CRYSTAL | EQUITY RESEARCH

WESTWATER RESOURCES, INC.

Update Report

August 18, 2021

WWR / NYSE-Amer

SPECULATIVE BUY

Unchanged

$20.00

(Reiterated 2/22/21)

CAPITALIZATION	
Shares Outstanding (8/11/21)	34.6 M
Recent Price (8/17/21)	$3.52
Market Capitalization	$121.8 M
+ Debt	0.0 M
- Cash	119.1 M
Enterprise Value	$ 2.7 M
Book Value	$126.6 M
Working Capital	$113.5 M
Dividend	Nil

Balance sheet figures as of 6/30/21

MARKET DATA	
Bid-Ask Spread, % Price	0.3%
52 Week High/Low	$14.50 - $1.34
Shares Outstanding	34.6 M
Inside Ownership	<1%
Institutional Ownership	11.2%
Estimated Flotation	34.3 M
Average Daily Volume	1.43 M
Short Interest, % of Float	9.6%
Beta	1.66

Source: Bloomberg LP

INVESTMENT RETURNS	WWR	Sector*
Return on Equity	Neg	18.07%
Return on Assets	Neg	8.49%
Return on Capital	Neg	11.20%

Source: Crystal Equity Research, CSI Markets

FINANCIAL PROFILE	FY19	FY20
Sales	$ 0.0 M	$ 0.0 M
EBITDA	($10.3) M	($13.8) M
(L)EPS	($5.39)	($2.68)

Source: Company Reports

HIGHLIGHTS

- **Capital resources.** Westwater ended the June 2021 quarter with a record cash balance of $119.1 million, sufficient to support working capital through 2022 and first phase of graphite project construction.
- **Graphite project location.** The Company has secured an advantageous site for its graphite processing facility 30 miles from its graphite resource in Coosa County, Alabama.
- **Near-term catalysts.** A final economic feasibility study is on schedule for completion by the end of October 2021, which could pave the way for start of graphite processing facility construction.
- **Undervaluation.** The shares have traded with weakness in recent weeks, leaving it at less than 1.0 times book value.
- **Rating and target price.** Our rating for WWR remains Speculative Buy with a target price of $20.00, which coincides with a line of volume-related price support/resistance.

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INDUSTRY: INDUSTRIAL, ENERGY MATERIALS	WWR: NASDAQ

RECENT DEVELOPMENTS

The last few years have been filled with challenge for Westwater Resources as the Company navigated entrance into new energy metals markets for graphite and lithium and faced government confiscation of uranium mining licenses in Turkey. The second quarter 2021 report revealed the bad news may have come to an end as positive developments continue to unfold. First, favorable pilot test results of the Company's proprietary graphite materials prove the products are marketable and ready for customer qualification screening. Second, the Company selected a site for its graphite processing facility and secured a generous package of tax credits and incentives valued at $36 million that will help reduce operating expenses over the next decade. With a location locked up, the Company's newly hired operating officer can move forward with the construction phase. Third, robust equity market conditions have given the Company the cash resources to proceed with timely and opportunistic execution. The cash balance at the end of June 2021, was $119.1 million, enough to support operations through the end of 2022. Even Westwater's claim against the Republic of Turkey for the Company' lost uranium investments appears to be nearing a conclusion with a hearing in September 2021 before an international arbitration panel. Such proceedings are typically followed by a final, binding decision within months.

RECOMMENDATION

After the recent price weakness, in our view, Westwater's common stock is even more undervalued than ever. The stock is currently trading at less than one times book value. While we have retained our Speculative Buy rating of WWR, we acknowledge recent progress has injected more certainty into Westwater's circumstances, making a stake in the Company much less tentative.

The current price level represents an impressive return potential when compared to our price target of $20.00. It is noteworthy that our target price coincides with a line of volume-related price support/resistance that has developed in historic trading. We believe there are several key catalysts that could help push the stock through that line. Most notably, the Company has promised publication of a final feasibility study near the end of the third quarter 2021, that will provide details on a proprietary graphite processing plan and budget. We expect that study to be pivotal in raising capital and beginning construction of the planned processing facility in Alabama. The accomplishment should inject new confidence in management's ability to execute on the Company's strategy plan and deliver even more certainty to Westwater's unique domestic U.S. graphite materials story.

VALUATION

Price/Sales	Neg
Price/Cash Flow	Neg
Price/EPS	Neg
Price/Book Value	0.96 X
Consensus EPS 2021	na
Forward PE	na

Per share figures estimated 8/17/21

OPERATING PROJECTIONS

	2018A	2019A	2020A	*2021E*	*2022E*
Sales	$ 0.0	$0.0	$ 0.0	*$ 0.0*	*$ 0.0*
Operating (Loss)	($ 36.0)	($ 6.3)	($11.2)	*($ 20.1)*	*($ 21.4)*
Net Inc (Loss)	($ 36.7)	($10.6)	($23.6)	*($ 18.7)*	*($ 16.0)*
CFO (U)	($ 11.7)	($10.0)	($15.2)	*($ 18.8)*	*($ 19.9)*
EPS (LPS)	($38.50)	($5.39)	($2.68)	*($0.57)*	*($0.33)*

Dollars in millions except per share earnings

Company Reports and Crystal Equity Research Estimates

QUARTER REPORT HIGHLIGHTS - cash resources

Westwater Resources delivered few surprises in its financial report for the second quarter ending June 2021. After divesting of all uranium and lithium assets, the Company is focused exclusively on development its graphite and vanadium resource in Alabama and perfecting its proprietary battery materials made with natural flake graphite. The quarter report revealed the cost of current efforts to bringing these materials to the commercial market through tests of its home-grown production process and plant design. To that end, Westwater reported $4.7 million in operating expenses that was partially mitigated by an unrealized gain on investments, leaving a net loss for the quarter of $3.5 million or $0.11 per share. Most of the spending was on product development work and general and administrative activities.

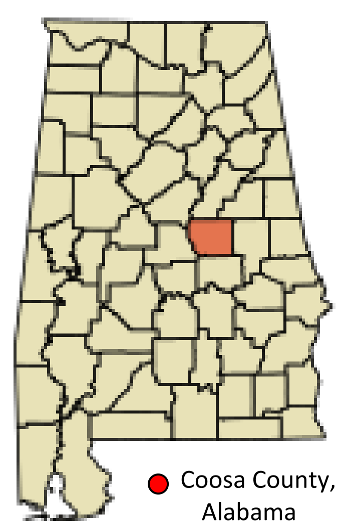
In our view, the current state of operations is better understood in terms of the amount of cash resources used to support operations. The Company used $4.2 million in cash to pay for operating activities in the quarter. This was 14% less than the $4.9 million in cash used in the March quarter.

The Company ended the June 2021 quarter with $119.1 million in cash in the bank, more than twice the bank balance just six months earlier at the end of the 2020 fiscal year. During the June quarter the Company raised another $5.7 million in new capital through the sale of 1.2 million shares of common stock to Lincoln Park Capital through a previously established at-market agreement. As of the beginning of August 2021, 10.8 million shares remained available to sell pursuant to the Lincoln Park agreement, representing approximately $38 million in potential new capital at the current stock price.

We estimate the Company has sufficient cash on hand to support operations for five years at the present rate of cash usage. In the second quarter report, management reiterated that current cash resources are adequate to support the Company's planned operating activities through the end of 2022, and potentially fund part of the construction budget for the planned graphite processing plant.

GRAPHITE PROCESSING PLANT SITE SELECTION

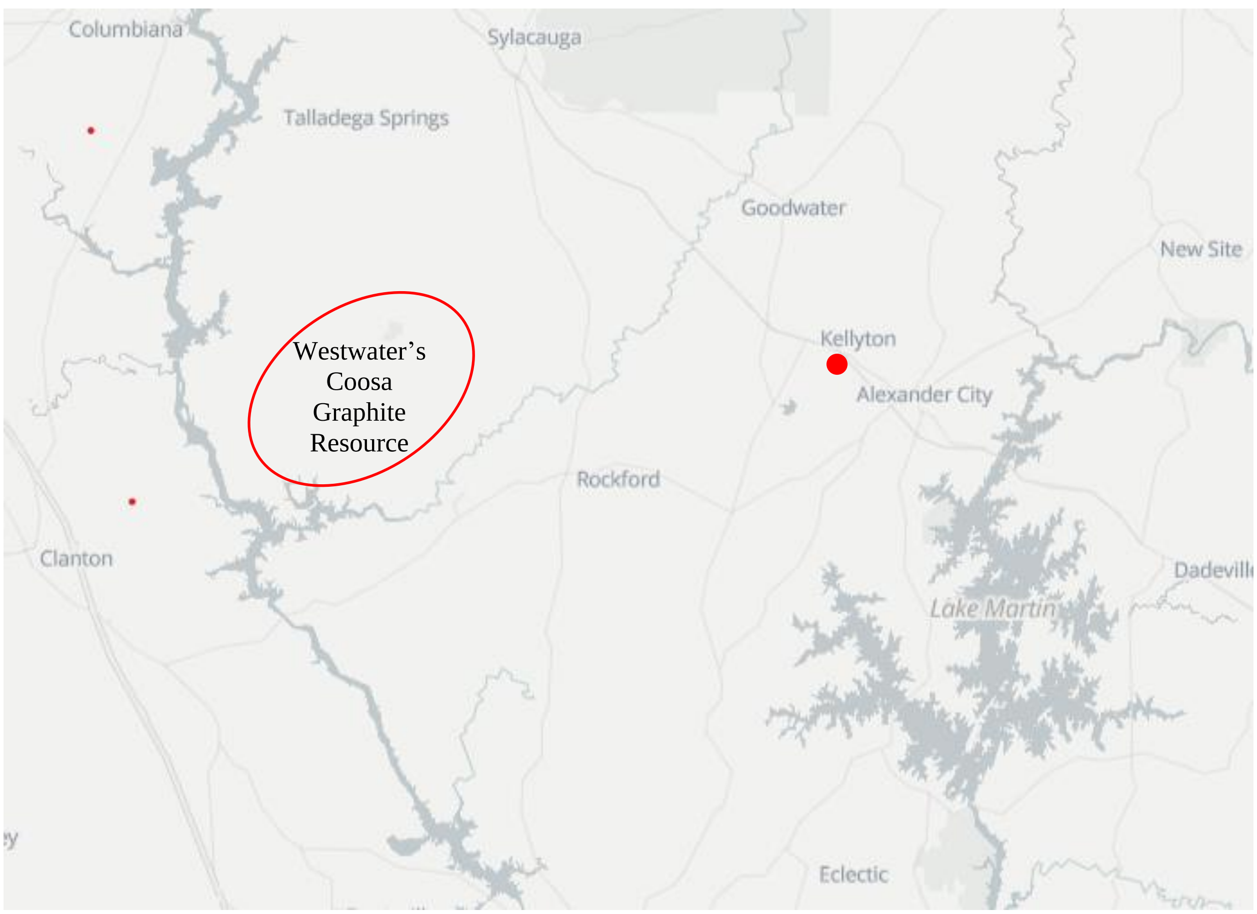
The most significant news for Westwater came after the quarter close as management announced Kellyton, Alabama as the area selected for the Company's planned battery-grade graphite production facility. Westwater's operating subsidiary in Alabama has leased 70 acres valued at $1.4 million at a nearby industrial park managed by the Lake Martin Area Economic Development Authority. The term of the lease is ten years and provides for transfer of ownership to Westwater's operating subsidiary at the end of the term.



Kellyton is a small town in Coosa County with a population just over 200 strong. The community is located along the eastern border of Coosa Country, which is itself positioned near the center of Alabama. Sitting at an elevation of 762 feet, Kellyton is just a short drive along a state highway to Alexander City and Lake Martin, one of Alabama's premier outdoor recreational areas. Kellyton is also about 30 miles from Westwater's graphite mine site on the western edge of Coosa County. The Company can use existing roads to access the processing facility, first with outsourced graphite materials and eventually graphite mined from its mine site.

Taking its name from the dominant regional geographical feature, the Lake Martin Area Economic Development Authority is focused on diversifying and expanding business activity in the region. To that end the Lake Martin Authority touts a ready workforce over 500,000 strong in the surrounding region. Given that Westwater plans to hire over 100 people for its processing facility, the Company could be among the most significant employers in the area.

According to the 2020 U.S. Census, in Coosa Country where Westwater's graphite asset is located, at least 80% of the population has graduated high school and 13% has a college degree. About 81% of the population has access to a computer and 70% has broadband Internet service. Workers in the county drive an average of 29 minutes one-way to work, with employees traveling to and from nearby Jefferson, Talladega, Clay, Tallapoosa, Shelby, and Elmore counties.



Westwater received a package of tax credits and incentives valued at a total of $36 million from the State of Alabama and the Lake Martin Area Economic Development Authority. Most of the benefits will be realized through reduction in expenses and obligations. First, the Company will receive a sales tax reduction on purchases during the construction phase of the graphite processing facility. There is also a property tax waiver for the first ten years of operation. An investment credit has also been offered when the project becomes operational. The net effect of the incentives is to mitigate costs of construction and cost of operation once the processing facility is completed.

FEASIBILITY STUDY - rate limiting step nearing completion

The final design for the graphite processing facility planned for the Kellyton site is apparently nearing completion. During the second quarter earnings conference call held on the day of the quarter report release, Westwater management reiterated that work is on schedule for completion of a final feasibility study by the end of October 2021. Management has in the past tossed out a preliminary estimate of $118 million for the initial construction phase of the processing facility. We expect that figure to be refined in the final feasibility study report.

As noted in previous reports, the final feasibility study provides management and shareholders alike a good foundation for the battery-grade graphite processing plan and the facility design. Importantly, it provides management with a detailed presentation to potential financing sources for the processing facility construction and initial working capital.

NEW HIRES - large organization experience added to management team

Westwater has hired an operations officer to lead the construction and operation of the graphite processing facility. Importantly, the Company selected a metals industry expert with experience in large organizations across several functions, including production, warehousing, human resources, and finance. We expect that broad knowledge of best business practices for growing metals and materials companies to be critical for Westwater as the Alabama project unfolds.

The Company had made two previous additions to its team. Last year a business development and sales professional was brought on board to spearhead a market penetration effort. That individual's previous success in promoting commodities and experience in international markets are important additions to the Company's capabilities. The Company also added to its finance and accounting capacity with the addition of a new controller with extensive experience in the energy and mining industry. Knowledge of effective management methods at larger operations should serve Westwater well as it carries out a major construction project and then hires dozens of new employees.

FINANCIAL PROJECTIONS - cost and expense estimates adjusted

Our financial model has been updated to reflect financial results in the June 2021 quarter. The update encompasses the costs and expenses recorded in the first half of 2021, as well as the sales of common stock in the three months ending June.

We have also adjusted our spending expectations for the second half of 2021, reflecting recent additions to senior management and first steps toward constructing a graphite processing facility in Alabama. We also expect higher legal expenses in the third quarter ending October 2021, associated with the September 2021 hearing before an international arbitration panel considering the Company's claims against the Republic of Turkey for the confiscation of uranium assets in that country in 2018. While our estimated net loss has increased for the year 2021, we continue to anticipate current cash resources will be adequate to cover working capital requirements for the next two years.

Our model continues to reflect the onset of revenue in late 2022, which mitigates the net loss in that year. We anticipate refining the timing and magnitude of first revenue streams as the next few months unfold and the graphite processing facility commissioning date becomes more certain. In the meantime, our somewhat imprecise estimate for 2022, portrays our view that the Company will continue to report losses even as first revenue streams are realized.

VALUATION AND OUTLOOK

We expect publication of the final feasibility study in late October 2021, to accelerate activity at Westwater as well as trigger new favorable sentiment toward the stock. The budget for the processing facility will be made more certain by the engineers' report, making it possible for management to begin serious conversations with financing sources for the construction phase of the project. We believe it could be possible to raise the required capital without the feasibility study, possibly using a combination of equipment financing and common stock sales. However, a comprehensive analysis prepared by a third-party of expert engineers lends credibility to management's plans and accelerates the due diligence process among individual and professional investors alike.

It may take a period of time for the details of the feasibility study to be absorbed by traders, allowing previous expectations to adjust to the more certain budget and plan. In the extended term, the report will be a critical accomplishment that adds clarity to the Westwater graphite strategy. Granted accomplishments in the first half of 2021, such as hiring new personal with appropriate experience and raising working capital at attractive prices, have also been enabling achievements and have added certainty to the Westwater story. However, in our view the report is potentially more informative about future operations and cash flows and thus has a greater potential to trigger upward valuation of the shares.

In the meantime, the shares are trading with some weakness. We believe traders are anticipating the upcoming feasibility report publication and the period of adjustment that we noted above. While sympathetic to this view, we note that at this point there are fewer impediments to Westwater realizing its long-term goal of commercializing its natural flake graphite asset in Alabama. First, testing of the Company's proprietary graphite materials has proven the products marketable and a business pipeline has formed up with several parties interested enough to qualify the *Purified Micronized Graphite* or *ULTRA PMG* material for a commercial product. Second, the Company's processing facility has been welcomed to the community near its graphite asset with favorable tax and labor concessions. Third, robust equity market conditions have given the Company the cash resources to proceed with timely and opportunistic execution.

With each obstacle cleared, the future cash flows that drive WWR value become more certain. In our view, our price target of $20.00 per share also become more realistic, leaving the stock deeply undervalued at the current price level. Accordingly, we continue to rate WWR as Speculative Buy, while acknowledging that value has become much less tentative over the last year.

GRAPHITE DEMAND - policy developments reinforce already favorable trend

In our view, adequate demand for graphite has never been a cause for concern in the Westwater story. The consumer interest in electric vehicles as well as manufacturer pursuit of more efficient battery designs are two pervasive drivers of demand for battery-grade graphite. Natural flake graphite is a price-competitive alternative to the costly, environmentally unsustainable synthetic graphite produced in China. The World Bank forecasts that low-carbon energy technology, including lithium-ion batteries will require as much as 4.5 million metric tons of graphite per year by 2050. That represents a three-fold increase over current demand levels. The implied growth will be largely on the adoption of electric vehicles, which require as much as 110 pounds of graphite for their drive train batteries, the most significant end-use for the Company's highest value-added product, *Coated Purified Micronized Graphite* or *ULTRA-CPMG*.

Long-term demand conditions in the U.S. have recently been reinforced by new public policy favoring manufacture of electric vehicles. On August 5, 2021, the President signed an Executive Order prioritizing manufacture of 'clean and efficient cars and trucks', setting a goal that such cars would represent 50% of total U.S. production by 2030. The order listed battery electric and plug-in hybrid electric vehicles among those that could qualify.

While largely a means to set a policy tone, the executive order does have some teeth through U.S. regulatory action. The order calls for rulemaking by the U.S. Environmental Protection Agency (EPA) under the Clean Air Act to establish new multi-pollutant emissions standards for light- and medium-duty vehicles and new oxides of nitrogen standards for heavy-duty engines and vehicles beginning with model year 2027. The order also directs the U.S. Department of Transportation (DoT) to begin rule making under the Energy Independence and Security Act of 2007, to establish new fuel efficiency standards for heavy-duty pick-up trucks and vans beginning with model year 2028. The EPA is to commence the rule making effort by January 2022 and reach a final rule by December 2022, while the DoT has a bit more breathing room with final rules not due until July 2024.

In general, business has been widely critical of pollution emissions standards, claiming such restrictions end up forcing manufacturers out of business for lack of profits and thus reducing output and competition. Based on an accumulation of experience with emissions and fuel economy standards in the U.S., a 2003 study published in the *Journal of Regulatory Economics* found exactly the opposite effect. Stricter standards have eliminated industry collusion, increased manufacturing output and lowered total pollution in the long run. If the current White House Executive Order is successful, we expect a similar impact, increasing automobile industry demand for batteries, including those with high graphite content.

There could be a more immediate impact on vehicle battery and by extension graphite demand from the 2021 Bipartisan Infrastructure Deal that is currently wending its way through the U.S. Congress. The White House has pledged investments in a national network of electric vehicle charging stations, consumer incentives to buy U.S. made vehicles, retooling of the domestic manufacturing supply chain, and clean technology development. Any of these investments could have a direct impact on demand for lithium ion batteries and graphite materials.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST

Table I: Historic and Projected Annual Financial Performance

Dollars in Thousands	2018A * Year	2019A * Year	2020A Year	*2021E Year*	*2022E Year*
Total revenue	-	-	-	-	*11,025*
Gross profit	-	-	-	-	*5,513*
Operating expenses:					
General and administrative	7,357	6,086	5,678	*10,427*	*10,500*
Product development and other	333	1,378	5,378	*8,332*	*10,000*
Depreciation and amortization	116	73	(55)	*2*	*160*
Mineral property expenses	3,538	2,852	34	*1,329*	*750*
Accretion of asset retirement obligations	993	390	201	-	-
Impairment of mineral properties	23,712	143	-	-	-
Total operating expenses	36,049	10.922	11,236	*20,090*	*21,410*
Operating income (loss)	(36,049)	(10,922)	(11.236)	*(20,090)*	*(15,898)*
Other income and expenses					
Gain (loss) on sale of assets	104	729	(2,665)	*1,411*	
Other	261	(372)	(11)	*9*	
Total other income (expense)	365	357	(2,676)	*1,420*	-
Income (loss) before income taxes	(35,684)	(10,565)	(13,912)	*(18,670)*	*(15,898)*
Discontinued operations, net of taxes	-	-	(9,662)	-	-
Unrealized change in value, mkt. securities	(861)	-	-	-	-
Realized loss on sale securities	484	90	-	-	-
Net income (loss)	(36,061)	(10,475)	(23,574)	*(18,670)*	*(15,898)*
Net EPS (LPS), comprehensive	$ (38.50)	$ (5.39)	$ (1.58)	*$ (0.57)*	*$ (0.30)*
Wtd shares outstanding, diluted in 000s	928	1,961	8,799	*33,007*	*48,000*

** Years 2018 and 2019 are displayed as originally reported and do not reflect the uranium operations as discontinued operations.*

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.

ANALYST CERTIFICATION

The analyst who is primarily responsible for this research and whose name is listed first on this front cover certifies that: 1) all of the views expressed in this research accurately reflect his or her professional views about any and all of the subject securities or issuers, and 2) no part of any of the analyst's compensation was, is or will be directly or indirectly related to the specific rating expressed by analyst in this research.

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	20%
Sells	10%
Total	100%

HISTORICAL RECOMMENDATIONS AND TARGET PRICE: Westwater Resources / WWR

Report	Date	Price	Rating	Target Price
Previous reports by request				
Update	11/19/19	$2.79	Buy	$30.00
Update	2/25/20	$1.96	Buy	$30.00
Update	4/14/20	$1.00	Buy	$30.00
Update	5/20/20	$1.78	Buy	$30.00
Update	8/17/20	$2.05	Buy	$30.00
Update	9/15/20	$1.81	Buy	$30.00
Update	11/19/20	$5.09	Buy	$20.00
Update	2/23/21	$6.97	Buy	$20.00
Update	5/19/21	$3.99	Buy	$20.00
Update	8/18/21	$3.52	Buy	$20.00

DISCLOSURES

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

Disclosure Key

A A member or employee of Crystal Equity Research, LLC serves on the board of directors of the company.
B A controlling member of Crystal Equity Research, LLC has a beneficial interest in the common stock of the company.
C A person or persons preparing this report or an immediate family member of the preparer has a beneficial interest in the common stock of the company.
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.
G The securities covered in this report can be margined.

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