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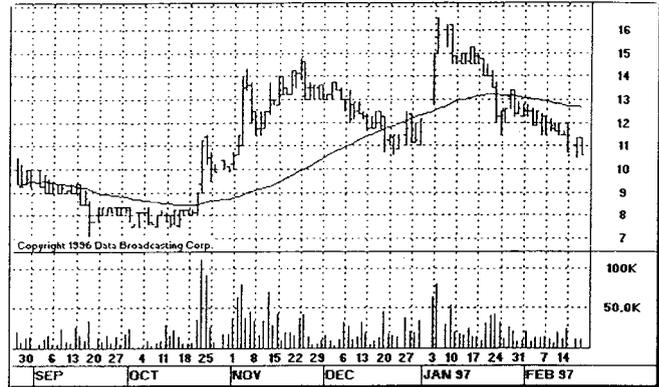
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**Update Report**

Investment Rating: **LONG TERM BUY**  
Risk Rating: **HIGH**

**Covol Technologies, Inc.**

OTC BB: CVOL	10 1/2
52 Wk. Range	7-3/4 / 30-3/4
Market Capitalization:	\$83 million
Shares Outstanding:	7.9 million
Fully Diluted Shares:	10.1 million
Est. Public Float:	3.7 million
<b>Estimates:</b>	<b>FY97    FY98    FY99</b>
Revenues (mil.):	\$18.7    \$103.7    \$160.6
EPS:	\$0.99    \$4.08    \$5.77



**Investment Thesis**

Following a transitional and difficult year in 1996, Covol Technologies has signed licensing agreements for its coal briquetting technology that could translate into positive earnings in fiscal 1997, and substantial growth in fiscal 1998. Our confidence level in the company has also increased due to new management, and an investment in Covol by two NYSE-listed companies (PacifiCorp and A.J. Gallagher.) Despite poor performance by its prior management in 1996, Covol's underlying technology and market potential are still very exciting and highly viable.

Investors with a time horizon of 12 to 15 months could be highly rewarded once Covol's recent success (in licensing its coal technology) and future licensing revenues translate into positive earnings and renewed interest from Wall Street. Putting a modest 15 earnings multiple to our fiscal 1998 estimate could translate into a price above \$60 per share by early to mid-1998. Therefore, we rate the stock as a LONG TERM BUY. However, due to a number of variables, we still consider this stock a HIGH RISK investment opportunity (see Risk Factors on page 4.)

Over the short term, the stock could continue to under-perform as Covol reestablishes confidence with shareholders. Confidence that was shook by a disappointing 1996, an unfavorable 1996 10-K filing, recent insider selling and the likely selling pressure from its current convertible debt offering. Also, we do not expect Covol to get Nasdaq listing before June in a best case scenario, which could limit new brokers and investors to the stock. Despite the current lack of buying interest, we still see short-term trading opportunities between \$10 and \$15 per share.

**Briquetting Technology/ Business Model**

Covol Technologies, located in Lehi, Utah, is a developmental stage company that has created a technology to recycle waste by-products of the steel and coal industries into a marketable source of fuel and revert material in the form of briquettes. We previously estimated this potential market at \$30 billion, domestically (see our November 1995 report.) In addition, we have still not discovered a competing technology that is in commercial production.

Covol's technology uses a special binding formula, which allows its high-grade coal and iron briquettes to withstand degradation during shipment and the burn cycle. Excluding the company's special binding formula, all equipment and machinery used in the briquetting process are commercially available.

Early in 1996, the company began concentrating nearly all of its efforts on its "coal" briquetting technology due to the limited time v

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quettes qualify as a "solid synthetic fuel" under Section 29 of the (depending on BTU value) in tax credits per ton sold. The credit e by June 30, 1998, and pursuant to a binding contract in effect by et "passive" or regular corporate income.

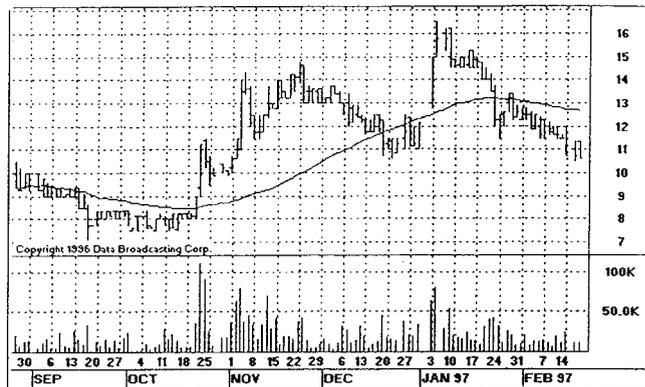
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Covol's technology uses a special binding formula, which allows its high-grade coal and iron briquettes to withstand degradation during shipment and the burn cycle. Excluding the company's special binding formula, all equipment and machinery used in the briquetting process are commercially available.

Early in 1996, the company began concentrating nearly all of its efforts on its "coal" briquetting technology due to the limited time window of the Section 29 tax credit. Covol's coal briquettes qualify as a "solid synthetic fuel" under Section 29 of the IRS code, and therefore can generate between \$22 and \$30 (depending on BTU value) in tax credits per ton sold. The credit is available until the year 2007 for facilities placed in service by June 30, 1998, and pursuant to a binding contract in effect by December 31, 1996. The tax credit can only be used to offset "passive" or regular corporate income.

Coal briquettes produced under Covol's technology are not an advanced coal product in terms of BTU value. The BTU value of the "mother" coal, to which the coal fines are extracted, dictates the quality of the synthetic coal. The key advantages of Covol's briquetting technology are its ability to control moisture content and ease of handling and shipping.

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## **Covol Technologies**

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Covol's business model is to build coal briquetting plants and sell or licence them to third parties, who could utilize the tax credits to offset corporate income. Under most of the agreements, the licensing partners will finance the construction of the plants. In addition to an up front licence fee, the sale price will be paid over the life of the tax credit period through royalty payments for the use of the briquetting technology. Covol will also earn a profit margin (cost plus mark up) on the sale of the binding agent (used to bind the coal fines) to the plant. In some cases, where the third party buyer does not want to operate the plant, Covol will run the plant for a management fee, with the potential of earning a profit margin by brokering the sale of the coal briquettes.

Currently, the company has one prototype briquetting plant and two commercial plants. One of the commercial plants is located at Geneva Steel in Utah and is operational for briquetting coke and revert material. However, the plant is currently sitting idle. Covol and Geneva Steel have had a very poor working relationship in the past, due both to lack of performance by Covol (regarding specifications of the briquettes) and lack of cooperation by Geneva Steel. Covol has said that the relationship with Geneva is improving, and hopes to sell or licence the plant to a third party for production of revert and coke breeze briquettes for Geneva, with the potential to produce coal briquettes.

Covol's other commercial plant, located in Price, Utah, is currently producing coal briquettes at an annual run rate of 150,000 tons per year. The plant has initial capacity of 360,000 tons per year, with the potential to double to 720,000 tons per year with an additional production line. Covol expects to get to initial full capacity within two to three months, after the plant expands its briquette drying capabilities and fine-tunes its mixing blend. Covol is in the final stages of selling the plant to Arthur J. Gallagher (NYSE: AJG).

### ***A Disappointing 1996***

The year 1996 turned out to be a transitional year for Covol, and not the highly profitable one we expected after our initial research coverage in November 1995. A number of factors were to blame, most of which were the company's own miscues. Others were just bad luck (such as the company's delay in receiving SEC registration) and poor timing (applying for Nasdaq listing in April 1996 at the same time Nasdaq was receiving scrutiny for its listing requirements.)

Despite the apparent industry demand for a cost effective briquetting technology, finding corporations willing to back the company's coal facilities (in return for tax credits) has been difficult. Through September 1996, Covol had not signed any letters of intent to licence coal briquetting plants. Most of the problem stemmed from the company's lack of credibility and the industry's lack of confidence that its technology could work on a large scale basis. Additionally, Covol's previous top two executives (CEO and President) had no experience or contacts within the steel, coal or energy markets. It seemed apparent that no one took Covol serious, and the ones that did, tried to take advantage of the company with low bid offers.

Fortunately, its previous President and CEO resigned in October for what was stated as personal reasons, but it was obvious it was due to lack of performance and progress at the company. Not only was their performance substandard, it was apparent that the two executives frequently acted in a self serving manner, evident by the issuance of a large amount of stock options to themselves and other management at below market prices. The result was nearly \$5 million in compensation expense on Covol 1996 financial statements.

### ***New Management -- New Credibility***

What the company lacked with its previous management (i.e., industry contacts, credibility), it appears to have with its new president. Hired as Covol's CFO in June 1996, Brent Cook was named the new president in October. Before joining Covol, Cook was Director of Strategic Accounts in Utah for PacifiCorp. (NYSE: PPW), the \$4 billion a year electric utility that operates in seven western states. Cook left a secure, high paying position (in which he managed nearly \$130 million in annual revenues) to join Covol.

In January 1997, Covol added to its credibility by hiring Stan Kimball as its new CFO. Kimball was previously with Huntsman Corporation as Director of Tax (at Huntsman Chemical Corp.), and then V.P., Administration for Huntsman. While Kimball has no experience as a CFO, he is reportedly a strong number's person, and also left a high paying position to join Covol.

Despite inheriting a company with some historical baggage, Cook and Kimball appear committed to getting Covol rolling straight again. One area of concentration will be in revamping its board of directors, by removing two to three of its current employees and replacing them with industry-experienced, independent directors. Covol has already started the process by announcing the appointment of a retired Dow Chemical executive, who has experience in environmental services and chemical manufacturing. From a management standpoint, Cook also expects to add upper-level personnel with "operations" experience from the steel and coal industries. Cook's strengths are in business development and sales, but he needs a strong Chief Operating Officer to help take Covol from a developmental company to an operating entity.

## Covol Technologies

While stock options are a strong tool for attracting strong management, Cook must make an effort to eliminate issuing options -- at below market prices -- if he wants Covol to be labeled a legitimate operating company. To our disappointment, the company expensed additional stock options at "below market prices" in its fiscal first quarter ended December 31, 1996. Cook must also make an effort to improve the company's investor communications effort, which has been a weak area for the company over the past 12 months.

### *More Plant Contracts Signed Than Anticipated*

Since December, Covol negotiated licensing deals for 21 plants, which were more than most people close to the company thought they could sign, especially in the eleventh hour (e.g. the Section 29 tax credit contract period ended on 12/31/96). Covol also signed a design and construction agreement for an additional nine plants, with the intention of licensing them to third parties in the future.

The most notable joint venture partner of the group is PacifiCorp, which signed a letter of intent for seven plants, that would produce 360,000 tons of coal briquettes each at full capacity. Under the proposed deals, PacifiCorp will invest \$5 million in Covol, through a convertible debenture, that will finance the first facility in Alabama. For the remaining six plants, PacifiCorp will finance the construction of the plants. For all seven plants, PacifiCorp will make an advanced licensing fee of \$500,000 per plant, plus quarterly royalty payments, which will entitle PacifiCorp to the tax credits generated by the plants. Covol will also receive a profit margin on the sale of the binder to all seven plants.

The next largest deal is with Arthur J. Gallagher & Co. for five plants, including purchasing Covol's first full scale facility in Price, Utah. AJG is an insurance brokerage and risk management firm with annual revenues of over \$425 million. Each plant has full capacity of 360,000 tons per year, with the Price plant capable of doubling to 720,000 tons per year. As part of the Price facility transaction, AJG will make a \$4 million investment in Covol (through a debenture, of which, \$1.1 million is convertible into Covol shares), plus make an initial \$2.5 million down payment to purchase the facility. Covol will also receive a profit margin on the sale of the binder to the plant. The agreement for the other four plants is mostly similar, except that Covol will receive a \$500,000 advanced license fee per plant.

<b>Licensing Agreements for Coal Briquetting Plants *</b>			
<u>Licensing Partner</u>	<u>Number of Plants</u>	<u>Annual Ton Capacity (000s)</u>	<u>Est. First Production</u>
PacifiCorp	7	2,520	4Q/FY97
Arthur J. Gallagher	5	2,160	2Q/FY97
Pace Carbon Fuels	4	2,000	1Q/FY98
Savage Industries	3	650	3Q/FY97
Ferro Resources	2	720	2Q/FY98
<b>To be announced</b>	<b>9</b>	<b>3,000</b>	<b>NA</b>
<b>Totals</b>	<b>30</b>	<b>11,050</b>	

\* Coal briquetting projects (either binding agreements or letters of intent) that have been announced. Covol's fiscal year ends September 30.

Covol also signed letters of intent with three other joint venture partners -- Pace Carbon Fuels, Savage Industries and Ferro Resources -- for a total of nine plants that could potentially produce 3.4 million tons of coal briquettes per year. The advanced licensing fees, royalty payments and other fees vary among the partners.

### *Realistic Expectations*

If all 21 licensed plants are constructed and operating at full capacity, they would produce 8.05 million tons of coal per year, to which Covol would earn licensing and other fees until the year 2007. If Covol is successful in completing the additional nine plants that have no identified licensing partners, tons produced would increase to 11.05 million tons per year.

However, it is highly unlikely that all 30 plants will be constructed. While each licensing partner has the intent to complete all of the plants under agreement, availability of low cost coal fines may restrict their plans. In talks with Covol and some of its licensing partners, we feel a more realistic and attainable figure is 14 plants in operation by the Section 29 tax credit deadline of June 1998, which translates into 5.7 million tons per year at full capacity.

The breakdown by licence partner for our 14 plant estimate is: PacifiCorp (4); A.J. Gallagher (4, one of which is the second line at the Price plant); Pace Carbon (2); Savage Industries (1); Ferro Resources (1) and Covol (2). The upside is likely to come from PacifiCorp, Gallagher, Pace and Covol to add one or more plants each.

Besides locating coal fines, finding investors to share in the tax credits is also a variable for the licensing partners. Even though most of the licensing partners have substantial taxable income, they can not use all of the tax credits due to alternative minimum tax rules. For instance, PacifiCorp (even though is had net income \$477 million over the past 12 months) expects it will be able to use about 25% of the credits, selling the rest to other corporate entities.

## Covol Technologies

### "Show Me The Money"

If Covol and its licensing partners somehow complete all 30 plants, Covol could earn between \$7.10 and \$8.00 per share (after-tax) in its 1998 fiscal year ending Sep. 30, 1998. For fiscal 1999, Covol's EPS could range from \$12.75 to \$13.50. These figures are "extremely" strong, but there is only a slim possibility that all 30 plants will get built. While our projection for plant construction (at 14 plants) is less than half of the plants under agreement, it could still translate into significant earnings for Covol. Our EPS estimate for fiscal 1998 ranges from \$3.70 to \$4.25, and \$5.25 to \$6.00 in fiscal 1999.

What could effect the range in each year is whether Covol sells coal briquettes for some of its licensing partners. While profit margins on the briquette sales will be marginal, it would add to EPS due to the high level of revenues booked (i.e., possibly \$40 million to \$80 million in coal sales in 1998 and \$70-\$150 million in 1999.)

The real fuel for Covol's operating margin will be the up-front licence fees and ongoing royalty payments, which will mostly be profits. Its sale of binder to the plants has been negotiated at cost plus profit margin, so the company is protected against losses there. As long as the company does not get fat in corporate overhead, profits should be strong.

### Risk Factors

**\*\* Final Commitments:** The licensing agreements appear to be strong, but there are number of conditions that could let the licensing partners walk from the deals.

**\*\* Potential Amendment to Section 29:** On Feb. 6, 1997, the Treasury Department released the current version of the Proposed Federal Budget that proposes changing the "placed in service date" for Section 29 projects to June 30, 1997 from the current date of June 30, 1998. If adopted, this would greatly affect (negatively) the number of plants built.

**\*\* Private Placement:** Due to commitments by prior management, Covol is obligated to raise capital through RAS Securities in a convertible debt offering (exercisable at a 50% discount to the future bid price) that could result in up to 430,000 shares of free trading stock by mid-summer.

**\*\* Weak Financial Statements (1996 10-K):** To say 1996 was a transitional year for Covol is an understatement. Its 1996 10-K was not a pleasing sight for shareholders, and it may not be a favorable sight for Nasdaq officials when the company attempts for its listing in a two to three months. To get any consideration from Nasdaq, Covol will need PacifiCorp and A.J. Gallagher to convert their debentures into shares, to increase Covol's net equity position.

**\*\* Insider selling:** While every company's management would like to diversify its holdings, it is not understandable why two of Covol's top management personnel (Russ Madsen, V.P. of Operations and former Chairman; and George Ford, V.P. of R&D) were selling stock in December and January when the company was signing its lucrative long term contracts.

Fiscal Year Ends: Sept. 30 (000's)	1Q97	2Q97 Est.	3Q97 Est.	4Q97 Est.	FY 97 Est.	FY 98 Est.	FY 99 Est.
Royalties/Licensing & Mgmt. Fees	\$0	\$3,088	\$2,485	\$5,434	\$11,007	\$44,897	\$67,806
Sale of Binder	0	250	450	1,221	1,921	15,187	23,727
Sale of Synthetic Coal	104	1,000	1,800	2,875	5,779	43,580	69,040
Total Revenues	\$104	\$4,338	\$4,735	\$9,530	\$18,707	\$103,664	\$160,573
Cost of Coal Sales	364	950	1,710	2,723	5,747	39,290	62,340
Cost of Binder	NA	210	378	1,045	1,633	12,867	20,047
Selling, Gen. & Admin.	807	850	900	1,000	3,557	4,500	6,000
Other Expenses (Income)	(388)	(50)	(50)	(50)	(538)		
Total Expenses	\$783	\$1,960	\$2,938	\$4,718	\$10,399	\$56,657	\$88,387
Taxes (Benefit)	0	0	0	0	0	7,051	14,437
After Tax Profit (Loss)	(679)	2,378	1,797	4,813	8,308	39,956	57,748
EPS	(\$0.09)	\$0.30	\$0.20	\$0.53	\$0.99	\$4.08	\$5.77
Fully diluted shares outstanding	7,711	7,800	8,900	9,000	8,353	9,800	10,000

## McNATT, DOUGLAS & CO.

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