

WWR / NYSE-Amer

**SPECULATIVE
BUY**

Unchanged

\$20.00

Unchanged

CAPITALIZATION

Shares Outstanding (8/10/22)	47.2 M
Recent Price (8/19/22)	\$1.50

Market Capitalization	\$ 70.8 M
+ Debt	-0- M
- Cash	<u>109.0 M</u>
Enterprise Value	(\$ 38.2) M

Book Value	\$145.1 M
Working Capital	\$102.7 M
Dividend	Nil

Balance sheet figures as of 6/30/22

MARKET DATA

Bid-Ask Spread, % Price	0.67%
52 Week High/Low	\$4.19 - \$1.00

Shares Outstanding	47.2 M
Inside Ownership	1.8%
Institutional Ownership	12.0%
Estimated Flotation	45.9 M

Average Daily Volume	566 K
Short Interest, % of Float	3.1%
Beta	1.50

Source: Bloomberg LP

INVESTMENT RETURNS

	WWR	Sector*
Return on Equity	Neg	18.91%
Return on Assets	Neg	9.21%
Return on Capital	Neg	12.08%

Source: Crystal Equity Research, CSI Markets

FINANCIAL PROFILE

	FY20	FY21
Sales	\$ 0.0 M	\$ 0.0 M
EBITDA	(\$11.2) M	(\$18.1) M
(L)EPS	(\$1.58)	(\$0.49)

Source: Company Reports

HIGHLIGHTS

- **Prospective Customer Announcement.** Mid-August 2022, Westwater announced a letter of intent with a battery manufacturer to supply the Company's proprietary *Purified Micronized Graphite (PMG)* material beginning in 2023.
- **Capital Expenditures.** In June 2022 quarter, the Company reported the investment of \$12.1 million in its commercial-scale graphite processing plant under construction near Kellyton, Alabama.
- **Cash Usage, Balance.** The Company used \$5.9 million in cash resources to support operations in the June quarter, leaving cash balance at \$109 million.
- **Undervalued.** A group of sixteen graphite exploration and development companies trades at 5.69 times book value, while WWR trades at 0.49 times Westwater book value.
- **Outlook.** Investors have plenty to celebrate in WWR: 1) on schedule construction of the graphite processing plant, 2) effective business pipeline successfully cultivating prospect relationships, 3) financing options for capital spending enhanced by potential for orders beginning in 2023.

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INDUSTRY: INDUSTRIAL, ENERGY MATERIALS

WWR: NYSE-Amer

RECENT DEVELOPMENTS

Westwater Resources 'buried the headline' deep in the announcement of financial results for the second quarter ending June 2022. Nonetheless, shareholders have plenty to celebrate as the Company announced a letter of intent with a manufacturer of consumer batteries to supply Westwater's *Purified Micronized Graphite (PMG)* beginning in 2023, following the construction and commissioning of the Kellyton Graphite Processing Plant. The unnamed battery producer has committed to additional testing and qualification of *PMG* samples produced using the Westwater's pilot plant capacity.

The announcement brings to three the number of customer prospects that have advanced to final steps in Westwater's business pipeline, including final qualification testing, indications of interest in specified volumes and commitments to mutual development activities. In our view, despite the lack of details regarding the potential customer, the announcement provides strong evidence of the commercial potential in Westwater's graphite materials. We believe the Company continues as a leader in the graphite sector in terms of its business development efforts.

RECOMMENDATION

We continue to view WWR as undervalued relative to its peers in the graphite materials. A group of sixteen graphite exploration and development companies are trading at an average of 5.69 times book value. This compares to a price to book value multiple of 0.49 for WWR. Impeccable execution on its graphite materials processing plant near Kellyton, Alabama that puts the Company in a good position to begin commercial scale production of its proprietary graphite materials products in late 2023. Nonetheless, traders have kept WWR trimmed back over concerns about the ability of the Company to raise all the capital needed to pay for the construction and commissioning of the plant. We believe the fretting over capital resources could be overplayed given the addition of yet a third prospective customer with a clear interest in Westwater products. The potential for orders beginning as early as 2023, clearly improves the chances of gaining new capital.

VALUATION

Price/Sales	Neg
Price/Cash Flow	Neg
Price/EPS	Neg
Price/Book Value	0.49 X
Consensus EPS 2022	na
Forward PE	na

Per share figures estimated 6/30/22

OPERATING PROJECTIONS

	2020A	2021A	2022E	2023E	2024E
Sales	\$ 0.0	\$ 0.0	\$ 0.0	\$21.1	\$28.1
Operating (Loss)	(\$11.2)	(\$18.2)	(\$15.9)	(\$ 9.8)	(\$ 6.0)
Net Inc (Loss)	(\$23.6)	(\$16.1)	(\$15.9)	(\$ 9.8)	(\$ 6.0)
CFO (U)	(\$15.2)	(\$16.9)	(\$15.9)	(\$13.9)	(\$ 2.7)
EPS (LPS)	(\$1.58)	(\$0.49)	(\$0.35)	(\$0.19)	(\$0.11)

Dollars in millions except per share earnings

Company Reports and Crystal Equity Research Estimates



CUSTOMER LETTER OF INTENT

Concomitant with the release of financial results for the second quarter ending June 2022, Westwater Resources announced a letter of intent with an unnamed consumer battery manufacturer related to Westwater's proprietary *Purified Micronized Graphite (PMG)* material. Westwater has pledged to providing *PMG* to the battery manufacturer from its Kellyton graphite processing facility once it is completed in 2023. The manufacturer has committed to evaluating the *PMG* product in its materials qualification programs.

During the earnings conference call management acknowledged that the prospective customer has already completed some testing of *PMG* samples produced using the Westwater pilot plant capacity. While having reached a stage where the two parties are prepared to make some limited commitment, no purchase volumes have been specified.

This announcement brings to three the number of potential customer relationships Westwater has disclosed with any detail.

- August 19, 2019 - announcement that major battery manufacturer requested a bulk sample of one metric ton of *ULTRA-PMG* product for further testing; update in June 2020, one metric ton sample shipped and customer qualification underway, possibly for alkaline battery designs.
- November 17, 2021 - letter of intent to sell 125 to 250 metric tons of *Coated Spherical Purified Graphite (CSPG)* to a developer of lithium-ion batteries beginning in 2023; with an option on an additional 16,000 metric tons for delivery in 2025.
- August 15, 2022 - letter of intent with an unnamed battery manufacturer for unspecified volumes of *PMG* to be delivered beginning in 2023, from Westwater's commercial-grade graphite processing in Kellyton, AL; negotiations for definitive agreements expected in coming months.

The Company has been reticent to provide details on any of these potential customers, citing strict non-disclosure agreements. Both parties have good reason to keep details under wraps. Customers do not want to cue competitors with information about future products or the product composition. Nor do manufacturers want to give up the name of a good supplier who might also do business with those competitors. Westwater certainly has strong competitive reasons to keep details about possible customers to themselves, as the revelation of even the slightest detail could trigger the sales efforts of rivals for the same prospect.

Likewise, Westwater management has provided few details on its business pipeline, stating only that a number of prospects have taken samples to test one or the other of the three proprietary graphite materials products. It is reasonable to expect a lengthy testing and qualification process that could last two or even three years.

QUARTER REPORT HIGHLIGHTS

Westwater reported using \$5.9 million in cash resources to support operations in the June 2022 quarter. Even as the Company has increased spending for the construction and staffing of its graphite processing facility near Kellyton, Alabama, expenses have been reduced for product development and legal services related to an arbitration action against the Republic of Turkey. Product development expenses in the quarter totaled \$367,000 compared to \$2.1 million in the same quarter a year ago. The Company reported no expenses related to the arbitration action in the near quarter.

The Company also used \$12.1 million in cash for capital expenditures, nearly all of which was related to the Kellyton graphite plant construction project. During the earnings conference call management reported completion of site preparation, including excavation and dirt works for flood protection, drainage and building foundations. The Company reported the movement of a total of 97,000 cubic yards of topsoil in the effort. Installation of utilities such as water, electricity and sewer have been initiated for the buildings that will be constructed over the next few months.

Balance Sheet

Westwater reported \$109.0 million in cash in the bank at the end of June 2022. We estimate that at the recently reported operating and capital cash usage rates the cash balance at the time of this report is near \$100.0 million.

The cash balance at the end of June falls short of the approximately \$170.0 million that remained to be applied to the Company's budget for first phase of its commercial-volume graphite processing plant. During the second quarter earnings conference call management commented that despite inflation worries, the \$202 million budget for the project is still accurate.

The Company had previously disclosed selling \$4.4 million shares of common stock for net proceeds of \$9.0 million during the month of April 2022. The capital raise was accomplished through an at-market sales agreement with Cantor Fitzgerald & Co. No additional shares have been sold since April 2022, largely we believe due to the depressed valuations in the U.S. equity market in recent months.

During the second quarter earnings conference call, leadership reiterated an ongoing effort to secure additional funding for its Alabama graphite project. Strategic investors as well as debt financing are on the table. That said, the team was non-committal regarding the Department of Energy's funding opportunity announced earlier this year, indicating advisors had been retained to evaluate the DOE funding source. Applications were due in July 2022, for one funding source provided by the Bipartisan Infrastructure Law Battery Materials Processing and Battery Manufacturing funding opportunity offered by the Office of Manufacturing and Energy Supply Chains and the Office of Energy Efficiency and Renewable Energy Vehicle Technologies.

PROJECTIONS REVISITED

We have updated our financial projections model with the reported financial results for the quarter ending June 2022. No additional changes have been made in our model. Our observation of the recently reported quarter is that the Company is on schedule with its graphite processing facility construction. Accordingly, our existing assumptions remain valid regarding use of cash by operations, capital spending and capital requirements.



It is also notable that the Company is quickly becoming an integral part of the Alabama economy. In June 2022, Westwater was praised in an announcement by officials from the Lake Martin Regional Industrial Park where Westwater has located its processing facility. The Alabama Department of Transportation Industrial Access Program has given the industrial park a grant valued at \$919,800 to construct a bridge and extend a roadway that will facilitate Westwater's access to the

southern side of a creek running past the industrial park. The infrastructure also allows for the expansion of the industrial park, which has become fully occupied.

Our expectations for initial revenue streams from the sale of graphite materials are still expected in late 2023. We continue to anticipate an operating loss in that year and potentially in the next. That said, when additional information becomes available for the recently announced letter of intent for the sale of *PMG* materials, we may revise our expectations accordingly. Indeed, any news of firming relations with prospective customers, could support upward revision of our sales and cost estimates.

VALUATION and OUTLOOK

In our view, WWR remains undervalued relative to a group of sixteen selected graphite exploration and development companies. Only two members of the group report regular revenue, Imerys Graphite & Carbon (NK: PA) and SGL Carbon SE (SGLFF: OTC). Because nearly all the group members are in developmental stage much like Westwater, only the price to book value multiple is available from the group to serve as valuation guidance for WWR. The group is trading at 5.69 times book value compared to 0.49 for WWR. We believe the entire graphite materials sector could use a boost in sentiment. The comparable group mentioned above has lost 24% of value over the last six months.

The Company has made meaningful progress on its graphite processing facility located near Kellyton, Alabama. Accordingly, the project is on schedule to begin production in late 2023. Realization of such progress should help protect the shares on the downside.

The Inflation Reduction Act signed into law subsequent to the second quarter earnings announcement and conference call could have a favorable impact on the adoption of electric vehicles. It could also encourage demand for domestically produced critical minerals over importations. Accordingly, it could serve as a strong long-term catalyst for WWR. Immediately following its enactment, Westwater management issued an endorsement of the Inflation Reduction Act (IRA). The legislation includes plans for investment of as much as \$369 billion in climate-related programs such as renewable fuels and the adoption of electric vehicles for consumer and commercial use.

Management believes that a production tax credit for certain critical minerals and a clean vehicle credit could benefit its Kellyton graphite plant and Coosa graphite deposit, respectively. The clean vehicle credit is likely to increase demand for electric vehicles through its impact on production costs as the IRA expands application of the credit. The IRA also appears to favor critical materials extracted from domestic sources by setting a minimum threshold for the percentage of critical minerals in the electric vehicle battery.

WWR may benefit from another catalyst unrelated to the graphite sector. A decision is expected in September 2022, related to Westwater's arbitration action against the Republic of Turkey for the confiscation of uranium mining licenses three years ago. The Company has asked for an award near \$36 million. Even if the arbitration panel's ruling is in Westwater's favor, it is not likely the Company will receive a payment in the near-term. We believe that shareholders and investors are particularly sensitive to the Company's capital position. Accordingly, the potential for compensation from Turkey that could be used to finance the graphite project could have a very strong impact on the stock price.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST

Table I: Historic and Projected Annual Financial Performance

Dollars in Thousands	2020A Year	2021A Year	2022E Year	2023E Year	2024E Year
Total revenue	-	-	-	21,056	28,074
Gross profit	-	-	-	12,633	18,248
Operating expenses:					
General and administrative	5,678	12,120	11,853	13,200	14,500
Product development and other	5,378	5,975	3,033	5,500	5,000
Depreciation and amortization	(55)	20	232	3,000	4,000
Mineral property expenses	34	110	773	750	750
Accretion of asset retirement obligations	201	-	-	-	-
Total operating expenses	11,236	18,225	15,891	22,450	24,250
Operating income (loss)	(11,236)	(18,225)	(15,891)	(9,817)	(6,002)
Other income and expenses					
Gain (loss) on sale of assets	(2,665)	2,057			
Other	(11)	24			
Total other income (expense)	(2,676)	2,081	-	-	-
Income (loss) before income taxes	(13,912)	(16,144)	(15,891)	(9,817)	(6,002)
Discontinued operations, net of taxes	(9,662)	-	-	-	-
Net income (loss)	(23,574)	(16,144)	(15,891)	(9,817)	(6,002)
Net EPS (LPS), comprehensive	\$ (2.68)	\$ (0.49)	\$ (0.35)	\$ (0.19)	\$ (0.11)
Wtd shares outstanding, diluted in 000s	8,799	32,653	44,939	53,000	53,000

Source: Company Reports and Crystal Equity Research Estimates

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ANALYST

Debra Fiakas, CFA is a seasoned, credentialed investment professional with a diversified and successful track record as a research analyst and as an investment banker. Her decade-plus career includes solid experience in all aspects of the equity capital markets with particular emphasis on emerging growth companies operating in the technology sectors. Ms. Fiakas is also the principal member of Crystal Equity Research, LLC.

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RATING SYSTEM

Buy	Price appreciation expected 10% or more over a 12-month period.
Hold	Price appreciation/depreciation expected between 10% and -10% over 12 months.
Sell	Price depreciation expected 10% or more over a 12-month period.

CRYSTAL RESEARCH UNIVERSE

Buys	70%
Holds	15%
Sells	15%
Total	100%

HISTORICAL RECOMMENDATIONS AND TARGET PRICE: Westwater Resources / WWR

<u>Report</u>	<u>Date</u>	<u>Price</u>	<u>Rating</u>	<u>Target Price</u>
Previous reports by request				
Update	2/24/2022	\$1.94	Buy	\$20.00
Update	4/29/2022	\$1.33	Buy	\$20.00
Update	5/17/2022	\$1.17	Buy	\$20.00
Update	8/22/2022	\$1.50	Buy	\$20.00

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<u>Name</u>	<u>Symbol: Exchange</u>	<u>Disclosures</u>
Westwater Resources, Inc.	WWR: NYSE/Amer	D

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- D Crystal Equity Research, LLC received compensation for research coverage from the company or one of its agents. The fees are paid in advance in cash.
- E The company has a convertible issue outstanding.
- F The securities covered in this report can be optioned.
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