

Re-assessing the Opportunity

Speculative Buy

Price: 2.0p

Target Price: 9.0p

Sector: Metals & Mining

Share Price Performance



Source: London Stock Exchange

Key Data

Market:	London (AIM)
TIDM:	TYM.L
1 Year Hi/Low:	4.117p – 0.945p
Existing Shares:	216.84m
Market Cap:	£4.33m
ISIN:	GB0008854563
SEDOL:	0885456
Co. Website:	tertiaryminerals.com

Charles Long
Research Analyst

charles.long@beaufortsecurities.com
+44 020 7382 8384

Sheldon Modeland, P.Geo.
Research Analyst

sheldon.modeland@beaufortsecurities.com

Strategic fluorspar assets

Tertiary is a fluorspar mine development company with large scale projects in Europe and the U.S. Its two main assets, the MB Project in Nevada and Storuman in Sweden, both have potential to be average to low cost operations with targeted production costs of between \$150 and \$200/t of acid grade fluorspar. Tertiary's strategy is to advance both projects during this current down-cycle, so they are construction ready when mine finance conditions improve. Management expects this to also coincide with a shortage of new fluorspar mines and potentially higher fluorspar prices. We have updated our valuation to reflect the current depressed fluorspar price, offset by progress made at MB and Storuman. We calculate a 9.0p target price, 4.5x the current share price.

Critical mineral in Europe, Strategic in the U.S.

Fluorspar is probably the most essential raw material that no one's heard of. It's one of 20 raw materials on the European Commission's critical list, while in the U.S. fluorspar is classified as a Strategic Material. Both regions are in need of a long term, local and reliable source of supply and Tertiary's two main projects suit this requirement.

MB Project - Nevada

Despite lagging Tertiary's Storuman project in the mine development process, in our opinion MB is of similar importance and potentially higher value. It is very large scale and located in a stable and mining friendly jurisdiction. Also very important is the U.S's reliance on imported fluorspar, mainly from Mexico, which makes MB a strategic asset.

Storuman - Exploitation Concession granted

On February 18 2016 Tertiary Minerals was granted a 25 year Mining Concession for Storuman. Although the permitting process is not finished (the next stage is the Environmental Permit) this is a major step forward which adds value to the project and reflects strong support from the Swedish Mining Inspectorate.

Fluorspar prices – positive outlook

Both acid and metallurgical fluorspar prices are at 5 year lows. Although downside risks remain (perhaps from weaker China macro), over the medium to long term the outlook is positive, driven by global demand growth of fluorine containing products.

Valuation and recommendation

Our Tertiary valuation is based on a sum-of-the-parts approach with values for MB and Storuman, based on conceptual mine models and discounted to reflect funding dilution and other execution risks. We calculate a \$26.5m valuation which equates to £19.6m or 9.0p per share, and a BUY recommendation.

Investment summary

Tertiary is an industrial minerals business focused on fluorspar, the only company of its kind listed in London. It has two main projects located in safe, mining friendly, jurisdictions with good infrastructure. Its strategy is to advance these projects during the current mining downturn so that when conditions improve, both are ready for funding and construction. The immediate challenges for Tertiary include attracting sufficient funding to pay for drilling, technical studies and other costs associated with project development.

In the short-term, share price upside should be linked to newsflow, particularly milestones reached at the two main projects. Potential short-term catalysts include:

- MB Project definition of high grade zones
- MB Project metallurgical testwork
- MB Project scoping study
- Storuman environmental submission and approval
- Storuman – Swedish government rejection of Sami Reindeer Husbandry Community appeal

In the medium to long term we also expect fluorspar prices to recover and Tertiary's market value to increase as a result. The value of its projects also depend on the pipeline of new fluorspar mines, which currently looks weak. The perfect situation for Tertiary would be for higher pricing (due to rising global demand) to coincide with limited new mine supply.

Why fluorspar?

Fluorspar is the primary source of fluorine used in industry. Its main use is in the manufacture of hydrofluoric acid, the raw material for most fluorine containing products.

60% of hydrofluoric acid is used to manufacture fluorocarbon refrigerants – non-ozone depleting HFCs are the current standard (third generation) but are being replaced by more environmentally friendly HFOs (fourth generation). The other main applications are as a flux in steel production and the manufacture of aluminium fluoride.

Other uses of fluorspar include: *Ceramics and glass, polymers (e.g. Gore-Tex and Teflon), welding, casting, anaesthetics, propellants, agrochemicals, glass industry, toothpastes, edible salts, silicon wafers, aluminium foils, printed circuit boards, pharmaceuticals.*

Major consumers of acid grade fluorspar include Mexichem, Chemours (ex-DuPont), Honeywell, Solvay, Lanxess, Fluorsid, Boliden and DDFluor. Dow Chemicals and Daikin are well known hydrofluoric acid users. China's main fluorine companies are Sinochem, Do-Fluoride and Juhua Group.

Dynamics of the Fluorspar market

Fluorspar is a medium value (10y average price \$300/t) industrial mineral. Although transport is a significant cost, it is a globally traded commodity.

Fluorspar is a c.6.4Mt market and demand is dominated by China (50%), Europe (10%) and the U.S. (7%) while supply is dominated by China (61%), Mexico (18%), Mongolia (6%) and South Africa (3.2%).

Most of the seaborne trade is in acid-grade fluorspar, for example of 440Kt the U.S. imported last year 330Kt was acid-grade for hydrofluoric acid plants in Texas and Louisiana (e.g. Chemours and Honeywell).

U.S. and Europe's reliant on imports

Although Europe and the U.S. are major consumers of fluorspar, both regions are reliant on imports. Part of Tertiary's strategy is to address this situation through the development of fluorspar mines in Nevada and Sweden.

The U.S, along with 18 other commodities, imports 100% of its fluorspar requirements mainly from Mexico, China, South Africa and Mongolia. We understand that the new Nui Phao mine in Vietnam also exports some fluorspar to the U.S. The U.S. government has classified fluorspar as a Strategic Material.

Europe produces some fluorspar but similar to the U.S., it is a net importer from a concentrated group of countries, namely Mexico, China, South Africa and Vietnam. The European Commission have listed fluorspar as Critical mineral.

Chinese exports falling

Between 2010 and 2013, the fluorspar investment case was based on rising consumption in China, Chinese export restrictions and an expectation that China would become a net importer. However, the slowing of the Chinese economy coupled with the fall in Chinese steel production has meant that China still exports some fluorspar, partly contributing to a softening of the fluorspar price.

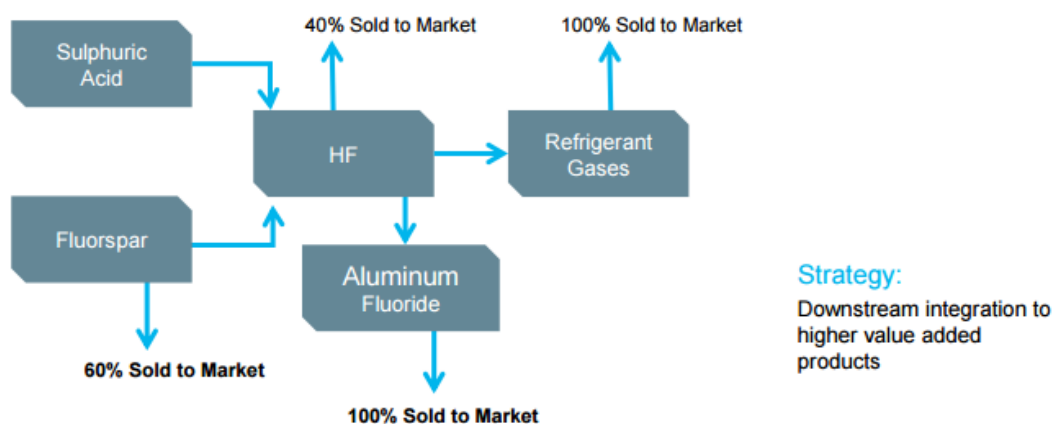
Some commentators believe this theme remains intact, albeit delayed. Chinese exports are significantly less than five years ago and if the trend continues, China could become a net importer before the end of the decade. The complicating factor is increased downstream capacity in China. While China's fluorspar consumption rises YoY, it is producing and exporting more, higher value, fluorine products such as hydrofluoric acid and aluminium fluoride.

Mexico – Mexichem's evolving strategy

The U.S. relies on fluorspar imports from Mexico, however its largest producer, Mexichem, has a strategy to use more of its own fluorspar which would result in lower exports available for companies like Chemours and Honeywell.

Mexichem produces fluorspar from the Las Cuevas mine in San Luis Potosi State, but it also produces hydrofluoric acid, refrigerant gases and aluminium fluoride. Although Mexichem is already a vertically integrated business, its strategy is to further increase its production of value-added speciality fluor products. In 2015, its fluor business produced 27% of EBITDA from only 10% of sales. This is despite 2015 being a relatively poor year for the downstream fluor business.

As the diagram below shows, 60% of its fluorspar production is currently sold in the open market (including to the U.S.). As Mexichem becomes more vertically integrated there is a danger for its U.S. customers that some of this tonnage will become unavailable.



Source: Mexichem

Some closed mines and very few new ones....

The soft fluorspar price since 2012 has led to a number of fluorspar projects being put on hold and several mines being closed (some permanently, some are on care and maintenance). This slowdown in project development may well lead to a shortage of new mines when demand-supply fundamentals improve. Mines which have closed since 2012 include Witkop (Fluormin, South Africa), Okurusu (Solvay, Namibia), Chiprovtsi (Solvay, Bulgaria) and Kimwarer (Kenya Fluorspar). These four mines removed a combined 350Kt of production capacity.

Of the known larger fluorspar mine development projects, the most significant are Nokeng and Doornhoek in South Africa and the AGS Fluorspar Mine in St. Lawrence, Canada.

Nokeng (SepFluor, private) is expected to start construction during 2016 and plans on producing 180Kt of acid grade and 30Kt of metallurgical grade fluorspar per annum. Nokeng has been in the pipeline for many years which casts some doubt on this timing.

Doornhoek is a joint venture between ENRC and SA Fluorite. The project has also been in the pipeline for many years and is at a relatively early stage. It is a similar scale project to Nokeng but timing is unknown.

Canada Fluorspar listed with the **AGS project** in 2011. In April 2014 private equity group, Golden Gate Capital, acquired Canada Fluorspar and delisted it. We understand that the feasibility studies are currently being updated but there is no publically available information regarding construction timelines.

....except Nui Phao in Vietnam

The only new mine to come on stream recently is Masan's Nui Phao mine in Vietnam, a polymetallic operation which, alongside bismuth and tungsten, is expected to produce up to 220Kt of fluorspar per annum.

Conclusion

Tertiary's projects are well placed to serve U.S. and European demand, both large markets where fluorspar production is small to non-existent and where governments are concerned by a reliance on imports. Both projects have strategic value to fluorine companies in the U.S. and Europe, but their value will more importantly depend on the future price of fluorspar delivered to Rotterdam or Louisiana.

In the U.S. prices will be influenced by Mexichem's increased consumption of its own mined fluorite while the European price will probably depend on the quantum of Chinese exports which have been decreasing since 2000.

New mine supply appears quite limited and should fluorspar demand increase YoY as expected (essentially in line with global GDP growth), fluorspar prices should rise over the medium term.

Valuation

Our valuation is based on Storuman's Scoping Study results and a conceptual model for the MB Project. We have then risked both projects to reflect the current lower fluorspar price and the cost (and dilution) of taking both projects through to production. We have risked Storuman by 75% and MB by 80% to reflect its earlier stage of development.

As both projects advance through the development stages we expect to reduce the risk factor which will increase our sum of the parts the valuation. A sustained higher fluorspar price may also positively impact our valuation. Note, we have also included a nominal value for Tertiary's other mineral and metal projects.

We value Tertiary at £19.6m which is equivalent to 9.0p.

Sum of the Parts:

Description				
Storuman	\$m	10.25	£m	7.6
MB Project	\$m	15.74	£m	11.7
Other projects	\$m	0.50	£m	0.4
Total		26.49		19.6

Price target	(p)	9.0
Current share price	(p)	2.0

Riskd values:

Description		Unriskd		Riskd
Storuman NPV	\$m	41.00	\$m	10.25
MB NPV	\$m	78.70	\$m	15.74

MB mine life

Our MB conceptual model is based 24Mt and a 12 year mine life because, beyond that, subsequent cashflows have very little impact on the NPV. However, MB has a much larger resource which could underpin a mine life of 30 years or more. This long life could have significant strategic value to one of the U.S. fluorspar end-users.

MB Project conceptual model:

Description	Our assumptions
Mining inventory	24 Mt
Grade	10.5%
Annual tonnage	1.5 Mt
Fluorspar price - Year 1	\$295
Average price - 10 year	\$309
Price inflation	1.0%
Annual production	150000 tpa
Mine life	12 years
Initial capex	75.0
NPV pre-tax (8%)	78.7
IRR (100% equity)	15%
Payback period	<5 years

Storuman Scoping Study (extended scenario):

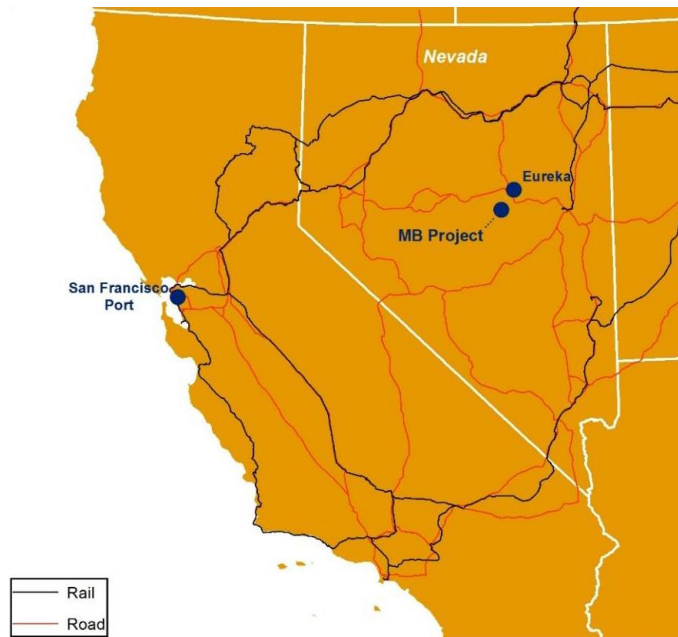
Description	Extended mine life
Mining inventory	23Mt
Grade	12.3%
Strip ratio	N/A
Annual tonnage	1 Mt
Fluorspar price (Rotterdam)	\$357/t
Annual production	103000 tpa
Mine life	23 years
Initial capex	\$46m
NPV pre-tax (8%)	\$41m
IRR (100% equity)	24%
Payback period	<3 years

MB Project – U.S.

Tertiary acquired MB in 2012 since when it has undertaken 4 drill programmes and delivered two resource estimates. The MB Project is located in central Nevada 14Km from Eureka, an active mining town. The nearest railhead is 161km and current estimated freight haulage costs to the hydrofluoric acid plants in Texas and Louisiana are between \$65/t and \$100/t, compared with shipping costs from China of circa \$50/t.

Of similar, potentially greater, importance to transport costs is MB's location in the U.S. which currently imports 100% of its acidspar (acid-grade fluorspar) requirements. The U.S. government has identified acidspar as a Strategic Material and has also put it on its Shortfall Materials list. Although fluorochemical manufacturers do not discuss outlook or strategy towards fluorspar supplies, we expect they share some of government's concerns.

MB Project location



Source: Company

Scale and grade – 86Mt

The MB Project is thought to be one of the largest fluorite deposits in the world with a current resource of 9.25Mt of contained fluorspar. Although the grade is relatively low, its scale, low strip and open pittable nature suggests potential for competitive production costs. A number of drill holes have intercepted higher grade zones and the most recent phase of drilling was designed to better understand the geometry of these zones. Drilling results published in February include the following intercepts:

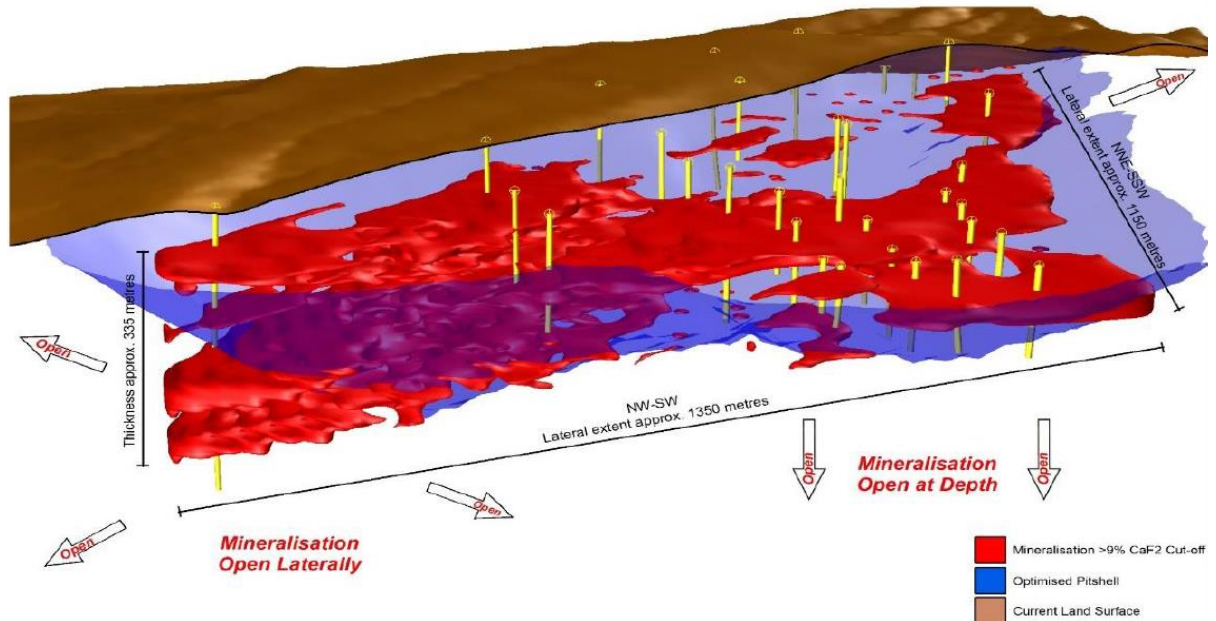
- 32m grading 16.74% CaF_2
- 32m grading 15.8% CaF_2

MB Project resource estimate

Description	Unit	Resource	Grade	Contained
Indicated	Mt	6.10	11%	0.659
Inferred	Mt	80.30	11%	8.592
Total	Mt	86.40		9.25

Source: Beaufort Securities. Note resources are inclusive of reserves.

Geological model – extensive flat lying mineralisation



Source: Company

Production costs and logistics

Management is targeting production and transport costs to users on the Eastern seaboard of sub \$250/t of acid grade fluorspar. In our conceptual model we used \$175/t production cost and \$240/t including freight to Louisiana or Texas. MB is 161km from the nearest railhead and so reasonably well placed to supply Chemours and Honeywell's operations on the East coast.

Metallurgy

Fluorite mineralisation at the MB Project is found in limestone and dolomite (magnesium rich limestone). Encouragingly, historical metallurgical testwork by the U.S. Bureau of Mines in the 1960's, produced high grade concentrates of 96-98% with recoveries of 85-94% using a coarse grind.

It is not known whether these tests were on carbonate or dolomite hosted samples. It could be that in areas of dolomitic mineralisation a slightly different flow sheet is required. Either way, with regards metallurgy there are no causes for concern at this stage.

Metallurgical testwork is in the 2016 work programme.

Background and historical drilling

Tertiary acquired the MB Project in Q4 2012 for \$30,000 upfront plus quarterly payments of \$6,250. The quarterly payments increase over time to a maximum of \$50,000 per quarter from 30 November 2021. If the project reaches production the vendor is due a 3% Net Revenue Royalty and the quarterly payments expire. Tertiary can walk away at any time.

Union Carbide and Asarco

The MB Project and surrounding area has been explored by various companies for various minerals. During the 1960's Union Carbide was exploring for beryllium and discovered thick near surface fluorspar mineralisation. It drilled 80 holes and excavated 86 trenches, all were tested for fluorspar.

Of Union Carbide's drilling, significant intersects include 13.7m at 13.9% CaF_2 , 18.3m grading 18.2% CaF_2 and 131.1m grading 8.1% CaF_2 with mineralisation from surface to the end of hole.

In the 1980's fluorspar explorer Asarco drilled the MB Project and one of its holes assayed 125m at 11.6% CaF_2 . A consultant working for Asarco estimated the deposit contained greater than 110 million tonnes of material grading 10%+.

Tertiary work to date

- 2013/14 phase 1 and 2 drilling programmes - 26 holes totalling 3,220 metres
- maiden JORC resource estimate - of 38.4 million tonnes grading 10.4% fluorspar
- 2014 phase 3 drilling programme - 9 holes totalling 2,516 metres
- 2014 upgraded resource estimate of 86.4 million tonnes grading 10.7% fluorspar
- 2015 166 line-km ground magnetic survey
- 2015/16 phase 4 drilling programme, 4 holes totalling 1,553 metres

2016 work programme

Tertiary's strategy is to advance the project to a construction ready/feasibility study stage as soon as possible. The next steps are:

1. Metallurgical testwork
2. Economic studies and independent Scoping Study
3. Mine permitting studies/planning

Storuman Project - Sweden

Tertiary's 100% owned Storuman project is the company's most advanced project. Technically the project is at the Scoping Study stage, although with regards the process flow sheet, pit design and resource estimate, there is only modest work required to reach a Preliminary Feasibility level of detail.

The next step is for Tertiary to complete an Environmental Permit application which will include detailed plans on all aspects of the operation e.g. tailings design, mine water egress, reindeer precautionary measures, traffic impact etc. This additional work will naturally feed into the existing Storuman technical studies and take the project to the Pre-Feasibility stage.

Storuman Project location



Source: Company

Project investment case

Apart from the safe jurisdiction and strategic location in Europe, Storuman's main attractions are as follows:

1. Long life – 23 years based on current resource estimates
2. Low strip, open pit mining
3. Excellent infrastructure – roads, rail and bulk rail terminal
4. Clean product

Note that although the current mine plan is for production of 103,000 tonnes of acid-grade fluorspar per annum (a mid-sized mine), the resource is open laterally in all directions and most probably could sustain a larger operation. Tertiary's management notes that there is potential for a step-change in scale of mineralisation at Storuman.

Project economics

Storuman economic studies were commissioned in 2010 and were based on a 17.96Mt mining inventory and an acidspar price of \$357/t CIF Rotterdam (equivalent to \$303/t at the mine gate). Since then the acid spar price has decreased (now \$270-\$300/t) but so have capex costs due to lower EPC pricing and equipment costs, the latter driven by lower steel prices. The lower oil price should also positively impact project economics.

Large resource, extended mine life

Subsequent to the 2010 scoping study the Storuman resource has been increased to 28Mt. Tertiary has also produced an “extended mine life” model based on mineable tonnes of 22.96Mt and the same parameters of the Scoping Study. This longer mine life produces a pre-tax NPV₈ of \$41m. We have used this number as the basis of our valuation, albeit risked to reflect its stage of development.

Storuman scoping study

Description	Base case	Extended mine life
Mining inventory	18 Mt	23Mt
Grade	12.3%	12.3%
Strip ratio	0.8 : 1.0	-
Annual tonnage	1 Mt	1 Mt
Fluorspar price (Rotterdam)	\$357/t	\$357/t
Annual production	103000 tpa	103000 tpa
Mine life	18 years	23 years
Initial capex	\$46m	\$46m
NPV pre-tax (8%)	\$33m	\$41m
IRR (100% equity)	24%	24%
Payback period	<3 years	<3 years

Source: Company

Storuman resource - 2011

Description	Unit	Resource	Grade	Contained
Indicated	Mt	25.00	10.3%	2.570
Inferred	Mt	2.70	9.6%	0.258
Total	Mt	27.70		2.83

Source: Company

Exploitation Concession granted

In February this year, the Swedish Mining Inspectorate approved Tertiary's exploitation permit. The permit is valid for 25 years and limited to the surface area of the proposed open pit. Studies that went into the permit application include resource estimates, scoping study, stakeholder engagement and two years of environmental baseline studies. Key stakeholders were:

- Landowners
- Storums Kommun (local municipality/council)
- County Administration Board of Västerbotten (regional council)
- Sami Reindeer Husbandry Community
- Trafikverket (Swedish transport administration)
- Vattenfall (Swedish electricity producer)
- Skanova (Swedish telecommunications provider)

The Sami Reindeer group objected during the application process and then appealed the mining inspectorate's decision to award the concession. An anti-mining environmental group also appealed the concession – they object to nearly all mining projects in Sweden.

Tertiary's board expects the Swedish government to reject the appeals although the timing is uncertain. Tertiary's main reasons are:

1. Six of the seven stakeholders support the project
2. The project will provide significant economic benefits to the region
3. Fluorspar's status as a critical raw material is one of the Mining Inspectorate's considerations

We agree that these appeals will be rejected. Our view is based on the Swedish Mining Inspectorate having said that with regards to the Storuman project, it gives precedence to the national interest of minerals over the national interest of reindeer herding.

Environmental permitting – next step

Before mining can begin, Tertiary also needs an environmental permit. Management describe the environmental permit as an operating licence which covers the processing plant, tailings facility and other infrastructure and activity. As with the exploitation concession, the group most likely to object during the environmental permitting process is the Sami Reindeer Husbandry Community.

Fluorspar market

The West's reliance on imports

Principally due to geological fate, China produces >60% of the world's fluorspar, most of which it currently consumes. The U.S. imports c.100% of its fluorspar demand while Europe imports upwards of 70% of its requirement.

As a result government agencies in both the U.S. and Europe have highlighted their vulnerability to fluorspar imports. The European Commission has classified fluorspar as a "Critical Raw Material" while the U.S.'s Department of Defense classifies fluorspar as a "Strategic Mineral".

Demand

Fluorspar is a 6.4Mt per year market with demand dominated by China the U.S. and Europe. 60% of fluorspar demand is of acid grade fluorspar concentrate, a fine white powder or filtercake grading a minimum of 97% CaF_2 . Acid grade fluorspar is used in the chemical and aluminium industries. The remaining 2.7Mt is split between metallurgical grade fluorspar - used as a flux in the production of stainless steel - and ceramic grade which is used in the ceramic and glass industries.

Supply

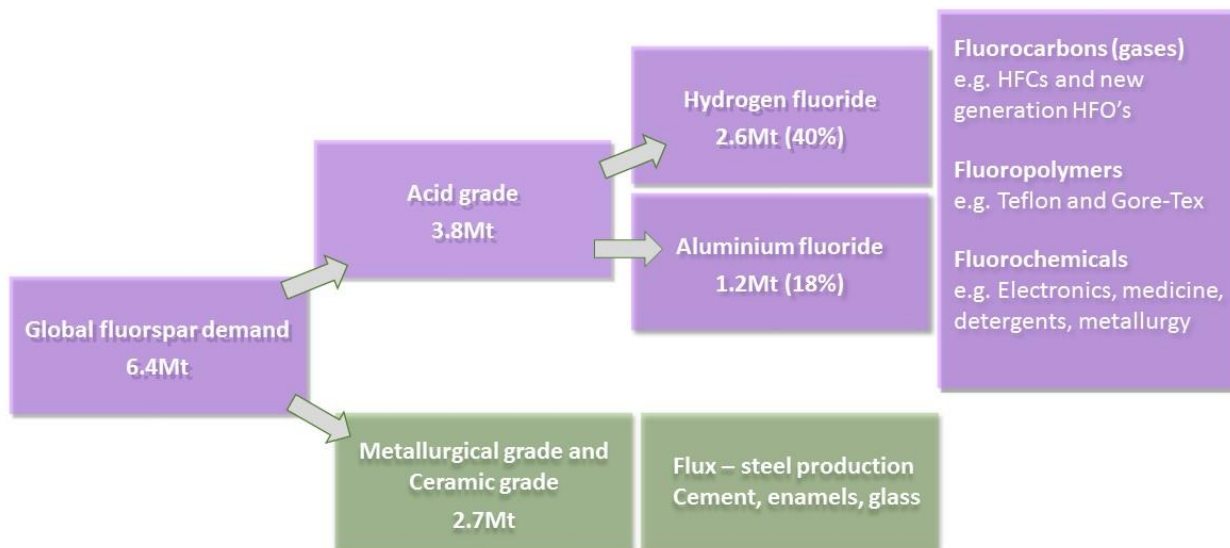
Supply is dominated by China 61%, Mexico 18%, Mongolia 6% and South Africa 3.2%. The table below details the supply side of the market.

Description	2014	2015	Reserves
United States	0	0	4,000
China	3,800	3,800	24,000
Mexico	1,110	1,110	32,000
Mongolia	375	375	22,000
South Africa	285	200	41,000
Kazakhstan	110	110	N/A
Iran	90	90	3,400
Spain	98	95	6,000
Germany	60	60	N/A
UK	77	70	N/A
Namibia	65	0	N/A
Morocco	75	75	580
Kenya	70	63	5,000
Other	177	210	110,000
World total	6,390	6,250	247,980

Source: USGS

Demand history and outlook

The largest market segment in the fluorspar market is hydrofluoric acid production (hydrogen fluoride) which consumes approximately 40% of the globally mined fluorite. Hydrofluoric acid is the precursor to various fluorine containing products. Fluorocarbon manufacture (refrigeration, foam blowing, air conditioning and most fluoropolymers products) consumes approximately 60% of the hydrofluoric acid or 25% of globally mined fluorite (www.eurofluor.org/hf-applications/fluorocarbons). Polytetrafluoroethylene (PTFE) is a well-known fluoropolymer used in a range of products from Teflon to plumber's tape. The rest of the hydrofluoric acid produced is used to make medicines, electronics (semiconductor devices), insecticides, detergents and as a catalyst in fuel production.



Source: Company, Beaufort, USGS

CFCs, HFCs and the next generation of refrigerants

As the major consumer of fluorite, refrigerants and the global regulations surrounding their future use, are an important area to understand. Over the last three decades legislation has and is phasing-out the use of certain refrigerants. The ozone depleting chlorofluorocarbons (CFCs) such as R-11 and R-12 were banned in the 1990's.

Hydrochlorofluorocarbon (HCFCs) such as R-22 were then phased-out over a period of 13 years, ending with a complete ban on 1 January 2015. More recently the European Parliament has introduced a "phase down" of other fluorine products including hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆). Similar laws have been passed in North America.

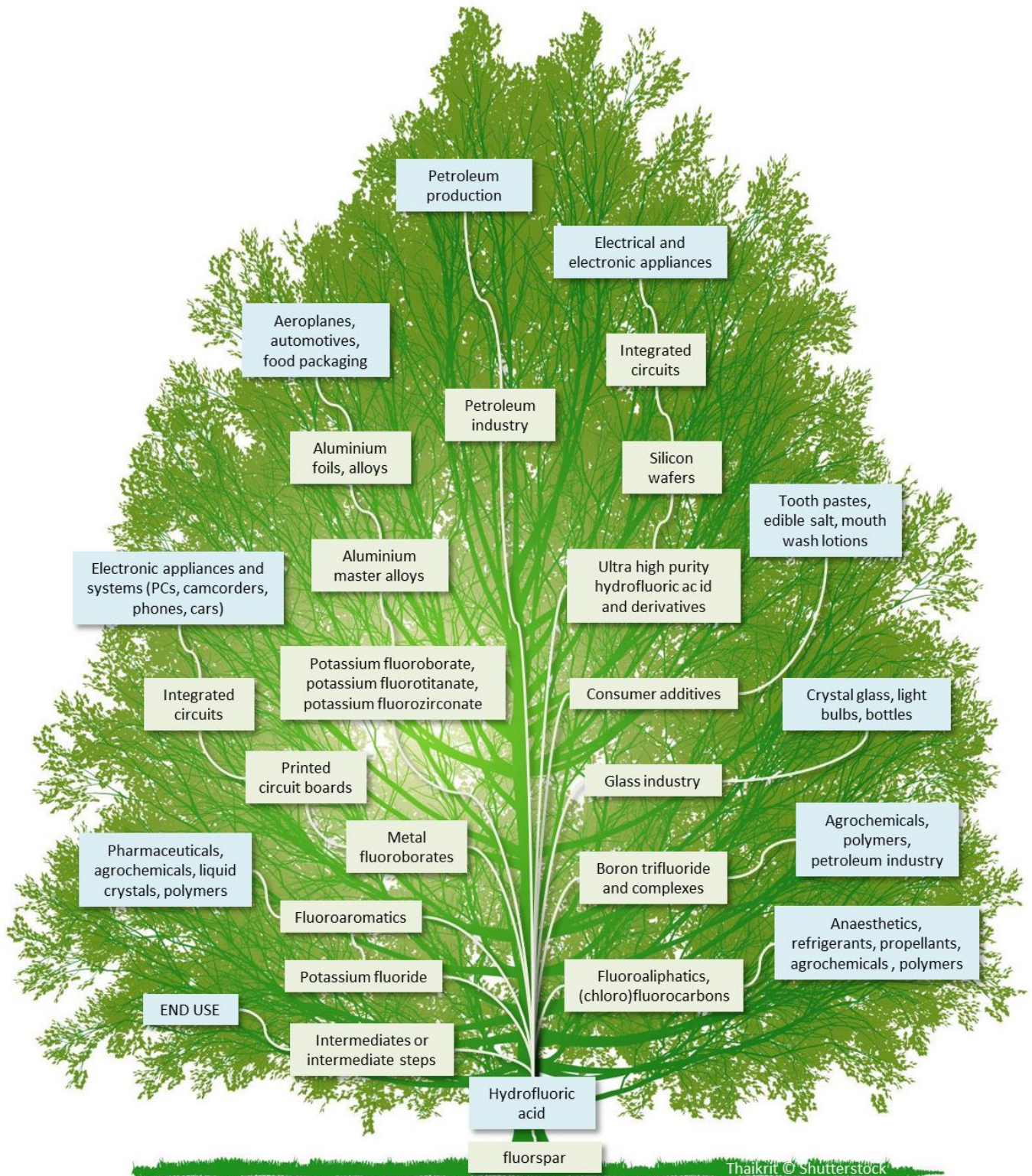
The current view is that HFCs will play an important but declining role over the next 15 years and that the newly developed hydrofluoroolefins (HFOs), the fourth generation of refrigerants, will be the main substitute. These developments are extremely important for fluorspar mining companies given the size of the refrigerant market.

U.S. supply dynamics

The U.S. Department of Defense is responsible for monitoring supplies of raw materials deemed vital to "defense, essential civilian and essential industry applications". The department's National Defense Stockpile (NDS) Program is responsible. It monitors the trade in a wide range of commodities and where necessary categorises certain materials as strategic or critical. In some cases it recommends stockpiling.

In its latest (2015) report the NDS Program highlighted "domestic single points of failure for beryllium, fluorspar, magnesium, and rare earth elements". It also determined that fluorspar is one of 30 Shortfall Materials due to reliance on foreign suppliers and that there is a 117Kt gross fluorspar shortfall.

Fluorspar uses



Source: Eurofluor

Income Statement (£m) Sep	2013A	2014A	2015A	2016E
Revenue	-	0.2	0.2	0.2
G&A	(0.5)	(0.6)	(0.6)	(0.6)
Other costs	-	(0.0)	(0.0)	(0.0)
Derivative profit / (loss)	0.0	0.1	-	-
Operating profit / (loss)	(0.5)	(0.4)	(0.4)	(0.4)
Impairments	-	-	(0.3)	-
Disposal income	-	-	-	-
Finance income / (costs)	0.0	0.0	0.0	-
Profit (loss) before tax	(0.5)	(0.4)	(0.7)	(0.4)
Tax expense	-	-	-	-
Profit / (loss) after tax	(0.5)	(0.4)	(0.7)	(0.4)
EPS	(0.31)	(0.22)	(0.37)	(0.18)

Source: Company. Beaufort Securities

Cashflow Statement (£m) Sep	2013A	2014A	2015A	2016E
Net loss for the year	(0.5)	(0.4)	(0.7)	(0.4)
Depreciation	0.0	0.0	0.0	0.0
Impairment charges	0.0	0.0	0.3	-
Share based payments	0.1	0.1	0.1	0.1
Derivative movement	(0.1)	(0.1)	-	-
Other	-	(0.1)	(0.0)	-
Sub-total	(0.4)	(0.4)	(0.4)	(0.3)
Changes in working capital	-	-	-	-
Decrease/ (increase) in receivables	(0.0)	(0.0)	0.0	-
Increase / (decrease) in payables	0.0	(0.1)	(0.1)	-
Operating cashflow	(0.4)	(0.5)	(0.4)	(0.3)
Investing cashflow				
Interest received	0.0	0.0	0.0	-
Purchase of intangibles	(0.5)	(0.8)	(0.6)	(0.4)
Purchase of property, plant and equipment	(0.0)	(0.0)	(0.0)	(0.0)
Loans to Group companies	-	-	-	-
Other	-	0.3	-	-
Investing cashflow	(0.5)	(0.5)	(0.6)	(0.4)
Financing cash flows				
Share issue net	1.6	0.7	0.3	0.6
Loan movements	-	-	-	-
Other	(0.4)	-	-	-
Financing cash flows	1.3	0.7	0.3	0.6
Net change in cash	0.4	(0.2)	(0.6)	(0.1)
Cash start period	0.8	1.2	0.9	0.3
FX effect	(0.0)	(0.0)	0.0	-
Cash end period	1.2	0.9	0.3	0.2

Source: Company. Beaufort Securities

Balance sheet (£m) Sep	2013A	2014A	2015A	2016E
Non-current assets				
Intangible assets	2.4	3.1	3.5	3.9
Property & plant	0.0	0.0	0.0	0.0
Investment in subsidiary	-	-	-	-
Available for sale	0.2	0.2	0.1	0.1
Total non-current assets	2.7	3.3	3.7	4.1
Current assets				
Trade and other receivables	0.1	0.1	0.1	0.1
Cash and equivalents	1.2	0.9	0.3	0.2
Restricted cash	0.4	-	-	-
Total current assets	1.6	1.1	0.4	0.3
	-	-	-	-
TOTAL ASSETS	4.3	4.4	4.1	4.4
Current liabilities				
Other financial liabilities	0.1	-	-	-
Trade and payables	0.2	0.2	0.1	0.1
Total current liabilities	0.3	0.2	0.1	0.1
Net assets	4.0	4.2	4.0	4.3
Equity capital				
Share capital	1.6	1.7	1.9	1.9
Share premium account	8.0	8.6	8.8	9.4
Other	0.6	0.4	0.5	0.5
Accumulated loss	(6.3)	(6.6)	(7.2)	(7.6)
Total equity	4.0	4.2	4.0	4.3

Source: Company. Beaufort Securities

Board of Directors

Executive Chairman: Patrick Cheetham

Patrick Cheetham has a first class honours degree in Mining Geology from the Royal School of Mines, Imperial College, University of London. He is a former winner of the Cominco (Europe) prize for mining geology. Patrick co-founded Archaean Gold N.L. in 1993 and in July 1996 it was the subject of a successful \$50 million takeover bid by Lachlan Resources NL. Prior to founding Archaean Gold, Patrick was, from 1986 to 1993 joint managing director of Dragon Mining NL. Patrick operated a private mineral exploration company, Sovereign Mining Limited, from 1983 to 1985 and prior to that worked for Western Mining Corporation in Western Australia, and for Imperial Metals Corporation in British Columbia, Canada. He is Chairman of Sunrise Resources plc.

Managing Director: Richard Clemmey

Richard is a Chartered Engineer with more than 20 years of mine/quarry development and management experience. A graduate of the Royal School of Mines in London, Richard spent the first 7 years of his career in the Middle East for Derwent Mining Ltd developing and managing a chromite mining business. On return to the UK Richard has held many senior positions including Operations Manager for Lafarge running their flagship industrial minerals operation in the north of England; General Manager for Hargreaves GB Ltd responsible for their quarrying and recycling operations and UK Operations Manager for Marshalls plc responsible for 8 quarrying operations. Richard returned back to the Middle East working as General Manager for CFE Rock managing their industrial minerals operations in Oman before joining Tertiary Minerals plc in September 2011. He was appointed by the Board to the position of Operations Director in May 2012 and became Managing Director in 2013.

Non-Executive Director: Donal McAlister

Mr McAlister is a founding director of the Company. He was until recently Finance Director of Mwana Africa. Prior to that he was Finance Director of Ridge Mining plc and Reunion Mining, having worked previously at Enterprise Oil plc, Texas Eastern N Sea Inc. and Cluff Oil Holdings plc. He has over 20 years' experience in all financial aspects of resource industry, including metal hedging, tax planning and economic modelling. Donald's experience also includes the economic evaluation of gold and base metal mines and the arranging of project finance for feasibility studies and mine developments. He was also involved in the listing of Reunion Mining plc on the Luxembourg and London Stock Exchanges.

Non-Executive Director: David Whitehead

Mr Whitehead is a mining geologist with over 40 years' experience in all aspects of mineral exploration, mine development and operations management. He joined Tertiary in April 2002 on retiring as Vice-President, Integration, Exploration and Innovation at BHP Billiton Group Plc, having been with the Billiton Group since 1976. As Chief Executive, Exploration and Development of Billiton Plc from 1997, David created and introduced a market oriented and commercial approach to minerals exploration, involving the formation of strategic alliances with junior exploration companies. Mr Whitehead is currently a director of Consolidated Mines & Investments Ltd and Chairman of its subsidiary Consolidated Nickel Mines Ltd.

Non-Executive Director: Colin Fitch

Colin Fitch is a Barrister-at-Law, and was previously Corporate Finance Director of Kleinwort Benson, Partner and Head of Corporate Finance at Rowe & Pitman (SG Warburg Securities) and Assistant Secretary at the London Stock Exchange. He has also held a number of non-executive directorships of public and private companies, including Merrydown, African Lakes and Manders plc and was until recently Company Secretary of both Ridge Mining plc and Cluff Gold. He is currently Company Secretary for Sunrise Resources plc.

Recommendation Breakdown

During the three months to end-March 2016, the number of stocks on which Beaufort Securities has published recommendations was 351, and the recommendations were as follows: Buy - 112; Speculative Buy - 203; Hold - 36; Sell - 0.

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