017	June Qtr 2017	Sep Qtr 2017	Dec Qtr 2017
Primary tonnes processed	tonnes	14,702	12,434	8,694	16,709
Tailing tonnes processed	tonnes	-	1,410	1,020	-
Head grade – ROM	cpht	9.32	15.63	18.34	19.35
Head grade – Tailings	cpht	-	8.08	13.26	-
Carats recovered – ROM	carats	1,370	1,943	1,595	3,233
Carats recovered – Tailings	carats	-	114	135	-
Total output (100%)	carats	1,370	2,057	1,730	3,233
Attributable output (74%)	carats	1,014	1,522	1,280	2,393

Source: Frontier, January 2018

The following exceptional stones were recovered from the Sedibeng mine and sold during the past three tenders that include the June 2017 tender:

- 31.2 carats sold for US\$497,390 (US\$15,942 per carat)
- 28.3 carats sold for US\$149,594 (US\$5,286 per carat)
- 27.9 carats sold for US\$168,600 (US\$6,043 per carat)
- 11.4 carats sold for US\$97,891 (US\$8,602 per carat)

Figure 1: 31.2 carat diamond recovered from Sedibeng during the half-year



Source: Frontier, January 2018



The Bobbejaan Fissure has now been intersected at Level 19, with the north and south stopes established and production commencing from the lower levels.

Full stope production from these high-grade areas is expected to see Sedibeng ore throughput rampup to targeted levels of 11,000 tonnes per month by June 2018.

Star mine

Planned refurbishment work completed at Star included the development of new ventilation shafts from Level 10 through to Level 13. Two additional winders were also installed in the main ventilation shaft from the surface to Level 6, and from Level 6 to Level 10, as alternative transportation routes for underground personnel. The creation of a secondary means of egress and new ventilation shafts was a high management priority and its completion substantially increases the overall safety profile of the Star operation.

Table 4: Star Mine production (100% basis)

Diamond production		Mar Qtr 2017	June Qtr 2017	Sep Qtr 2017	Dec Qtr 2017
Primary tonnes processed	tonnes	1,705	729	-	-
Tailing tonnes processed	tonnes	8,066	7,102	-	-
Head grade – ROM	cpht	33.47	27.72	-	-
Head grade – Tailings	cpht	4.25	4.92	-	-
Carats recovered – ROM	carats	571	202	-	-
Carats recovered – Tailings	carats	343	350	-	-
Total output (100%)	carats	914	552	-	-
Attributable output (74%)	carats	676	409	-	-

Source: Frontier, January 2018

The sinking and equipping of the Main Shaft to Level 17 is complete with the main winder now also able to operate to this primary production level. A total of 457 linear metres of underground development on ore drives, cross cuts, shaft sinking and service stations was completed during the December 2017 half.

The excavation of double ore passes from Level 14 down to Level 17 for the main conveyor skip loading system has been well advanced, with equipping and change-over to automatic skip loading planned for July 2018.

Ore throughput at the Star mine is expected to ramp-up to targeted levels of 6,958 tonnes per month by September 2018.



Enhanced operational strategy

In pursuit of enhanced long-term operating efficiency and consistency, Frontier senior management has invested considerable time in evaluating the potential to introduce new mining methods at both the Sedibeng and Star mines. This exercise has led to the proposed application of Sub Level Retreat mining to all new stopes.

The Sub Level Retreat method will increase mechanisation and is anticipated to substantially reduce waste dilution and enhance ROM diamond grades. It has been used previously in mining narrow vein, sub-vertical ore bodies, such as those at the Sedibeng and Star operations, and shown to deliver substantial improvements to overall mine operating performance.

Progressive introduction of this mining method, in combination with the extensive remediation and refurbishment works that have taken place over the past year, are expected to deliver a considerably enhanced safety environment for the Frontier workforce and increased long-term profitability outcomes through greater efficiency and consistency of operations.

The Frontier Board granted in-principle approval to implement the new mining method at its recent January board meeting, subject to formal revision of mine operating budgets for review at the February board meeting.

Subject to final approval, introduction of the new mining method is expected to elongate expected volume ramp-up at the Sedibeng and Star mines by around 2-3 months, relative to Frontier prospectus forecasts. This is anticipated to negatively impact on expected output and earnings levels for FY2018, but is not expected to materially affect FY2019 prospectus guidance.

Development and exploration

Tailings Dump Project

The tailings processing plant acquired by the Company in June 2017 was dry commissioned at Sedibeng in December 2017 and is expected to commence commercial production in February 2018.

Figure 2: Tailings processing plant under construction



Source: Frontier, January 2018



Bellsbank Project

The Bellsbank open pit has now been excavated to a depth of 22 metres. Stockpiling of the extracted kimberlitic material is set to commence at Sedibeng in anticipation of further bulk sample treatment.

Figure 3: Mining development at Bellsbank during the quarter



Source: Frontier, January 2018

The discovery of green kimberlite and garnet indicator minerals in the calcretised weathered material, encountered approximately 18 metres below surface, also supports the historical core drilling results at Bellsbank.

Corporate

The Company completed the acquisition of 100% of Sedi Star Diamonds Pty Ltd on 22 December 2017. Concurrently this entity acquired 74% interests in the Sedibeng and Star diamond mines, plus additional diamond development and exploration interests, via the acquisition of 74% of Sedi Diamonds (Pty) Ltd. Economic ownership of these interests was effected from 1 July 2017.

Frontier successfully closed its Initial Public Offering (IPO) in December 2017, raising A\$4.1 million (before costs) through the offer. The Company was admitted to the official list of the Australian Securities Exchange (ASX) on 3 January 2018 and commenced trading under the code "FDX" on 5 January 2018.

The Company's cash balance at 31 December 2017, which included the IPO proceeds, was US\$3.1 million.

Frontier expects to release its December 2017 Half Year Accounts in early March 2018.



Forward Looking Statements

This announcement contains forward looking statements that are subject to risk factors associated with diamond mining businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to: price fluctuations, actual demand, currency fluctuations, production results, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

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About Frontier Diamonds Limited

Frontier Diamonds Limited (ASX: FDX) is an independent diamond mining company with interests in two producing underground mines in South Africa, the Sedibeng Diamond Mine and the Star Diamond Mine, and a development project at Bellsbank.

Visit www.frontierdiamonds.com for information on Frontier's current and planned future activities.

