

Equity Research

Pamela Bassett, DMD
212-829-4769
pbassett@cantor.com

Codexis, Inc. (CDXS-\$8.34)

Rating: BUY

Target Price: \$13.00

Positive Pharma/Biofuels Developments -- EPS In-Line -- BUY

EPS	1Q	2Q	3Q	4Q
2008A	---	---	---	---
2009A	---	---	---	---
2010E	(0.50)A	(0.15)A	(0.11)E	(0.12)E
Prev	(0.50)A	(0.15)E	(0.17)E	(0.09)E
2011E	(0.09)E	(0.15)E	(0.10)E	(0.10)E
Prev	(0.15)E	(0.16)E	(0.16)E	(0.05)E
FY	2008A	2009A	2010E	2011E
EPS	(18.96)A	(7.74)A	(0.54)E	(0.45)E
Prev	(18.96)A	(7.74)A	(0.58)E	(0.53)E
P/E	NM	NM	NM	NM

Sum of quarterly EPS may not equal full-year total due to rounding and/or change in share count.

- Yesterday, after the close, Codexis reported 2Q:10 EPS of \$(0.15), in-line with our estimated EPS of \$(0.15) and consensus EPS of \$(0.13), and ended the quarter with cash and equivalents of approximately \$100.3 million.
- Management announced achievement of two of six milestones anticipated in 2010 for the Shell (NYSE: RDS, NC) collaboration and expect milestone payments in 2H:10, continued positive development driving long-term cash flow, in our view.
- Codexis reported record high pharma business product revenue including \$2 million from Merck (NYSE: MRK, NC) for FDA process validation of Januvia, a DPP-4 inhibitor Type 2 Diabetes (T2D), with global sales of \$1.9 billion in 2009. Should this bioprocess be approved by FDA and adopted by Merck, we anticipate Codexis to lock-in a long-term supply agreement, providing sustainable cash flow plus stimulating additional pharma interest in green chemistry driven by both economic and sustainability incentives.
- Recall, Codexis is part of a key alliance with Shell developing cellulases and other biocatalysts to convert cellulosic biomass into sugars and biodiesel/ethanol-producing yeasts to convert sugars into two advanced biofuels, cellulosic ethanol and biohydrocarbon diesel. We think Codexis could become a key player in bioenergy leveraging its proprietary technology platform to generate enabling enzymes required for first generation ethanol, cellulosic ethanol production and carbon-related businesses.
- Codexis currently sells biocatalysts (enzymes, microbes) and value-added pharmaceutical intermediates/APIs, a green chemistry manufacturing alternative to conventional processes, with potential to improve pharma customers' gross margins while reducing environmental impact. Management has guided to additional pharma partnerships that we think could contribute to near-term revenue growth. We reiterate our BUY rating.

Current Statistics

Market Cap (\$Mil)	\$284.3	Institutional Holdings:	8.9%
Avg. Daily Trading Volume (3 mo.):	99,524	Technology Value (TV):	\$183.993
Shares Out (Mil):	34.084	Cash (Mil):	\$100.307
Float Shares (Mil):	6.104	Short Interest (Mil):	0.473

Company Description

Codexis (www.codexis.com) applies its proprietary technology to create and optimize biocatalysts that enable the manufacture of products cost-effectively, at commercial scale and with significantly reduced environmental impact relative to conventional manufacturing processes. The company develops products for energy, pharmaceutical, and environmental industries. Codexis has alliances with market leading companies including Pfizer, Merck, Roche, Teva, and Shell.

The Disclosure Section may be found on pages 7 - 8 of this report.

Valuation

Exhibit 1: CDXS sum-of-the parts analysis

Valuation		NPV \$MM	\$ / share
Cash 3Q:11		\$87	\$2
Shares 3Q:11= 39MM			
Biocatalysts			
10-y NPV		\$69	\$2
Terminal value		\$101	\$3
Total value		\$170	\$4
Biofuels			
10-y NPV		\$237	\$6
Terminal value		\$172	\$4
Total value		\$410	\$10
Total discounted value	3-y	\$251	\$6
Total value		\$509	\$13

		Biofuels royalty rate		
		6%	7%	8%
Discount rate	13%	\$14	\$16	\$18
	15%	\$12	\$13	\$14
	17%	\$10	\$11	\$12

Source: Cantor Fitzgerald

Our 12-month price target of \$13 is based on the following assumptions:

- We applied a discount rate of 15% to account for CDXS' relatively low risk business model, a contract service/manufacturing leveraging its enzyme optimization technology platform in exchange for product revenues / royalties and service fees.
- We assume a nominal terminal growth rate of 2% after 2020 to reflect a sustainable long-term business.
- We provide a detailed NPV model with market size and penetration assumptions for the specialty enzyme business.
- For the Shell biofuels alliance, we assume a two stage expansion from 500 million gallon per year (MPY) plant online in 2014 to 1.5 billion MPY online in 2019, approximately 10% of EISA RFS cellulosic biofuel requirement, based on Shell's capability and industry progress. Due to the product royalty arrangement with BP (NYSE: BP, NC), we assume a total 7% royalty payment to CDXS, of which 2% is payable to Maxygen (NASDAQ: MAXY, NC) according to the company's licensing agreement.

We think that CDXS is under valued given its current market capitalization and relatively low risk business model. As a result of the exclusive agreement with Shell, the company could not license any technology developed under the collaboration for the patent life of such technology should Shell not pursue the commercialization of any cellulosic sugars, biofuels or related products developed under the collaborative agreement, a significant competitive disadvantage in the biofuels market, in our view. However, the company is positioned to pursue alternative businesses outside of the field of fuels and lubricants leveraging its technology developed in the biofuels alliance – providing upsides should these new ventures become successful. Based on our risk/return analysis, we assign a BUY rating and a \$13 price target.

Financials

Yesterday, after the close, Codexis reported 2Q:10 EPS of \$(0.15), in-line with our estimated EPS of \$(0.15) and consensus EPS of \$(0.13), and ended the quarter with cash and equivalents of approximately \$100.3 million.

The company reported a record high product revenue from its pharma customers including \$2 million from Merck for supplying enzymes for FDA process validation used in the manufacturing of Januvia, a DPP-4 inhibitor indicated for the treatment of Type 2 Diabetes (T2D), with global sales of \$1.9 billion in 2009, 38% growth versus 2008. Sitagliptin, the active ingredient in Januvia, is also the primary component in Merck's Janumet (combination of sitagliptin and metformin for T2D), sales of which reached \$658 million in 2009, 87% growth versus 2008. Should the bioprocess be approved by FDA and adopted by Merck, we anticipate Codexis to lock-in a long-term supply agreement up to 2022 (Januvia/Janumet US patent expiration), providing sustainable cash flow plus stimulate additional pharma interest in green chemistry driven by both economic and sustainability incentives.

Codexis also reported a 28% gross margin versus 17% in 1Q:10 for its product revenue due to large order quantity occurred in 2Q:10. Management guided to lower gross margin forward and anticipate a long-term improvement driven by volume growth and technology development.

Management announced achievement of two milestones out of six anticipated in 2010 for the Shell collaboration and expect milestone payments in 2H:10. The timing is uncertain and we assumed one payment each in 3Q:10 and 4Q:10. We have updated our model to reflect revised EPS estimates forward.

Risks

Development risks: Codexis is a development stage company and that could continue to incur substantial losses and not achieve profitability. Codexis has an accumulated deficit of \$159.6 million as of December 31, 2009. The development of technology for converting sugar derived from non-food renewable biomass sources into a commercially viable biofuels is still in its early stages, as a result, production and commercialization of cellulosic biofuels may not be feasible.

Commercial risks: Codexis is dependent on the acceptance of its enzyme products in the marketplace and could experience delays if these new biotechnology-derived products experience customer resistance and/or regulatory hurdle.

Collaboration risks: Codexis is dependent upon its relationships with collaborative partners and their interest and ability to commercialize biocatalyst-based manufacturing processes and/or cellulosic ethanol products based upon Codexis technology for its future revenue.

Competitive risks: Codexis products could face significant competition in the future which could diminish its revenue potential. Additionally, Codexis is dependent upon its patent estate to create product value for its customers. The company could also face competitive opposition and be required to defend its intellectual property that could involve litigation and expenses. Further, under the licensing agreement with Maxygen, there are limitations on Codexis' ability to enforce Maxygen's patents to which it hold a license, which could have a material adverse effect on Codexis' business.

Financing risks: Codexis may need substantial capital requirements to continue its development. Should Codexis be unable to enter into or maintain collaborations with partners that are able or willing to fund its development efforts and/or raise additional funds, the company may be forced to delay or terminate research or development programs or the commercialization of products, curtail or cease operations or obtain funds through collaborative and licensing arrangements that may require the company to relinquish

commercial rights, or grant licenses on terms that are not favorable.

Market risks: Codexis' biofuels business is dependent on prices of petroleum-based fuels, price and availability of cellulosic biomass and fuel regulations/policies. The company may not be able to produce commercially viable alternatives to petroleum-based fuels and biofuels royalty revenues under the agreements with Shell are indexed to the price of oil. Additionally, the availability of arable land to supply feedstock, weather conditions, farming decisions, government policies and subsidies with respect to agriculture and international trade, and global demand and supply may impact the price and availability of biomass. Further, foreign, federal, state and local government regulations and policies concerning the petroleum industry may have material impact on the biofuels industry and Codexis' business.

Codexis, Inc.
(,000)

Income Statement

Year End December 31st

	FY 2008A	FY 2009A	1Q 2010A	2Q 2010A	3Q 2010E	4Q 2010E	FY 2010E	1Q 2011E	2Q 2011E	3Q 2011E	4Q 2011E	2011E
Revenues:												
Product	\$16,860	\$18,554	\$6,275	\$8,484	\$6,484	\$6,614	\$27,857	\$7,105	\$7,632	\$8,199	\$8,808	\$31,744
Related party collaborative research and development	30,239	62,656	16,042	14,653	16,653	16,653	64,001	16,732	14,732	16,732	16,732	64,928
Collaborative research and development	3,062	1,652	661	851	800	800	3,112	1,200	1,200	1,200	1,200	4,800
Government grants	317	46	2,722	492	0	0	3,214	500	500	500	500	2,000
Biofuels royalties												
Total revenues	50,478	82,908	25,700	24,480	23,937	24,067	98,184	25,537	24,064	26,631	27,240	103,472
Cost of revenues:												
Cost of product sales	13,188	16,678	5,218	6,075	5,317	5,423	22,033	5,826	6,258	6,723	7,222	26,030
Gross margin%	21.8%	10.1%	16.8%	28.4%	18.0%	18.0%	20.9%	18.0%	18.0%	18.0%	18.0%	18.0%
Operating expenses:												
Research and development	45,554	54,725	12,982	13,004	13,264	13,529	52,779	13,665	13,801	13,939	14,079	55,484
Selling, general and administrative	35,709	29,871	8,600	8,652	8,825	9,002	35,079	9,092	9,182	9,274	9,367	36,915
Total operating expenses	81,263	84,596	21,582	21,656	22,089	22,531	87,858	22,756	22,984	23,214	23,446	92,399
Income from operations	(43,973)	(18,366)	(1,100)	(3,251)	(3,469)	(3,887)	(11,707)	(3,045)	(5,178)	(3,306)	(3,428)	(14,957)
Interest and other income	1,538	180	28	46	51	50	175	98	94	90	86	367
Interest expense and other, net	(2,365)	(2,037)	(358)	(654)	(316)	(283)	(1,610)	(254)	(229)	(209)	(201)	(893)
Income before income tax provision (benefit)	(44,800)	(20,223)	(1,430)	(3,859)	(3,734)	(4,120)	(13,143)	(3,202)	(5,313)	(3,425)	(3,543)	(15,483)
Income tax provision (benefit)	327	66	(61)	87	0	0	26	10	10	10	10	40
Net Income	(45,127)	(20,289)	(1,369)	(3,946)	(3,734)	(4,120)	(13,169)	(3,212)	(5,323)	(3,435)	(3,553)	(15,523)
EPS basic	(18.96)	(7.74)	(0.50)	(0.15)	(0.11)	(0.12)	(0.54)	(0.09)	(0.15)	(0.10)	(0.10)	(0.45)
EPS diluted	(18.96)	(7.74)	(0.50)	(0.15)	(0.11)	(0.12)	(0.54)	(0.09)	(0.15)	(0.10)	(0.10)	(0.45)
Weighted average common shares outstanding, basic	2,380	2,622	2,714	26,557	34,215	34,266	24,438	34,780	34,832	34,885	34,937	34,858
Weighted average common shares outstanding, diluted	2,380	2,622	2,714	26,557	34,215	34,266	24,438	34,780	34,832	34,885	34,937	34,858

Source: Company reports and Cantor Fitzgerald estimates

Codexis, Inc.
(,000)

Balance Sheet

Year End December 31st

	FY 2008A	FY 2009A	1Q 2010A	2Q 2010A	3Q 2010E	4Q 2010E	FY 2010E	1Q 2011E	2Q 2011E	3Q 2011E	4Q 2011E	2011E
Assets												
Cash , cash equivalents and investments	\$37,130	\$55,563	\$39,264	\$100,307	\$101,938	\$99,367	\$99,367	\$95,670	\$91,617	\$87,499	\$85,093	\$85,093
Accounts receivable, net	6,193	7,246	6,561	7,289	7,127	7,166	7,166	7,604	7,165	7,929	8,111	8,111
Inventories, net	2,976	2,915	2,912	2,176	2,128	2,139	2,139	2,270	2,139	2,367	2,421	2,421
Prepaid expenses and other current assets	1,669	1,658	1,919	4,788	4,682	4,707	4,707	4,995	4,707	5,209	5,328	5,328
Property, plant and equipment, net	16,006	21,581	21,251	21,332	19,952	18,555	18,555	19,331	20,156	21,031	21,962	21,962
Restricted cash	924	731	731	668	668	668	668	668	668	668	668	668
Other non-current assets	1,054	5,173	7,213	3,224	3,224	3,224	3,224	3,224	3,224	3,224	3,224	3,224
Goodwill, intangibles and other long-term assets, net	4,930	4,169	3,985	3,891	3,862	3,833	3,833	3,804	3,775	3,747	3,718	3,718
Total assets	70,882	99,036	83,836	143,675	143,580	139,659	139,659	137,566	133,451	131,675	130,525	130,525
Liabilities and stockholders' equity												
Total current liabilities	42,401	50,985	37,433	30,847	34,027	32,275	32,275	31,306	30,380	29,854	30,021	30,021
Other non-current liability	24,859	13,224	10,889	8,533	6,650	6,213	6,213	5,863	5,513	5,163	4,813	4,813
Total stockholders' equity	3,622	34,827	35,514	104,295	102,903	101,172	101,172	100,397	97,558	96,658	95,691	95,691
Total liabilities and stockholders equity	\$70,882	\$99,036	\$83,836	\$143,675	\$143,580	\$139,659	\$139,659	\$137,566	\$133,451	\$131,675	\$130,525	\$130,525

Cash Flow Statement

Year End December 31st

	FY 2008A	FY 2009A	1Q 2010A	2Q 2010A	3Q 2010E	4Q 2010E	FY 2010E	1Q 2011E	2Q 2011E	3Q 2011E	4Q 2011E	2011E
Net Income (Loss)	(45,127)	(20,289)	(1,369)	(3,946)	(3,734)	(4,120)	(13,169)	(3,212)	(5,323)	(3,435)	(3,553)	(15,523)
Non-cash items	7,777	12,576	3,530	5,125	4,241	4,309	17,205	4,379	4,548	4,724	4,910	18,562
Changes in operating assets and liabilities, net	1,034	(973)	(14,186)	(7,867)	2,956	(923)	(20,021)	(1,175)	581	(1,726)	(537)	(2,856)
Net cash used in operating activities	(36,316)	(8,686)	(12,025)	(6,688)	3,462	(734)	(15,984)	(7)	(195)	(436)	820	182
Decrease in restricted cash	1,271	193	0	65	0	0	65	0	0	0	0	0
Expenditures for property, plant and equipment	(8,537)	(10,797)	(1,320)	(1,872)	(490)	(495)	(4,177)	(2,690)	(2,858)	(3,036)	(3,226)	(11,810)
Sale (purchase) of investments, net	14,322	(9,138)	13,610	(39,096)	0	0	(25,486)	0	0	0	0	0
Purchases of CO2 Solution common shares		(1,316)					0					0
Acquisition, net of cash acquired							0					0
Net cash used in investing activities	7,056	(21,058)	12,290	(40,903)	(490)	(495)	(29,598)	(2,690)	(2,858)	(3,036)	(3,226)	(11,810)
Principle payments on financing obligations	(4,264)	(6,087)	(1,339)	(1,342)	(1,342)	(1,342)	(5,365)	(1,000)	(1,000)	(645)	0	(2,645)
Payments in preparation of IPO		(959)	(1,636)	(1,470)			(3,106)					0
Proceeds from equity transactions, net	378	47,043	140	72,653	0	0	72,793	0	0	0	0	0
Net cash provided by (used in) financing activities	(3,886)	39,997	(2,835)	69,841	(1,342)	(1,342)	64,322	(1,000)	(1,000)	(645)	0	(2,645)
Effect of exchange rate changes on cash and cash equivalents	(26)	(371)	(18)	(34)			(52)					
Net increase in cash and cash equivalents	(33,172)	9,882	(2,588)	22,216	1,631	(2,571)	18,688	(3,697)	(4,053)	(4,118)	(2,406)	(14,273)
Cash and cash equivalents at beginning of year (period)	55,075	21,903	31,785	29,197	51,413	53,044	31,785	50,473	46,776	42,723	38,605	50,473
Cash and cash equivalents at end of year (period)	21,903	31,785	29,197	51,413	53,044	50,473	50,473	46,776	42,723	38,605	36,199	36,199

Source: Company reports and Cantor Fitzgerald estimates

Disclosures Appendix

Analyst Certification

The analyst primarily responsible for this research report, and whose name appears on the front cover, certifies that: (i) all of the views expressed in this research report accurately reflects his or her personal views about any and all of the subject securities or issuers featured in this report; and (ii) no part of any of the research analyst's compensation was, is, or will be, directly or indirectly related to the specific recommendations or views expressed by the research analyst in this report.

Legal Disclosures

Investment banking (next 3 months): Cantor Fitzgerald and/or its affiliates, expect to receive, or intend to seek, compensation for investment banking services within the next three months from all of the companies referenced within this report.

Lead or Co-manager: Cantor Fitzgerald and/or its affiliates, has not acted as lead or co-manager in a public offering of equity and/or debt securities for Codexis, Inc. within the last 12 months

Cantor Fitzgerald and/or its affiliates has not received compensation for investment banking services in the last 12 months from Codexis, Inc.

Cantor Fitzgerald and/or its affiliates is a market maker in Codexis, Inc.

Cantor Fitzgerald's rating system

BUY : We have a positive outlook on the stock based on our expected 12 month return relative to its risk. The expected return is based on our view of the company and industry fundamentals, catalysts, and valuation. We recommend investors add to their position.

HOLD : We have a neutral outlook on the stock based on our expected 12 month return relative to its risk. The expected return is based on our view of the company and industry fundamentals, catalysts, and valuation.

SELL : We have a negative outlook on the stock based on our expected 12 month return relative to its risk. The expected return is based on our view of the company and industry fundamentals, catalysts, and valuation. We recommend investors reduce their position.

NC : Not Covered. Cantor Fitzgerald does not provide an investment opinion or does not provide research coverage on this stock.

Prior to September 12, 2006, Cantor Fitzgerald had the below ratings

BUY : denotes stocks that we expect will provide a total return (price appreciation plus yield) of 15% or more over a 12-month period. A Buy rated stock is expected to outperform the total average return of analyst's industry coverage universe on a risk adjusted basis.

HOLD : denotes stocks that we suggest will provide a total return or total negative return of up to 15% over 12-month period. A Hold rated stock is expected to perform in-line with the total average return of the analyst's industry coverage universe on a risk adjusted basis

SELL : denotes stocks that we expect to provide a total negative return of more than 15% over a 12 month period. A Sell rated stock is expected to underperform the total average return of the analyst's industry coverage universe on a risk adjusted basis.

NC : Not Covered. Cantor Fitzgerald does not provide research coverage on this company.

Other Disclosures

This report is for informational purposes only and is based on publicly available data believed to be reliable, but no representation is made that such data are accurate or complete. Opinions and projections contained herein reflect our opinion as of the date of this report and are subject to change. Pursuant to Cantor Fitzgerald's policy, the author of this report does not own shares in any company he/she covers.

Additional material for UK investors

This material is approved for distribution in the United Kingdom by Cantor Fitzgerald Europe, regulated by the Financial Services Authority (FSA). While we believe this information and the materials upon which this information was based, is accurate, except for any obligations under the rules of the FSA, we do not guarantee its accuracy. This material is only intended for use by professionals or institutional investors who fall within articles 19 or 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 and not the general investing public. None of the investments or investment services mentioned or described herein are available to other persons in the U.K and in particular, are not available to "private customers" as defined by the rules of the FSA.

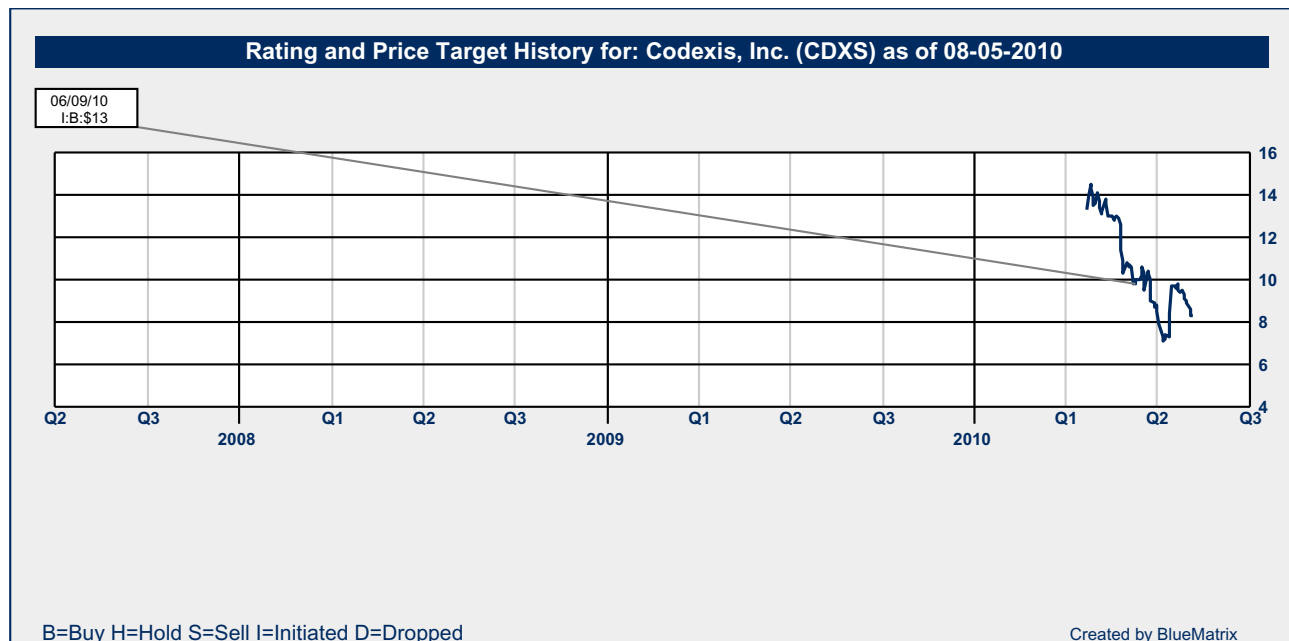
Disclosure for Canadian Institutional Investors

This research report was prepared by analysts of Cantor Fitzgerald & Co. and not by Cantor Fitzgerald Canada Corporation. As a result this report has not been prepared subject to Canadian Disclosure requirements. Cantor Fitzgerald Canada Corporation itself does not issue research reports but may distribute research reports prepared by its affiliates.

Risks

The financial instruments discussed in this report may not be suitable for all investors and investors must make their own investment decisions based on their specific investment objectives. Past performance should not be taken as an indication or guarantee of future performance. The price, value of

and income from, any of the financial instruments featured in this report can rise as well as fall and be affected by changes in economic, financial and political factors. If a financial instrument is denominated in a currency other than the investor's currency, a change in exchange rates may adversely affect the price or value of, or income derived from, the financial instrument, and such investors effectively assume currency risk. In addition, investors in securities such as ADRs, whose value is affected by the currency of the home market of the underlying security, effectively assume currency risk.



Distribution of Ratings/Investment Banking Services (IB) as of 08/06/10

Cantor

Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [B]	42	61.80	9	21.43
HOLD [H]	22	32.40	4	18.18
SELL [S]	4	5.90	0	0.00

Additional information available on request

Copyright (C) Cantor Fitzgerald 2010