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HOUSTON AMERICAN ENER



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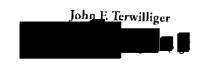
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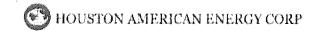
Investor Presentation

November 2009





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Forward-Looking Statements

This presentation contains forward-looking statements, including those relating to our future financial and operational results, reserves or transactions, that are subject to various risks and uncertainties that could cause the Company's future plans, objectives and performance to differ materially from those in the forward-looking statements. Forward-looking statements can be identified by the use of forward-looking terminology such as "may," "expect," "intend," "plan," "subject to," "anticipate," "estimate," "continue," "present value," "future," "reserves," "appears," "prospective," or other variations thereof or comparable terminology. Factors that could cause or contribute to such differences could include, but are not limited to, those relating to the results of exploratory drilling activity, the Company's growth strategy, changes in oil and natural gas prices, operating risks, availability of drilling equipment, availability of capital, weaknesses in the Company's internal controls, the inherent variability in early production tests, dependence on weather conditions, seasonality, expansion and other activities of competitors, changes in federal or state environmental laws and the administration of such laws, the general condition of the economy and its effect on the securities market, the availability, terms or completion of any strategic alternative or any transaction and other factors described in "Risk Factors" and elsewhere in the Company's Form 10-K and other filings with the SEC. While we believe our forward-looking statements are based upon reasonable assumptions, these are factors that are difficult to predict and that are influenced by economic and other conditions beyond our control.

The United States Securities and Exchange Commission permits oil and gas companies, in their filings with the SEC, to disclose only proved reserves that a company has demonstrated by actual production or conclusive formation tests to be economically and legally producible under existing economic and operating conditions. We use certain terms in this document, such as non-proven, resource potential, Probable, Possible, Exploration and unrisked resource potential that the SEC's guidelines strictly prohibit us from including in filings with the SEC. These terms include reserves with substantially less certainty, and no discount or other adjustment is included in the presentation of such reserve numbers. The recipient is urged to consider closely the disclosure in our Form 10-K. File No. 001-32955, available from us at 80° Travis, Suite 1425, Houston, Texas 77002. You can also obtain this form from the SEC by calling 1-800-SEC-0330.



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HOUSTON AMERICAN ENERGY CORP

Company Overview

 Houston American Energy Corp (NASDAQ:HUSA), the "Company", is a growth oriented independent energy company engaged in the exploration, development and production of crude oil and natural gas resources

Market Cap:	\$112.0 MM	Debt Outstanding:	\$0.0
Average Volume:	54,000	Shares Outstanding:	28,000,772

- Operations focused in Colombia
 - Current production of approximately 850 barrels of oil equivalent per day
 - Participated in drilling of 100 wells in Colombia to date
 - Developing new international projects with a focus on Colombia, Peru and Brazil
- Significant concessions in Colombia with substantial drilling inventory identified by advanced 3-D seismic interpretation
 - Over 895,000 gross acres with more than 100 currently identified drilling prospects



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Investment Opportunity

- Unique portfolio of high impact, large reserve potential projects in Colombia.
 - Pure-play small cap oil focused investment opportunity with substantial upside potential
 - · Significant acreage position focused in the Llanos Basin in Colombia
 - · Favorable government royalties and fiscal terms on existing contracts
- Significant Technical Partner with SK Energy, a leading Asian integrated oil and as company
- Proven Track Record
 - Participating in successful drilling program led by Hupecol
 - Drilled 100 wells in Colombia with a 70% success rate to date
 - With approximately \$19.8MM in invested capital management has generated in excess of \$112.0MM of market capital to date
- Low cost structure
 - Non-operator strategy allows for minimal corporate staff
 - Colombian properties have lower finding and development costs versus U.S. conventional and unconventional reserves
- Experienced management and board of directors with access to proprietary dea I flow

3

Simple capitalization structure



HOUSTON AMERICAN ENERGY CORP

Business Strategy

- Explore and develop existing properties through the drill bit
 - · Increase production and cash flow by drilling and completing identified well locations
 - · Quantify value of our asset base through an aggressive testing and drilling program
 - Explore for and develop additional proved reserves on approximately 150,000 net acres
- Acquire additional interest in oil and gas properties through partnerships and joi nt ventures with experienced operators
 - Target acquisitions that enhance our core areas
 - Focus on high impact, lower risk drilling prospects
- Capitalize on the experience and strategic relationships of the management team and board of directors



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International Assets

International Operations - Llanos Basin Colombia

Interest in Eight Concessions and One Technical Evaluation Agreement

<u>Operator</u>	Interest
SK Energy	25.0% working interest in the CPO 4 concession covering ~ 345,452 acres
Shona	12.5% working interest in the Serrania concession covering ~ 110,769 acres
Hupecol	12.5% interest in the Los Picachos Technical Evaluation Agreement (the "TEA") ~ 86,235 acres
Hupecol	12.5% working interest in the Las Garzas concession covering ~ 103,000 acres
Hupecol	12.5% working interest in the Leona concession covering ~ 70,343 acres
Hupecol	12.5% working interest in the Cabiona concession covering ~ 86.066 acres
Hupecol	12.5% working interest in Dorotea concession covering ~ 51,321 acres
Hupecol	6.25% working interest in the Surimena concession covering \sim 69,000 acres
Hupecol	1.6% working interest in La Cuerval contract covering ~ 48,000 acres

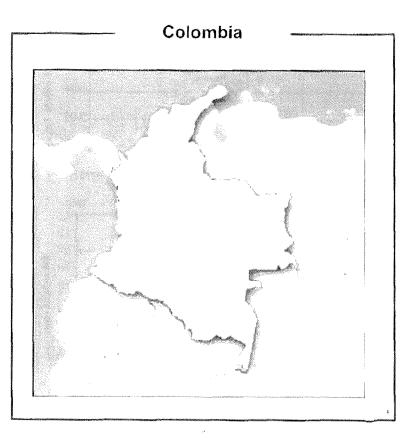


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Overview of Colombia

- President Alvaro Uribe Velez (re-elected May 28, 2006) – Pro Business
- Main US ally in South America
- Population: 45,644,023
- Capital Bogotá: 7,881,156 citizens
- Exchange rate 2009: 1,949 COP\$/US\$
- Gross domestic product, GDP, 2008: US\$ 395.4 Billion
- GDP / Capita, 2008: \$8,800
- Current Production of 600,000 bbl/day
- Estimated 1.36 Billion barrels of proven reserves



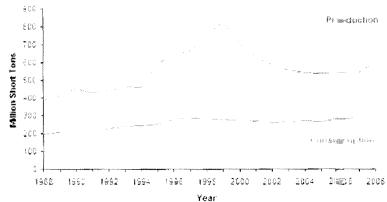


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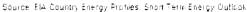
Source: Wood Mackenzie, IHS, CIA GOV

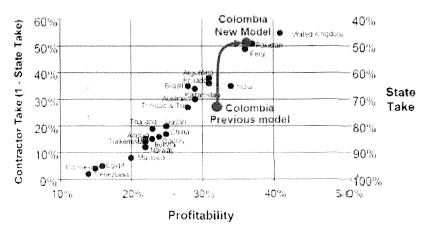
Overview of Colombia

- Colombia is currently a net exporter (~ 282,000 bbls/d) of crude oil, but the country's reserves and production have been declining
- To combat this decline, the Colombian government enacted a number of incentives almed to attract foreign investment;
 - Sliding scale royalty rates based on field size, with an 8% royalty rate for most fields
 - 100% company ownership of production projects
 - Eliminated government back-in rights on new concessions
 - Vastly improved security environment President Uribe
 on offensive with broad popular support
 - Military increased 273,000 to 370,000 personnel in 2 years. US assistance at US\$600 million/year
 - Progressive Colombia fiscal changes similar to those in UK which spurred renewed interest in the North Sea
- Colombia has a well developed infrastructure system comprising of over 3,700 miles of crude and product pipelines. This system is concentrated on transporting crude from the main producing basins (Llanos and Magdalenas)



Colombia's Oil Production and Consumption







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Llanos Basin

- The Llanos Basin covers an area of approximately 125,000 square miles
- Its primary geologic formations are: the Upper Cretaceous, Paleocene and Eocene
- There are currently more than 25 operators located in the Llanos Basin
- The Llanos Basin is one of the most active basins in Colombia





Source: Wood Mackenzie IHS, CIA GOV

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SK Energy - CPO 4 Block

Overview of SK Energy

Large Asian conglomerate with an integrated business model

Billion KRW

3illion KRW

Refining and Petroleum Business

In 2008, SK Energy had \$27.12 billion USD in sales (71% of revenues), with refining capacity of 1.1 million barrels of oil per day. This represents the largest capacity in Korea, as well as one of the largest in all of Asia

Petrochemical Business

SK Energy is the undisputed leader in the petrochemical business in Korea. During 2008 SK sold 8,445,000 tons of petrochemical products for \$8.75 billion USD in sales in 2009

E&P Business

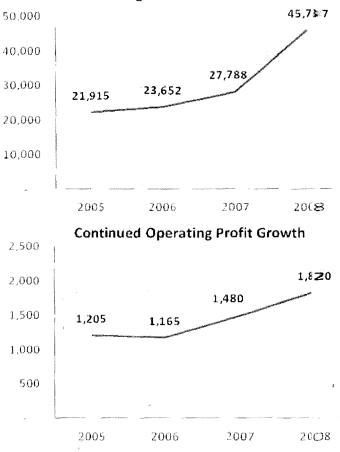
SK Energy Participates in 34 oil and gas blocks and four LNG projects in 47 countries, with proved oil equivalent reserves of 520 million barrels (BOE).

Lubricants Business

Leading lubricant manufacturer in Korea. During 2008 SK Energy sold 9,531,000 barrels of Lubricants

It should also be noted that SK Energy has Research and Development and Technology businesses that are leaders in the industry.

Source: SIK Energy Presentation 1 USD = \$189 KRW



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Strong Revenue Profile

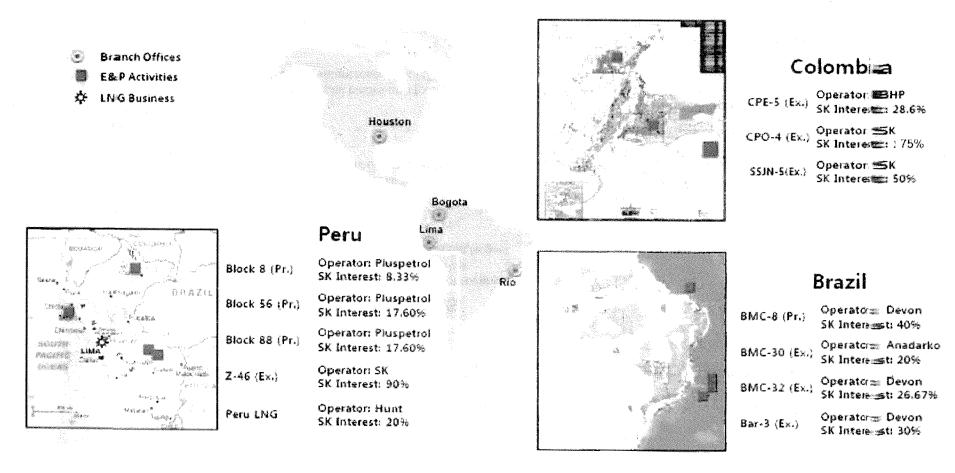


SK Energy E&P Activities

SK Energy

34 Blocks (11 Dev./Prod. and 23 Exp.) and 4 LNG Businesses in 17 Countries

• Reserves: 520 MM Boe at the end of 2008



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SK Energy - Farmout Agreement and JOA – CPO 4

- Contract entered between National Hydrocarbon Agency of Colombia and SK Energy, a leading Korean conglomerate
- Right to earn an undivided 25% of the rights of the CPO 4 Contract located in the Western Llanos Basin in the Republic of Colombia
- CPO 4 Block consists of 345,452 net acres and contains over 100 identified leads or prospects with estimated recoverable reserves of 1 to 4 billion barrels
- The Block is located along the highly productive western margin of the Llanos Basin and is adjacent to Apiay field which is estimated to have in excess of 610 million barrels of 25-33 API oil recoverable. On the CPO 4 Block's Northeast side lies the Corcel Block where well rates of 2,000 to 14,000 barrels of initial production per day have been announced for recent discoveries.
- In addition, the CPO 4 Block is located nearby oil and gas pipeline infrastructure.
- The Company has agreed to pay 25% of all past and future cost related to the CPO 4 block as well as an additional 12.5% of the seismic acquisition costs incurred during Phase 1 Work Program
- All future cost and revenue sharing (excluding the phase 1 seismic cost) will be on a heads up basis;
 75% SK Energy and 25% HUSA no carried interest or other promoted interest on the block



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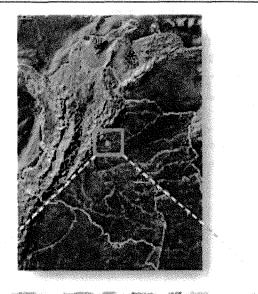
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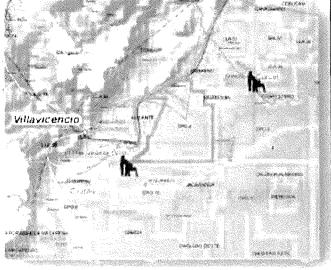
Block Overview

General information

- Location : Onshore, Central Colombia
- Basin : Western Llanos Basin
- Area : 139,859 ha (1,398.59 km²)
- Effective Date : December 18, 2008
- Contract Type : License Agreement (Royalty & Tax)
- Participant :
 - SK Energy : 75% (Operator)
 - Houston American Energy : 25%
- Exploration Period & Work Obligation

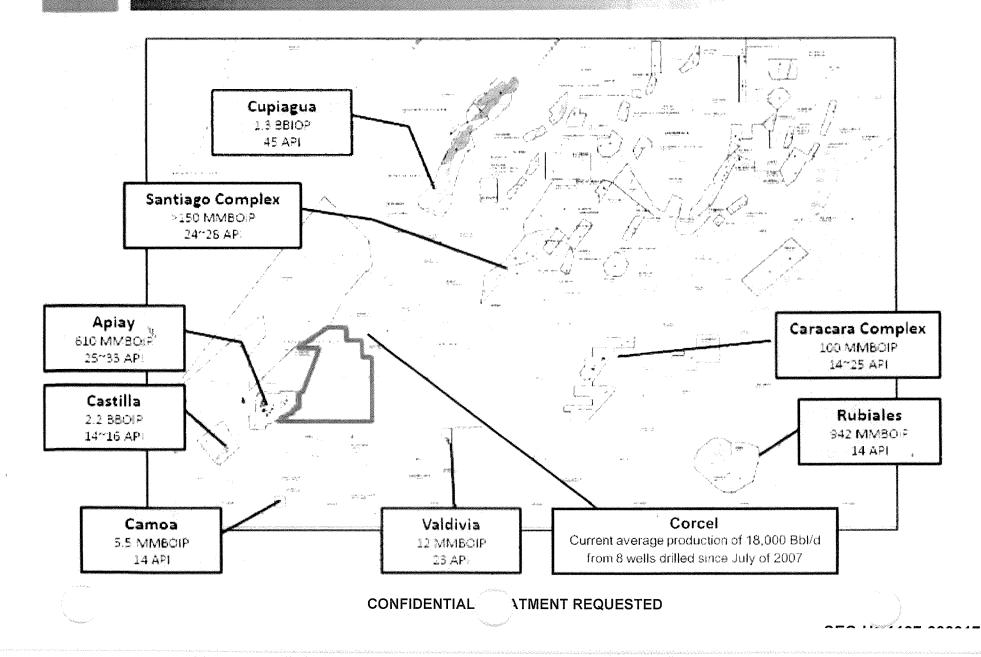
PHASE	PERIOD	WORK OBLIGATION
Phase O	18.12.'08 ~ 17.6.'09 (6 mos.)	Phase O Report
Phase 1	18.6.'09 ~ 17.6.'12 (3 yrs.)	 400 km 2D Seismic Reprocessing 620 km 2D New Seismic Acquisition 2 Exploration Wells
Phase 2	18.6.'12 ~ 17.6.'15 (3 yrs.)	 400 km 2D Seismic Reprocessing 3 Exploration Wells



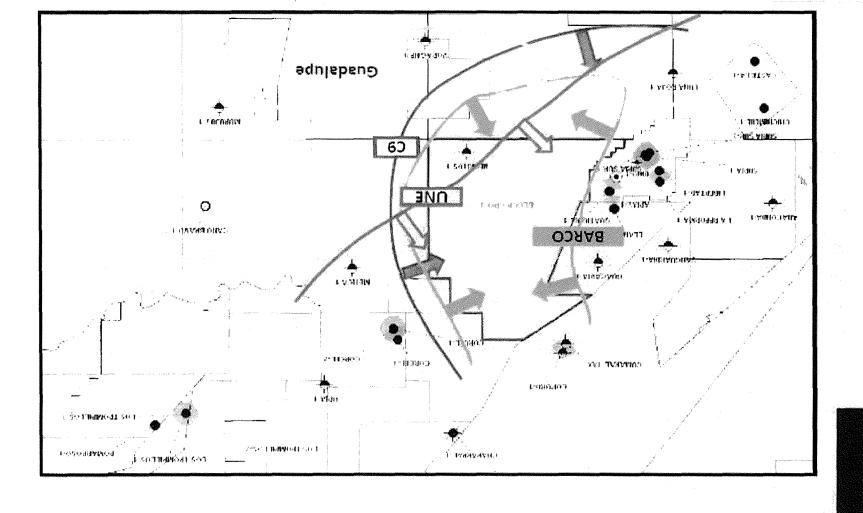


Surrounded Area by Existing F

Source Rock



Reservoir Distribution



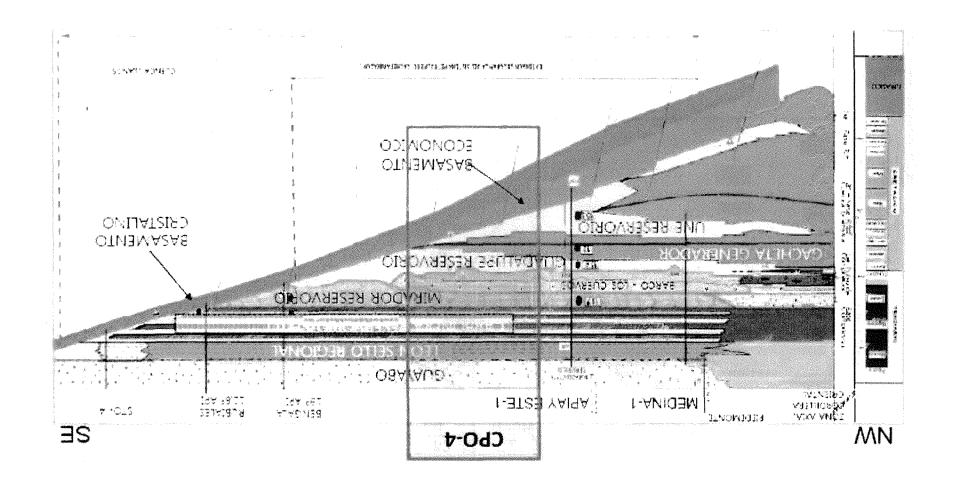
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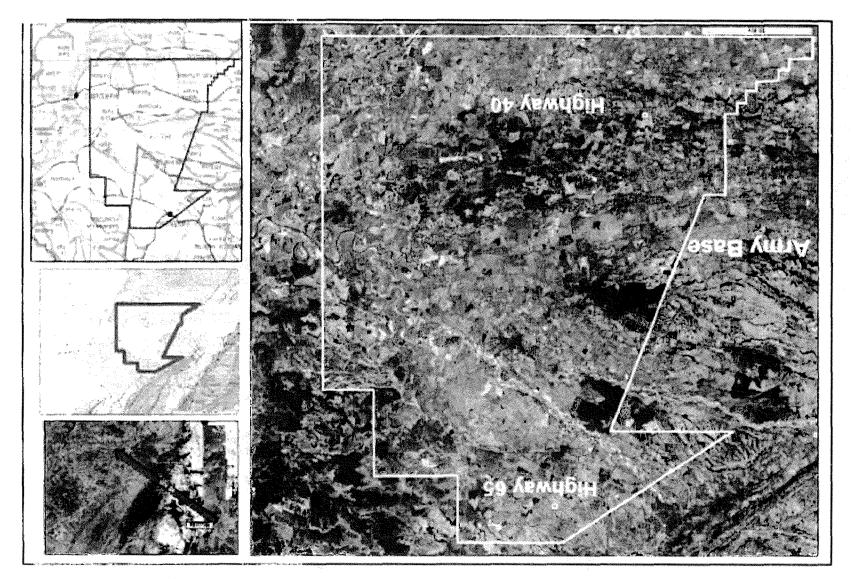
Multi Reservoir

Reservoir Rock



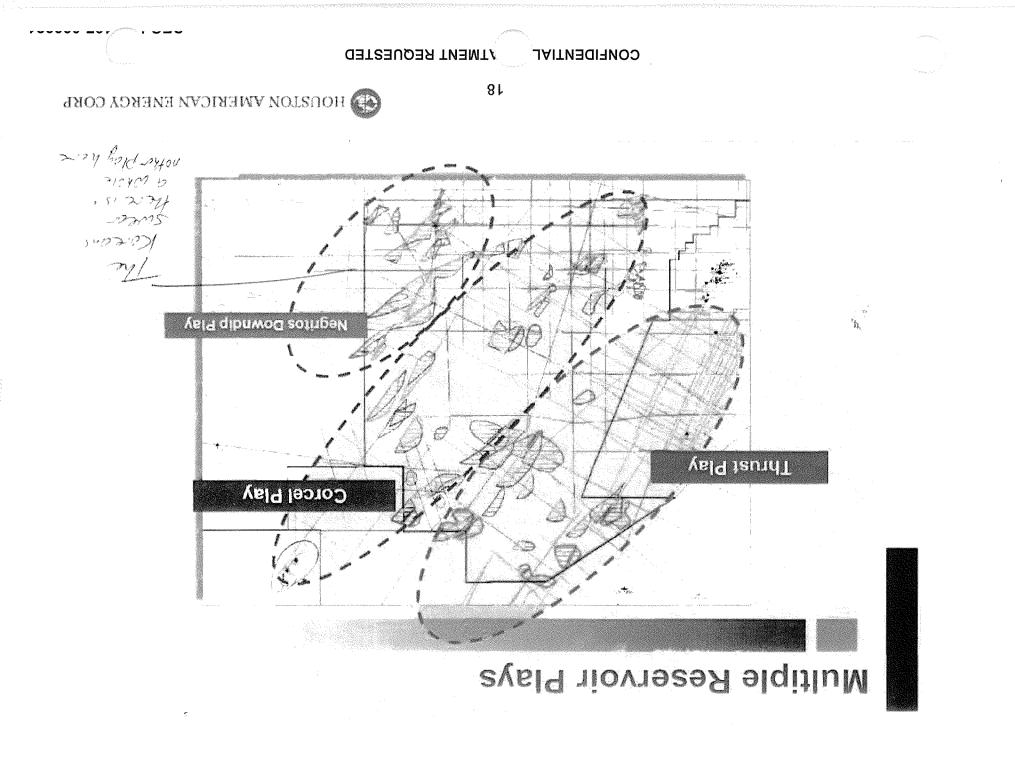
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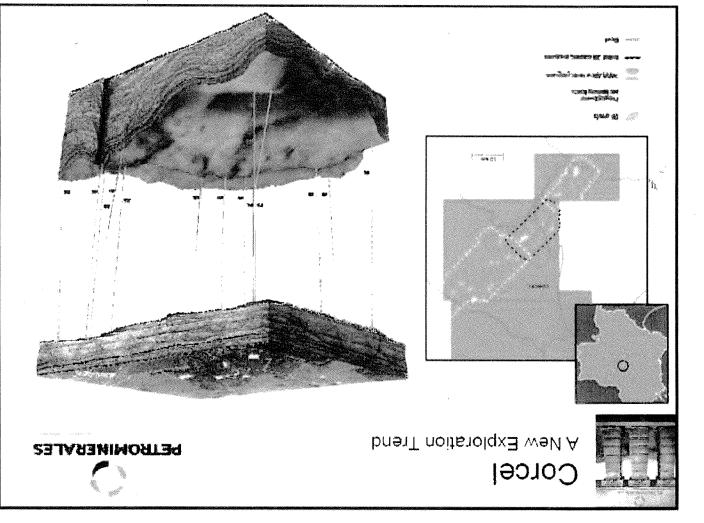
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Corcel Overview



Source' Petromimerales.com

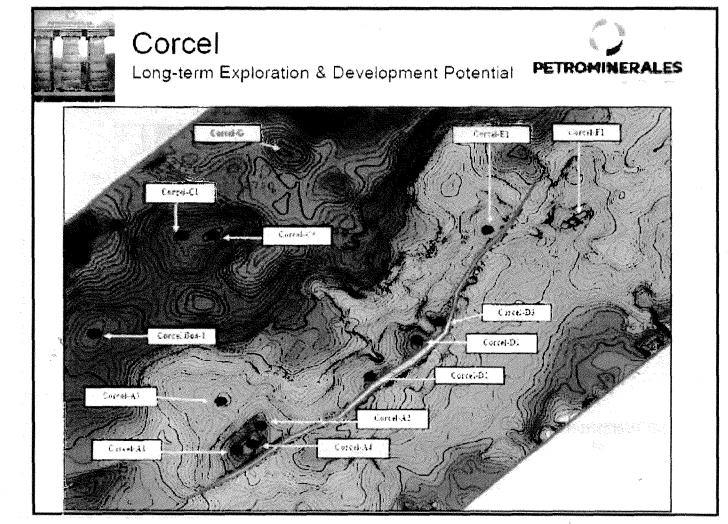
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Corcel Overview (continued)

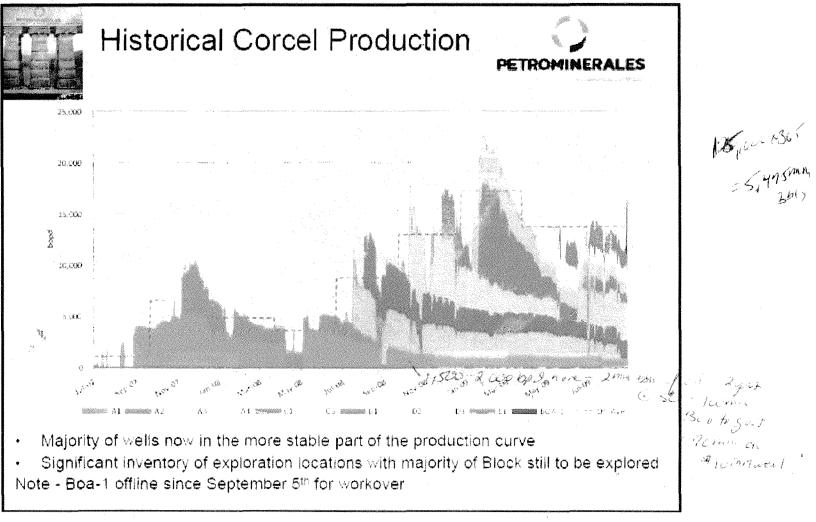


Source: Petrominerales.com

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Corcel Overview (continued)



Source: Petromnerales.com

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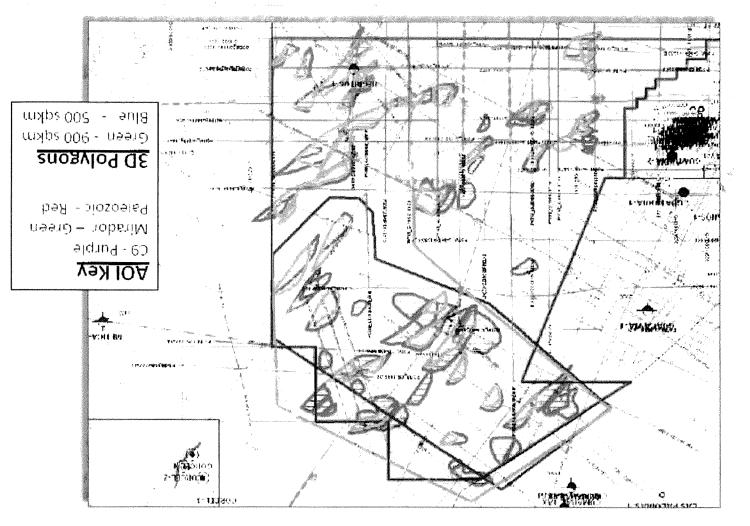
Corcel Overview (continued)

- Production from Corcel's wells have averaged in excess of 5,500 barrels of oil per day for the first thirty days of production declining to approximately 2,000 barrels of oil per day after the first year of production.
- Production after the first year of production is expected to decline marginally at 5 to 10% per annum
- Multiple stacked pay sands
- Active water drive is expected to result in high ultimate recoveries
- The Corcel-A2 side-track well (drilled Sept. 09) is producing over 10,000 barrels of oil per day of 30 API oil at less than 1% water cut from the Lower Mirador, Upper Guadalupe and Lower Guadalupe sands.

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Source: Petrominerales.com

Proposed 3D Areas with Structure Maps



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Land Satellite Image with Structures and 3D Areas



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Serrania Block and Los Picachos

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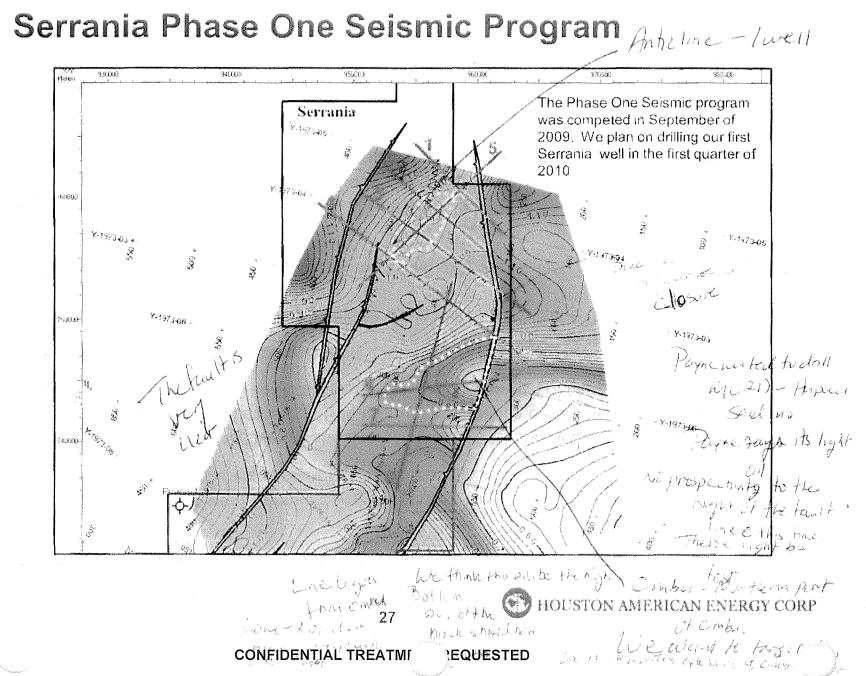
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Serrania Block and Los Picachos

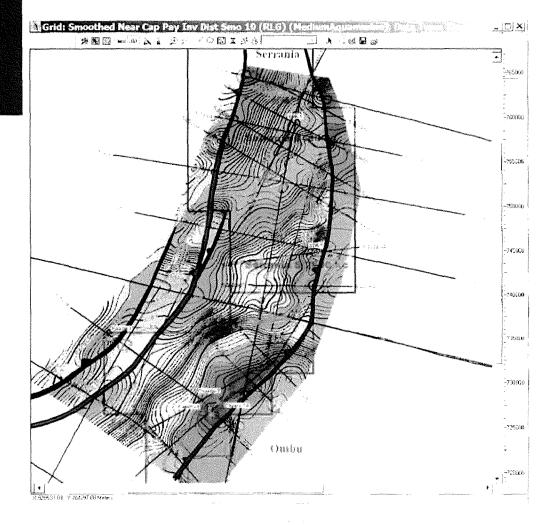
- Contract entered between Shona Energy (Colombia) Limited (major investors of which include Encap and Nabors) and Houston American Energy on June 24, 2009
- Right to earn an undivided twelve and one half percent (12.5%) of the rights to the Serrania Contract for Exploration and Production (the Serrania Contract) which covers the Serrania Block located in the municipalities of Uribe and La Macarena in the Department of Meta
- Serrania Block consists of approximately 110,769 acres
- Oil Royalty: 8% to 5,000 BOPD and sliding scale to 20% at 125,000 BOPD
- The Block is located adjacent to the recent Ombu discovery, which is estimated to have potentially over one billion barrels of oil in place
- The Company has agreed to pay 25% of Phase 1 Work Program. The Phase 1 work program consist of completing a geochemical study, reprocessing existing 2-D seismic data, and the acquisition, processing and interpretation of 2D seismic program containing approximately 116 kilometers of 2-D data
- The Company's is expected to drill its first well on Serrania Block in the 1st quarter of 2010
- Los Picachos Technical Evaluation Agreement encompasses an 86,235 acre region located to the west and northwest of the Serrania block

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Picture of Ombu field extension onto Serrania



Key Points Ombu Field

Canacol Energy LTD (TSX-V: CNE) - 10% owner of the Ombu field is estimating that there is up to 1.1 billion barrels of original oil in place on the Ombu field

Emerald Energy – 90% owner and operator of the Ombu field recently sold to Sinochem Resources for approximately \$836 million USD. Emerald's major assets were located in Syria and Colombia. Emerald's major Colombian asset was the Ombu field in the Llanos Basin

In 2009 Emerald Energy after drilling 5 wells on the Ombu field was given potential recoverable reserves of 122 million barrels by Netherland, Sewell & Associates, Inc. Production rates of the five wells ranged from 100 to 400 bbl/d

Source, Emeraldenergy com. Canacolenergy com.

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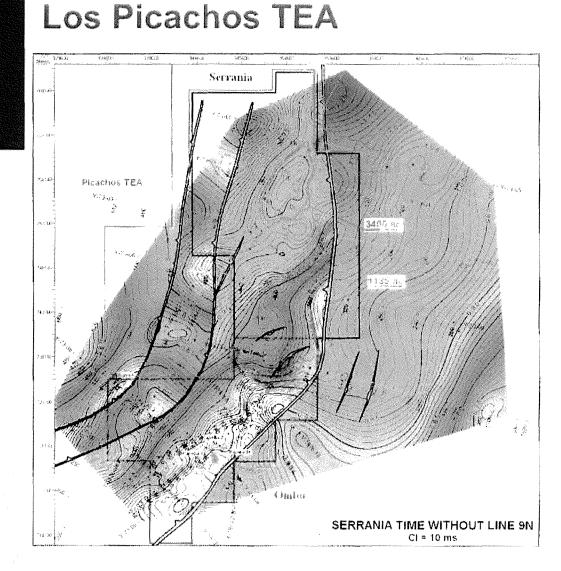


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Los Picachos encompasses an 86,235 acre region located to the west and northwest of the Serrania block

Los Picachos establishes a future growth area for the Serrania concession

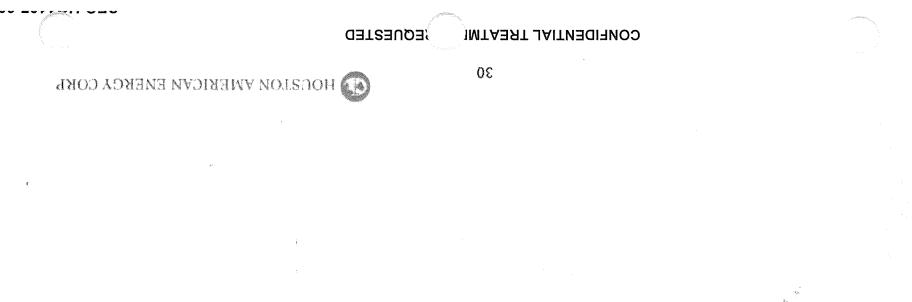
Initial 2-D data has identified several large prospects located on the Los Picachos TEA similar to those found on the Ombu Block to the south east

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Hupecol Operated Assets

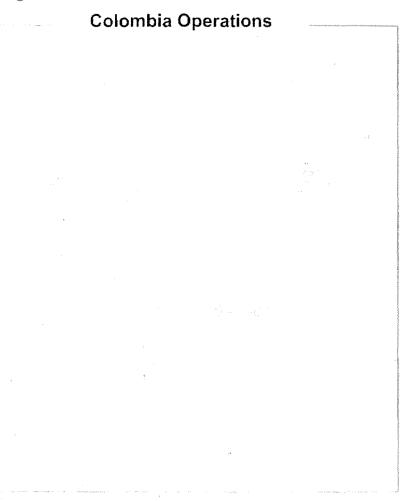


Hupecol Colombian Operations

- Operator: Hupecol
- Hupecol has acquired significant concessions in the Llanos Basin since Houston American Energy's inception in April 2001. The following are HUSA's effective working interests based on its indirect ownership interests in Hupecol:
 - La Cuerva 1.6% W.I.
 Dorotea 12.5% W.I.
 Leona 12.5% W.I.
 Cabiona 12.5% W.I.
 - Las Garzas 12.5% W.I.
 - Surimena 6.25% W.I.

* Highlighted Concessions are currently for sale

- Current net production of 850 boe/d
- Currently 5 of the six concessions operated by Hupecol are for sale by Scotia Waterous



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Overview of Hupecol (Private Company)

- Operator of the majority of the Company's existing producing Colombian assets
- Privately held E&P company with offices in Colombia and Texas
 - Hupecol's managing partner currently operates significant production and gathering facilities domestically in the U.S.
 - Operates with an extensive staff of geologists, petroleum engineers, geophysical and accounting professionals
- One of the more active independents operating in Colombia
 - Hupecol currently produces approximately 7,500 barrels of oil equivalent per day in Colombia
 - Hupecol sits on the Board of Directors of the Colombian Petroleum Association General Assembly along with Perenco, Petrobras, ExxonMobil, Hocol, and Terpel
- Proven track record
 - In June 2008, the Company, through Hupecol Caracara LLC as owner/operator, sold all of the Caracara assets to Cepsa, covering approximately 232,500 acres for USD \$920 million
 - As a result of the sale of the Caracara assets, HUSA received net proceeds of \$11.55 mm
 - Drilled over 100 wells in Colombia to date with a 70% success ratio



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Budget through December 2010

Project	Working Interest	rking Interest Use of Fund Gross Pro		HUSA Net Capex (\$000)
Colombian Budget				
SK Energy - CPO 4 (1)	25.0%	3-D Seismic	\$20,000	\$7,500
SK Energy – CPO 4	25.0%	2 Well Prep.	\$8,200	\$2,050
SK Energy – CPO 4	25.0%	Overhead	\$4,100	\$1,025
Shona – Serrania (2)	12.5%	2-D Seismic	\$3.200	\$800
Shona – Serrania	12.5%	Drill two Wells	\$10,000	\$1,250
Hupecol – Existing Assets 39	12.5%	Drill eight wells	\$24,000	\$3,000
Colombia Total			\$69,500	\$15,625
Domestic Budget				
Crown Mineral Acquisition	36.0%	Mineral Acquisition	\$1,425	\$513
North Jade Prospect	22.5%	Drill One Well	\$10,000	\$2,250
Grand Total			\$80,925	\$18,388

(1) Per the SK Farm-Out agreement, HUSA pays an additional 12.5% of the Seismic Acquisition Cost.

(2) Per the Shona Farm-Out Agreement, HUSA pays an additional 12.5% of the Seismic Acquisition Cost.

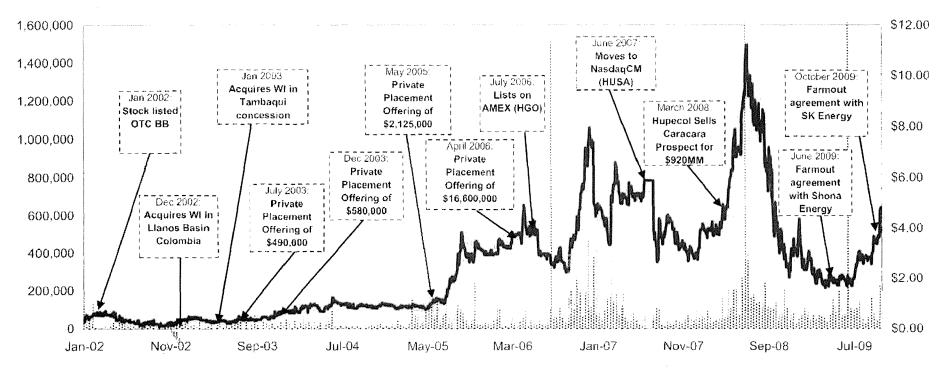
(3) Cash flow from existing production is expected to fund all future Capex. Select properties are presently being offered for sale.

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Stock Price Performance Chart



	Period	Average	Average Daily	Total Volume	Daily Closin	g Price
Period	Start Date	Close	Volume	Traded	High	Low
Last Month	10/2/2009	\$4.04	51,891	1,193,490	\$4.84	\$3.38
Last 60 Days	9/2/2009	3.58	52,628	2,368,240	\$4.84	\$2.58
Last 90 Days	8/2/2009	3.35	46,305	3,102,410	\$4.84	\$2.58
Last 120 Days	5/2/2009	2.71	80,540	10,631,280	\$4.84	\$1.72
Last 365 days	11/2/2008	2.64	63,491	16,634,660	\$4.84	\$1.64

35

HOUSTON AMERICAN ENERGY CORP

CONFIDENTIAL TREATMENT REQUESTED

HUSA Financial Overview

- Strong Balance Sheet with no debt.
- Significant production growth since the first quarter of 2009 from existing Hupecol operated properties.

Summary Balance Sheet

\$ Thousands	Q3 2009	Q2 2009	Q1 2009	FY2008
Cash	\$4,709.1	\$4,886.2	\$6,455.8	\$9,910.7
Oil and Gas Properties	20,809.0	22,906.9	20,852.1	19,614.8
Debt	\$0.0	\$0.0	\$0.0	\$0.0
Shareholders Equity	20,082.1	19,524.9	19,257.7	21,048.2
Summary Income Statement				
\$ Thousands	Q3 2009	Q2 2009	Q1 2009	FY2008
Oil & Gas Revenue	\$2,404.0	\$1,134.1	\$445.1	\$10,622.1
Operating Income ⁽¹⁾	133.2	(576.2)	(1,481.4)	5,912.4
Basic Shares Outstanding (MM)	28.0	28.0	28.0	28.0

(1) Operating income is adjusted for impairment of oil and gas properties brought on by low commodity prices at-12/31/2008.



HOUSTON AMERICAN ENERGY CORP

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Management Biography

John F. Terwilliger, President and CEO

John F. Terwilliger has served as the Company's President, Chairman and Chief Executive Officer since its inception in April 2001. From 1988 to 2001, Mr. Terwilliger served as Chairman of the Board and President of Moose Oil and Gas Company, a Houston based exploration and production company focused on operations in the Texas Gulf Coast region. Prior to 1988, Mr. Terwilliger was Chairman of the Board and President of Cambridge Oil Company, a Texas based exploration and production company. John is a member of the Houston Geological Society, Houston Producers Forum, Independent Petroleum Association of America and the Society of Petroleum Engineers.

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James J. Jacobs -Chief Financial Officer

James "Jay" Jacobs has served as the Company's Chief Financial Officer since joining the Company in July 2006. From April 2003 until joining the Company in July 2006, Mr. Jacobs served as an Associate and as Vice President in the Energy Investment Banking division at Sanders Morris Harris, Inc., an investment banking firm headquartered in Houston Texas, where he specialized in energy sector financings and transactions for a wide variety of energy companies. Prior to joining Sanders Morris Harris, Mr. Jacobs worked as a financial analyst for Duke Capital Partners where he worked on the execution of senior secured, mezzanine, volumetric production payment, and equity transactions for exploration and production companies. Prior to joining Duke Capital Partners, Mr. Jacobs worked in the Corporate Tax Group of Deloitte and Touché LLP. Mr. Jacobs holds a B.B.A. and a Masters in Professional Accounting from the McCombs School of Business at the University of Texas in Austin and is a Certified Public Accountant.

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HOUSTON AMERICAN ENERGY CORP

Board of Directors

Lee Tawes

Mr. Tawes is Executive Vice President, Head of Investment Banking and a Director of Northeast Securities, Inc. Prior to joining Northeast Securities, Mr. Tawes held management and research analyst positions with C.E. Unterberg, Towbin, Oppenheimer & Co. Inc., CIBC World Markets and Goldman Sachs & Co. from 1972 to 2001. Mr. Tawes has served as a Director of Baywood International, Inc. since 2001 and of GSE Systems, Inc. since 2006. Mr. Tawes is a graduate of Princeton University and received his MBA from Darden School at the University of Virginia

Ted Broun

Mr. Broun is the owner/operator of Broun Energy, LLC, an oil and gas exploration and production company. He co-founded, and, from 1994 to 2003, was Vice President and Managing Partner of Sierra Mineral Development, L.C., an oil and gas exploration and production company. Previously, Mr. Broun was a partner and consultant in Tierra Mineral Development, L.C. and served in various petroleum engineering and management capacities with Atlantic Richfield Company, Tenneco Oil Company, ITR Petroleum, Inc. General Atlantic Resources, Inc. and West Hall Associates, Inc. Mr. Broun received his B.S. in Petroleum Engineering from the University of Texas and an M.S. in Engineering Management from the University of Alaska.

Stephen Hartzell

Since 2003, Mr. Hartzell has been an owner/operator of Southern Star Exploration, LLC, an independent oil and gas company. From 1986 to 2003, Mr. Hartzell served as an independent consulting geologist. From 1978 to 1986, Mr. Hartzell served as a petroleum geologist, division geologist and senior geologist with Amoco Production Company, Tesoro Petroleum Corporation, Moore McCormack Energy and American Hunter Exploration. Mr. Hartzell received his B.S. in Geology from Western Illinois University² and an M.S. in Geology from Northern Illinois University.

John Boylan

Mr. Boylan has served as a financial consultant to the oil and gas industry since January 2008. Mr. Boylan served as a manager of Atasca Resources, an independent oil and gas exploration and production company, from 2003 through 2007. Previously, Mr. Boylan served in various executive capacities in the energy industry, including both the exploration and production and oil services sectors. Mr. Boylan's experience also includes work as a senior auditor for KPMG Peat Marwick and a senior associate project management consultant for Coopers & Lybrand Consulting. Mr. Boylan holds a B.B.A. with a major in Accounting from the University of Texas and an M.B.A. with majors in Finance, Economics and International Business from New York University.

CONFIDENTIAL TREATME

HOUSTON AMERICAN ENERGY CORP

1/8/10

TO: Phil McPherson

FROM: John F. Terwilliger

Phil:

This is some internal SK work on the reserves. In this example they used 150 BO per acre foot recoveries and everyone in the Llanos uses 500 BO per acre foot. If you adjust to accepted recoveries, this example is 500 divided by 150 or 3.33 x 974,000 or 3,243,420 BO recoverable. It is only from the attached 22 leads. It allocates recovery over the sands deemed present and potential thickness of these sands based on their model.

HOUSTON AMERICAN ENERGY CORP.

Perhaps this helps.

Best,

John

EXHIBIT

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1 an a 1 a 4 harrow and the art - 1 - 1	. 2	556	212	417	150	50'+103'+75'	12 .	Synthetic	- Porosity : 20 % - So : 60%
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Global Hunter Securities, LLC Institutional Sales & Trading: (949) 274-8050 Research: (949) 274-8052 660 Newport Center Dr. Suite 950 Newport Beach, CA 92660 www.ghsecurities.com January 19 , 2010 Company Update Energy: Exploration & Production

Analyst: Phil McPherson pmcpherson@ghsecurities.com Direct: (949) 274-8056

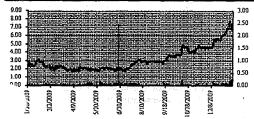
Rating Rice Target: \$14.00

Price Target Metrics: DNAV - Discounted Net Asset Value

Closing Price:	\$6.70
Diluted Shares:	31.0MM
Float:	19MM
Short Interest:	105k
Average Daily Volume:	75k
52-week Range:	\$1.58 - \$8.01
Market Cap:	\$208MM
Cash & Investments(E):	\$17MM
Debt	\$0MM
Enterprise Value:	\$191MM
Net Cash/Sh:	\$0.55
Proved Reserves (MBOE)	217

PRICE CHART

EXT



ESTI	MATES -	US \$ (MMs exce	pt multip	es & EPS	}
			2009	2009	2010/2010
			Prior	New	
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Q1	Mar		\$0.4	\$0.4	
Q2	Jun	Converte one	\$1.1	\$1.1	A A CONTRACTOR OF A CONTRACT O
Q3	Sep		\$2.3	\$2.4	A
<u>Q4</u>	Dec		\$3.3	\$3.3	E
FY			\$7.1	\$7.3	E
EVIS	ales	122022212202		26.3x	
EPS.	1.5	No. NECOR		S	and the second
Q1	Mar		(\$0.05)	(\$0.05)	A EXCLUSION OF CONTRACT
Q2	Jun		\$0.00	\$0.00	A
Q3	Sep	1. The Real of the Local Division of the Loc	\$0.01	\$0.02	
Q4	Dec		\$0.02	<u>\$0.01</u>	E
FY			(\$0.02)	(\$0.03)	
P/E				Neg	A

CFPS	بالم الم		ang k		
01	Mar		(\$0.03)	(\$0.03)	
Q2	Jun		\$0.00	\$0.00	
Q3	Sep		\$0.05	\$0.05	
Q4	Dec	3 201 10. A	<u>\$0.07</u>	<u>\$0.05</u>	
FY			\$0.11	\$0.08 8	
P/E		TAXABAN MAXARIAN		84.78x	

EBITC	A		164727		
Q1	Mar	· **********	(\$1.0)	(\$1.0)	
02	Jun		(\$0.6)	(\$0.6)	
Q3	Sep		\$1.4	\$1.0	
Q4	Dec		\$2.3	\$1,9 E	
FY			\$2.8	\$2.0 E	
Ξ	ADTR			94.1x	

Houston American Energy (Nasdaq: HUSA)

Important Disclosure: Global Hunter Securities, LLC acted as lead placement agent in a registered direct offering for Houston American Energy completed on December 4, 2009. See additional disclosures at the end of this report.

Event: Investor's warming up to Colombia

Summary: Houston American Energy's (HUSA) stock has started 2010 strong. We believe investors are just beginning to understand the impact of recent property acquisitions that are in close proximity to high impact exploration success by other operators. With more than \$17MM in cash on the balance sheet and zero debt, HUSA's 2010 CAPEX budget is fully funded with two exploration wells targeted for late 1Q10 and two additional exploration wells targeted for late 4Q10. We are therefore raising our price target from \$7.00 to \$14.00 while reiterating our Buy rating.

Highlights

Foreign direct investment up in 2009. Despite a global recession foreign direct investment in Colombia was \$4.9 billion in 2009, up from \$4.6 billion 2008. This stability comes as a result of the current government's effort to reign in terrorism that had plagued the country in past decades. In 2009, only 131 kidnappings occurred in Colombia, down from a 3,572 in 2000. In 2010, both pipeline capacity and refining capacity are set for major expansion to keep pace with recent exploration success.

Base production of 1,000 bopd. HUSA is currently producing 1,000 bopd net. This is an important milestone for a small cap E&P company. This base of production provides ample free cash flow combined with nearly \$17MM in cash on the balance sheet to self fund the company's next 18 months of CAPEX.

Ombu-leevable. Last year Emerald Energy was bought by Sinochem for \$802MM following its discovery of the Capella heavy oil field on the Ombu exploration block. HUSA's Serrania block shares its southern border with the Capella field. HUSA and its partners will drill the first of two exploration wells in late 1Q10, targeting the North Capella structure which could contain 1 billion barrels of oil in place.

Who needs friends with neighbors like these? Petrominerales has announced another significant discovery, the Guatiquia, a well that had initial production of 11,500 bopd. This is in addition to the Corcel discovery which currently has 10 wells producing in excess of 20,000 bopd. HUSA's CPO-4 block lies two miles west and adjacent to these discoveries. SK Energy and HUSA are in the process of shooting 250 square kilometers of high resolution 3D seismic at CPO-4, with the first of two exploration wells to begin at the end of 2010 or the beginning of 2011. SK Energy has identified 22 prospects with unrisked oil exposure of 1 billion barrels.

Maintain Buy rating while raising price target to \$14.00. HUSA's stock has outperformed to start the year as investors begin to grasp the amount of potential oil this small company has access to over the next 12 months. With the company's current production tracking ahead of our estimates and the first of two exploration wells to begin within the next 90 days, we believe any pull back from this recent move presents an ideal entry point for new and existing investors. We are therefore reiterating our Buy rating while raising our price target from \$7.00 to \$14.00 as we fully implement the impact that the Serrania and CPO-4 blocks could have if exploration efforts are successful into our Discounted Net Asset Value (DNAV)

Company Description: Houston American Energy is a Houston Based E&P company with operations focused in the Llanos Basin of Columbia and Northeast Louisiana. The company was founded in 2001 and has three employees.

PLAINTIFF'S EXHIBIT

PX-086

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SEE ANALYST CERTIFICATION AND OTHER IMPORTANT DISCLOSURES AT THE END OF THIS REPORT

Review of Colombia:

To most the word, kidnap is almost synonymous with Colombia. Ten years ago that was a fair statement. However, in 2002 Alvaro Uribe was elected president of Colombia. A Harvard educated lawyer, Mr. Uribe has been instrumental in turning Colombia into a destination for foreign investment, while systematically dismantling the once feared Revolutionary Armed Forces of Colombia (FARC). In a strange twist of fate, it was the FARC that in 1983 killed Uribe's father during a kidnapping attempt. Perhaps this personal brush with the FARC has been a source for his passion to eradicate the group from terrorizing Colombia and disrupting foreign trade. In 2009, total kidnappings came in at **131**, which was a drastic drop from **3,572** in 2000.

Upon taking office Uribe instituted a 1.2% tax on all liquid assets of individuals and corporations that eventually raised nearly \$800MM. These funds were used to boost military spending, additionally he increased military spending from 3.6% of GDP to 6% of GDP by 2006. By 2004, two years into his first term, homicides, kidnappings and terrorist attacks in Colombia had decreased by as much as 50% - the lowest level in 20 years. By April of 2004, the government had established permanent police or military presence in every Colombian municipality for the first time in decades.

Since 2003, the United States has provided an estimated \$600MM annually in aid to Colombia to primarily augment its military budget and fight the war on



drugs. This increased spending has been a key asset in bringing stability to the country and decreasing the FARC's capabilities. In 2005, Mr. Uribe successfully championed a bill through the Colombian congress allowing him to stand for re-election in 2006. The Colombian constitution had forbid candidates from running for consecutive terms. Mr. Uribe won the 2006 election with an estimated 62% of the vote. Colombia will hold presidential elections in May of 2010. Currently Mr. Uribe is restricted from a third term, however last May congress started drafting a bill that would allow Mr. Uribe to run for a third term. That bill has not been passed as of yet. Defense Minister Juan Manuel Santos, who orchestrated some of the most devastating blows to the FARC and other leftist rebels, is seen as the front runner to continue Mr. Uribe's legacy. As of January 2010, Colombia's Constitutional Court had not finished studying the proposal to hold a referendum on allowing a third term for Mr. Uribe, this in spite of the country's Inspector General advising the courts to approve the referendum. The Constitutional Court has 60 days to determine the legality of the referendum to change the constitution and allow Mr. Uribe a third term. It is expected the court will rule by the end of January.

Colombia's oil production currently stands at approximately 660,000 barrels per day and is anticipated to continue growing as foreign direct investment (FDI) continues to increase. In 2008, FDI for the oil and mining sector was \$4,6 billion and in 2009 amidst a global recession FDI continued to increase in the oil and mining sector to \$4,9 billion. Colombia currently consumes approximately 300,000 barrels per day domestically; the remaining oil production is exported with the majority of it to the United States. In fact, Colombia is the 9th largest supplier of foreign oil to the United States. Colombia has five major pipelines, four of which pump oil to the Caribbean Coast, the remaining pipeline the Transandino delivers oil to the Pacific coastal town of Tumaco. The state owned oil and gas company Ecopetrol (EC) has budgeted \$735MM to increase pipeline capacity in order to keep pace with exploration activity. One of the major CAPEX items for Ecopetrol in 2010 will be to expand a portion of the Transandino pipeline from 16,000 barrels per day to 60,000 barrels per day. This pipeline services oil production in the Southern portion of Colombia near Houston America's (HUSA) Serrania exploration block which borders one of the largest oil field discoveries of 2008 the Capella field. This field sits approximately 200 miles from the town of Tumaco, which is where the Transandino pipeline deliveries oil for export. The Capella field is estimated to produce 60,000 barrels per day by 2015.

Colombia's refining capacity is also set to expand. Recent announcements by Ecopetrol and Chicago Bridge & Iron (CBI) have confirmed a \$1.4 billion expansion of the Cartagena refinery. A new refinery will be built adjacent to the existing refinery with capacity of 85,000 barrels per day. Additionally the existing refinery will be upgraded to 80,000 barrels per day and also be retrofitted to allow for higher grade petroleum products. The expansion and retrofitting is scheduled to be completed in 2012.

We view Colombia as ripe for continued exploration success. Past geopolitical risk has created unparellel opportunities that can not be found in the United States. More often than not, geopolitical risk is assumed in absence of geological risk when operating in foreign countries. Given the significant changes that have occurred and should continue to occur to suppress the FARC's ability to operate, we believe the next decade will reward those investors with foresight to look to the future rather than the past.

Company Update

Houston American's (HUSA) current production of approximately 1,000 barrels per day, comes from seven blocks in the Llanos basin. These blocks are operated by a consortium lead by Hupecol LLC. Hupecol is a private exploration company based out of Dallas, Texas which has been operating in Colombia for more than a decade. Currently the consortium has put these assets up for sale, hiring Scotia Waterous to market them. Timing on the asset sale has been pushed back several times, first due to higher oil prices and now due to robust success on recent wells. The group recently drilled two wells, one of which had initial production rate in excess of 3,000 barrels per day with the second having initial production rates close to 1,000 barrels per day. Originally the assets where put up for sale due to the location of the seven leases. In some cases these leases are several hundred miles apart from one another. Thus, trying to expand infrastructure to assist in full development is viewed as costly. Historically, Hupecol has been an exploration company. Once the initial phase of exploration has yielded success they would rather sell the assets to a larger E&P company to develop. Such was the case in 2008 when they sold the Cara Cara concession to Cepsa for \$920MM. HUSA had a 1.2% interest in the Cara Cara sale and netted \$10.5MM after taxes.

While we believe the sale of these assets could net HUSA \$25MM - \$50MM, the timing of a sale seems to grow more uncertain and perhaps if oil prices continue to climb becomes less likely. Still this production provides a nice foundation for the company to grow from. Utilizing a \$70.00 oil price deck, HUSA should generate approximately \$5MM per quarter in revenue in 2010 and have free cash flow of approximately \$3MM per quarter. This cash flow coupled with a recent equity raise (3.9MM shares at \$4.68 per share) gives the company approximately \$17MM in cash on the balance sheet, which fully funds its 2010 CAPEX budget of \$15MM. We estimate the company's 18 month CAPEX to be approximately \$20MM. Obviously success or failure on its two new exploration blocks could change this CAPEX amount but should not outstrip current cash and estimated cash flow.

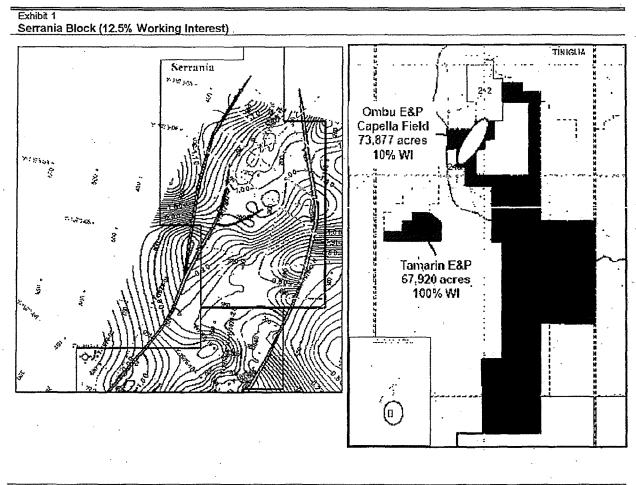
In 1Q10, HUSA and its partners will drill the first of two exploration wells at the Serrania block. HUSA has a 12.5% working interest in the Serrania block that encompasses 110,000 acres, with Shoana and Hupecol owning the remaining interest. This block sits directly north of the Ombu block. In July of 2008 the Capella No. 1 well was drilled to total depth of 3,802' and discovered 10 degree API oil. Two intervals where encountered in the Eocene aged Mirador formation. The upper Mirador flow tested at 85 barrels of oil per day (bopd), the lower Mirador flowed at 155 bopd. The operator at the time was Emerald Energy a London based E&P Company. The company then drilled five additional wells to delineate the extension of the discovery. The Capella No. 2 was drilled one mile southwest of the No. 1 to 3,550' and encountered two intervals and tested at a combined rate of 345 bopd. The Capella No. 3 was a deviated well adjacent to the No. 1 and tested 135 bopd from the lower Mirador but the upper Mirador was not tested. The Capella No. 4 was drilled 1.2 miles southwest of the No. 1 but was not tested due to a poor cementing job. The Capella No. 5 was drilled 2.2 miles north east from the No. 1 and tested 108 bopd. The Capella No. 6 was drilled 2.75 miles southwest of the No. 1 well and encountered 80 feet of upper Mirador and 175 feet of lower Mirador. This well flow tested a combined 295 bopd and was by-far the best of the six wells drilled.

Emerald began an extended production test of the six wells in February 2009. Production started at 400 bopd and increased to 700 bopd by March before being suspended due to marketing limitations. At this point oil was being trucked out and sold directly to local industrial users. However, it is expected that eventually this oil will be delivered to existing pipelines following blending with higher grade oils and or upgrading of the heavy oil. In June of 2009 Sinochem one of the four state owned Chinese oil companies made an unsolicited offer to buy Emerald Energy for 532MM Euro's or approximately \$802MM.

Before the asset sale, Emerald had contracted Netherland Sewell & Associates (NSA), one of the top quartile reservoir engineers in the United States to provide a third party assessment of the Capella heavy oil discovery. NSA only had six well bores from which to extrapolate data, of which one well bore had not been cemented properly, therefore had zero production data. These six well bores also only encompassed 3,500 of the 22,000 acres that the seismic data estimates is the boundaries of the Capella field. NSA assigned original oil in place (OOIP) figure of 245MM barrels on the 3,500 acres and 1.1 billion barrels in place on the entire 22,000 acre structure. Oil in place is only the first variable when assessing reserves. The next stage is the percentage recoverable in the field. Given the limited production data, coupled with the fact that this is heavy oil, NSA only assigned an 11% recovery factor. However, this is based upon only primary reserve recovery without the assistance of artificial lifts or the steaming of the formation. As a comparison in the United States it is not uncommon to recover 15% in primary recovery and then 20% in secondary recovery methods. Additionally, there are other heavy oil operators in the Llanos Basin of Colombia touting technology that can recover 50%+ of the OOIP in heavy oil fields. The point being that given the limited number of wells and data, NSA still assigned over 1 billion barrels of OOIP for the Capella field aiscovery.

Company Update

The Obmu block and Serrania block (212 block in yellow below) share a southern border. HUSA and its partners recently reprocess vintage 2D seismic that shows the Capella field crosses this border and exists on their side of the lease hold. Plans are currently underway to permit two exploration wells in the Serrania block. The first well's location will look to prove that the Capella discovery exists on the Serrania block, the second well will be drilled on a separate prospect called the Northern Anticline that resembles a look alike to the Capella discovery. The following exhibit shows the Capella discovery, the mapped prospect area on the border and the northern anticline prospect.



Source: Company data, Global Hunter Securities, LLC

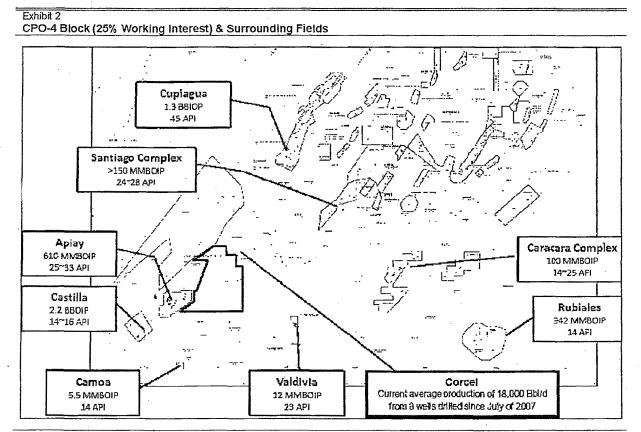
Each of these wells will cost approximately \$4MM to drill and complete. The key for the first well will be how many feet of the upper and lower Mirador are present and the quality of the rock. If the thickness and rock quality resemble the Capella discovery than HUSA and its partners will have proven that the Capella heavy oil discovery extends onto its lease line. Upon completion of the second exploration well at the Northern anticline, we would expect the rig to return to the Capella North area and drill delineation wells to prove the extent of the structure. This would be the same path Emerald Energy took with Capella and should lead to the company hiring third party reservoir engineers to calculate OOIP and recoverable reserves. HUSA currently estimates that approximately 33,000 acres covers the North Capella prospect area, which is 50% larger than the Capella discovery that sits on 22,000 acres. This could mean that the North Capella could have OOIP exceeding 1.5 billion barrels. Which would place net recoverable reserves utilizing the 11% recovery factor and HUSA's 12.5% working interest at 20MM barrels. Again we view this recovery level of 11% as extremely conservative.

As for the Northern Anticline prospect this area looks to be slightly smaller than North Capella prospect area. We therefore estimate HUSA's net unrisked exposure on the Northern Anticline to be 10MM barrels of oil. It is important to note that a prospects ariel extent is only one of the parameters when reservoir engineers estimate OOIP. The thickness of the formation can have even more of an impact on OOIP than the number of acres. For Capella we estimate the average well found 150 feet of pay in the upper and lower Mirador, this would imply that the oil in place equates to 450 barrels per acre foot. If North Capella and/or the Northern Anticline prospects were to encounter more net feet of oil pay, than the OOIP could also increase substantially.

Company Update

The second new exploration concession that HUSA recently acquired is the CPO-4 block. HUSA was assigned a 25% direct working interest in this block by SK Energy in December of 2009. SK Energy is the energy division of the SK Group, South Korea's largest. Jiversified industrial company. SK Energy was awarded 100% working interest in the CPO-4 block in the 2009 Colombian licensing round. To win the block SK Energy made an aggressive bid on two counts. First they committed to a \$50MM work program and second they offered Colombia a 33% royalty on the block. Standard royalty rate in Colombia is a sliding scale that starts at 8% for fields producing less than 5,000 bopd and escalates to 23% for fields producing in excess of 25,000 bopd. From this aggressive bid one would infer that SK Energy is extremely excited and confident in regards to the amount of oil present on the block.

The CPO-4 block is over 350,000 acres in size. It sits in close proximity to some of Colombia's largest oil fields. The following is a map of those fields and CPO-4 outlined in red.



Source: Company data, Global Hunter Securities, LLC

Company Update

SK Energy spent nearly two years reviewing and reprocessing vintage 2D seismic data before bidding and eventually winning the CPO-4 block. From that vintage data the company has found over 100 prospects. Thus far they have high graded 22 of those prospects which contain an estimated 1 billion barrels of unrisked oil potential. Those leads are detailed in the following graph.

Exhibit 3

CPO-4 Block (25% Working Int	erest)
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		C	PO-4 Pros	pect Inventor		
Lead	· · · · · · · · · · · · · · · · · · ·	Acres	ule de la dela de la dela dela dela dela	Oil Per Acre	Net Pay	Unrisked Oil
	C7	Mirador	Une	BBIs	Feet	MMBOE
1	1055	724	899	150	50/100/75	29
2	556	212	417	150	50/100/75	12
3	420	291	0	150	50/100/75	8
4	6358	6506	3495	150	50/100/75	185
5	1018	2119	1435	150	50/100/75	56
6	531	114	.388	150	50/100/75	10
7	1097	657	311	150	50/100/75	22
8	1606	1074	694	150	50/100/75	36
9	3821	7037	220	150	50/100/75	139
10	469	0	0	150	50/100/75	4
11	447	622	509	150	50/100/75	18
12	664	659	0	150	50/100/75	15
13	2687	936	761	150	50/100/75	43
14	882	3399	1625	150	50/100/75	76
15	993	1692	605	150	50/100/75	40
16	234	847	252	150	50/100/75	20
17	0	420	326	150	50/100/75	10
18	0	818	0	150	50/100/75	12
19	0	0	1247	150	50/100/75	14
20	3320	4029	2364	150	50/100/75	112
21	2510	2611	3162	150	50/100/75	94
22	790	1102	0	150	50/100/75	22
Total -	MMBOE		· · ·		, 	977
Averag	e Field Size	- MMBOE				44.4
Source:	SK Energy		*:			

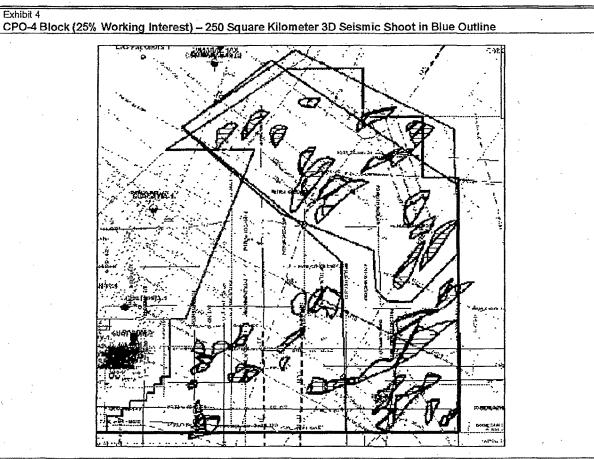
Source: Company data, Global Hunter Securities, LLC

SK Energy has identified the three primary hydrocarbon bearing sands on the CPO-4 block are the C7, the Mirador and the Une. The company then places 150 barrels per acre foot as the amount of oil recoverable. It should be noted that these sands in other Llanos basin blocks typically have 500 barrels per acre foot. As a comparison Netherland Swell & Associates assigned 450 barrels per acre foot at the Capella heavy oil discovery. We believe SK Energy is being conservative, however if you were to use the 500 barrels per acre foot number then the unrisked oil potential could exceed three billion barrels.

The next step for SK Energy and HUSA will be to shoot 250 square kilometers of high resolution 3D seismic data. This data will determine which of these 22 prospects are considered "A", "B", "C" etc. Data should be done shooting by then end of 2Q10 and we expect the joint operating committee (JOC) consisting of both SK Energy and HUSA members to meet in Colombia during the 3Q10 to select the first two drilling sites.

Company Update

The following graph shows the proposed boundary of the high resolution 3D seismic survey. The purple outlines are prospects with potential C7 sands, the green outlines are prospects with potential Mirador sands and the red circles are prospects with potential Une ands. Several prospects have the potential to contain all three sands. The first two wells will most likely be drilled at the end of 2010 or early 2011. Part of SK Energy's work commitment to the Colombian government calls for two exploration wells drilled to the basement of the basin. The basement is the technical term for a basin's limit on hydrocarbon bearing sands. These wells will be approximately 14,000 feet deep and costs approximately \$10MM each.



Source: Company data, Global Hunter Securities, LLC

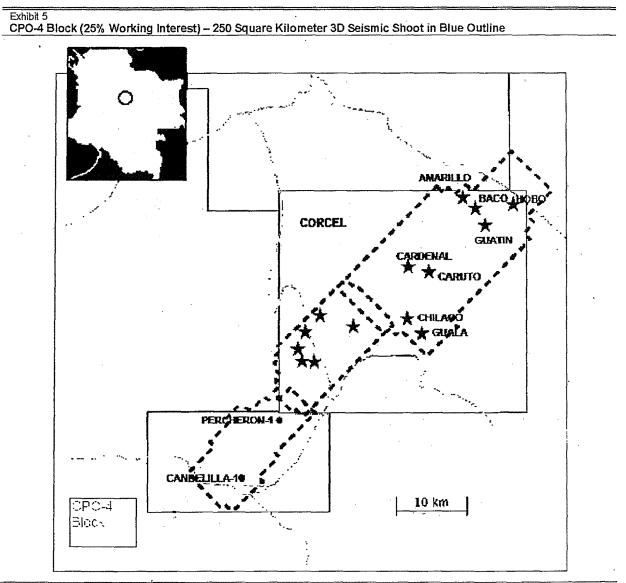
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Company Update

HUSA approached SK Energy to become partners in the CPO-4 block in September 2009. The reason HUSA wanted to be part of this exploration block was because of recent success on a block 2 miles to the north of the CPO-4 block. This block is called the Corcel area and was discovered by Petrominerales (PMG) a publicly trade E&P company on the Toronto exchange with a current market cap of \$2 billion. In July of 2007 PMG drilled the A1 exploration well, by November of 2007 that well was producing 5,000 bopd. The company then drilled the A2 exploration well which had initial production of nearly 5,000 bopd. Eight wells later and the Corcel field is currently producing in excess of 20,000 bopd. These wells are characterized as having high initial production rates and then declining by more than 50% in the first year. Once the hyperbolic production has leveled off they are predicted to decline by 10% per year. The map below shows the wells drilled at Corcel by PMG and also the close proximity in which the CPO-4 resides to this prolific discovery.



Source: Company data, Global Hunter Securities, LLC

In January of 2010 PMG announced a well on its Guatiquia lease that had initial production rate of 11,500 bopd. This exploration area is in the southern corner of the Corcel block pictured above. These exploration achievements have positive implications for the CPO-4 block. However until the block is drilled we won't know if or how much oil is in place. Often the impact of a 5,000 barrel per day well is lost in translation. As an example, assuming a \$70.00 oil price deck with \$20.00 of lease operating costs (LOE) the company would net \$50.00 per barrel. If a well that has initial production rate of 5,000 barrels per day just produces at that level for 30 days it will have produced 150,000 barrels. With that \$50.00 per barrel net back, that would generate cash flow of \$7.5MM in the first 30 days. These wells typically cost \$8MM to drill and complete. Meaning that payback is literally achieved in the first month of production. For HUSA this high level of cash flow would allow the company to self fund its future development of any discoveries.

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Exhibit 6 Discounted Net Asset Value (DNAV)

Houston American Energy (H Discounted Net Asset Value											Ja	nuary-10
Reserves				3BL)		Gas MCF)	PV-10 Value	Discount Factor	Discounted Value		Discounted Per Share Value	
Proved Developed				213		19	3,151	0%	\$	3,151	\$	0.10
Proved Undeveloped				· - ·		-		0%	\$	-	\$	-
Total Proved Reserves				213		19	3,151	0%	\$	3,151	\$	0.10
Other Assets							482,438	0%		482,438	\$	15,56
Net Working Capital								<u></u>		17,000	\$	0.55
Debt										-	\$	
Total Discounted Net Asset V	/alue										\$	16.21
Outstanding Shares							31,000					14
Other Assets	Net Lo	cations	EUR-I	IBOE	Pe	r BOE	Value	Discount	n.	DNAV	e Pe	r Share
2009 Reserve Additions		1	1,5	00	\$	15.00	22,500	0%		22,500	\$	0.73
Las Garzas Field - 75 Locations	9.3	37 5	1,0	00	\$	15.00	140,625	90%		14,063	\$	0.45
Leona Field - 25 Locations	3.1	125	2,0	00	\$	15.00	93,750	90%		9,375	\$	0.30
Dorotea Field - 20 Locations	3.	75	2,0	00	\$	15.00	112,500	90%		11,250	\$	0.36
Cabion Field - 12 Locations	1	.5	1,0	00	\$	15.00	22,500	90%		2,250	\$	0.07
Serrania Block - Ombu Extension		1	20,0	000	\$	10.00	200,000	75%		50,000	\$	1.61
Serrania Block - North Anticline		1	10,0	000	\$	10.00	100,000	90%		10,000	\$	0.32
CPO-4 Block	2	22	11,0	000	\$	15.00	3,630,000	90%	:	363,000	\$	11.71
Total Other Assets & Liabilities							4,321,875		•	482,438	\$	15.56
Commodity Price Deck	C)ilat ser	Ga	ST								
Year-End 2008	\$	44.60	\$	5.62								
Current	\$	79.00	\$	5.75								
Year-End 2009 GHS (E)	S	65.00	\$	5.00								

Source: Company data, Global Hunter Securities, LLC

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Houston American Energy (HUSA) Financial Model Global Hunter Securities, LLC Research Department: 949-274-8052

'Iscal period Encologia de la companya de la comp	FY '06(A)	FY '07(A)	FY '08(A)	Q1 '09(A)	G2 '09(A)	Q3 '09(A)	Q4 '09(E)	FY '09(E)	Q1 '10(E)	Q2 '10(E)	Q3 '10(E)	Q4 '10(E)	FY '10(E)
аўна Statement (U.S. 5000s) — (11)											Second		
naaminin maaraasin tana asara minunun naaminin otal Revenues	3,203	4,977	10,522	445	1,134	2,404	3,270	7,253	4,900	5,225	5,550	5,875	21,550
ease Operating Expense (LOE)	1,017	1,841	3,366	910	713	1,021	1,165	3,810	1,517	1,617	1,717	1,817	6,667
bint Venture Expenses	167	149	183	41	38	49	•	127	-	-	-	· •	-
D&A	866	1,100	5,816	254	287	621	912	2,074	1,365	1,455	1,545	1,635	6,000
&A	1,231	1,568	3,152	721	672	580	550	2,523	500	500	500	500.	2,000
ther		348	(1,994)		• •	<u> </u>	<u> </u>	i	: .	<u>.</u> .	<u>.</u>	<u> </u>	
otal Expenses	3,303	5,006	10,523	1,926	1,710	2,271	2,627	8,535	3,382	3,572	3,762	3,952	14,667
ncome from Operations	(101)	(29)	99	(1,481)	(576)	133	643	[1,282]	1,518	1,653	1,788	1,923	6,883
Other Income (expense)	1 1		.							•			
otal Other Income (Expense)	99	650	295	18	27	9	20	74	25	25	25	25	100
ncome (loss) from operations	(1)	621	394	(1,464)	(550)	143	663	(1,208)	1,543	1,678	1,813	1,948	6,983
ncome Tax expense (benefit) - current	511	127	(73)	15	(662)	(286)	232	(423)	540	587	636	682	2,444
let income (loss)	(512)	493	467	(1,478)	112	429	431	(785)	1,003	1,091	1,179	1,265	4,539
EPS F/D	(0.02)	0.02	0.02	(0.05)	0.00	0.02	0.01	(0.03)	0.03	0.04	0.04	0.04	0.15
Basic shares outstanding	25,088	27,920	28,000	28,000	28,000	28,000	31,000	31,000	31,000	31,000	31,000	31,000	31,000
Diluted shares outstanding	25,088	28,132	28,062	28,062	28,062	28,062	31,000	31,000	31,000	31,000	31,000	31,000	31,000
ash Flow Items			ai ir sait ar ta	k ini dhalaria	ni) (Aliferia		in A ttili				inglika kerdite	a di kara	
let Income	(512)	493	467	(1,478)	112	429	431	(785)	1,003	1,091	1,179	1,266	4,539
DD&A	1,231	1,568	3,152	254	287	621	912	2,074	1,365	1,455	1,545	1,635	6,000
Deffered Tax	-	•		•	(662)	-		-	270	294	317	341	1,222
loп-Cash Compensation	290	335	1,050	247	295	269	350	1,161	250	250	250	250	1,000
Diher	171		4,669	(977)	33	1,318	1,693	- 2,450	- 2,888	3,090	3,291	3,492	12,761
otal Cash Flow	1,180	2,397		the state of the s		and a second standard statement of the second statement of the second statement of the second statement of the			The second secon				0.41
Cash Flow per share F/D	0.05	0.09	0.17	(0.03)	0.00	0,05	0.05	.0.08	0.09	0.10	0.11	0,11	U.41
BITDA	1,690	2,524	4,596	(962)	(629)	1,032	1,925	2,027	3,428	3,677	3,926	4,174	15,205
BITDA per shate F/D	0.07	0.09	0.16	(0.03)	(0.02)	0.04	0.06	0.07	0.11	0.12	0,13	0.13	0,49

Global Hunter Securities, LLC

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January 19, 2010

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Houston Am	erican Energy (HU	SA) Financial Model	
Global Hunter	Securities, LLC	:	

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Blobal Hunter Securities, LLC Research Department: 949-274-8052							•						
lscal period	FY '06(A)	FY '07(A)	FY '08(A)	Q1 '09(A)	Q2 '09(A)	Q3 '09(A)	Q4 '09(E)	FY '09(E)	Q1 '10(E)	Q2 '10(E)	Q3 '10(E)	Q4 '10(E)	FY '10(E)
lscal period	i i i dec de la			in Marson S.				No Caracteria		norganit	inisoten din		
Production Model III Market III And the specific markets				N SERVICE DES							HINHHINH		
Total OII Production (Ihousands)	50	71	122	13	19	35	50	117	75	80	85	90	330
Vg. Price per Bbi	55.55	65.61	90.60	33.32	58.47	68.43	65.00	56.31	65.00	65.00	65.00	65.00	65.00
Dil Sales	2,763	4,672	10,823	447	1,082	2,404	3,250	7,182	4,875	5,200	5,525	5,850	21,450
otal Natural Gas Production (000's)	78	44	34	-	4		4	8	5	5	.5	5	20
vg. Price per Mcf	6.75	6.90	9.48	4.70	4.50	4.50	5,00	4.68	5.00	5.00	5.00	5.00	5.00
Valural Gas Sales	527	305	320	22	18	•	20	60	. 25	25	25	25	100
otal Oll & Gas Sales	3,290	4,977	11,143	468	1,100	2,404	3,270	7,242	4,900	5,225	5,550	5,875	21,550
Iotal Oll & Gas Production (BOE)	63	79	128	13	19	35	51	118	76	81	86	91	333
Oil & Gas Production (BOE/PD)	174	218	355	149	213	390	563	329	843	898	954	1,009	925
6 Increase from prior period	0.0%	25.2%	62.7%	1.10	~			-7.4%				.,	181,6%
Avg. Price per BOE	52.43	63.34	87.16	34,94	57.38	68.43	64.54	61.18	64.62	64.64	64.66	64.68	64,65
U													
Cost Model as require an arrival candidation of the data are								1. Slavikili		hanshkaslas			
ease Operating Expense (LOE) per BOE	16.21	23.43	26.33	67.94	37.18	29.07	23.00	32.19	20.00	20.00	20.00	20.00	20.00
DD&A per BOE	19.62	14.00	45.50	18,98	14.99	17.67	18.00	17.53	18.00	18.00	18.00	18.00	18.00
G&A per BOE	19.62	19.96	24.65	53.79	35,08	16.51	10.86	21.32	7.25	6.80	6.41	6.06	6.60
nterest Expense per BOE	•	•	-		-	-	-	-	•		-	-	-
Total Cost	55.44	<u> </u>	96.47	140.72	87.25	63.25	51.86	71.03	45.25	44.80	44.41	44.06	44.60
Net per BOE	(3.01)	5.95	(9.31)	(105.78)	(29.88)	5.18	12.68	(9.85)	19.36	19.84	20.25	20.62	20.05
Profil Margin	-5.7%	9.4%	-10.7%	-302.8%	-52.1%	7.6%	19.7%	-16.1%	30.0%	30.7%	31.3%	31.9%	31.0%
alance Sheet Items	an and the second	a takoning (สะปรุญชานองใ	in de la compañía de		and the state of the	historia da seconda da	ด 255 สีครับสูปได้	an de la compañía de		nia dalla dalla na Investi pinter dalla area	r olaran Gunang Graz	a se contra de la co
Cash and Investments	14,409	418	11,583	6,455	4,886	4,709							
Accounts receivable	325	9,650	316	7	376	1,251							1
Oll and Gas properties - Full Cost Method	6,796	12,715	5,263	4,283	5,455	20,809		1					
Accounts payable	399	260	1,363	592	229	34							
Debt (short-term and long-term)	. •	-	-	-	1	1							1
Slockholders' equily	19,415	20,243	21,049	19,257	19,525	20,082							1

Equity Research

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Global Hunter Securities, LLC

Company Update

Houston American Energy (HUSA) Disclosures

Analyst Certification

I, Phil McPherson, certify that the views expressed in this report accurately reflect my personal beliefs about this company and that I have not and will not receive compensation directly or indirectly in connection with my specific recommendations or views contained in this report.

Important Disclosures

- GHS does and seeks to do business with the company covered in this research report.
- During the past twelve months, GHS has received compensation for investment banking services from Houston American Energy.
- As with all employees of GHS, a portion of this analyst's compensation is based on investment banking revenues.

Risks & Considerations

Price Target Risks & Related Risk Factors:

Investment risks associated with the achievement of the price target include, but are not limited to, a company's failure to achieve Global Hunter Securities, LLC production and cash flow estimates; unforeseen geopolitical influences or changes in supply and demand for crude oil and natural gas that negatively affect commodity prices that could differ from our projected commodity price deck; changes to investor sentiment regarding the energy sector in general and the exploration and production segment in particular; effects of severe weather or unpredictable negative developments in exploration efforts of the company.

Valuation Methodology:

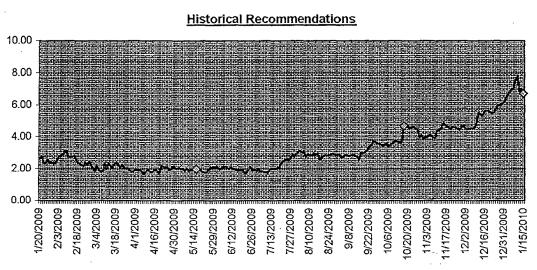
In developing our ratings and price targets we include a number of quantitative and qualitative factors that affect the ability of a company to craft and develop its operating plan including managerial capacity and quality, access to sufficient tools and services necessary to develop oil and natural gas properties, financial situation and liquidity, geographic base of properties, relation of the exploration and production sector to the overall equity market and macroeconomic environment, and ability to execute in a cost effective manner. We base our valuations on the ability of a company to generate cash flow sufficient to fund both its maintenance capital expenditures and its plans for future growth. Accurate forecasts of future crude oil and natural gas production rates, commodity prices , and operating costs, all of which can be highly variable and difficult to predict, drive cash flow and, as a result, valuation.

See the Company's most recent SEC filings, including 10-Ks, 10-Qs, 8-Ks and proxy filings, for additional risks and considerations.

Other Companies Mentioned In This Report

- Chicago Bridge & Iron (NYSE: CBI; \$22.71)
- Ecopetrol (NYSE: EC; \$25.41)
- Petromineral (Toronto: PMG.TO; \$20.82)
- Sinochem (Shanghai: 600500.SS; \$13.22)
- SK Energy (KSE: 096770.KS; \$118,500.00)
- .

Houston American Energy (HUSA) Disclosures (Continued)



Initiated coverage on 06/20/08 with a Buy rating and price target of \$15.00.

	Date :	Ratio	📄 🖓 Price Targe	Cicence	
1.	6/20/2008	Buy	\$15.00	\$8.72	
2.	10/22/2008	Buy	\$8.00	\$3.94	
З.	5/18/2009	Buy	\$3.50	\$1.85	* Intraday
4.	10/19/2009	Buy	\$7.00	\$4.70	
5.	1/19/2010	Buy	\$14.00	\$6.70	•

Explanation of Ratings

Buy: We expect the stock to outperform the average total return of the stocks in the analyst's industry (or industry team's) coverage universe over the next six to twelve months.

Neutral: We expect the stock to perform in line with the average total return of the stocks in the analyst's industry (or industry team's) coverage universe over the next six to twelve months.

Sell: We expect the stock to underperform the average total return of the stocks in the analyst's industry (or industry team's) coverage universe over the next six to twelve months.

Ratings Distribution

Research Coverage			Investment Banking Clients*				
Rating	Count	% of Total	Count	% of Total	% of Rating Category		
Buy	53	65.4%	1	100.0%	· 1.9%		
Neutral	25	30.9%	0				
Sell	3	3.7%	0				
Total	81	100.0%	1	100.0%	1.2%		

*Investment banking clients are companies from whom GHS or an affiliate received compensation from investment banking services provided in the last 12 months.

Note: Ratings Distribution as of December 31, 2009

Disclaimer & Other Disclosures

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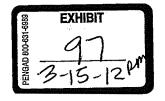
om: ant: To: Cc: Subject: Attachments: John Terwilliger Friday, February 12, 2010 2:01 PM david Snow james Jacobs Fw: David Snow David Snow215.pdf

David:

I suggest these changes. Please update and email back to Jay and myself and we will then call and go over it one more time.

Thanks,

John



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PLAINTIFF'S EXHIBIT PX-091

David G. Snow Energy Equities, Inc.

31,033,272

HOUSTON AMERICAN ENERGY (OTC: HUSA-\$8.36)

ENERGY CONTRACTOR OF THE PROPERTY OF THE PROPE

(28mm Shares, 46% Management-Owned; \$125mm Float) 31 47 "Another Triton" 128

52-Week Range \$8.38-1.70 <u>'10 Cash Flow/Share</u> \$0.85-1.07E Potential Risked Value/Share <u>CPO-4</u> Serrania Total \$81-406 \$21-42 \$102-448

Ind. Dividend \$0.04 \$0.00 annully

33%

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RECOMMENDATION AND SUMMARY

We recommend purchase of HUSA because:

1. Colombia has liberalized its fiscal regime to one of the most attractive in the world; major new discoveries have made it now one of world's the hottest exploration arenas; and HUSA has broad, high-potential exposure with mostly 12.5-25% interests in 150,000 net acres.

2. The new 25% CPO-4 block is 2.4 miles from a Petrominerales 10,900+ b/d well, with 3D now, drilling later in '10, and potentials of upward to \$81-406/share;

3. The Serrania block adjoins and may be part of a 1 billion bbl field; will be drilled in March or April, and may be worth some 21-42/share, verifyable quite soon; ??

3. HUSA has low costs, \$1/mm cash, \$12mm/year free cash flow, no debt, and founded/ managed by oil industry verteran John Twilliger and former OPCO research director Lee Hawes.

NEW FISCAL REGIME, BIG NEW FINDS, AND BIG, LOW-COST EXPOSURE

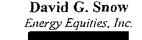
In 2004, Colombia revised its fiscal regime to a) drop the 50% back-in-right, b) thus dropping the red tape of seeking approvals from a government partner, while c) keeping the 8% royalty on most fields, sliding to 20% on very big fields, and 34% corporate tax rate. Already fifth most attractive, this is now second only to the U.K., yielding average 36% ROIs (Table 1).

At the same time, major new finds have made Colombia one of the hottest exploration arenas in the world. Canadian Petrolinerales (PMG.V) has drilled 6M, 10M, and 11M b/d wells in the Corcel field only 2.4 miles from HUSA; Pacific Rubiales (PMG.V) will quadruple production in the 3 years through '10; and the big new 1B bbl-E Ombu find adjoins HUSA.

Security has dramatically improved and guerilla activity fallen in the last 3-4 years, with U.S. forces on all bases; U.S. speinding is \$600mm/year; and no incidents in 100+ HUSA wells since '02. GDP is \$8,800/capital, making Colombia very stable despite its reputation in drugs.

HUSA was attracted by <u>Colombia</u>'s low finding costs, and became involved when it bought a small interest in the <u>Cora Cora</u> block from Hupecol in '02. Twilliger knew the <u>Dan</u> Hughes family of TX whose acronym comprises Hupecol, and negotiated no-promote rights for

oures Who happen to be Terres Caracara



HUSA (Page 2.)

12.5% in any additional concessions for 5 years (case-by-case now). Hupecol is an early-stage player, driller, then monetizer, with its concessions now for sale; but new ones being considered.

10S

HUSA now holds a total of **1.5 pron** thet acres, mostly in the rich Llanos Basin. It aims to increase its past typical 12.5% interests to 25%+, and is farming into the new CPO 4 and Serrenia blocks from other operators, for modest promotes. Concessions and gross acres are:

Working Interest	Operator	Concession	Gross Acres
25%	SK Energy	CPO 4	345,452
12.5%	Shona	Serrania	110,769
12.5%	Hupecol	Los Picachos	86,235
12.5%	Hupecol	Las Garzas	103,000
12.5%	Hupecol	Leona	70,343
12.5%	Hupecol	Cabiona	86,066
12.5%	Hupecol	Dorotea	51,321
6.25%	Hupecol	Surimena	69.000
1.6%	Hupecol	La Cuerva	48,000

CPO 4: "MIND-BOGGLING"

= He closestuells to CPU-Y

The Corcel field was found by Canadian independent Petromineralis (PMG) in 9/07, and 11 wells are now producing 30,000 b/d, and recent wells at 6, 10, and 11,000 b/d. The oil is highgrade 44-degree gravity. When SK Energy, a large Korean integrated oil company with interests in 17 countries including Colombia, acquired the adjoining CPO 4 block, HUSA cold-called and negotiated a 25% farm-in for just \$2.5mm over its 25% share of initial coismic costs. 3D is about to commence, followed by drilling late in '10; with drilling near the border meantime by PMG.

PMG on 1/3/10 completed a well 2.4 miles from HUSA's block, and on 2/3 announced that it flowed 10,900 b/d for the first 30-day average, from 71° of Mirador pay—Prudhoe Bay-size flow rates! PMG on 2/3/10 completed a second well nearby with 139° of pay: **38°** from the **New or and 51°** from the Guadalupe, with flow results likely to be announced around this week.

HUSA has an even thicker 300' of Guadalupe on its block. An old well drilled in '62 in the other, south end of the CPO 4 block from this north end had the same 300', with shows in both the Guadalupe and Mirador. Such a single well would give HUSA \$1.50/ share cash flow!

The Corcel field is a series of discrete 1-10-well reservoirs all trapped against the same series of faults like a string of pearls. Their closeness gives them single-field economics. The NE-SW trend continues straight into HUSA's block. Corcel has a water drive, for a high percentage recovery; HUSA's block is updip from Corcel, and thus has a lower risk of being watered out.

(believed to be





HUSA (Page 3.)

Over 100 leads have been identified with 2D seismic, with estimated potential recoverable reserves of 1 to 4 billion barrels (25% of that to HUSA). 3D will start this week, will be completed in a couple months, followed with the first well by yearend. PMG may be using this concluded parties to the some wells near the border in the meantime, giving HUSA more immediate drilling exposure. HUSA will in turn offset these offset wells when it drills.

The Corcel target is 12,000' deep, taking 30 days to drill plus 15 days to hook to line, at a cost of \$10mm per well. Roads and a pipeline go right through the block.

A 10,000 b/d well and \$50/bbl net wellhead price gives a 1 month payout. At 10-15mm bbls per well and \$50/bbl net price, \$500-750mm value per \$10mm well is a 50-75:1 return.

A second play is Cusiana-type (Triton Energy) thrust sheet targets, at 15-15,500'. The block is on trend with Cusiana. These deeper targets, plus a shallower one, will be sought later.

These small discrete reservoirs will probably have the 8% royalty, rather than sliding up to 20% for larger-size reservoirs. For this CPO 4 concession only, the government gets an added 31% compensation, for a total effective 35% royalty. HUSA's 25% working interest thus reduces to about 16.25% net revenue interest.

A 1-4 billion bbl resource would thus be 162-650mm bbls net. In '09 Hepecol/HUSA sold a major field for \$26/bbl. HUSA believes CPO 4 oil in the ground is worth \$20-25/bbl. This gives a range of \$3.25-\$16.25B (\$116-580/share), a midpoint of \$9.75B, or \$350/share. Risked at HUSA's total 70% Colombia success rate to date, this is \$81-406/share, midpoint \$243/share.

SERRANIA BLOCK, ADJOINING OMBU DISCOVERY, AND LOS PICACHOS BLOCK

In 6/09 HUSA farmed into 12.5% interest in the Serrania block's 110,769 acres from Shona Energy, with major investors including Encap and Nators. The block adjoins and the conincluded up to half of the recent Ombu find, found in 7/08, with potentially 1B bbls of recoverable oil. HUSA will drill its first well in March or April.

Emerald Energy sold its 90% interest in Ombu just a year later in 7/09 to the Chinese Sinochem Resources for about \$836mm, when proved reserves were only 26mm bbls (\$32/bbl). Yearend potential reserves were then given by Netherland, Sewell at 122mm bbls (\$6.85/bbl).

The reservoir is continuous, vs. CPO 4's discrete structures, with 12-degree gravity crude, and 7 wells to date (and 7 to go in '10) giving 100-400 b/d per well. The wells are **seep**, and drilled horizontally. (HUSA's first 2 wells will be vertical, to define the structure.) The Chinese are laying a pipeline to the field, which would have takeaway capacity for HUSA too.

CONTRACTOR OF CONTRACTOR

HUSA (Page 4.)

Canadian junior Canacol Energy (CNE.V) owns the 10% of Ombu not sold to the Chinese. When it recently raised \$20mm via Canacord Adams, the Chicago group Columbia Universe put up \$14mm. They saw from the seismic that the structure was continuous and extended onto HUSA's block, with as much as half of it on HUSA's block. On this basis they took the entire \$12mm equity financing HUSA completed this last December.

It's not clear if this would mean another 1B bbls on HUSA's block or half of 1B bbls estimated for the total of both sides of the reservoir. At 500mm – 1B bbls, 12.5% working interest might be 11.25% net revenue interest, or 56-112mm bbls net to HUSA. HUSA believes the oil might be worth \$15/bbl in the ground, which would give \$30-60/share potential value. Again, risked at HUSA's overall 70% success, this would be \$21-42/share—verifyable soon.

HUSA plans 2 wells in '10: 1 to HUSA's part of Ombu, and 1 to a north structure. Closest Ombu wells are 3-5 miles away, so the first task is to verify that the structure extends onto HUSA's block. Another 1-2 wells are possible. The first two wells will be vertical, to define the structures. This seems to be potential for an immediate bang for the buck.

The Los Picachos Technical Evaluation Agreement, 12.5% with Hupecol, has 86,235 acres west and northwest of Serrania. 2D has found several large prospects similar to the Ombu field. This is a growth area for the future.

US DRILLING

The North Jade, 22.5% with Clayton Williams, in Vermillion Parish, will be a \$10mm, 19,000' target, seeking hundreds of bcfs with an 80-100 bcf lower-risk bailout zone, with individual wells of 20-30mmcf/d plus liquids. Six Miagyp sands are targeted, updip from 3 flank wells that have produced 23 bcf. The crest has never been tested. Spudding in a few months.

HUPECOL OPERATIONS AND '10 BUDGET +0

Hupecol is now producing over 1,200 b/d net to HUSA, up from 800 b/d in November. In 6/08 Hupecol sold its largest concession/Cepsa, for US\$930mm (\$11.55mm to HUSA). Its other concessions are up for sale in '10, pending the right price. If they fetched \$40-60mm, this would be on top of \$10-11mm cash now, which with cash flow will fund this year's budget.

The budget for '10 includes \$15. 6mm for Colombia, \$2.7mm for La, or \$18.4mm total. Free cash flow after CX is budgeted at \$6mm but could be \$12mm. Yearend '10 cash may thus be \$15+mm. Cash flow before capex may thus be \$24-36mm, or \$0.85-1.07/share, putting the stock around a solidly reasonable 4x cash flow. A small \$0.047/share per year dividend is paid.

HA562



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145/02

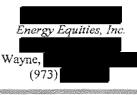
HUSA (Page 5.)

MANAGEMENT, BALANCE SHEET, AND POTENTIALS

HUSA offers an unusual combination of: 1) \$10mm cash, 2) \$6-12Emm free cash flow, 3) no debt, 4) a modest \$0.04/year dividend, and 5) strong management, including industry veteran Twilliger and Wall Street icon Lee Tawes. Management owns 44% of the stock. The stock is reasonably priced on cash flow and offers exceptional upside exploratory potential.

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Jewillier



HOUSTON AMERICAN ENERGY (OTC: HUSA-58.52)

(31mm Shares Out, 33mm F.D., 42% Management-Owned; \$150mm Float) February 15, 2010

"Another Triton Energy!"

52-Week	'10 Cash Flow/Share	Potent	ial Risked	Value/Sha	re	Ind. Annual
<u>Range</u> \$8.38-1.70	\$0.85-1.07E	<u>Now: 8xCF</u> \$8.50		<u>Serrania</u> \$18-36	<u>Total</u> \$ 85-305	Dividend \$0.02

RECOMMENDATION AND SUMMARY

We recommend purchase of HUSA because:

1. Colombia has liberalized its fiscal regime to one of the most attractive in the world; major new discoveries have made it now one of the world's hottest exploration areas; and HUSA has broad, high-potential exposure with mostly 12.5-25% interests in 150,000 net acres.

2. The new 25% CPO-4 block is 2.4 miles from a Petrominerales 15,800+ b/d well announced today; with 3D now, drilling later in '10, and potentials of upward to \$67-269/share;

3. The Serrania block adjoins and may be part of a 1 billion bbl field; will be drilled in March or April; and may be worth some *\$18-36/share*, verifyable by drilling by 2Q10;

4. HUSA has \$15mm cash, \$6-12mm/year free cash flow, no debt, and founded/managed by oil industry verteran John Terwilliger and former Opco research director and icon Lee Tawes.

NEW FISCAL REGIME, BIG NEW FINDS, AND BIG, LOW-COST EXPOSURE

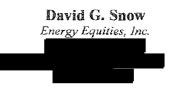
In 2004, Colombia revised its fiscal regime to a) drop the 50% back-in right, b) thus dropping the red tape of seeking approvals from a government partner, while c) keeping the 8% royalty on most fields, sliding to 20% on very big fields, and 33% corporate tax rate. Already fifth most attractive, this is now second only to the U.K., yielding average 36% ROIs (Table).

At the same time, major new finds have made Colombia one of the hottest exploration arenas in the world. Canadian Petrominerales (PMG.V) has drilled 10M, 14M, and 15M b/d wells in the Corcel and Candelila fields as close as only 2.4 miles from HUSA's CPO 4 block; Pacific Rubiales (PMG.V) will quadruple production in the 3 years through '10; and the big new 1B bbl-E Ombu find found in 7/08 adjoins HUSA's Serrania block.

Security has dramatically improved and guerilla activity fallen in the last 3-4 years, with U.S. forces on all bases; U.S. spending of \$600mm/year; and no incidents in 100+ HUSA wells since '02. GDP is \$8,800/capital, making Colombia very stable despite its reputation in drugs.



EEI 000001



HUSA (Page 2.)

HUSA was attracted by Colombia's low finding costs, and became involved when it bought a small interest in the Caracara block from Hupecol in '02. Terwilliger knew the owners of Hupecol who happened to be Texas oilmen, and negotiated no-promote rights for 12.5% in any additional concessions for 5 years (case-by-case now). Hupecol is an early-stage player, driller, then monetizer, with most of its concessions now for sale; but new ones being considered.

HUSA now holds a total of 150,000 net acres, mostly in the rich Llanos Basin. It aims to increase its past typical 12.5% interests to 25%+, and is farming into the new CPO 4 and Serrania blocks from other operators, for modest promotes. Concessions and gross acres are:

Working Interest	Operator	Concession	Gross Acres
25%	SK Energy	CPO 4	345,452
12.5%	Shona	Serrania	110,769
12.5%	Hupecol	Los Picachos	86,235
12.5%	Hupecol	Las Garzas	103,000
12.5%	Hupecol	Leona	70,343
12.5%	Hupecol	Cabiona	86,066
12.5%	Hupecol	Dorotea	51,321
6.25%	Hupecol	Surimena	69,000
1.6%	Hupecol	La Cuerva	48,000

CPO 4: "MIND-BOGGLING"

The Corcel fields were found by Canadian independent Petromineralis (PMG) in 9/07, and 13 wells are now producing about 30,000 b/d, with recent wells at 10, 14, and 15,000 b/d the closest wells to HUSA's new CPO 4 Block. *This is a whole new Colombia exploration trend --largely onHUSA's acreage (map)*. The oil is high-grade 44-degree gravity. When SK Energy, a large Korean integrated oil company with interests in 17 countries including Colombia, acquired the adjoining CPO 4 block, HUSA cold-called and negotiated a 25% farm-in. 3D is about to commence, followed by drilling late in '10; with drilling near the border meantime by PMG.

PMG on 1/3/10 completed a well 2.4 miles from HUSA's block on a related field, Candelilla, and on 2/3/10 announced that it flowed 10,900 b/d of 44-degree gravity crude for the first 30-day average—Prudhoe Bay-size flow rates! Today (2/15/10) PMG announced it now has flowed naturally at 12,400 b/d for its first 45 days! Such a single well would give HUSA \$1.50-2.00/share cash flow! Corcel is about 10 miles, and Candelilla 2.4 miles, from HUSA's acreage, along the same fault system. This 12,400 b/d flow came from 71 feet of Mirador pay.

On 2/3/10 PMG completed a second well nearby in the Candelilla with 139' of pay: 88' from the Lower Sand 3 (Une) and 51' from the Guadalupe. Today (2/15) PMG announced the well is flowing over 15,800 b/d of 43-degree gravity oil. This well is 2.36 miles from HUSA's acreage. A third PMG well is spudding and results will be due in mid-March.

HUSA (Page 3.)

These super-high 14-15,000 b/d flow rates suggest that Candelilla may be an even larger field than Corcel—and very near HUSA. Corcel now produces a total of just 15,600 b/d from 13 wells, or 1,200/well, about 3,000E b/d adjusting for decline curves. The average 14,100 b/d per Candelilla well is thus 4.7x Corcel's average, with no signs of decline—actually, still rising, suggesting truly monster wells and a large reservoir--and just 2.4 miles away.

The same fault structure of Candelilla, and possibly Candelilla itself, appears to extend onto HUSA's acreage, based on 2D; finalizing 3D in a couple months should add focus. Corcel has a water drive, for a high percentage recovery—plus high flow rates. HUSA's block is believed to be updip from Corcel, and thus has a lower risk of being watered out.

The general Corcel field complex is a series of discrete 1-10-well reservoirs, all trapped against the same series of faults, like a string of pearls. Their closeness gives them single-field economics. The NE-SW trend continues straight into, and sweeps through, HUSA's 350,000 acre block, with over two dozen 2D targets identified in the Corcel-trend play alone (see map).

HUSA has an even thicker 300' of Guadalupe sand on its block, probably 150' at this location, versus 51' plus 88' of Une for Candelilla 2. HUSA has over 50' of Mirador, versus 71' for Candelilla 1. The Une is not present here in the CPO 4 but should be on most of the blockand is several hundred feet thick in the 600mm bbl Apiay Field just west of CPO 4. An old well drilled in '62 in the other, south end of the CPO 4 block from this north end had the same 300' of Guadalupe and 50' of Mirador, with shows in both the Guadalupe and Mirador. The Guadalupe is thought to be continuous, and the Mirador thickens over the CPO 4 block. These are all big targets, both for extending Candelilla onto CPO 4 and for the 100+ other targets on the block.

Over 100 leads in total have been identified with 2D seismic, with estimated potential recover-able reserves of 1 to 4 billion barrels (25% of that to HUSA). 3D will start this week, will be completed in a couple months, and followed with the first well by yearend. *PMG may drill some wells near the border in the meantime, giving HUSA more immediate drilling exposure. HUSA will in turn offset these offset wells when it drills.*

The Corcel target is 12,000' deep, taking 30 days to drill plus 15 days to hook to line, at a cost of \$10mm per well. Roads and a pipeline go right through the block. The field might be well toward full development over three years; although the deeper and many targets could take years.

A 10,000 b/d well and \$50/bbl net wellhead price gives a 1 month payout. At 10-15mm bbls per well and \$50/bbl net price, \$500-750mm value per \$10mm well is a 50-75:1 return. This price is conservative, as the 43-44-degree gravity crude, and pipeliñe should give a W.T.I. price.

A second play is Cusiana-type (Triton Energy) thrust sheet targets, at 15-15,500'. The block is on trend with Cusiana. These deeper targets, plus a shallower one, will be sought later.

HUSA (Page 4.)

These small discrete reservoirs will probably have the 8% royalty, rather than sliding up to 20% for larger-size reservoirs. For this CPO 4 concession only, the government gets an added 31% compensation, for a total effective 36.5% royalty. HUSA's 25% working interest thus reduces to about 15.87% net revenue interest.

A 1-4 billion bbl resource would thus be 157-635mm bbls net. In '09 Hepecol/HUSA sold a major field for \$26/bbl. HUSA believes CPO 4 oil in the ground is worth \$20-25/bbl. This gives a range of \$3.17-\$15.87B (\$96-384/FD share), a midpoint of \$240/share. Risked at HUSA's total 70% Colombia success rate to date, this is \$67-269/share, midpoint \$168/share.

SERRANIA BLOCK, ADJOINING OMBU DISCOVERY, AND LOS PICACHOS BLOCK

In 6/09 HUSA farmed into 12.5% interest in the Serrania block's 110,769 acres from Shona Energy. The block adjoins and may include up to half of the Ombu find, recently found in 7/08, with potentially 1B bbls of recoverable oil. HUSA will drill its first well in March or April.

Emerald Energy sold itself and its 90% interest in Ombu just a year after discovery, in 7/09, to the Chinese Sinochem Resources for about \$836mm (about \$500mm estimated for Ombu), when proved reserves were only 26mm bbls (\$19/bbl). Yearend potential reserves were then given by Netherland, Sewell at 122mm bbls (\$4/bbl).

The reservoir is continuous, vs. CPO 4's discrete structures, with 12-degree (WTI - 15%) crude, and 7 wells to date (and 7 to go in '10) giving 100-400 b/d per well. The wells are 4,000 feet deep and drilled horizontally. (HUSA's first wells will be vertical, to define the structure.) The Chinese are laying a pipeline to the field, which will have takeaway capacity for HUSA too.

Canadian junior Canacol Energy (CNE.V) owns the 10% of Ombu not sold to the Chinese. When it recently raised \$20mm via Canacord Adams, a Chicago group invested \$14mm. They saw from the seismic that the structure was continuous and extended onto HUSA's block, with as much as half of it on HUSA's block. On this basis they took most of the \$13mm equity financing HUSA completed this last December.

It's not clear if this would mean another 1B bbls on HUSA's block or half of 1B bbls estimated for the total of both sides of the reservoir. At 500mm – 1B bbls, 12.5% working interest might be 11.25% net revenue interest, or 56-112mm bbls net to HUSA. HUSA believes the oil might be worth \$15/bbl in the ground, which would give \$25-51/share potential value. Again, risked at HUSA's overall 70% success, this would be *\$18-36/share—verifyable soon*.

HUSA plans 2 wells in '10: 1 to HUSA's part of Ombu, and 1 to a north structure. Closest Ombu wells are 3-5 miles away, so the first task is to verify that the structure extends onto HUSA's block. Another 1-2 wells are possible. The first two wells (and up to 7) will be

David G. Snow Energy Equities, Inc.

HUSA (Page 5.)

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HUPECOL OPERATIONS AND '10 BUDGET

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The budget for '10 includes \$15. 6mm for Colombia, \$2.7mm for La, or \$18.4mm total. Free cash flow after Capex is budgeted at \$6mm but could be \$12mm. Yearend '10 cash may thus be \$15+mm. Cash flow before capex may thus be \$24-36mm, or \$0.85-1.07/share, putting the stock around a solidly reasonable 8x cash flow. This is also a fair valuation for Colombia before exploratory potentials, as per top of page 1. A small \$0.02/share per year dividend is paid.

MANAGEMENT, BALANCE SHEET, AND POTENTIALS

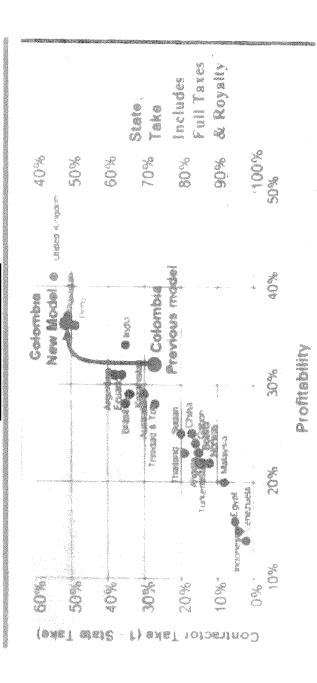
HUSA offers an unusual combination of: 1) \$15mm cash, 2) \$6-12mm-E free cash flow, 3) no debt, 4) a modest \$0.02/year dividend, and 5) strong management, including industry veterans Terwilliger and James Jacobs and Wall Street icon and former Oppenheimer Research Director Lee Tawes. Management owns 42% of the stock. The stock is reasonably priced on cash flow and offers exceptional upside exploratory potential.

David G. Snow

February 15, 2010

The information contained in this report has been derived from sources we believe to be reliable, but we do not guarantee the accuracy or completeness of such information. This report is for informational purposes only and is not intended to be an offer to sell or a solicitation to buy the securities mentioned herein. David G. Snow, the President of Energy Equities, Inc., may have a position in the securities mentioned herein, and may buy or sell such securities at any time. All rights reserved. This report may not be reproduced or distributed without prior permission.

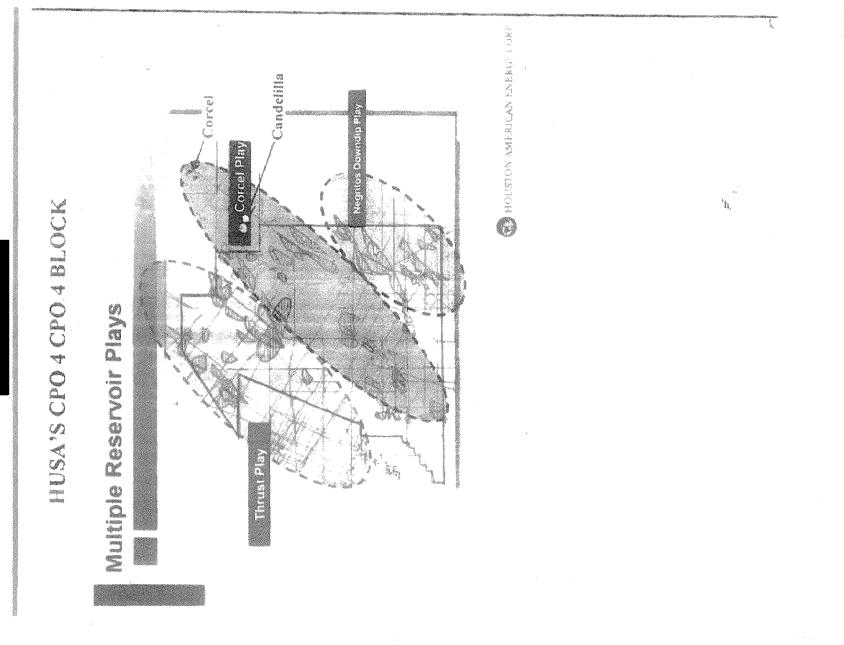
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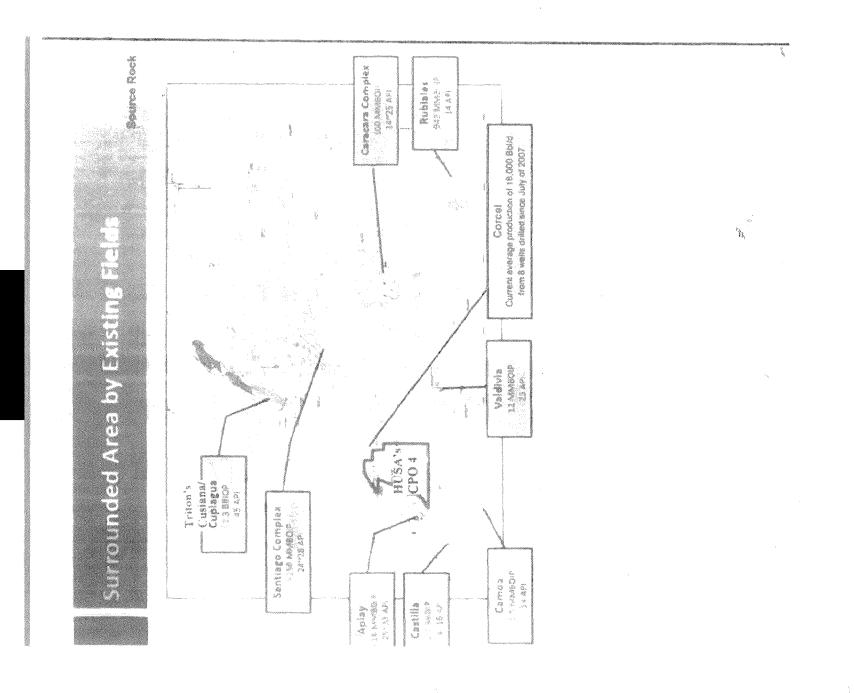
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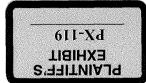
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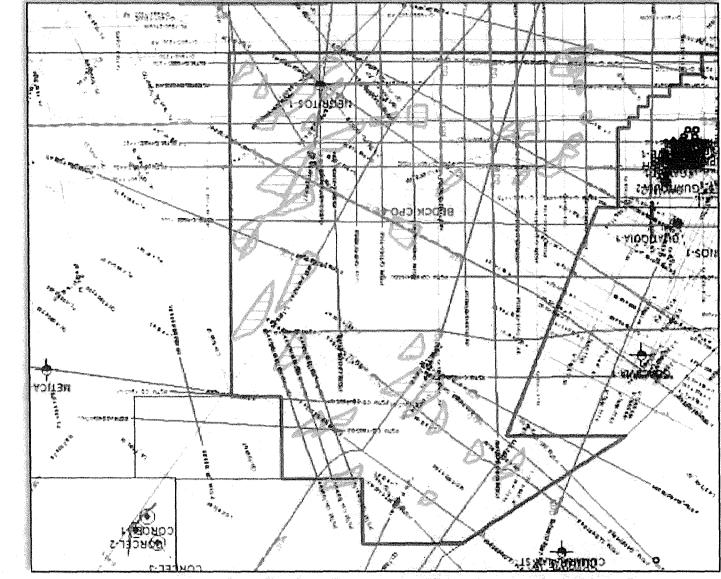
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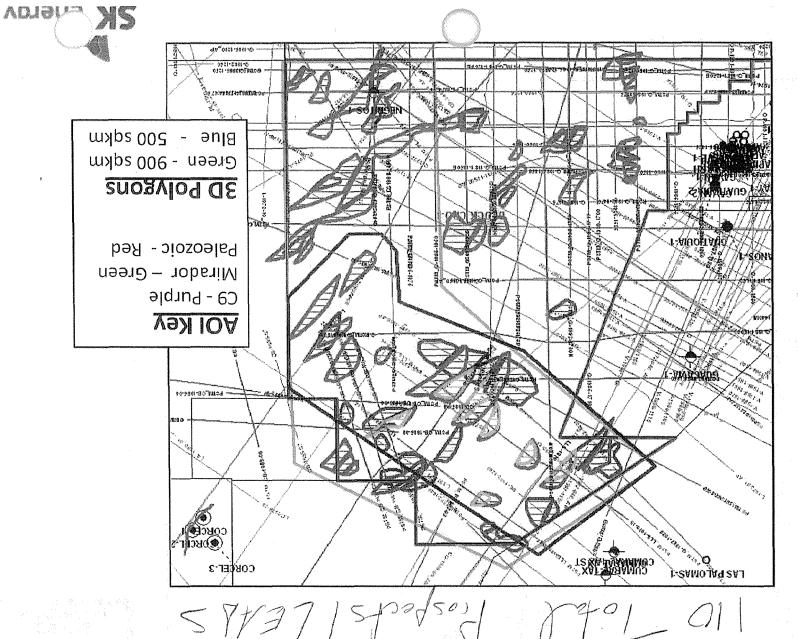


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Total Potential

ead	<u> </u>	Acres Mirador	Une Une	Unit R.R.	Net Pay	Recoverable	Remark
					(C9+M+U)	Reserve (MMBO)	
1	1055	724	899	150	50'+100'+75'	29	Synthetic
2	556	212	417	150	50'+100'+75'	12	Synthetic
3	420	291	0	150	50'+100'+75'	8	Synthetic
4	6358	6506	3495	150	50'+100'+75'	185	Thrust
5	1018	2119	1435	150	50'+100'+75'	56	Thrust
6	531	114	388	150	50'+100'+75'	10	Inversion
7	1097	657	311	150	50'+100'+75'	22	Inversion
8	1606	1074	694	150	50'+100'+75'	36	Inversion
9	3821	7037	420	150	50'+100'+75'	139	Inversion
10	469	0	0	150	50'+100'+75'	4	Inversion
11	447	622	509	150	50'+100'+75'	18	Inversion
12	664	659	0	150	50'+100'+75'	15	Inversion
13	2687	936	761	150	50'+100'+75'	43	Inversion
14	882	3399	1625	150	50'+100'+75'	76	Drapeover
15	993	1692	605	150	50'+100'+75'	40	Inversion
16	284	847	452	150	50'+100'+75'	20	Inversion
17	0	420	326	150	50'+100'+75'	10	Inversion
18	o	818	o	150	50'+100'+75'	12	Inversion
19	o	0	1247	150	50'+100'+75'	14	Inversion
20	3320	4029	2364	150	50'+100'+75'	112	Thrust
21	2510	2611	3162	150	50'+100'+75'	94	Thrust
22	790	1102	0	150	50'+100'+75'	22	Thrust
		Total	Potentia	aí		974	valet i stav spata Stali Na

Unit R.R.

- Porosity	/:20 %
- So	: 60%
- So/Bo	: 0.9
- GF	: 0.7
- RF	: 30 %

<u>Net Pay</u>

Avg. Thickness
 From Net Sd Map

SK energy

3.246 Billion

Recovery 1/2. 500

PLAINTIFF'S EXHIBIT PX-120

PARA. 2 DOC/RES 2.2



Total Potential

ि	Lead		Acres	Makey etc.	Unit R.R.	Net Pay	Recoverable	Remark	Unit R.R.
Ľ	Leau	C7	Mirador	Une	Unit K.K.	(C9+M+U)	Reserve (MMBO)	Remark	
	1	1055	724	899	150	50'+100'+75'	29	Synthetic	- Porosity : 20 %
ſ	2	556	212	417	150	50'+100'+75'	12	Synthetic	- So : 60%
1	3	420	291	0	150	50'+100'+75'	8	Synthetic	- So/Bo : 0.9
ſ	4	6358	6506	3495	150	50'+100'+75'	185	Thrust	- GF : 0.7
Γ	5	1018	2119	1435	150	50'+100'+75'	56	Thrust	- RF : 30 %
Γ	6	531	114	388	150	50'+100'+75'	10	Inversion	
ſ	7	1097	657	311	150	50'+100'+75'	22	Inversion	Net Pay
Γ	8	1606	1074	694	150	50'+100'+75'	36	Inversion	
Ĩ	9	3821	7037	420	150	50'+100'+75'	139	Inversion	- Avg. Thickness
ſ	10	469	0	0	150	50'+100'+75'	4	Inversion	-From Net Sd Map
ſ	11	447	622	509	150	50'+100'+75'	18	Inversion	
	12	664	659	0	150	50'+100'+75'	15	Inversion	The second seco second second sec
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୍ଷ	14	882	3399	1625	150	50'+100'+75'	76	Drapeover	
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Γ	16	284	847	452	150	50'+100'+75'	20	Inversion	ni eren i statistica. Posta di statistica
Γ	17	o	420	326	150	50'+100'+75'	10	Inversion	for engineered second
Γ	18	0	818	0	150	50'+100'+75'	12	Inversion	ngeneren en er som en en er en er
Γ	19	0	0	1247	150	50'+100'+75'	14	Inversion	and a second
Γ	20	3320	4029	2364	150	50'+100'+75'	112	Thrust	
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Г	22	790	1102	0	150	50'+100'+75'	22	Thrust	general de la general de la composition. La composition de la c
Ē			Tota	I Potenti	al		974		SK ene

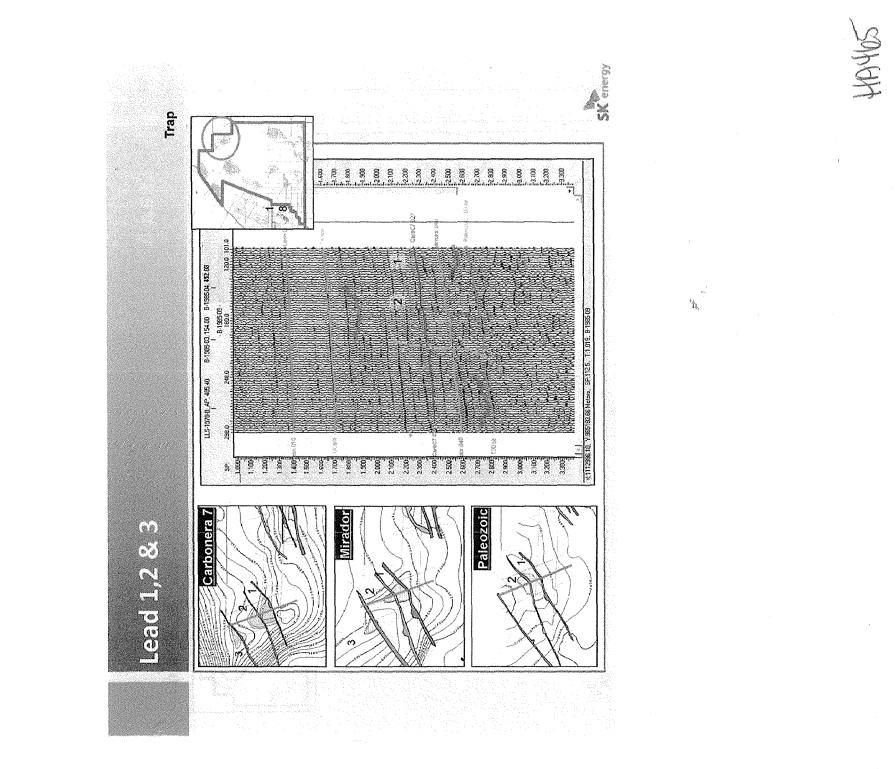
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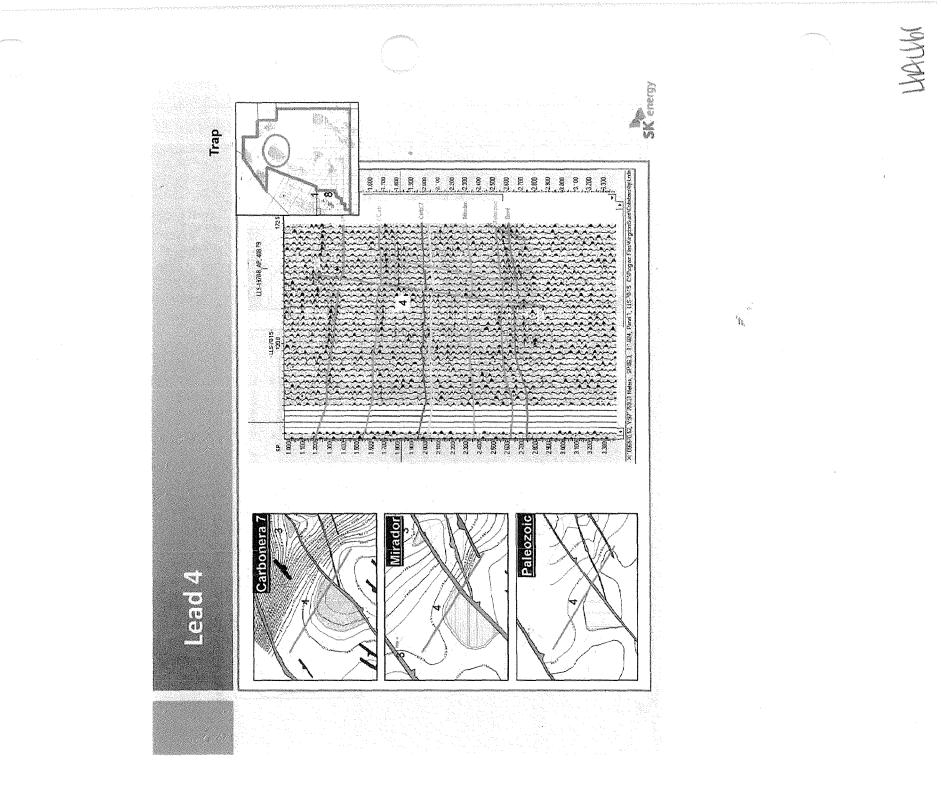
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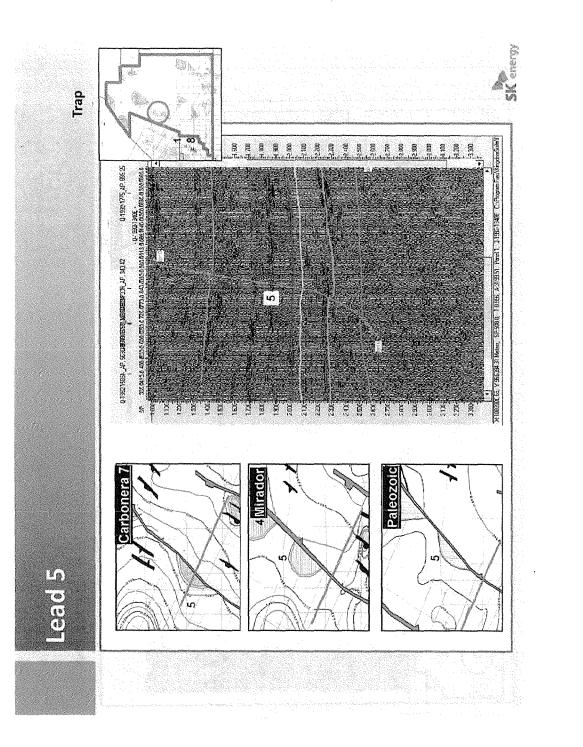
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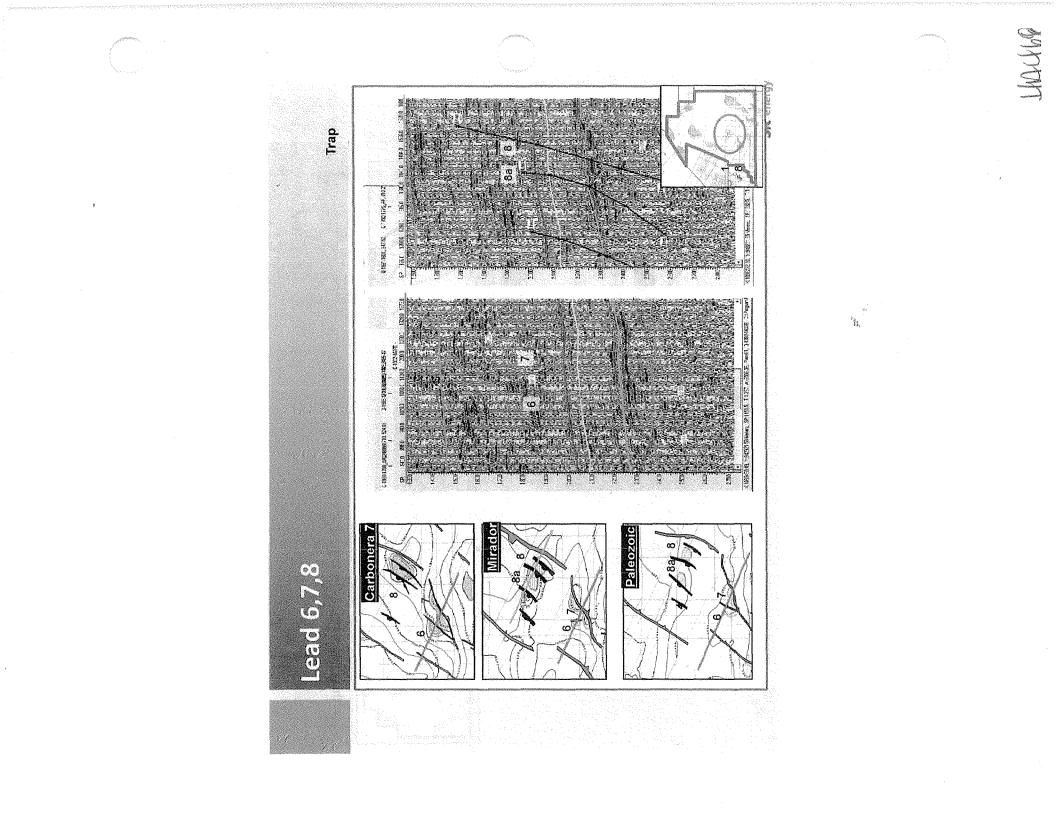
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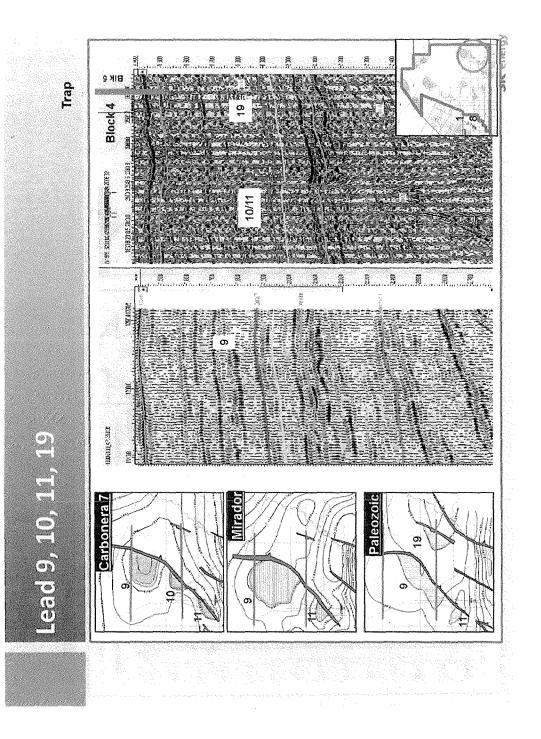
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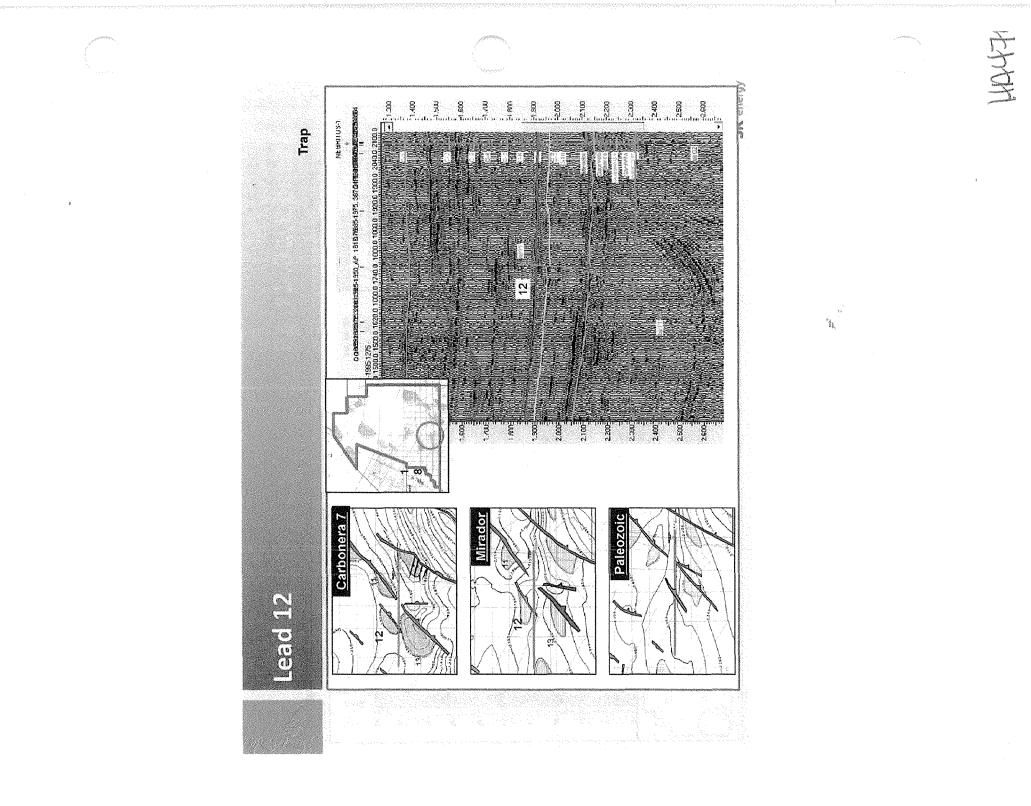
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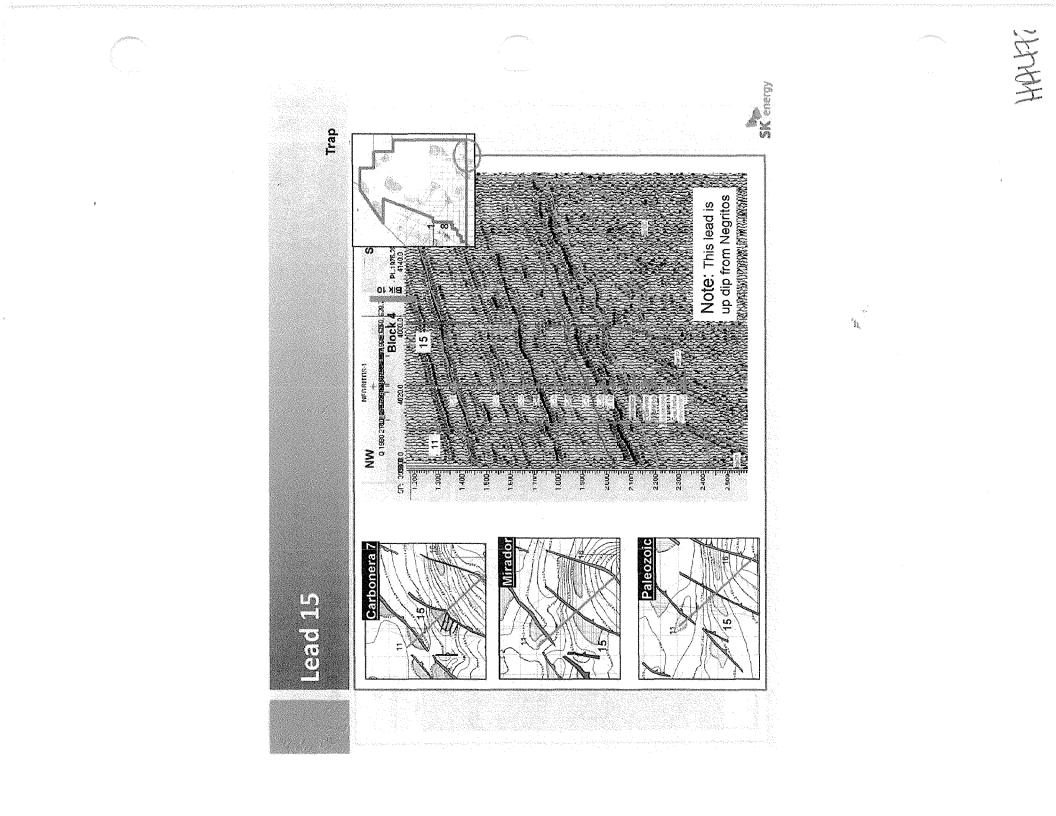


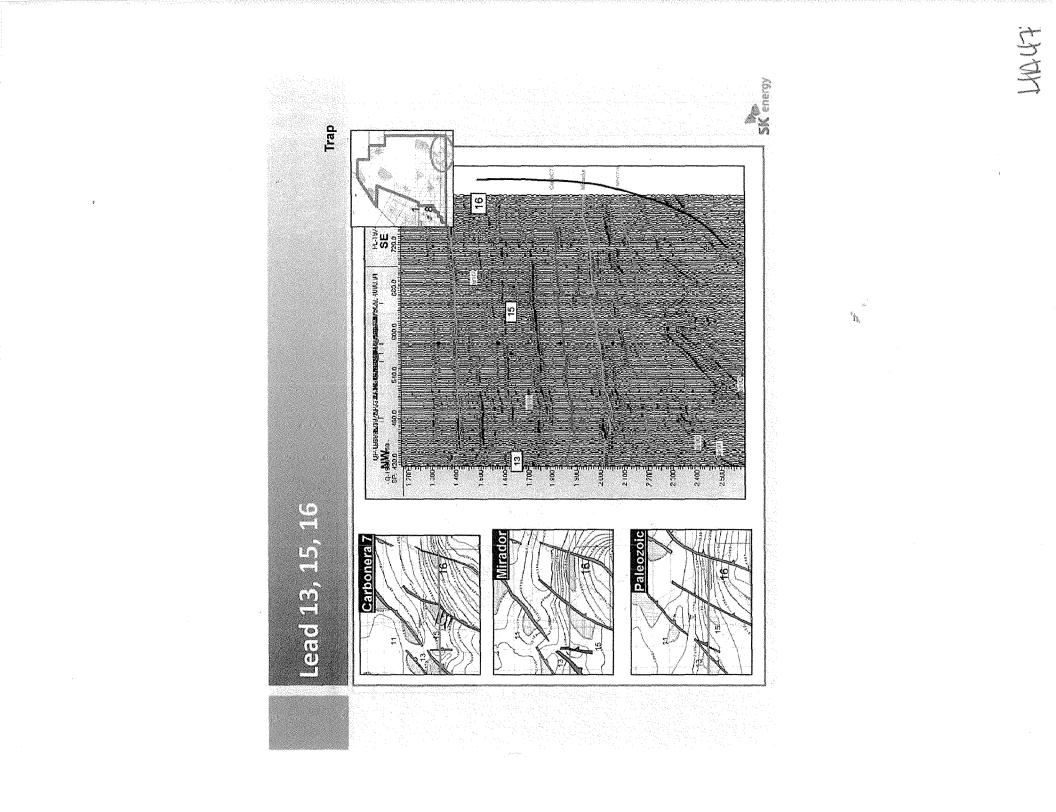
The Point is in down dip position: still a little closure tern movements over compressioners and a con-Trap S Lo Maria **NAM** ŝ 8 87 **P** 031-9 ş . ş 8 924 वकाः विवयस्य स्थातः या सा भाषा दा दा स X:36-0 Carate and a second Tie Point M 61E int¹ Ē 1525 ыğ Ę, 22.0 a 7 Paleozoic op Mira Carb Lead 13 m' er. 10,

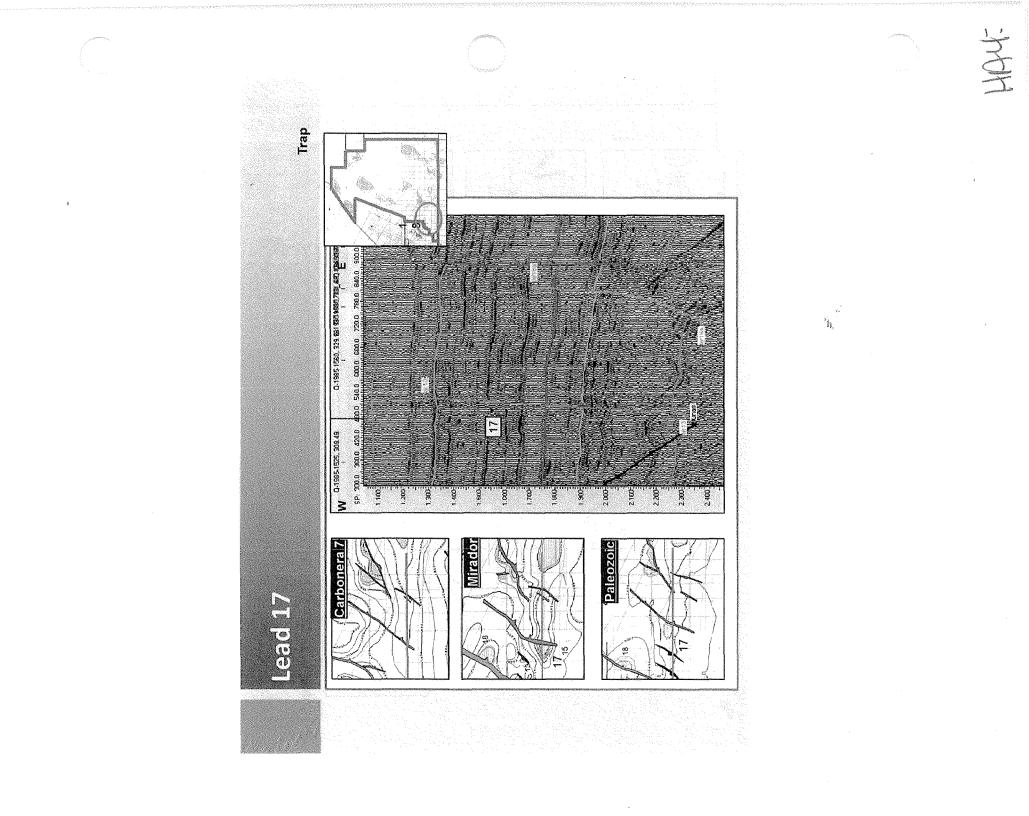
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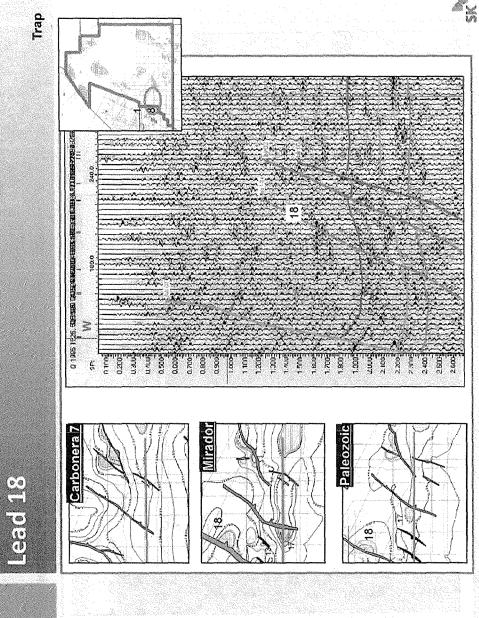
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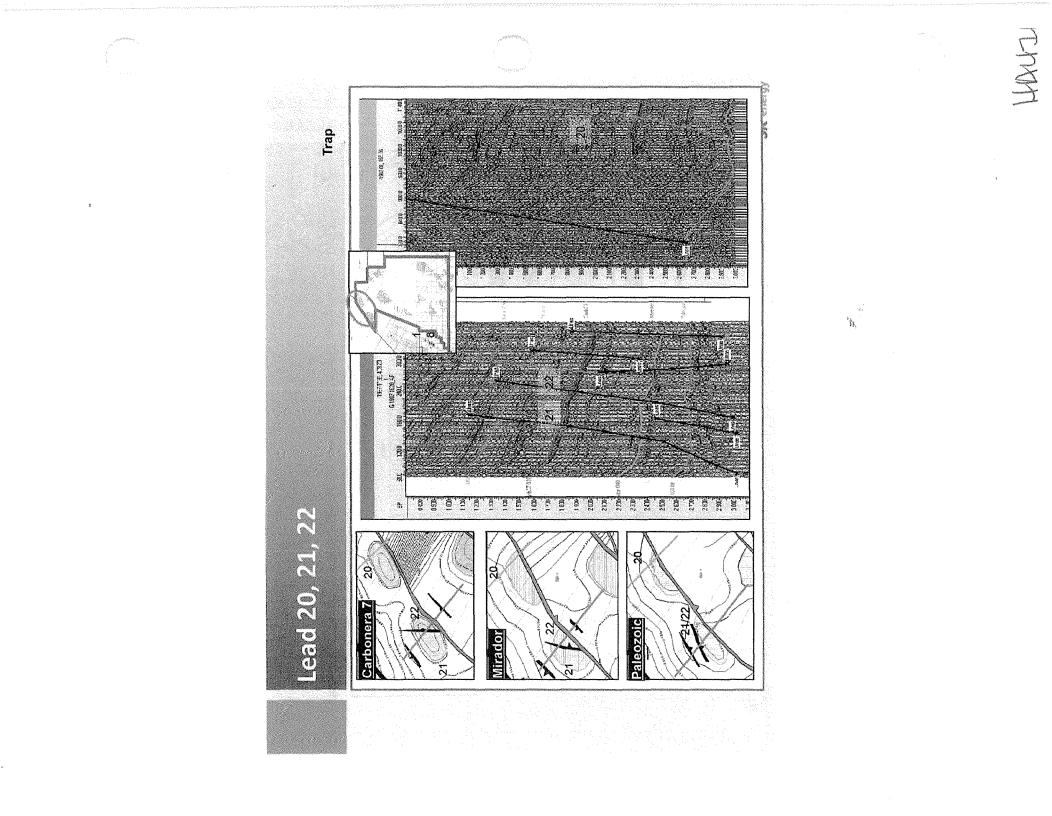




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Ref: 00015738 00119740

Summary



MorganStanley SmithBarney



December 1 - December 31, 2010

Morgan Stanley Smith Barney LLC. Member SIPC.

Your Financial Advisor

John Fiorita and Vincent Roth

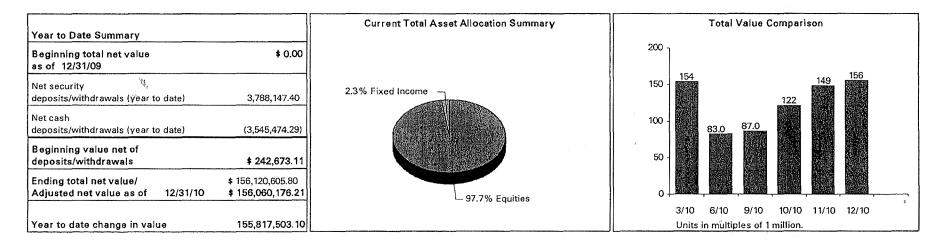


Reserved Client Service Center: 800-423-7248 Branch Phone: 800 445 6529

Accounts carried by Citigroup Global Markets Inc. Member SIPC.

Enclosed are statements for the following accounts in your consolidated household. "Total Value Comparison" and "Year to Date Summary" may contain information for previously existing accounts which have been recently consolidated. Unpriced securities are not included in the "Net Value" columns. Unless otherwise indicated, values shown are for "This Period." Accrued interest and dividends, earned but not paid, are excluded from the Adjusted Net Value.

Account Number	Abbreviated Name	Account Type	Total Value Prior Month/ Adj.Net Value		Net Securities Deposited/ Withdrawn	Net Capital Deposits/ Withdrawals	Total Income Taxable/ Non-Taxable	Unrealized Gain or (Loss)	Adjusted YTD Realized Gain or (Loss)
	JOHN F. TERWILLIGER		148,615,189.72 148,551,045.40	\$ 156,120,605.80 \$ 156,060,176.21	\$ 0.00	\$ 0.00	\$ 0.00 \$ 18,549.63	\$ 0.00	\$ 0.00 ST \$ 0.00 LT
Total			the best of the state of the second	\$ 156,120,605.80 \$ 156,060,176,21	\$ 0.00	\$ 0.00	\$ 0.00 \$ 18,549.63	\$ 0.00	\$ 0.00 ST \$ 0.00 LT





Reserved Client Financial Management Account

December 1 - December 31, 2010

Page 2 of 16

Account number

8 029

Morgan Stanley Smith Barney LLC. Member SIPC. Your Financial Advisor

John Fiorita and Vincent Roth ONE NY PLAZA 36TH FLOOR NEW YORK NY 10004 212 428 5200 Website: www.smithbarney.com Reserved Client Service Center: 800-423-7248 Branch Phone: 800 445 6529 TTY/TDD Deaf & Hard of hearing: 800-227-4238

Account carried by Citigroup Global Markets Inc. Member SIPC.

Account value	Last period	This period	%
Common stocks & options	\$ 148,424,061.06	\$ 156,013,804.74	97.73
Accrued interest on bonds/CDs	64,144.32	60,429.59	.04
Municipal bonds	3,660,536.40	3,569,808.25	2.24
Portfolio CreditLine	-3,533,552.06	-3,523,436.78	
Total value	\$ 148,615,189.72	\$ 156,120,605.80	100.00
Total value (excluding accrued interest)	\$ 148,551,045.40	\$ 156,060,176.21	
Portfolio CreditLine Additional Borrowing Power		\$ 5,479	, 109.00

Cash, money fund, bank deposits	This period	This year
Opening balance	(\$ 3,533,552.06)	
Deposits	0.00	507.18
	0.00	(1,327,400.00)
Interest charged on loans	(8,434.35)	
Checks written	0.00	(2,218,581.47)
Interest credited	18,549.63	
Closing balance	(\$ 3,523,436.78)	

A free credit balance in any securities account may be paid to you on demand. Although properly accounted for, these funds may be used for business purposes.

		This period	This	This year		
Earnings summary	Taxable	Non-taxable	Taxable	Non-taxable		
Interest	\$ 0.00	\$ 18,549.63	\$ 0.00	\$ 68,619.60		
Total	\$ 0.00	\$ 18,549.63	\$ 0.00	\$ 68,619.60		
Gain/loss summary			This period	This year		
Unrealized gain or (loss) to date	\$0	.00				

Portfolio summary	This period	This year		
Beginning total value (excl. accr. int.)	\$ 148,551,045.40	\$ 0.00		
Net security deposits/withdrawals	0.00	3,788,147.40		
Net cash deposits/withdrawals	0.00	(3,545,474.29)		
Beginning value net of deposits/withdrawals	148,551,045.40	242,673.11		
Total value as of 12/31/2010 (excl. accr. int.) \$ 156,060,176.21	\$ 156,060,176.21		
Change in value	\$ 7,509,130.81	\$ 155,817,503.10		

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JOHN F. TERWILLIGER

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December 1 - December 31, 2010

JOHN F. TERWILLIGER

Account number

8 029

PORTFOLIO DETAILS

IMPORTANT NOTE: According to our records, it appears that your account contains a concentrated position. Academic studies and real-world experience have shown that asset allocation is the key factor in long-term investment performance. By choosing a diversified mix of stocks, bonds and other asset classes, investors may create the portfolios that best match their financial goals and tolerance for risk. Concentrated positions entail greater risks than a diversified portfolio. Morgan Stanley Smith Barney can provide you with strategies to reduce your exposure to a concentrated position. To discuss your asset allocations and potential strategies to reduce the risk and/or volatility of a concentrated position, please contact your Financial Advisor. Please note, to the extent the concentrated position involves Citigroup or Morgan Stanley stock, we are providing this notice for informational purposes only. Under regulatory rules, Morgan Stanley Smith Barney cannot solicit the purchase or sale of stock or investments/hedges derived from an affiliate's stock.

Your holdings are valued using the most current prices available to Citigroup Global Markets Inc. (CGMI). In most cases, these values are as of 12/31/10, but in some cases CGMI's sources are unable to provide timely information. To see the date of the most recent price update, please view your account online at www.smithbarney.com.

Securities purchased or sold are included or excluded in this section as of the trade-date. This section may include securities that have not settled as of this statement closing date. Please see the "Unsettled Purchases/Sales" section for more information. Dividend yield is the estimated annual income, assuming the current dividend, divided by the security's market price at the end of the statement period. We do not guarantee the accuracy of the prices reflected on the statement nor do these prices represent levels at which securities can be bought or sold. **Please Note:** unrealized gain/(loss) is being shown for informational purposes only and should not be used for tax preparation without the assistance of your tax advisor.

Common stocks & options

Quantity	Description	Symbol	Date acquired	Cost	Share cost	Current price	Current value	Unrealized gain/(loss)		Anticipated Income (annualized)
25,000	CHINA GERUI ADVANCED MATERIALS GROUP LTD	CHOP		Please pro	vide	\$ 5.88	\$ 147,000.00	Not available		
8,616,186	HOUSTON AMERICAN ENERGY CORP. COMMON STCK RESTRICTED In safekeeping: 8,616,186			Please pro	ovide	18.09	155,866,804.74	Not available		
Total comm	non stocks and options			\$ 0,00			\$ 156,013,804.74	\$ 0.00** ST \$ 0.00** LT	0,00	\$ 0.00

Reserved Client Financial Management Account

December 1 - December 31, 2010

JOHN F. TERWILLIGER

Account number 8 029

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Bonds

STATISTICS AND DESCRIPTION OF ADDRESS

Unrealized gains & losses have been adjusted to account for the accretion of OID (original issue discount), the amortization of premium, and/or the accretion of market discount.

Call features shown indicate the next regularly scheduled call date and price. Your holdings may be subject to other redemption features including sinking funds or extraordinary calls.

The research rating for Moody's Investors Service and Standard & Poor's may be shown for certain fixed income securities. All research ratings represent the "opinions" of the research provider and are not representations or guarantees of performance. Your Financial Advisor will be pleased to provide you with further information or assistance in interpreting research ratings.

Municipal bonds

Ref: 00015738 00119743

Amoun	t Description	Date acquired/ CUSIP #	Cost/ Adjusted cost	Share cost/ Adjusted share cost	Current share price/Accrued Interest	Unr Current value	ealized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income/ Capital gain/(loss)
30,000	LEESBURG FLA HOSP REV RFDG-LEESBURG REGL MED CTR PJ B/E DD6/26/03FC1/1/04 INT: 04.000% MATY: 07/01/2013 Rating: BAA1/BBB +	524360EZ3		Please provide	101.211 \$ 600.00	\$ 30,363.30	Not available	3.952 \$ 1,200.00	\$ 0.00 \$ 0.00
25,000	INDIO CALIF REDEV AGY TAX ALLOC SUB-RFDG-MERGED REDEV PJ B/E REV DD 5/8/08 INT: 04.000% MATY: 08/15/2014 Rating: S&P A	455719BX1		Please provide	102.578 377.78	25,644.50	Not available	3.899 1,000.00	0.00 0.00
125,000	RICHMOND CALIF CMNTY REDEV AGY TAX ALLOC RFDG-SUB-MERGED PJ B/E REV OID D4/22/10 F/C9/1/10 INT: 03.250% MATY: 09/01/2014 Int rate eff: 04/22/10 Rating: S&P A	764424BL0		Please provide	100.41 1 ,354.17	125,512.50	Not available	3.236 4,062.50	0.00 0.00
25,000	SAN JACINTO CALIF CMNTY FACS DIST SPL TAX RFDG-NO 2-SER A B/E DD 10/10/02 F/C 3/1/03 INT: 04.800% MATY: 09/01/2014 Rating: S&P BBB +	797834BD9		Please provide	105.703 400.00	26,425.75	Not available	4.541 1,200.00	0.00 0.00
250,000	CITIZENS PPTY INS CORP FLA HIGH RISK-SR SECD-A-1 B/E REV DD 4/6/10 F/C 12/1/10 INT: 04.000% MATY: 06/01/2015 Int rate eff: 04/06/10 Rating: A2/A +	176553EL5		Please provide	100.476 833.33	251,190.00	Not available	3.981 10,000.00	0.00 0.00 *

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Ref: 00015738 00119744

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December 1 - December 31, 2010

					JOHN F. TERI	WILLIGER	Acc	ount number	8 029
lunicipal	bonds continued								
Amour	nt Description	Date acquired/ CUSIP #	Cost/ Adjusted cost	Share cost/ Adjusted share cost	Current share price/Accrued Interest	Un Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income/ Capital gain/(loss
150,000	RICHMOND CALIF CMNTY REDEV AGY TAX ALLOC RFDG-SUB-MERGED PJ B/E REV OID D4/22/10 F/C9/1/10 INT: 03.500% MATY: 09/01/2015 Int rate eff: 04/22/10 Rating: S&P A	764424BM8		Please provide	99.003 \$ 1,750.00	\$ 148,504.50	Not available	3.535 \$ 5,250.00	\$ 0.00 \$ 0.00
20,000	FOLSOM CALIF PUB FING AUTH REV RFDG-REASSESSMENT-PRAIRIE DIST B/E REV OID DD 7/30/08 INT: 04.250% MATY: 09/02/2015 Rating: S&P A	344393BN2		Please provide	102.563 280.97	20,512.60	Not available	4.143 850.00	0.00 0.00
20,000	PERRIS CALIF PUB FING AUTH REV RFDG-SER A B/E DD 6/28/01 INT: 05.350% MATY: 10/01/2015 Rating: S&P A	71437RBW3		Please provide	108.765 267.50	21,753.00	Not available	4.918 1,070.00	0.00 0.00
50,000	JACKSONVILLE FLA HEALTH FACS AUTH HEALTH FACS RE V BROOKS B/E REV OID DD 12/7/07 INT: 04.250% MATY: 11/01/2015 Rating: A2/A	469402EY3		Please provide	104.027 354 .17	52,013.50	Not available	4.085 2,125.00	0.00 0.00
160,000	ADONEA MET DIST NO 2 COLO REV SER B M/S/F B.E DD 12/29/05 INT: 04.375% MATY: 12/01/2015 Rating: S&P A	00725PAA6		Please provide	99.547 583.33	159,275.20	Not available	4.394 7,000.00	0.00 0.00
30,000	CITIZENS PPTY INS CORP FLA SR SECD-HIGH ACT-A-1 B/E REV OID DD 5/7/09 INT: 05.375% MATY: 06/01/2016 Rating: A2/A +	176553EA9		Please provide	105.711 134.37	31,713.30	Not available	5.084 1,612.50	0.00 0.00
25,000	LOUISIANA CITIZENS PPTY INS CORP ASSMT REV SER B AMBAC B/E DD 4/11/06F/C 12/1/06- INT: 05.000% MATY: 06/01/2016 Rating: BAA1/A-	546456AY0		Please provide	106.128 104.17	26,532.00	Not available	4.711 1,250.00	0.00 0.00
70,000	CONNECTICUT ST HEALTH & EDL FACS AUTH REV RFDG-HOSP FOR RADIAN AT B/E REV DD 6/28/07 INT: 05.250% MATY: 07/01/2016 Rating: S&P BBB-	20774UND3		Please provide	104.56 1,837.50	73, 192.00	Not available	5.021 3,675.00	0.00 0.00

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Reserved Client Financial Management Account December 1 - December 31, 2010

			n an	JOHN F. TERV	WILLIGER	Acc	ount number	8 029
lunicipal	bonds continued							
Amoun	at Description	Date acquired/ CUSIP #	Share cost/ Cost/ Adjusted share Adjusted cost	Current share price/Accrued Interest	Uni Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(loss
50,000	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV UMASS MEM-SER B/E REV OID D5/27/10 F/C7/1/10 INT: 04.000% MATY: 07/01/2016 Int rate eff: 05/27/10 Rating: BAA1/BBB +	57586EUX7	Please provide	100.00 \$ 1,000.00	\$ 50,000.00	Not available	4.00 \$ 2,000.00	\$ 0.00 \$ 0.00
10,000	DIST OF COLUMBIA (WASHINGTON D.C.) BALLPARK REV SER B-1 FGIC B/E DD 5/15/06F/C8/1/06 INT: 05.000% MATY: 02/01/2017 Rating: A3/BBB Next call on 02/01/16 @ 100.000	25476WAT8	Please provide	105.838 208.33	10,583.80	Not available	4.724 500.00	0.0 0.0
190,000	CITIZENS PPTY INS CORP FLA SR SECD-HIGH ACT-A-1 B/E REV OID DD 5/7/09 INT: 05.500% MATY: 06/01/2017 Rating: A2/A +	176553EE1	Please provide	105.693 870.83	200,816.70	Not available	5.203 10,450.00	0.0 0.0
20,000	DIST OF COLUMBIA (WASHINGTON D.C.) BALLPARK REV SER B-1 FGIC B/E DD 5/15/06F/C8/1/06 INT: 05.000% MATY: 02/01/2018 Rating: A3/BBB Next call on 02/01/16 @ 100.000	25476WAU5	Please provide	104.135 416.67	20,827.00	Not available	4.801 1,000.00	0.0 0.0
10,000	LOS ANGELES [®] CALIF SANTN EQUIP CHARGE REV SER A FGIC B/E DD 7/7/05 INT: 05.000% MATY: 02/01/2018 Rating: AA2/AA Next call on 02/01/15 @ 100.000	54462PDN9	Please provide	109.96 208.33	10,996.00	Not available	4.547 500.00	0.0 0.0
10,000	PUERTO RICO COMWLTH HWY&TRANS AUTH TRANS REV BDS SER L B/E CIFG DD 10/4/05 F/C 1/1/06 INT: 05.250% MATY: 07/01/2018 Rating: A3/BBB	N 745190UD8	Please provide	103.029 262 .50	10,302.90	Not available	5.095 525.00	0.0
10,000	ESCONDIDO CALIF REV CTFS PARTN WASTEWATER RFDG PROJ-SER A MBIA B/E OID D1/6/05FC9/1/05 INT: 04.125% MATY: 09/01/2018 Rating: BAA1/A + Next call on 09/01/14 @ 100.000	296344CH5	Please provide	101.132 137.50	10,113.20	Not available	4.078 412.50	0.00 0.00

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eserved Client Inancial Management Account December 1 - December 31, 2010

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lunicipal	bonds continued							
Amour	nt Description	Date acquired/ CUSIP #	Share cost/ Cost/ Adjusted share Adjusted cost	Current share price/Accrued Interest	Un Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(los
10,000	ALABAMA 21ST CENTY AUTH TOB SETTLEMENT REV BOOK ENTRY DTD 12/1/01 F/C 6/1/02 INT: 05.750% MATY: 12/01/2018 Rating: BAA1/A- Next call on 12/01/11 @ 101.000	010652BM6	Please provide	101.169 \$ 47.92	\$ 10,116.90	Not available	5.683 \$ 575.00	\$ 0.00 \$ 0.00
25,000	LAS VEGAS NEV REDEV AGY TAX INCREMENT REV SER A B/E REV OID DD 3/26/09 INT: 07.000% MATY: 06/15/2019 Rating: S&P A	517732BP7	Please provide	113.062 77.78	28,265.50	Not available	6.191 1,750.00	0.0 0.0
25,000	NEW JERSEY ECON DEV AU CIGARETTE TAX REV B/E DD 10/14/04 F/C 12/15/04 INT: 05.625% MATY: 06/15/2019 Rating: BAA3/BBB Next call on 01/31/11 @ 100.000	645916S32	Please provide	100.00 62.50	25,000.00	Not available	5.625 1,406.25	0.0 0.0
25,000	NEW JERSEY ECON DV AU REVHILL CREST HLTH SVC-0-CPN-5.70% C/A AMBAC BK ENT DTD 6/18/97 INT: 00.000% MATY: 01/01/2020 Rating: Moody BAA1	645905L65	Please provide	56.709	14,177.25	Not available		0.0 0.0
45,000	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV _{lg} B/E DD 02/06/07 INT: 05.000% MATY: 02/15/2020 Rating: A2/A	777863AM3	Please provide	99.582 850.00	44,811.90	Not available	5.02 2,250.00	0.0 0.0
10,000	RIVERSIDE-QUINDARO BEND LEVEE DIST MO LEVEE DIST IMPT REV RADIAN AT B/E REV OID DD7/6/06 INT: 04.500% MATY: 03/01/2020 Rating: S&P BBB Next call on 03/01/17 @ 100.000	76926RAP6	Please provide	97.068 150.00	9,706.80	Not available	4.635 450.00	0.0 0.0
10,000	PERRIS CALIF PUB FING AUTH REV TAX ALLOC-HSG LN-SER A B/E REV OID D4/22/10 FC10/1/10 INT: 05.000% MATY: 10/01/2020 Int rate eff: 04/22/10 Rating: S&P A	71437RHA5	Please provide	100.008 125.00	10,000.80	Not available	4.999 500.00	0.00 0.00

Reserved Client Financial Management Account December 1 - December 31, 2010

				JOHN F. TER	WILLIGER	Acc	ount number	8 029
unicipal	bonds continued							
Amoun	nt Description	Date acquired/ CUSIP #	Share cost/ Cost/ Adjusted share Adjusted cost cost	Current share price/Accrued Interest	Un Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(los
105,000	LANCASTER CALIF REDEV AGY TAX ALLOCATION COMB REDEV PROJ B/E REV OID DD9/3/09 F/C2/1/10 INT: 05.750% MATY: 08/01/2021 Rating: S&P A Next call on 08/01/19 @ 100.000	513799WX0	Please provide	104.95 \$ 2,515.62	\$ 110,197.50	Not available	5.478 \$ 6,037.50	\$ 0.0 \$ 0.0
100,000	INDIO CALIF REDEV AGY TAX ALLOC SUB-RFDG-MERGED REDEV PJ B/E REV DD 5/8/08 INT: 05.000% MATY: 08/15/2021 Rating: S&P A Next call on 08/15/18 @ 100.000	455719CE2	Please provide	98.578 1,888.89	98,578.00	Not available	5.072 5,000.00	0.0 0.0
50,000	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 2/6/07 F/C 8/15/07 INT: 05.000% MATY: 02/15/2022 Rating: A2/A	777863AP6	Please provide	97.137 944.44	48,568.50	Not available	5.147 2,500.00	0.0
10,000	ILLINOIS FIN AUTH REV CHILDRENS MEM HOSP-SER B B/E REV DD 5/15/08 INT: 05.500% MATY: 08/15/2022 Rating: S&P A- Next call on 08/15/18 @ 100.000	45200FGL7	Please provide	104.211 207.78	10,421.10	Not available	5.277 550.00	0.0 0.0
100,000	RICHMOND CALIF CMNTY REDEV AGY TAX ALLOC RFDG-SUB-MERGED PJ B/E REV OID D4/22/10 F/C9/1/10 INT: 05.625% MATY: 09/01/2022 Int rate eff: 04/22/10 Rating: S&P A Next call on 09/01/20 @ 100.000	764424BU0	Please provide	100.569 1 ,875.00	100,569.00	Not available	5.593 5,625.00	0.0 0.0
40,000	HOUSTON TEX IDC REV SR AIR CARGO-AMT-OID B/E DD 3/26/02 F/C 7/1/02 INT: 06.375% MATY: 01/01/2023 Rating: Moody BA1 Next call on 01/01/12 @ 101.000	442406AC8	Please provide	92.952 1,275.00	37,180.80	Not available	6.858 2,550.00	0.0 0.0

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December 1 - December 31, 2010

CONTRACTOR DOCUMENTS JOHN F. TERWILLIGER Account number B 029

Municipal bonds continued

Amoun	t Description	Date acquired/ CUSIP #	Cost/ Adjusted cost	Share cost/ Adjusted share cost	Current share price/Accrued Interest	Uni Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income/ Capital gain/(loss)
15,000	MORENO VALLEY CALIF UNI SCH DIST CTFS PARTN RFDG FSA B/E DD 01/20/2005 INT: 05.000% MATY: 03/01/2023 Rating: AA3/AA + Next call on 03/01/14 @ 100.000	616872FN2		Please provide	101.043 \$ 250.00	\$ 15,156.45	Not available	4.948 \$ 750.00	\$ 0.00 \$ 0.00
200,000	INDIO CALIF REDEV AGY TAX ALLOC SUB-RFDG-MERGED REDEV PJ B/E REV OID DD 5/8/08 INT: 05.000% MATY: 08/15/2023 Rating: S&P A Next call on 08/15/18 @ 100.000	455719CG7		Please provide	95.198 3,777.78	190,396.00	Not available	5.252 10,000.00	0.00 0.00
100,000	RICHMOND CALIF CMNTY REDEV AGY TAX ALLOC RFDG-SUB-MERGED PJ B/E REV OID D4/22/10 F/C9/1/10 INT: 05.750% MATY: 09/01/2023 Int rate eff: 04/22/10 Rating: S&P A Next call on 09/01/20 @ 100.000	764424BV8		Please provide	100.381 1,916.67	100,381.00	Not available	5.728 5,750.00	0.00 0.00
300,000	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 02/06/2007 INT: 05.000% MATY: 02/15/2024 Rating: A2/A	777863AR2		Please provide	94.737 5,666.67	284,211.00	Not available	5.277 15,000.00	0.00 0.00
100,000	MISSISSIPPI DEV BK SPL OBLIG CAP PJS & EQUIP ACQUISITION-A1 AMBAC B/E DTD 5/27/99 INT: 05.875% MATY: 07/01/2024	605343TS1		Please provide	100.102 2,937.50	100,102.00	Not available	5.869 5,875.00	0.00 0.00
50,000	PUERTO RICO ELEC PWR AUTH PWR REV RFDG-SER VV MSF FGIC INSD B/E DD 5/30/07 INT: 05.250% MATY: 07/01/2024 Rating: A3/BBB +	74526QPH9		Please provide	101.549 1 ,312.50	50,774.50	Not available	5.169 2,625.00	0.00 0.00
25,000	SAUGUS / HART SCH FACS FING AUTH LEASE REV SER B B/E REV OID D5/26/10 F/C9/1/10 INT: 05.000% MATY: 09/01/2024 Int rate eff: 05/26/10 Rating: A1/A Next call on 09/01/15 @ 100.000	80420P BK3		Please provide	96.255 416.67	24,063.75	Not available	5.194 1,250.00	0.00 0.00

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Reserved Client Financial Management Account

Account number

December 1 - December 31, 2010

JOHN F. TERWILLIGER

Amount	t Description	Date acquired/ CUSIP #	Cost/ Adjusted cost	Share cost/ Adjusted share cost	Current share price/Accrued Interest	Uni Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income/ Capital gain/(loss
10,000	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 02/06/2007 INT: 05.000% MATY: 02/15/2025 Rating: A2/A	777863AS0		Please provide	94.191 \$ 188.89	\$ 9,419.10	Not available	5.308 \$ 500.00	\$ 0.00 \$ 0.00
75,000	CLARK CNTY NEV IMPT DIST SPL LOC IMPT DIST NO 112 L/T B/E BARREL OID DD 5/13/08 INT: 04.500% MATY: 08/01/2025 Rating: AA1/AA + Next call on 08/01/17 @ 100.000	181003K D5		Please provide	92.902 1,406.25	69,676.50	Not available	4.843 3,375.00	0.00 0.00
140,000	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 2/6/07 F/C 8/15/07 INT: 05.000% MATY: 02/15/2026 Rating: A2/A	777863AT8		Please provide	92.01 2,644.44	128,814.00	Not available	5.434 7,000.00	0.00 0.00
100,000	MASSACHUSETTS EDL FING AUTH ED LN REV RFDG-ISSUE I-SER A B/E REV OID D2/18/10 F/C7/1/10 INT: 05.200% MATY: 01/01/2027 Int rate eff: 02/18/10 Rating: S&P AA Next call on 01/01/20 @ 100.000	57563RHM4		Please provide	96.013 2,600.00	96,013.00	Not available	5.415 5,200.00	0.00 0.00
50,000	PUERTO RICO AQUEDUCT & SEWER AUTH RV BDS \$R A BK/ENTRY DTD 3/18/08 F/C 7/01/08 INT: 05.000% MATY: 07/01/2028 Rating: AA3/AA + Next call on 07/01/18 @ 100.000	745160PZ8		Please provide	98.284 1,250.00	49,142.00	Not available	5.087 2,500.00	0.00 0.00
60,000	MATAGORDA CNTY TEX NAV DIST #1 REV HOUSTON LTG AMT AMBAC BK/ENT DTD 1/15/97 INT: 05.125% MATY: 11/01/2028 Rating: A3/BBB +	57652TAV9		Please provide	87.90 512.50	52,740.00	Not available	5.83 3,075.00	0.00 0.00
80,000	SAN JOAQUIN HILLS CA TRAN CORR AGY TOLL RD REF REV SER A-MBIA B/E OID DD 9/1/97 F/C 7/15/98 INT: 05.375% MATY: 01/15/2029 Rating: BAA1/8BB	798111DS6		Please provide	89.034 1 ,982.78	71,227.20	Not available	6.037 4,300.00	0.00 0.00

Next call on 01/31/11 @ 100.000

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Served Client rinancial Management Account December 1 - December 31, 2010

Ref: 00015738 00119750

				JOHN F. TERM	VILLIGER		ount number	8 029
Aunicipal	bonds continued		vennengen GAN-S	an a	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		<u></u>	
Amour	nt Description	Date acquired/ CUSIP #	Share cost/ Cost/ Adjusted share Adjusted cost cost	Current share price/Accrued Interest	Un Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(los
10,000	PLEASANTS CO W VA PCR CO-AMT COMMN-POTOMAC ED-E-AMBAC MBIA B/E DD 4/1/99 INT: 05.500% MATY: 04/01/2029 Rating: BAA1/BBB Next call on 01/31/11 @ 100.000	728896CA7	Please provide	96.531 \$ 137.50	\$ 9,653.10	Not available	5.697 \$ 550.00	\$ 0.00 \$ 0.00
20,000	LOS ANGELES CNTY CALIF MTA SALES TAX REV PROPA 1ST TIER SR-A-AMBAC B/E D7/13/05 OID INT: 04.375% MATY: 07/01/2029 Rating: AA2/AAA Next call on 07/01/15 @ 100.000	544712XV9	Please provide	92.856 437.50	18,571.20	Not available	4.711 875.00	0.00
50,000	HARRIS CNTY TEX MUN UTIL DIST U/T RADIAN AT B/E GO OID DD 3/1/07 INT: 04.375% MATY: 09/01/2029 Rating: S&P BBB Next call on 09/01/15 @ 100.000	413957DX6	Please provide	79.738 729.17	39,869.00	Not available	5.486 2,187.50	0.00 0.00
10,000	MICHIGAN ST STRATEGIC FD AMT LTD OBILG REV RFDG DET ED PLT CTL-C B/E D9/3/99I/F9/1/01 INT: 05.650% MATY: 09/01/2029 Rating: A2/A Next call on 09/Q1/11 @ 100.000	59469C2X0	Please provide	94.273 188.33	9,427.30	Not available	5.993 565.00	0.0 0.0
100,000	SAN JOAQUIN HILLS CA TRAN CORR AGY TOLL RD RV RFDG-A-MBIA B/E OID DD 9/1/97 F/C 7/15/98 INT: 05.250% MATY: 01/15/2030 Rating: BAA1/BBB Next call on 01/31/11 @ 100.000	798111CD0	Please provide	88.014 2,420.83	88,014.00	Not available	5.964 5,250.00	0.0 0.0
50,000	LOUISIANA LOC GOVT ENVIRMNTL FACS & CMNTY DEV AU REV CAP PJ & EQUIP AMBAC B/E DD7/13/00 INT: 06.300% MATY: 07/01/2030	546279GL8	Please provide	98.928 1 ,575.00	49,464.00	Not available	6.368 3,150.00	0.00 0.00
40,000	PUERTO RICO HWYS & TSPTN AU TSPTN REV REF SER N AMBAC B/E DD 3/6/07 F/C 7/1/07 INT: 05.250% MATY: 07/01/2030 Rating: A3/BBB	745190ZM3	Please provide	94.969 1,050.00	37,987.60	Not available	5.528 2,100.00	0.00 0.00

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Reserved Client Financial Management Account December 1 - December 31, 2010

					JOHN F. TERW	/ILLIGER	Acc	ount number -	8 02
unicipal	bonds continued					<u></u>			
Amour	nt Description	Date acquired/ CUSIP #	Cost/ Adjusted cost	Share cost/ Adjusted share cost	Current share price/Accrued Interest	Uni Current value	ealized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Incom Capital gain/(los
40,000	E-470 PUB HWY AUTH COLO REV SR-SER B-0-CPN C/A 6.32% MBIA B/E DD 5/10/00 INT: 00.000% MATY: 09/01/2030 Rating: BAA1/BBB	26822LDW1		Please provide	23.548	\$ 9,419.20	Not available		\$ 0.0 \$ 0.0
50,000	NEW YORK CITY IDA PILOT BDS (QUEENS BASEBALL STAD PJ)AMBAC B/E DD 8/22/06 F/C 1/1/07 INT: 05.000% MATY: 01/01/2031 Rating: BA1/BB + Next call on 01/01/17 @ 100.000	64971PDX0		Please províde	86.972 1,250.00	43,486.00	Not available	5.748 2,500.00	0.0 0.0
90,000	MIAMI-DADE CO FLA SUB SPL OBL -A-O-CPN C/A 5.19 MBIA B/E DD 6/16/2005 INT: 00.000% MATY: 10/01/2031 Rating: A2/A + Next call on 10/01/15 @ 44.051	59333NKM4		Please provide	23.37	21,033.00	Not available		0.0 0.0
40,000	HAWAII ST DEPT B&F SPL PURP REV HAWAIIAN ELEC CO-A-AMT AMBAC B/E OID D9/1/02FC3/1/03 INT: 05.100% MATY: 09/01/2032 Rating: BAA1/BBB- Next call on 09/01/12 @ 100.000	419800EH6		Please provide	89.604 680.00	35,841.60	Not available	5.691 2,040.00	0.0 0.0
10,000	CHI ILL O HARE INTL ARPT- REV RFDG-GEN-AIRPORT-3RD XLCAP LIEN-C-1 B/E DD 8/21/03 INT: 05.250% MATY: 01/01/2034 Rating: A1/A- Next call on 01/01/14 @ 100.000	167592XN9		Please provide	95.009 262.50	9,500.90	Not available	5.525 525.00	0.0 0.0
50,000	SAN ANTONIO TEX CVT CTR HTL FIN CRP CONT REV AMT -A-AMBAC B/E DD 5/15/05 F/C 7/15/05 INT: 05.000% MATY: 07/15/2034 Rating: BAA2/BBB Next call on 07/15/15 @ 100.000	796245AA6		Please provide	81.216 1,152.78	40,608.00	Not available	6.156 2,500.00	0.0
10,000	FOOTHILL/EASTERN TRANSN CORRDR AGY CALIF TOLL RD REV SR LIEN -A-B/E OID D5/15/95FC1/1/96 INT: 05.000% MATY: 01/01/2035 Rating: BAA3/BBB- Next call on 01/31/11 @ 100.000	345105AH3		Please provide	81.168 250.00	8,116.80	Not available	6.16 500.00	0.0 0.0



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Ref: 00015738 00119752

December 1 - December 31, 2010

					JOHN F. TERV	VILLIGER	Acci	ount number	8 029
unicipal	bonds continued								
Amoun	t Description	Date acquired/ CUSIP #	Cost/ Adjusted cost	Share cost/ Adjusted share cost	Current share price/Accrued Interest	Unı Current value	ealized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(loss
20,000	FOOTHILL/EASTERN TRANS CORRDR AGY CALIF TOLL RD REV SR LIEN -A-OID-IBC- MBIA DTD 5/15/95 INT: 05.000% MATY: 01/01/2035 Rating: BAA1/BBB Next call on 01/31/11 @ 100.000	345105FR6		Please provide	81.323 \$ 500.00	\$ 16,264.60	Not available	6.148 \$ 1,000,00	\$ 0.00 \$ 0.00
25,000	SAN ANTONIO TEX CVT CTR HTL FIN CRP CONT REV AMT -A-AMBAC B/E D5/15/05 F/C 7/15/05-OID INT: 04.750% MATY: 07/15/2036 Rating: BAA2/BBB Next call on 07/15/15 @ 100.000	796245AB4		Please provide	76.901 547.57	19,225.25	Not available	6.176 1,187.50	0.00
10,000	MIAMI-DADE CNTY FLA AVIATION REV MIAMI INTL ARPT-SER A AMT XLCA B/E DD 11/02/2005 INT: 04.875% MATY: 10/01/2036 Rating: A2/A- Next call on 10/01/15 @ 100.000	59333PJV1		Please provide	83.112 121.88	8,311.20	Not available	5.865 487.50	0.00 0.00
10,000	NEW JERSEY EDA WTR FACS REV N J-AMERICAN WTR CO INC SER A AMT-FGIC B/E DTD 7/1/98 INT: 05.250% MATY: 07/01/2038 Rating: S&P BBB Next call on 07/01/11 @ 100.000	645780DT1		Please provide	90,332 262,50	9,033.20	Not available	5.811 525.00	0.00 0.00
and both the second second second	ipal bonds		\$ 0.00 \$ 0.00		\$ 60,429.59	\$ 3,569,808.25	\$ 0.00** ST \$ 0.00** LT	4.98 \$ 178.018.75	\$ 0.00
3,775,000 otal portfo	lio valus		\$ 0.00		• • • •	159,583,612.99	\$ 0.00" LT \$ 0.00"* ST \$ 0.00"* LT	\$ 178,018,75 .11 \$ 178,018.75	¥ 0.00 ¥ 0.00 \$ 0.00

**Unrealized Gain/Loss is only calculated when an original cost basis is available.

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Reserved Client Financial Management Account

December 1 - December 31, 2010

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RANSAC	CTION DETAILS	All transactions appearing are based	on trade-date:			
terest cl	harged on loans					
late	Description					Amount
	INTEREST CHARGE FROM 11/22 THRU CLOSING BALANCE AVERAGE BALANCI	12/20 @ 2.213% 3,515,002				\$ 6,268.77
	INTEREST CHARGE FROM 12/21 THRU CLOSING BALANCE AVERAGE BALANCE	12/30 @ 2.214% 3,521,271		······		2,165.58
otal intere	est charged on loar	15				\$ 8,434.35
	S DETAILS	The tax status of earnings is reliable to the securities, not of your account.	best of our knowledge. Taxable and non-taxab	le designations refer t	o the federal income tax s	tatus of your
n terest ci late	realted	Description	Comment	Taxable	Non-taxable	Amount
12/01/10		ADONEA MET DIST NO 2 COLO REV SER B M/S/F B.E DD 12/29/05 DUE 12/01/2015 RATE 4.375	REG INT ON 160000 BND PAYABLE 12/01/10		\$ 3,500.00	\$ 3,500.00
2/01/10		ALABAMA 21ST CENTY AUTH TOB SETTLEMENT REV BOOK ENTRY DTD 12/1/01 F/C 6/1/02 DUE 12/01/2018 RATE 5.750	REG INT ON 10000 BND PAYABLE 12/01/10		287.50	287.50
2/01/10		CITIZENS PPTY INS CORP FLA SR SECD-HIGH ACT-A-1 B/E REV OID D5/7/09 F/C12/1/09 DUE 06/01/2016 RATE 5.375	REG INT ON 30000 BND PAYABLE 12/01/10		806.25	806.25
2/01/10		CITIZENS PPTY INS CORP FLA SR SECD-HIGH ACT-A-1 B/E REV OID D5/7/09 F/C12/1/09 DUE 06/01/2017 RATE 5.500	REG INT ON 190000 BND PAYABLE 12/01/10		5,225.00	5,225.00
2/01/10		CITIZENS PPTY INS CORP FLA HIGH RISK-SR SECD-A-1 B/E REV DD 4/6/10 F/C 12/1/10 DUE 06/01/2015 RATE 4.000	REG INT ON 250000 BND PAYABLE 12/01/10		6,527.75	6,527.75
2/01/10		LOUISIANA CITIZENS PPTY INS CORP ASSMT REV SER B AMBAC B/E DD 4/11/06F/C 12/1/06- DUE 06/01/2016 RATE 5.000	REG INT ON 25000 BND PAYABLE 12/01/10		625.00	625.00

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Total

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\$ 46.582.09

December 1 - December 31, 2010

\$ 8,434,35

		JOHN F. TERWILLIGER		Account number	8 029
nterest credited conti Date	nued Description	Comment	Taxable	Non-taxable	Amount
12/15/10	LAS VEGAS NEV REDEV AGY TAX INCREMENT REV SER A B/E REV OID DD 3/26/09 DUE 06/15/2019 RATE 7.000	REG INT ON 25000 BND PAYABLE 12/15/10		\$ 875.00	\$ 875.00
12/15/10	NEW JERSEY ECON DEV AU CIGARETTE TAX REV B/E DD 10/14/04 F/C 12/15/04 DUE 06/15/2019 RATE 5.625	REG INT ON 25000 BND PAYABLE 12/15/10		703.13	703.13
otal interest earned			\$ 0.00	\$ 18,549,63	\$ 18,549.63
CREDIT	Please retain this information for your recor	ds.			
Existing loans tem	Amount owe	d Interest charged this period		Interest	t charged this year
Portfolio CreditLine		\$ 8,434.35		. <u> </u>	\$ 46,582.09

Message: In the wake of extreme volume and volatility impacting the various debt markets, please be aware that security valuations reflected under the "Current Value" heading of your client statement and/or the "Market Value" of your account position page online, may not necessarily be reflective of actual market prices at which debt securities may be purchased or sold.

\$ 3.523.436.78

Statement valuations provided to us through our pricing sources may not necessarily be indicative of where you may ultimately be able to buy or sell a debt security due to various factors. These factors include, but are not limited to, liquidity of the specific security and overall market, trade size, general credit quality and independent credit ratings, security product attributes such as call provisions and other features disclosed in security prospectuses and debt covenants, supply/demand imbalances in the market, and general volatility attributable to the issuer or overall market in generally.

Message: Discontinuation of FMA Servicing at Citibank Financial Centers

Beginning January 27, 2011, FMA clients will no longer have access to the following services at Citibank locations: Deposit cash and checks into FMA at ATMs and tellers, Withdraw cash from FMA at tellers, Cash checks, Obtain cashier's checks, money orders, or traveler's checks, Redeem savings bonds, and Reset FMA Card PINs. ATM withdrawals are not impacted. ATM withdrawals will continue to be free at Citibank, MoneyPass, Publix and participating 7-Eleven ATMs.

Message: Forms 1099/Year End Summary mailing schedule: Your December brokerage statement will not include all the information you need to complete your tax returns. You should refer to your Forms 1099/Year End Summary to report your brokerage transactions on your tax returns. This year's Forms 1099/Year End Summary mailing will commence on or about February 9th, and is tentatively scheduled to be completed by February 15th. Forms 1099/YES for all e-delivery accounts will be available online within one day of the commencement of the mailing. If you are not enrolled in e-delivery and would like to take advantage of our online feature, so you will be able to view these important tax documents as soon as they are posted please contact your Financial Advisor.

Ref: 00015738 00119755

Reserved Client Financial Management Account

December 1 - December 31, 2010

JOHN F. TERWILLIGER

Account number

8 029

Message: Important information if you are a margin customer

If you have a margin account with us, as permitted by law we may use certain securities in your account for, among other things, settling short sales and lending the securities for short sales, and as a result may receive compensation in connection therewith.

Information regarding commissions and charges will be made available to you promptly upon request. Please advise Morgan Stanley Smith Barney of any material change in your financial objectives or financial situation. All checks written and deposited to your account must be made payable to Citigroup Global Markets Inc. A financial statement of Citigroup Global Markets Inc. is available for your personal inspection at its offices, or a copy of it will be mailed upon your written request. **If you believe there are any inaccuracies or discrepancies in your account, you must promptly contact Citigroup Global Markets Inc. at 212-723-9903 and the Manager of the branch servicing your account (see page 1 of statement for address and phone number).** To protect your rights, including any rights you may have under the Securities Investor Protection Act (SIPA), you should reconfirm all oral communication in writing to Morgan Stanley Smith Barney, Attention: Early Dispute Resolution Group, 485 Lexington Avenue, 14th Floor, New York, NY 10017.

Summary



H11000013301 311243AB01 WSC00068A

JOHN F. TERWILLIGER

served Client consolidation Summary

August 1 - August 31, 2011

Morgan Stanley Smith Barney LLC. Member SIPC.

Your Financial Advisor

John Fiorita and Vincent Roth

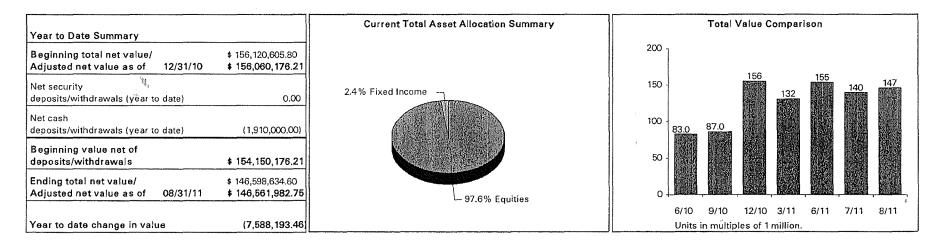


212 428 5200 Reserved Client Service Center: 800-423-7248 Branch Phone: 800 445 6529

Accounts carried by Citigroup Global Markets Inc. Member SIPC.

Enclosed are statements for the following accounts in your consolidated household. "Total Value Comparison" and "Year to Date Summary" may contain information for previously existing accounts which have been recently consolidated. Unpriced securities are not included in the "Net Value" columns. Unless otherwise indicated, values shown are for "This Period." Accrued interest and dividends, earned but not paid, are excluded from the Adjusted Net Value.

Account Abbreviated Number Name	Account Type	Total Value Prior Month/ Adj.Net Value		Net Securities Deposited/ Withdrawn	Net Capital Deposits/ Withdrawals	Total Income Taxable/ Non-Taxable	Unrealized Gain or (Loss)	Adjusted YTD Realized Gain or (Loss)
JOHN F. TERWILLIGER	RESERVED \$ 1 \$, ,	\$ 146,598,634.60 \$ 146,561,982.75	\$ 0.00	(\$ 150,000.00)	\$ 0.00 \$ 27,908.09	\$ 188,934.53	\$ 0.00 ST \$ 0.00 LT
Total	wards the second second second second second second second second	Service of the servic	\$ 146,598,634,60 \$ 146,561,982,75	\$ 0,00	(\$ 150,000.00)	\$ 0.00 \$ 27,908.09	\$ 188,934.53	\$ 0.00 ST \$ 0.00 LT





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Reserved Client Financial Management Account

August 1 - August 31, 2011

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H11000013301 311243AB01 WSC00068A JOHN F. TERWILLIGER

Ref: 00013301 00107274

Account number Morgan Stanley Smith Barney LLC. Member SIPC. Your Financial Advisor John Fiorita and Vincent Roth ONE NY PLAZA 36TH FLOOR NEW YORK NY 10004 212 428 5200 Website: www.smithbarney.com

Reserved Client Service Center: 800-423-7248 Branch Phone: 800 445 6529 TTY/TDD Deaf & Hard of hearing: 800-227-4238

Account carried by Citigroup Global Markets Inc. Member SIPC.

Account value	Last period	This period	%
Common stocks & options	\$ 142,228,421.56	\$ 148,662,561.06	97.62
Accrued interest on bonds/CDs	49,888.67	36,651.85	.02
Municipal bonds	3,601,085.90	3,586,754.25	2.36
Portfolio CreditLine	-5,584,134.23	-5,687,332.56	
Total value	\$ 140,295,261.90	\$ 146,598,634.60	100.00
Total value (excluding accrued interest)	\$ 140,245,373.23	\$ 146,561,982.75	
Portfolio CreditLine Additional Borrowing Power		\$ 3 527	.095.00

Cash, money fund, bank deposits	This period	This year
Opening balance	(\$ 5,584,134.23)	
Securities bought and other subtractions	0.00	
Securities sold and other additions	25,301.84	
Deposits	0.00	600,000.00
Withdrawals	0.00	0.00
Interest charged on loans	(6,106.42)	
Checks written	(150,000.00)	(2,510,000.00)
Interest credited	27,606.25	
Closing balance	(\$ 5,687,332.56)	
1.1		

		This period	This year		
Earnings summary	Taxable	Non-taxable	Taxable	Non-taxable	
Interest	\$ 0.00	\$ 27,606.25	\$ 0.00	\$ 141,787.51	
Accrued interest received	0.00	301.84	0.00	336.48	
Total	\$ 0.00	\$ 27,908.09	\$ 0.00	\$ 142,123.99	

A free credit balance in any securities account may be paid to you on demand. Although properly accounted for, these funds may be used for business purposes.

Portfolio summary	This period	This year		
Beginning total value (excl. accr. int.)	\$ 140,245,373.23	\$ 156,060,176.21		
Net security deposits/withdrawals	0.00	0.00		
Net cash deposits/withdrawals	(150,000.00)	(1,910,000.00)		
Beginning value net of deposits/withdrawals	140,095,373.23	154,150,176.21		
Total value as of 8/31/2011 (excl. accr. int.)	\$ 146,561,982.75	\$ 146,561,982.75		
Change in value	\$ 6,466,609.52	(\$ 7,588,193.46)		

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served Client rinancial Management Account

August 1 - August 31, 2011

an a	n an	J	OHN F. TERWILLIGER	Account number -	8 029
Gain/loss summary	This period	d This year			
Original Realized gain or (loss)	\$ 0.00				
Adjusted Realized gain or (loss)	0.00	0.00 LT 0.00 ST			
Unrealized gain or (loss) to date	188,934.53				

PORTFOLIO DETAILS

Your holdings are valued using the most current prices available to Citigroup Global Markets Inc. (CGMI). In most cases, these values are as of 08/31/11, but in some cases CGMI's sources are unable to provide timely information. To see the date of the most recent price update, please view your account online at www.smithbarney.com.

Securities purchased or sold are included or excluded in this section as of the trade-date. This section may include securities that have not settled as of this statement closing date. Please see the "Unsettled Purchases/Sales" section for more information. Dividend yield is the estimated annual income, assuming the current dividend, divided by the security's market price at the end of the statement period. We do not guarantee the accuracy of the prices reflected on the statement nor do these prices represent levels at which securities can be bought or sold. **Please Note:** unrealized gain/(loss) is being shown for informational purposes only and should not be used for tax preparation without the assistance of your tax advisor.

Common stocks & options

Quantity	Description	Symbol	Date acquired	Cost	Share cost	Current price	Current value	Unrealized gain/(loss)	Average % yield	Anticipated Income (annualized)
25,000	CHINA GERULADVANCED	СНОР		Please pro	ovide	\$ 3.78	\$ 94,500.00	Not available		
50,000	MATERIALS GROUP LTD		03/17/11	11,006.00	.22	3.78	189,000.00	177,994.00 ST		
9,900			03/18/11	3,523.47	.355	3.78	37,422.00	33,898.53 ST		
15,100			03/23/11	80,036.00	5.27	3.78	57,078.00	(22,958.00) ST		
100,000				94,565.47	1.261		378,000.00	188,934.53**		
8,616,186	HOUSTON AMERICAN ENERGY CORP. COMMON STCK RESTRICTED In safekeeping: 8,616,186			Please pro	ovide	17.21	148,284,561.06	Not available		
	non stocks and options			\$ 94,565.47			\$ 148,662,561.06	\$ 188,934.53**ST \$ 0.00**LT	0.00	\$ 0.00 ⁺

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Reserved Client Financial Management Account

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August 1 - August 31, 2011

JOHN F. TERWILLIGER Account number 8 029

Bonds

Unrealized gains & losses have been adjusted to account for the accretion of OID (original issue discount), the amortization of premium, and/or the accretion of market discount.

Call features shown indicate the next regularly scheduled call date and price. Your holdings may be subject to other redemption features including sinking funds or extraordinary calls.

The research rating for Moody's Investors Service and Standard & Poor's may be shown for certain fixed income securities. All research ratings represent the "opinions" of the research provider and are not representations or guarantees of performance. Your Financial Advisor will be pleased to provide you with further information or assistance in interpreting research ratings.

Municipal bonds

Amoun	t Description	Date acquired/ CUSIP #	Cost/ Adjusted cost	Share cost/ Adjusted share cost	Current share price/Accrued Interest	Un Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income/ Capital gain/(loss)
10,000	MICHIGAN ST STRATEGIC FD AMT LTD OBILG REV RFDG DET ED PLT CTL-C B/E D9/3/99I/F9/1/01 INT: 05.650% MATY: 09/02/2011 Prerefunded bond Orig maturity: 09/01/29 Prerefunded price: \$ 100.000 Rating: A2/A	59469C2X0		Please provide	100.013 \$ 282.50	\$ 10,001.30	Not available	5.649 \$ 585.00	\$ 0.00 \$ 0.00
30,000	LEESBURG FLA HOSP REV RFDG-LEESBURG REGL MED CTR PJ B/E DD6/26/03FC1/1/04 INT: 04.000% MATY: 07/01/2013 Rating: BAA1/BBB +	524360EZ3		Please provide	102.145 200.00	30,643.50	Not available	3.916 1,200.00	0.00 0.00
25,000	INDIO CALIF REDEV AGY TAX ALLOC SUB-RFDG-MERGED REDEV PJ B/E REV DD 5/8/08 INT: 04.000% MATY: 08/15/2014 Rating: S&P BBB +	455719BX1		Please provide	99.668 44.44	24,917.00	Not available	4.013 1,000.00	0.00 0.00
125,000	RICHMOND CALIF CMNTY REDEV AGY TAX ALLOC RFDG-SUB-MERGED PJ B/E REV OID D4/22/10 F/C9/1/10 INT: 03.250% MATY: 09/01/2014 Rating: S&P A	764424BL0		Please provide	103.10 2,031.25	128,875.00	Not available	3.152 4,062.50	0.00 0.00
25,000	SAN JACINTO CALIF CMNTY FACS DIST SPL TAX RFDG-NO 2-SER A B/E DD 10/10/02 F/C 3/1/03 INT: 04.800% MATY: 09/01/2014 Rating: S&P BBB +	797834BD9		Please provide	106.937 600.00	26,734.25	Not available	4.488 1,200.00	0.00

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served Client

August 1 - August 31, 2011

a, i ni se se i i					JOHN F. TER	WILLIGER		ount number	8 029
Municipal	bonds continued								
Amour	nt Description	Date acquired/ CUSIP #	Cost/ Adjusted cost	Share cost/ Adjusted share cost	Current share price/Accrued Interest	Un Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(los
250,000	CITIZENS PPTY INS CORP FLA HIGH RISK-SR SECD-A-1 B/E REV DD 4/6/10 F/C 12/1/10 INT: 04.000% MATY: 06/01/2015 Rating: A2/A +	176553EL5		Please provide	104.899 \$ 2,500.00	\$ 262,247.50	Not available	3.813 \$ 10,000.00	\$ 0.00 \$ 0.00
150,000	RICHMOND CALIF CMNTY REDEV AGY TAX ALLOC RFDG-SUB-MERGED PJ B/E REV OID D4/22/10 F/C9/1/10 INT: 03.500% MATY: 09/01/2015 Rating: S&P A	764424BM8		Please provide	103.333 2,625.00	154,999.50	Not available	3.387 5,250.00	0.0 0.0
20,000	FOLSOM CALIF PUB FING AUTH REV RFDG-REASSESSMENT-PRAIRIE DIST B/E REV OID DD 7/30/08 INT: 04.250% MATY: 09/02/2015 Rating: S&P A	344393BN2		Please provide	106.56 422.64	21,312.00	Not available	3.988 850.00	0.0 0.0
20,000	PERRIS CALIF PUB FING AUTH REV RFDG-SER A B/E DD 6/28/01 INT: 05.350% MATY: 10/01/2015 Rating: S&P A	71437RBW3		Please provide	111.883 445.83	22,376.60	Not available	4.781 1,070.00	0.0 0.0
50,000	JACKSONVILLE FLA HEALTH FACS AUTH HEALTH FACS RE V BROOKS B/E REV OID DD 12/7/07 INT: 04.250% MATY: 11/01/2015 Rating: A2/A	469402EY3		Please provide	107.221 708.33	53,610.50	Not available	3.963 2,125.00	0.00 0.00
150,000	ADONEA MET DIST NO 2 COLO REV SER B M/S/F B.E DD 12/29/05 INT: 04.375% MATY: 12/01/2015 Rating: S&P A	00725PAA6		Please provide	97.254 1 ,640.63	145,881.00	Not available	4.498 6,562.50	0.00 0.00
30,000	CITIZENS PPTY INS CORP FLA SR SECD-HIGH ACT-A-1 B/E REV OID DD 5/7/09 INT: 05.375% MATY: 06/01/2016 Rating: A2/A +	176553EA9		Please provide	110.055 403.13	33,016.50	Not available	4.883 1,612.50	0.00 0.00
25,000	LOUISIANA CITIZENS PPTY INS CORP ASSMT REV SER B AMBAC B/E DD 4/11/06F/C 12/1/06- INT: 05.000% MATY: 06/01/2016 Rating: BAA1/A-	546456AY0		Please provide	107.34 312.50	26,835.00	Not available	4.658 1,250.00	0.00 0.00

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					JOHN F. TERWILLIGER A		Acc	ount number	8 029	
lunicipal	bonds continued			1997 - H. Saman, Andreas, 75, 77, 75, 75, 76, 76, 77, 77, 77, 77, 77, 77, 77, 77						
Amour	nt Description	Date acquired/ CUSIP #	Cost/	Share cost/ Adjusted share cost	Current share price/Accrued Interest	Uni Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(loss	
70,000	CONNECTICUT ST HEALTH & EDL FACS AUTH REV RFDG-HOSP FOR RADIAN AT B/E REV DD 6/28/07 INT: 05.250% MATY: 07/01/2016 Rating: S&P BBB-	20774UND3		Please provide	109.015 \$ 612.50	\$ 76,310.50	Not available	4.815 \$ 3,675.00	\$ 0.00 \$ 0.00	
50,000	MASSACHUSETTS ST HEALTH & EDL FACS AUTH REV UMASS MEM-SER B/E REV OID DD 5/27/10 INT: 04.000% MATY: 07/01/2016 Rating: BAA1/A-	57586EUX7		Please provide	102.83 333.33	51,415.00	Not available	3.889 2,000.00	0.0 0.0	
10,000	DIST OF COLUMBIA (WASHINGTON D.C.) BALLPARK REV SER B-1 FGIC B/E DD 5/15/06F/C8/1/06 INT: 05.000% MATY: 02/01/2017 Rating: A3/BBB Next call on 02/01/16 @ 100.000	25476WAT8		Please provide	108.813 41.67	10,881.30	Not available	4.595 500.00	0.0	
190,000	CITIZENS PPTY INS CORP FLA SR SECD-HIGH ACT-A-1 B/E REV OID DD 5/7/09 INT: 05.500% MATY: 06/01/2017 Rating: A2/A +	176553EE1		Please provide	109.958 2,612.50	208,920.20	Not available	5.001 10,450.00	0.0 0.0	
20,000	DIST OF COLUMBIA (WASHINGTON D.C.) BALLPARK REV SER B-1 FGIC B/E DD 5/45/06F/C8/1/06 INT: 05.000% MATY: 02/01/2018 Rating: A3/BBB Next call on 02/01/16 @ 100.000	25476WAU5		Please provide	107.476 83.33	21,495.20	Not available	4.652 1,000.00	0.0 0.0	
10,000	LOS ANGELES CALIF SANTN EQUIP CHARGE REV SER A FGIC B/E DD 7/7/05 INT: 05.000% MATY: 02/01/2018 Rating: AA2/AA Next call on 02/01/15 @ 100.000	54462PDN9		Please provide	111.546 41.67	11,154.60	Not available	4.482 500.00	0.0 0.0	
10,000	PUERTO RICO COMWLTH HWY&TRANSN AUTH TRANS REV BDS SER L B/E CIFG DD 10/4/05 F/C 1/1/06 INT: 05.250% MATY: 07/01/2018 Rating: AA3/AA +	745190UD8		Please provide	109.759 87.50	10,975.90	Not available	4.783 525.00	0.0 0.0	

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Served Client rinancial Management Account August 1 - August 31, 2011

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				JOHN F. TERV	VILLIGER		ount number	8 029
unicipal	bonds continued					n an	<u>ai</u>	
Amoun	nt Description	Date acquired/ CUSIP #	Share cost/ Cost/ Adjusted share Adjusted cost cost	Current share price/Accrued Interest	Ui Current value	nrealized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(los
10,000	ESCONDIDO CALIF REV CTFS PARTN WASTEWATER RFDG PROJ-SER A MBIA B/E OID D1/6/05FC9/1/05 INT: 04.125% MATY: 09/01/2018 Rating: BAA1/A + Next call on 09/01/14 @ 100.000	296344CH5	Please provide	103.691 \$ 206.25	\$ 10,369.10	Not available	3.978 \$ 412.50	\$ 0.0 \$ 0.0
10,000	ALABAMA 21ST CENTY AUTH TOB SETTLEMENT REV BOOK ENTRY DTD 12/1/01 F/C 6/1/02 INT: 05.750% MATY: 12/01/2018 Rating: BAA1/A- Next call on 12/01/11 @ 101.000	010652BM6	Please provide	101.424 143.75	10,142.40	Not available	5.669 575.00	0.0 0.0
25,000	LAS VEGAS NEV REDEV AGY TAX INCREMENT REV SER A B/E REV OID DD 3/26/09 INT: 07.000% MATY: 06/15/2019 Rating: S&P A	517732BP7	Please provide	117.196 369.44	29,299.00	Not available	5.972 1,750.00	0.0
10,000	NEW JERSEY ECON DEV AU CIGARETTE TAX REV B/E DD 10/14/04 F/C 12/15/04 INT: 05.625% MATY: 06/15/2019 Rating: BAA3/BBB Next call on 09/30/11 @ 100.000	645916532	Please provide	100.023 118.75	10,002.30	Not available	5.623 562.50	0.0 0.0
25,000	NEW JERSEY EQON DV AU REVHILL CREST HLTH SVC-0-CPN-5.70% C/A AMBAC BK ENT DTD 6/18/97 INT: 00.000% MATY: 01/01/2020 Rating: Moody A3	645905L65	Please provide	62.40	15,600.00	Not available		0.0 0.0
45,000	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 02/06/07 INT: 05.000% MATY: 02/15/2020 Rating: A2/A	777863AM3	Please provide	98.791 100.00	44,455.95	Not available	5.061 2,250.00	0.0 0.0
10,000	RIVERSIDE-QUINDARO BEND LEVEE DIST MO LEVEE DIST IMPT REV RADIAN AT B/E REV OID DD7/6/06 INT: 04.500% MATY: 03/01/2020 Rating: S&P BBB Next call on 03/01/17 @ 100.000	76926RAP6	Please provide	99.651 225.00	9,965.10	Not available	4.515 450.00	0.0 0.0

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Reserved Client Financial Management Account August 1 - August 31, 2011

				JOHN F. TEP	RWILLIGER	Acc	ount number	8 029
lunicipal	bonds continued			4-49-49-49-49-49-49-49-49-49-49-49-49-49	·			
Amoun	nt Description	Date acquired/ CUSIP #	Share cost Cost/ Adjusted st Adjusted cost cost		U Current value	nrealized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(los
10,000	PERRIS CALIF PUB FING AUTH REV TAX ALLOC-HSG LN-SER A B/E REV OID D4/22/10 FC10/1/10 INT: 05.000% MATY: 10/01/2020 Rating: S&P A	71437RHA5	Please pro	/ide 103.366 \$ 208.33	\$ 10,336.60	Not available	4.837 \$ 500.00	\$ 0.00 \$ 0.00
105,000	LANCASTER CALIF REDEV AGY TAX ALLOCATION COMB REDEV PROJ B/E REV OID DD 9/3/09 INT: 05.750% MATY: 08/01/2021 Rating: S&P BBB + Next call on 08/01/19 @ 100.000	513799WX0	Please pro	vide 98.292 503.12	103,206.60	Not available	5.849 6,037.50	0.00 0.00
100,000	INDIO CALIF REDEV AGY TAX ALLOC SUB-RFDG-MERGED REDEV PJ B/E REV DD 5/8/08 INT: 05.000% MATY: 08/15/2021 Rating: S&P BBB + Next call on 08/15/18 @ 100.000	455719CE2	Please pro	vide 94.155 222.22	94,155.00	Not available	5.31 5,000.00	0.00 0.00
50,000	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 2/6/07 F/C 8/15/07 INT: 05.000% MATY: 02/15/2022 Rating: A2/A	777863AP6	Please pro	vide 94.909 111.11	47,454.50	Not available	5.268 2,500.00	0.00 0.00
10,000	ILLINOIS FIN AUTH REV FOR ISSUES DTD PRIOR TO 09 /27/07 B/E REV DD 5/15/08 INT: 05.500% MATY: 08/15/2022 Rating: S&P A- Next call on 08/15/18 @ 100.000	45200FGL7	Please pro	/ide 107.351 24.44	10,735.10	Not available	5.123 550.00	0.00
100,000	RICHMOND CALIF CMNTY REDEV AGY TAX ALLOC RFDG-SUB-MERGED PJ B/E REV OID D4/22/10 F/C9/1/10 INT: 05.625% MATY: 09/01/2022 Rating: S&P A Next call on 09/01/20 @ 100.000	764424BU0	Please pro	/ide 107.867 2,812.50	107,867.00	Not available	5.214 5,625.00	0.00
40,000	HOUSTON TEX IDC REV SR AIR CARGO-AMT-OID B/E DD 3/26/02 F/C 7/1/02 INT: 06.375% MATY: 01/01/2023 Rating: Moody BA2 Next call on 01/01/12 @ 101.000	442406AC8	Please pro	vide 87.82 425.00	35,128.00	Not available	7.259 2,550.00	0.00

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			na a landi gaarta na saraa sana a	JOHN F. TERV	WILLIGER		ount number	8 029
lunicipal	bonds continued							
Amour	nt Description	Date acquired/ CUSIP #	Share cost/ Cost/ Adjusted share Adjusted cost cost	Current share price/Accrued Interest	Uni Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(loss
15,000	MORENO VALLEY CALIF UNI SCH DIST CTFS PARTN RFDG FSA B/E DD 01/20/2005 INT: 05.000% MATY: 03/01/2023 Rating: AA3/AA + Next call on 03/01/14 @ 100.000	616872FN2	Please provide	103,428 \$ 375.00	\$ 15,514.20	Not available	4.834 \$ 750.00	\$ 0.00 \$ 0.00
200,000	INDIO CALIF REDEV AGY TAX ALLOC SUB-RFDG-MERGED REDEV PJ B/E REV OID DD 5/8/08 INT: 05.000% MATY: 08/15/2023 Rating: S&P BBB + Next call on 08/15/18 @ 100.000	455719CG7	Please provide	90.756 444.44	181,512.00	Not available	5.509 10,000.00	0.0 0.0
100,000	RICHMOND CALIF CMNTY REDEV AGY TAX ALLOC RFDG-SUB-MERGED PJ B/E REV OID D4/22/10 F/C9/1/10 INT: 05.750% MATY: 09/01/2023 Rating: S&P A Next call on 09/01/20 @ 100.000	764424BV8	Please provide	107.33 2,875.00	107,330.00	Not available	5.357 5,750.00	0.0 0.0
300,000	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 02/06/2007 INT: 05.000% MATY: 02/15/2024 Rating: A2/A	777863AR2	Please provide	93.382 666.67	280,146.00	Not available	5.354 15,000.00	0.0 0.0
100,000	MISSISSIPPI DEV BK SPL OBLIG CAP PJS & EQUIP ACQUISITION-A1 AMBAC B/E DTD 5/27/99 INT: 05.875% MATY: 07/01/2024	605343TS1	Please provide	97.401 979.17	97,401.00	Not available	6.031 5,875.00	0.0 0.0
50,000	PUERTO RICO ELEC PWR AUTH PWR REV RFDG-SER VV MSF FGIC INSD B/E DD 5/30/07 INT: 05.250% MATY: 07/01/2024 Rating: A3/BBB +	74526QPH9	Please provide	106.141 437.50	53,070.50	Not available	4.946 2,625.00	0.00
25,000	SAUGUS / HART SCH FACS FING AUTH LEASE REV SER B B/E REV OID D5/26/10 F/C9/1/10 INT: 05.000% MATY: 09/01/2024 Rating: A1/A Next call on 09/01/15 @ 100.000	80420PBK3	Please provide	102.116 625.00	25,529.00	Not available	4.896 1,250.00	0.00 0.00

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Next call on 09/30/11 @ 100.000

Reserved Client Financial Management Account

August 1 - August 31, 2011

JOHN F. TERWILLIGER

Municipal bonds continued Date Share cost/ Current share Unrealized Gain/(loss) Current % Yield/ acquired/ Adjusted share price/Accrued Original/ Cost/ Current Anticip. Income Ordinary Income/ Amount Description CUSIP # Adjusted cost cost Interest Adjusted Capital gain/(loss) value (annualized) 10,000 ROSEVILLE CALIF NAT GAS FING 92.585 \$ 9.258.50 5.40 \$ 0.00 Please provide Not available AUTH GAS REV B/E DD 02/06/2007 777863AS0 \$ 22.22 \$ 500,00 \$ 0.00 INT: 05.000% MATY: 02/15/2025 Rating: A2/A 75,000 CLARK CNTY NEV IMPT DIST SPL 75,501.00 4.47 0.00 100.668 Please provide Not available LOC IMPT DIST NO 112 281.25 3,375.00 0.00 181003KD5 B/E BARREL OID DD 5/13/08 INT: 04.500% MATY: 08/01/2025 Rating: AA1/AA + Next call on 08/01/17 @ 100.000 140.000 ROSEVILLE CALIF NAT GAS FING Please provide 92.24 129,136.00 Not available 5.42 0.00 AUTH GAS REV B/E 777863AT8 311.11 7,000.00 0.00 DD 2/6/07 F/C 8/15/07 INT: 05.000% MATY: 02/15/2026 Rating: A2/A 95,000 MASSACHUSETTS EDL FING AUTH ED 105.954 100,656.30 4.907 0.00 Please provide Not available LN REV RFDG-ISSUE I-SER A 823.33 4,940.00 0.00 57563RHM4 B/E REV OID DD 2/18/10 INT: 05.200% MATY: 01/01/2027 Rating: S&P AA Next call on 01/01/20 @ 100.000 50,000 PUERTO RICO AQUEDUCT & SEWER 50,806.50 4.92 0.00 101.613 Please provide Not available AUTH RV BDS SR A BK/ENTRY 416.67 2.500.00 0.00 745160PZ8 DTD 3/18/08 F/07/01/08 INT: 05.000% MATY: 07/01/2028 Rating: AA3/AA + Next call on 07/01/18 @ 100.000 60,000 MATAGORDA CNTY TEX NAV DIST #1 103.291 61,974.60 4.961 0.00 Please provide Not available **REV HOUSTON LTG AMT AMBAC** 1.025.00 3.075.00 0.00 57652TAV9 BK/ENT DTD 1/15/97 INT: 05.125% MATY: 11/01/2028 Rating: A3/BBB+ 80,000 SAN JOAQUIN HILLS CA TRAN CORR 79.542 63,633.60 6.757 0.00 Please provide Not available AGY TOLL RD REF REV SER A-MBIA 798111DS6 549.44 4,300.00 0.00 B/E OID DD 9/1/97 F/C 7/15/98 INT: 05.375% MATY: 01/15/2029 Rating: BAA1/BBB

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Account number

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served Client , nancial Management Account August 1 - August 31, 2011

			and a second	JOHN F. TERV	WILLIGER	Acc	ount number	8 029
Municipal	bonds continued			9 Mi - William ann an 19 Mi - Mi - Ann an				
Amour	nt Description	Date acquired/ CUSIP #	Share cost/ Cost/ Adjusted share Adjusted cost cost	Current share price/Accrued Interest	Un Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income/ Capital gain/(loss)
20,000	LOS ANGELES CNTY CALIF MTA SALES TAX REV PROPA 1ST TIER SR-A-AMBAC B/E D7/13/05 OID INT: 04.375% MATY: 07/01/2029 Rating: AA2/AAA Next call on 07/01/15 @ 100.000	544712XV9	Please provide	101.28 \$ 145.83	\$ 20,256.00	Not available	4.319 \$ 875.00	\$ 0.00 \$ 0.00
50,000	HARRIS CNTY TEX MUN UTIL DIST U/T RADIAN AT B/E GO OID DD 3/1/07 INT: 04.375% MATY: 09/01/2029 Rating: S&P BBB Next call on 09/01/15 @ 100.000	413957DX6	Please provide	88.662 1,093.75	44,331.00	Not available	4.934 2,187.50	0.00 0.00
100,000	SAN JOAQUIN HILLS CA TRAN CORR AGY TOLL RD RV RFDG-A-MBIA B/E OID DD 9/1/97 F/C 7/15/98 INT: 05.250% MATY: 01/15/2030 Rating: BAA1/BBB Next call on 09/30/11 @ 100.000	798111CD0	Please provide	76.924 670.83	76,924.00	Not available	6.824 5,250.00	0.00 0.00
50,000	LOUISIANA LOC GOVT ENVIRMNTL FACS & CMNTY DEV AU REV CAP PJ & EQUIP AMBAC B/E DD7/13/00 INT: 06.300% MATY: 07/01/2030	546279GL8	Please provide	99.716 525.00	49,858.00	Not available	6.317 3,150.00	0.00 0.00
, 40,000	PUERTO RICO HWYS & TSPTN AU TSPTN REV REF SER N AMBAC B/E DD 3/6/07 F/C 7/1/07 INT: 05.250% MATY: 07/01/2030 Rating: BAA1/BBB	745190ZM3	Please provide	96.628 350.00	38,651.20	Not available	5.433 2,100.00	0.00 0.00
40,000	E-470 PUB HWY AUTH COLO REV SR-SER B-0-CPN C/A 6.32%MBIA B/E DD 5/10/00 INT: 00.000% MATY: 09/01/2030 Rating: BAA1/BBB	26822LDW1	Please provide	27.812	11,124.80	Not available		0.00 0.00
50,000	NEW YORK CITY IDA PILOT BDS (QUEENS BASEBALL STAD PJ)AMBAC B/E DD 8/22/06 F/C 1/1/07 INT: 05.000% MATY: 01/01/2031 Rating: BA1/BB + Next call on 01/01/17 @ 100.000	64971PDX0	Please provide	90.874 416.67	45,437.00	Not available	5.502 2,500.00	0.00 0.00

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Ref: 00013301 00107284

Reserved Client Financial Management Account August 1 - August 31, 2011

		,		JOHN F. TERV	WILLIGER	Acc	ount number	8 02
inicipal	bonds continued						-	
Amoun	nt Description	Date acquired/ CUSIP #	Share cost/ Cost/ Adjusted share Adjusted cost cost	Current share price/Accrued Interest	Un Current value	realized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Incom Capital gain/(los
90,000	MIAMI-DADE CO FLA SUB SPL OBL -A-0-CPN C/A 5.19 MBIA B/E DD 6/16/2005 INT: 00.000% MATY: 10/01/2031 Rating: A2/A + Next call on 10/01/15 @ 44.051	59333NKM4	Please provide	25.382	\$ 22,843.80	Not available		\$ 0.0 \$ 0.0
40,000	HAWAII ST DEPT B&F SPL PURP REV HAWAIIAN ELEC CO-A-AMT AMBAC B/E OID D9/1/02FC3/1/03 INT: 05.100% MATY: 09/01/2032 Rating: BAA1/BBB- Next call on 09/01/12 @ 100.000	419800EH6	Please provide	91.564 1,020.00	36,625.60	Not available	5.569 2,040.00	0.0 0.0
10,000	CHI ILL O HARE INTL ARPT- REV RFDG-GEN-AIRPORT-3RD XLCAP LIEN-C-1 B/E DD 8/21/03 INT: 05.250% MATY: 01/01/2034 Rating: A1/A- Next call on 01/01/14 @ 100.000	167592XN9	Please provide	100.384 87.50	10,038.40	Not available	5.229 525.00	0.0 0.4
50,000	SAN ANTONIO TEX CVT CTR HTL FIN CRP CONT REV AMT -A-AMBAC B/E DD 5/15/05 F/C 7/15/05 INT: 05.000% MATY: 07/15/2034 Rating: BAA2/BBB Next call on 07/45/15 @ 100.000	796245AA6	Please provide	87.75 319.44	43,875.00	Not available	5.698 2,500.00	0.0 0.0
10,000	FOOTHILL/EASTERN TRANSN CORRDR AGY CALIF TOLL RD REV SR LIEN -A-B/E OID D5/15/95FC1/1/96 INT: 05.000% MATY: 01/01/2035 Rating: BAA3/BBB- Next call on 09/30/11 @ 100.000	345105AH3	Please provide	81.28 83.33	8,128.00	Not available	6.151 500.00	0.0
20,000	FOOTHILL/EASTERN TRANS CORRDR AGY CALIF TOLL RD REV SR LIEN -A-OID-IBC- MBIA DTD 5/15/95 INT: 05.000% MATY: 01/01/2035 Rating: BAA1/BBB Next call on 09/30/11 @ 100.000	345105FR6	Please provide	81.28 166.67	16,256.00	Not available	6.151 1,000.00	0.0

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August 1 - August 31, 2011

					JOHN F. TER	WILLIGER	Acco	ount number	8 029
Aunicipal	bonds continued							······	
Amoun	nt Description	Date acquired/ CUSIP #	Share o Cost/ Adjuste Adjusted cost cost	cost/ ed share	Current share price/Accrued Interest	Ur Current value	nrealized Gain/(loss) Original/ Adjusted	Current % Yield/ Anticip. Income (annualized)	Ordinary Income Capital gain/(loss
25,000	SAN ANTONIO TEX CVT CTR HTL FIN CRP CONT REV AMT -A-AMBAC B/E D5/15/05 F/C 7/15/05-OID INT: 04.750% MATY: 07/15/2036 Rating: BAA2/BBB Next call on 07/15/15 @ 100.000	796245AB4	Please	provide	83.161 \$ 151.74	\$ 20,790.25	Not available	5.711 \$ 1,187.50	\$ 0.00 \$ 0.00
10,000	MIAMI-DADE CNTY FLA AVIATION REV MIAMI INTL ARPT-SER A AMT XLCA B/E DD 11/02/2005 INT: 04.875% MATY: 10/01/2036 Rating: A2/A- Next call on 10/01/15 @ 100.000	59333PJV1	Please	provide	91.355 203.13	9,135.50	Not available	5.336 487.50	0.00 0.00
10,000	NEW JERSEY EDA WTR FACS REV N J-AMERICAN WTR CO INC SER A AMT-FGIC B/E DTD 7/1/98 INT: 05.250% MATY: 07/01/2038 Rating: S&P A Next call on 01/01/12 @ 100.000	645780DT1	Please	provide	96.915 87.50	9,691.50	Not available	5.417 525.00	0.00 0.00
otal munic	sipal bonds	an an an tao an	\$ 0.00		\$ 36,651.85	\$ 3,586,754.25	\$ 0.00** ST	4,90	
,735,000			\$ 0.00				\$ 0.00** LT	\$ 175,927.50	\$ 0.00
otal portfo	blio value		\$ 94,565.47			152,249,315,31	\$ 188,934.53** ST \$ 0.00** LT	,11 \$ 175,927.50	\$ 0.00 \$ 0.00

**Unrealized Gain/Loss is only calculated when an original cost basis is available.

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TRANSACTION DETAILS All transactions appearing are based on trade-date. Investment activity Activity Price Date Description Quantity Amount 08/01/11 Part call \$ 107.81 NEW JERSEY ECON DEV AU CIGARETTE TAX REV B/E DD 10/14/04 F/C 12/15/04 DUE 06/15/2019 RATE 5.625 ACCRUED INT REC \$ 107.81 15,000.00 08/01/11 Part call NEW JERSEY ECON DEV AU -15,000 CIGARETTE TAX REV B/E DD 10/14/04 F/C 12/15/04 DUE 06/15/2019 RATE 5.625

Ref: 00013301 00107286

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Reserved Client Financial Management Account August 1 - August 31, 2011

				JOHN F. TE	RWILLIGE	र	Account number	8 02
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ate	Activity	Description		Quai	ntity	Price		Amoun
08/08/11	Full call	PLEASANTS CO W VA PCR						\$ 194.03
		COMMN-POTOMAC ED-E-A	MBAC					
		MBIA B/E DD 4/1/99 DUE 04/01/2029 RATE 5.500	n					
		ACCRUED INT REC \$ 194.03						
8/08/11	Full call	PLEASANTS CO W VA PCR	CO-AMT	- 10,000				10,000.00
		COMMN-POTOMAC ED-E-A	MBAC					
		MBIA B/E DD 4/1/99						
		DUE 04/01/2029 RATE 5.500	D	<u>,</u>				
otal securities bought a otal securities sold and		18						\$ 0.00 \$ 25,301.84
otal accrued interest rece	ved							301.84
1 1- 1- 1-								
hecks written								
Account number ****	** 4909 0:4:6	L						
Account number	~4203 - Cilibani	K NA						
							· · · · · · · · · · · · · · · · · · ·	
			Tracking	Chock Data	Data			Tracking
Check Date Date o. written cleare	d Description	Т	Tracking	Check Date no. written	Date	Description		Tracking code Amount
heck Date Date p. written cleare		Т				Description		Tracking code Amount
check Date Date o. written cleare		Т	ode Amount		cleared	Description		
heck Date Date o. written cleare 1009 08/08/11 08/09/	11 SCOTTRADE	Т	ode Amount	no. written	cleared	Description		code Amount
heck Date Date b. written cleare 1009 08/08/11 08/09/ nterest charged on lo	11 SCOTTRADE	Т	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00
heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on lo ate Description	11 SCOTTRADE	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00 Amoun
heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on lo ate Description 8/22/11 INTEREST CH/	11 SCOTTRADE	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00
heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on lo ate Description 8/22/11 INTEREST CH/ FROM 7/21 TH	۱۱ SCOTTRADE مورم مراجع RGED FOR 32 DAY(S	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00 Amoun
heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on lo ate Description 8/22/11 INTEREST CH/ FROM 7/21 TH CLOSING BAL	11 SCOTTRADE aps RGED FOR 32 DAY(S IRU 8/21 @ 1.221%	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00 Amoun
heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on Io ate Description 3/22/11 INTEREST CH/ FROM 7/21 TH CLOSING BAL	11 SCOTTRADE ans ARGED FOR 32 DAY(S IRU 8/21 @ 1.221% ANCE 5,681,226	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00 Amoun
heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on Io ate Description 3/22/11 INTEREST CH/ FROM 7/21 TH CLOSING BAL	11 SCOTTRADE ans ARGED FOR 32 DAY(S IRU 8/21 @ 1.221% ANCE 5,681,226	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00 Amoun
heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on Io ate Description B/22/11 INTEREST CH/ FROM 7/21 TH CLOSING BAL	11 SCOTTRADE ans ARGED FOR 32 DAY(S IRU 8/21 @ 1.221% ANCE 5,681,226	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00 Amoun
heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on Io ate Description B/22/11 INTEREST CH/ FROM 7/21 TH CLOSING BAL	11 SCOTTRADE ans ARGED FOR 32 DAY(S IRU 8/21 @ 1.221% ANCE 5,681,226	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00 Amoun
heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on lo ate Description 8/22/11 INTEREST CH/ FROM 7/21 TH CLOSING BAL	11 SCOTTRADE ans ARGED FOR 32 DAY(S IRU 8/21 @ 1.221% ANCE 5,681,226	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00 Amoun
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heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on Io ate Description 3/22/11 INTEREST CH/ FROM 7/21 TH CLOSING BAL	11 SCOTTRADE ans ARGED FOR 32 DAY(S IRU 8/21 @ 1.221% ANCE 5,681,226	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00 Amoun
heck Date Date b. written cleare 009 08/08/11 08/09/ terest charged on lo ate Description 8/22/11 INTEREST CH/ FROM 7/21 TH CLOSING BAL	11 SCOTTRADE ans ARGED FOR 32 DAY(S IRU 8/21 @ 1.221% ANCE 5,681,226	T	ode Amount	no. written	cleared	Description		code Amount \$ 150,000.00 Amoun
heck Date Date b. written cleare 1009 08/08/11 08/09/ Interest charged on Io ate Description 3/22/11 INTEREST CH/ FROM 7/21 TH CLOSING BAL	11 SCOTTRADE ans ARGED FOR 32 DAY(S IRU 8/21 @ 1.221% ANCE 5,681,226	T	ode Amount	no. written	cleared	Description	· · · · · · · · · · · · · · · · · · ·	code Amount \$ 150,000.00 Amoun

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Salah () - E Salah (Maraka) () - Salah Salah () - Salah ()	andere andere er op opper viewe er en en er en er	JOHN F. TERWILLIGER	in an an ann an Anna an	Account number	8 029
EARNINGS DETAILS	The tax status of earnings is reliable to the be securities, not of your account	st of our knowledge. Taxable and non-taxable	designations refe	r to the federal income tax st	atus of your
Interest credited Date	Description	Comment	Taxable	Non-taxable	Amount
08/01/11	CLARK CNTY NEV IMPT DIST SPL LOC IMPT DIST NO 112 B/E BARREL OID DD 5/13/08 DUE 08/01/2025 RATE 4.500	REGINT ON 75000 BND PAYABLE 08/01/11		\$ 1,687.50	\$ 1,687.50
08/01/11	DIST OF COLUMBIA (WASHINGTON D.C.) BALLPARK REV SER B-1 FGIC B/E DD 5/15/06F/C8/1/06 DUE 02/01/2017 RATE 5.000	REG INT ON 10000 BND PAYABLE 08/01/11		250.00	250.00
08/01/11	DIST OF COLUMBIA (WASHINGTON D.C.) BALLPARK REV SER B-1 FGIC B/E DD 5/15/06F/C8/1/06 DUE 02/01/2018 RATE 5.000	REG INT ON 20000 BND PAYABLE 08/01/11		500.00	500.00
08/01/11	LANCASTER CALIF REDEV AGY TAX ALLOCATION COMB REDEV PROJ B/E REV OID DD 9/3/09 DUE 08/01/2021 RATE 5,750	REG INT ON 105000 BND PAYABLE 08/01/11		3,018.75	3,018.75
08/01/11	LOS ANGELES CALIF SANTN EQUIP CHARGE REV SER A FGIC B/E DD 7/7/05 DUE 02/01/2018 RATE 5.000	REG INT ON 10000 BND PAYABLE 08/01/11		250.00	250.00
08/15/11	ILLINOIS FIN AUTH REV FOR ISSUES DTD PRIOR TO 09 /27/07 B/E REV DD 5/15/08 DUE 08/15/2022 RATE 5.500	REG INT ON 10000 BND PAYABLE 08/15/11	-	275.00	275.00
08/15/11	INDIO CALIF REDEV AGY TAX ALLOC SUB-RFDG-MERGED REDEV PJ B/E REV DD 5/8/08 DUE 08/15/2014 RATE 4.000	REG INT ON 25000 BND PAYABLE 08/15/11	1	500.00	500.00
08/15/11	INDIO CALIF REDEV AGY TAX ALLOC SUB-RFDG-MERGED REDEV PJ B/E REV DD 5/8/08 DUE 08/15/2021 RATE 5.000	REG INT ON 100000 BND PAYABLE 08/15/11		2,500.00	2,500.00
08/15/11	INDIO CALIF REDEV AGY TAX ALLOC SUB-RFDG-MERGED REDEV PJ B/E REV OID DD 5/8/08 DUE 08/15/2023 RATE 5.000	REG INT ON 200000 BND PAYABLE 08/15/11		5,000.00	5,000.00
08/15/11	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 02/06/07 DUE 02/15/2020 RATE 5.000	REG INT ON 45000 BND PAYABLE 08/15/11	3	1,125.00	1,125.00

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Reserved Client Financial Management Account

August 1 - August 31, 2011

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Interest credited continued Date Description		Comment	Taxable	Taxable Non-taxable	
08/15/11	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 2/6/07 F/C 8/15/07 DUE 02/15/2022 RATE 5.000	REG INT ON 50000 BND PAYABLE 08/15/11		\$ 1,250.00	\$ 1,250.00
08/15/11	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 02/06/2007 DUE 02/15/2024 RATE 5.000	REG INT ON 300000 BND PAYABLE 08/15/11		7,500.00	7,500.00
08/15/11	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 02/06/2007 DUE 02/15/2025 RATE 5.000	REG INT ON 10000 BND PAYABLE 08/15/11		250.00	250.00
08/15/11	ROSEVILLE CALIF NAT GAS FING AUTH GAS REV B/E DD 2/6/07 F/C 8/15/07 DUE 02/15/2026 RATE 5.000	REG INT ON 140000 BND PAYABLE 08/15/11		3,500.00	3,500.00
Total interest earned			\$ 0.00	\$ 27,606,25	\$ 27,606.25

GAIN/LOSS DETAILS

Please note, this material is being prepared for informational purposes only and should not be used for tax preparation without the assistance of your tax advisor. Absent specific instructions from you, trades are allocated using the FIFO (first-in/first-out) method. Day traders should therefore not rely on this section for day trading results. Your reinvestment activity has been summarized. Single lines have been designated to distinguish Short-term (ST) or Long-term (LT) information. Detailed information will be available at year-end in your 1099 Year-end summary.

Realized gain or loss 🦄

Description	Original Trade Date/ Closing Trade Date Quantity	Cost basis/ Purchase price/ Adjusted basis Adjusted price	Sale price/ Proceeds	Original Realized gain/(loss)	Adjusted Realized gain/(loss)	Capital gain/(loss)/ Ordinary Income
NEW JERSEY ECON DEV AU	15,000	Please provide	٤	Not available	Not available	\$ 0.00
CIGARETTE TAX REV	08/01/11 Redemption		15,000.00			\$ 0.00
B/E DD 10/14/04 F/C 12/15/04						
DUE 06/15/2019 RATE 5.625						

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August 1 - August 31, 2011

				JOHN F. TERWIL	LIGER		ount number	8 02
Realized gain or loss continued								
Description	Original Trade Date/ Closing Trade Date	Quantity	Cost basis/ Adjusted basis	Purchase price/ Adjusted price	Sale price/ Proceeds	Original Realized gain/(loss)	Adjusted Realized gain/(loss)	Capital gain/(loss)/ Ordinary Income
PLEASANTS CO W VA PCR CO-AMT COMMN-POTOMAC ED-E-AMBAC MBIA B/E DD 4/1/99 DUE 04/01/2029 RATE 5.500	08/08/11 Redemption	10,000		Please provide	10,000.00	Not available	Not available	\$ 0.00 \$ 0.00
Total realized gain or (loss) this period	**		\$ 0.00		\$ 0.00	\$ 0.00	\$ 0,00	1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -
Total Long Term year-to-date						\$ 0.00	\$ 0.00	
Total Short Term year-to-date						\$ 0.00	\$ 0.00	
Total realized gain or (loss) year-to-da	te		\$ 0.00		\$ 0,00	\$ 0.00	\$ 0.00	

CREDIT Plea	e retain this information for your records.		
Existing loans Item	Amount owed	Interest charged this period	Interest charged this year
Portfolio CreditLine		\$ 6,106.42	\$ 41,954.30
Total	\$ 5,687,332.56	\$ 6,106.42	\$ 41,954.30

Message: On June 17, 2011, the Western Asset Institutional Money Market Fund was reorganized into the Western Asset Institutional Liquid Reserves fund. As a result, all Morgan Stanley Smith Barney managed accounts enrolled in the Bank Deposit Program ("BDP") will now receive an interest rate based on the following criteria: Accounts with \$10 million or greater in a Statement Consolidation Plus Relationship (a group of accounts within the same household that have the same address) will receive the \$10 million and above interest rate tier or the Western Asset Institutional Liquid Reserves 7 day yield, whichever is greater. Accounts with less than \$10 million in a BDP Pricing Group will receive the \$1 million to \$9,999,999.99 interest rate tier or the Western Asset Institutional Liquid Reserves 7 day yield, whichever is greater. Please note that this change only affects Morgan Stanley Smith Barney managed accounts will remain unaffected.

Message: Please be aware that security valuations reflected under the "Current Value" heading of your client statement and/or the "Market Value" of your account position page online, may not necessarily be reflective of actual market prices at which debt securities may be purchased or sold.

Statement valuations provided to us through our pricing sources may not necessarily be indicative of where you may ultimately be able to buy or sell a debt security due to various factors. These factors include, but are not limited to, liquidity of the specific security and overall market, trade size, general credit quality and independent credit ratings, security product attributes such as call provisions and other features disclosed in security prospectuses and debt covenants, supply/demand imbalances in the market, and general volatility attributable to the issuer or overall market in general.

Reserved Client Financial Management Account

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August 1 - August 31, 2011

JOHN F. TERWILLIGER

Account number

Message: Notice Regarding the Order Protection Rule

MorganStanley

SmithBarnev

The following is being provided to you in light of the pending effectiveness of FINRA Rule 5320, the Order Protection Rule, a copy of which can be obtained at www.finra.org/.

Consistent with our current practices and with the exceptions permitted under FINRA Rule 5320, we and our trade routing destinations may trade principally at prices that would satisfy your equity trading order through our and their use of internal controls, such as information barriers, that operate to prevent a trading unit that handles principal positions from obtaining knowledge of customer orders handled by a separate trading unit.

With respect to certain "Not Held" large orders (orders for more than 10,000 shares and \$100,000), the same internal controls may not be available. For these orders you may instruct us that you do not wish us or our routing destinations to trade principally along side your order. Such instruction will limit the range of execution alternatives that we are able to offer.

Additional information regarding the handling of your equity orders and our business practices in light of the Order Protection Rule is available online at www.morganstanleyindividual.com/customerservice/disclosures/.

Message: Important information if you are a margin customer

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If you have a margin account with us, as permitted by law we may use certain securities in your account for, among other things, settling short sales and lending the securities for short sales, and as a result may receive compensation in connection therewith.

Information regarding commissions and charges will be made available to you promptly upon request. Please advise Morgan Stanley Smith Barney of any material change in your financial objectives or financial situation. All checks written and deposited to your account must be made payable to Citigroup Global Markets Inc. A financial statement of Citigroup Global Markets Inc. is available for your personal inspection at its offices, or a copy of it will be mailed upon your written request. **If you believe there are any inaccuracies or discrepancies in your account, you must promptly contact Citigroup Global Markets Inc. at 212-723-9903 and the Manager of the branch servicing your account (see page 1 of statement for address and phone number).** To protect your rights, including any rights you may have under the Securities Investor Protection Act (SIPA), you should reconfirm all oral communication in writing to Morgan Stanley Smith Barney, Attention: Early Dispute Resolution Group, 485 Lexington Avenue, 14th Floor, New York, NY 10017.

Affidavit of David Snow

BEFORE ME the undersigned authority on this day personally appeared David G. Snow, who, after being duly sworn, on oath deposes and says:

1. My name is David G. Snow.

2. I am over the age of 18 and am a resident of the state of New Jersey. I have personal knowledge of the facts herein, and, if called as a witness, could testify completely thereto.

3. I have followed energy stocks for institutional investors since 1969 and continue to do so.

4. At all times since 1992, I have owned and operated Energy Equities, Inc.

5. Energy Equities, Inc. is based in Wayne, New Jersey.

6. In my business, I meet with Energy Company management and I take notes of my conversations with management that I then use to prepare my reports.

7. In February 2010, I had multiple telephone conversations (the "Conversations") with John F. Terwilliger, who I understood to be the Chief Executive Officer of Houston American Energy Corp. ("HUSA").

8. During the Conversations, Mr. Terwilliger described, among other things,

HUSA's investment in a prospect located in the Republic of Colombia that is known as the CPO-4 Block.

9. During the Conversations, I took handwritten notes (the "Notes"). A true and correct copy of the Notes is attached to this Affidavit as Exhibit 1.

10. The Notes are a contemporaneous record of the Conversations. To the best of my knowledge and understanding, the Notes accurately reflect statements made by Mr. Terwilliger during the Conversations.

PLAINTIFF'S EXHIBIT - PX-136 11. Through my attorney, I produced a copy of the Notes to the Securities and Exchange Commission (the "Commission") in response to its December 16, 2010 request (the "Request").

12. As produced to the Commission, the Notes bear control numbers EEI000216 through EEI000223 and EEI000225 through EEI000246.

13. All of the handwriting contained in the Notes is my own.

14. Each page of the Notes is on ruled paper that contains a header line and 35 standard lines.

15. Hereinafter, the header line on a page of Notes will be referred to the "Header Line" and the standard lines will be referred to sequentially, where the first line at the top of a page is Line 1 and the last line at the bottom of the page is Line 35.

16. Line 21 of EEI000216 contains my Notes, which state: "<u>CPO-4 Block is mind-boggling</u> – part of trend."

17. I took the Notes on Line 21 of EEI000216 during a Conversation with Mr. Terwilliger that occurred between February 1, 2010 and February 15, 2010. The Notes accurately reflect statements that Mr. Terwilliger made to me during the Conversation.

18. Lines 26 through 28 of EEI000218 contain my Notes, which state:

"CPO-4 - \$20-25/bbl in ground 150mm bbl x 20 <u>100/shr</u> 1-4 gross, 25% 650mm net"

19. I took the Notes on Lines 26 through 28 of EEI000218 during a Conversation with Mr. Terwilliger that occurred between February 1, 2010 and February 15, 2010. The Notes accurately reflect statements that Mr. Terwilliger made to me during the Conversation.

20. The phrase "\$20-25/bbl in ground" in Line 26 of EEI000218 reflects Mr. Terwilliger's suggestion to me that estimated recoverable oil reserves on the CPO-4 Block could be worth between \$20 and \$25 per barrel in the ground.

21. In the context of Mr. Terwilliger's statement, the value of oil "in the ground" refers to the value that is assigned to oil discovered but not yet on production.

22. The phrase "1-4 gross" in Line 28 of EEI000218 reflects Mr. Terwilliger's suggestion to me that the CPO-4 Block could contain between 1 billion and 4 billion of estimated recoverable reserves.

23. The mathematical calculations shown or reflected on Lines 26-28 of EEI000218 are mathematical calculations that Mr. Terwilliger described to me during our Conversation.

24. The phrase "<u>100/shr</u>" in Line 27 of EEI000218 reflects Mr. Terwilliger's suggestion to me that the oil in the ground at the CPO-4 Block could be valued at approximately \$100 per share to HUSA.

25. The Header Lines and Lines 1 and 2 on EEI000240 contain my Notes, which state:

"CPO-4 – May-June very important SK-1 well, '62 s end 80B co. – 12 countries 150,000 b/d Libya 100 targets, 3.5B recoverable, they say"

26. I took the Notes on the Header Line and Lines 1 and 2 of EEI000240 during a Conversation with Mr. Terwilliger that occurred between February 1, 2010 and February 15, 2010. The Notes accurately reflect statements that Mr. Terwilliger made to me during the Conversation.

27. The phrase "3.5B recoverable, they say" reflects Mr. Terwilliger's suggestion to me that SK Energy estimated that the CPO-4 Block could potentially contain 3.5 billion barrels of recoverable oil reserves.

28. Lines 15 through 19 of EEI000243 contain my Notes, which state:

"CPO-4 8+31%1 B bbls 150 net vs 250 <u>20</u> 3B = \$100/shr"

29. I took the Notes on Lines 15-19 of EEI000243 during a Conversation with Mr. Terwilliger that occurred between February 1, 2010 and February 15, 2010. The Notes accurately reflect statements that Mr. Terwilliger made to me during the Conversation.

30. The mathematical calculations on Lines 15 through 19 of EEI000243 reflect mathematical calculations that Mr. Terwilliger described to me during our Conversation.

31. The number "20" in Line 18 of EEI000243 reflects Mr. Terwilliger's suggestion to me that estimated recoverable oil reserves on the CPO-4 Block could be worth \$20 per barrel in the ground.

32. The phrase "3B = 100/shr" in Line 19 of EEI000243 reflects Mr. Terwilliger's suggestion to me that, valued at \$20 per barrel, the oil in the ground at the CPO-4 Block would be worth \$3 billion to HUSA, and \$100 per share.

33. Lines 31 through 34 of EEI000244 contain my Notes, which state:

"CPO-4 SK – up to 3½B bbls Vo: 105 wells, 70% 32-33% royal 1B bbls, 150 net (not 250) x 20 = \$3B/31 = 100/sh" 34. I took the Notes on Lines 31 through 34 of EEI000244 during a conversation with Mr. Terwilliger that occurred between February 1, 2010 and February 15, 2010. The Notes accurately reflect statements that Mr. Terwilliger made to me during the Conversation.

35. The phrase "SK – up to 3½B bbls" reflects Mr. Terwilliger's statement to me that SK Energy had estimated that the CPO-4 Block could potentially contain up to 3.5 billion barrels of recoverable oil reserves.

36. The mathematical calculations shown or reflected on Line 34 of EEI000244 are mathematical calculations that Mr. Terwilliger described to me during our Conversation.

37. The number "20" in Line 34 of EEI000244 reflects Mr. Terwilliger's suggestion to me that estimated recoverable oil reserves on the CPO-4 Block could be worth \$20 per barrel in the ground based on the value of oil in HUSA's other concessions of \$20-25 per barrel.

38. The phrase "\$3B/31 = 100/sh" in Line 34 of EEI000244 reflects Mr. Terwilliger's suggestion to me that, valued at \$20 per barrel, oil in the ground at the CPO-4 Block could be worth \$3 billion to HUSA and \$100 per share.

39. On or around February 15, 2010, Energy Equities, Inc. issued a research report on HUSA (the "Report"). I was the sole author of the Report, which was produced to the Commission in response to its request.

40. Energy Equities, Inc. provided the report to its clients electronically and via U.S. Mail. To the best of my knowledge and understanding, Energy Equities, Inc. provided the Report to approximately 50 of its clients, which include individual and institutional investors.

41. As produced to the Commission, the Report bears control numbers EEI000001 through EEI000008.

42. The Report includes numerous statements and representations about the CPO-4 Block that are based on information that Mr. Terwilliger provided to me during our Conversations.

43. Before Energy Equities, Inc. issued the Report, I gave Mr. Terwilliger an opportunity to review it for any factual inaccuracies. Mr. Terwilliger made a number of corrections to the draft report, including to the section of the Report that discusses the CPO-4 Block. A true and correct copy of Mr. Terwilliger's corrections to the draft report is attached to this Affidavit as Exhibit 2.

44. To the best of my recollection, I incorporated all of Mr. Terwilliger's suggested corrections into the final version of the Report.

45. The second page of the Report, which in the copy produced to the Commission bears control no EEI000002 includes the following statement: "<u>CPO-4: 'MIND-BOGGLING</u>" That statement is a direct quote from Mr. Terwilliger who told me during our Conversations that the CPO-4 Block was mind-boggling.

46. The third page of the Report, which in the copy produced to the Commission bears control number EEI000003 includes the following statement: "Over 100 leads in total have been identified with 2D seismic, with estimated potential recover-able reserves of 1 to 4 billion barrels (25% of that to HUSA)." That statement is based on information that Mr. Terwilliger provided to me during our Conversations, specifically that the CPO-4 Block contained 100 leads in total and that the CPO-4 Block had estimated potential recoverable oil reserves of between 1 and 4 billion barrels.

47. The fourth page of the Report, which in the copy produced to the Commission bears control number EEI000004 includes the following statement: "HUSA believes CPO 4 oil

in the ground is worth \$20-25/bbl." That statement is based on information that Mr. Terwilliger provided to me during our Conversations specifically that the oil in the ground at the CPO-4 Block was worth between \$20 and \$25 per barrel.

48. To the best of my recollection, Mr. Terwilliger never told me that SK Energy's estimates for the CPO-4 Block were lower than HUSA's.

49. I declare under penalty of perjury that the foregoing is true and correct.

erger New Dated: New York, New York April -2013

David G. Snow

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Sworn to before me on the day of April, 2013 New Jusey Notary Public, State of New York

ANITA BERNAL NOTARY PUBLIC OF NEW JERSEY MY COMMISSION EXPIRES NOV. 5, 2017



SEC Form 4

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F	FORM 4	ι ι	UNITED STATES SECURITIES AND EXCHANGE COMMISS Washington, D.C. 20549													B APPRC		
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					or Section 30(h) of the Investment Company Act of 1940										response		0.5	
1. Name and Address of Reporting Person					2. Issuer Name and Ticker or Trading Symbol HOUSTON AMERICAN ENERGY CORP								5. Relationship of Reporting Person(s) to Issuer (Check all applicable)					
TERWILLIGER JOHN F					[HUSA]								X Director X 10% Owner X Officer (give title Other (specify					
(Last)	st) (First) (Middle)				3. Date of Earliest Transaction (Month/Day/Year) 04/20/2012								A below) below) President and CEO					
(Straet)					4. If Amendment, Date of Original Filed (Month/Day/Year) 04/24/2012								6. Individual or Joint/Group Filing (Check Applicable Line)					
(Street)														X Form filed by One Reporting Person Form filed by More than One Reporting				
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Common Stock					04/23/2012						154,380	D	\$1.8419 (3)	8,12	24,650	D		
Common Stock					04/24/2012				S (1)		478,983	D	\$1.735 (4)	7,64	15,667	D		
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06/02/2008

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Explanation of Responses:

\$7.2

1. Pledged shares sold by Morgan Stanley Smith Barney as creditor of John Terwilliger to cover margin calls.

2. This transaction was executed in multiple trades at prices ranging from \$1.89 to \$2.26. The price reported above reflects the weighted average sale price.

3. This transaction was executed in multiple trades at prices ranging from \$1.80 to \$1.85. The price reported above reflects the weighted average sale price.

4. This transaction was executed in multiple trades at prices ranging from \$1.65 to \$1.92. The price reported above reflects the weighted average sale price.

5. The options vest and are exercisable in 1/6 increments on each anniversary of the date of grant. The date exercisable is the first vesting date.

Remarks:

Stock

buy)

Option (Right to

This document is filed as a corrected form 4 to the original filed on April, 24 2012.

/s/ John F. Terwilliger ** Signature of Reporting Person

Common Stock

06/02/2018

04/24/2012 Date

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Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.



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AFFIDAVIT OF BRETT HENDRICKSON

STATE OF TEXAS COUNTY OF DALLAS

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BEFORE ME, the undersigned authority, on this day personally appeared BRETT HENDRICKSON, who, after being duly sworn, on oath deposes and says:

- 1. My name is Brett Hendrickson.
- 2. I am over the age of 18 and am a resident of the State of Texas. I have personal knowledge of the facts herein, and, if called as a witness, could testify completely thereto.
- 3. Since 2009, I have been a Portfolio Manager for Nokomis Capital Partners LP.
- 4. Nokomis Capital Partners LP is based in Dallas, Texas.
- 5. On November 24, 2009, I had a meeting with John F. Terwilliger, the Chief Executive Officer of Houston American Energy Corp. (the "November 24, 2009 Meeting" or the "Meeting").
- 6. The November 24, 2009 Meeting took place in a conference room at Nokomis Capital Partners LP's Dallas, Texas offices.
- 7. During the November 24, 2009 Meeting, Mr. Terwilliger referred to and showed slides from a November 2009 Investor Presentation that described, among other things, Houston American Energy Corp. and certain of its assets (the "Presentation").
- 8. During the November 24, 2009 Meeting, Mr. Terwilliger described, among other things, Houston American Energy Corp.'s investment in an exploration and production block located in the Republic of Colombia that is known as the CPO-4 Block.
- 9. During the November 24, 2009 Meeting, I took notes on a notepad (the "Notes") and also made some notes on a copy of the Presentation.
- 10. The Notes are a contemporaneous record of the Meeting. To the best of my knowledge and understanding, the Notes accurately reflect statements made by Mr. Terwilliger during the course of the Meeting.
- 11. To the best of my knowledge and understanding, the Notes and the notes on the Presentation reflect all of my contemporaneous notes of the November 24, 2009 Meeting.



AFFIDAVIT OF BRETT HENDRICKSON

- Nokomis Capital Partners LP provided the Securities and Exchange Commission (the "Commission") with a copy of the Notes in response to the Commission's January 27, 2012 subpoena.
- 13. As produced to the Commission, the Notes bear control numbers SEC-Nokomis-E-0000006 through SEC-Nokomis-E-0000010.
- 14. As produced to the Commission, the Presentation that contains my handwritten notes bears control numbers SEC-Nokomis-E-0000019 through SEC-Nokomis-E-0000057.
- 15. A true and correct copy of the Notes, in the form in which they were provided to the Commission, is attached hereto.
- 16. From time to time, I supplement the notes of meetings on either the day of or the day after the meeting, in order to ensure they completely and accurately reflect statements made during the meeting. The Notes may have been supplemented in this way, but otherwise have not been modified, supplemented, or amended in any way since the November 24, 2009 Meeting.
- 17. All of the handwriting contained in the Notes is my own.

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- 18. Each page of the Notes is on ruled paper that contains a header line and 29 standard lines.
- 19. Hereinafter, the header line on a page of the Notes will be referred to as the "Header Line," and the standard lines will be referred to sequentially, where the first line at the top of a page is Line 1 and the last line at the bottom of a page is Line 29.
- 20. The Header Line of SEC-Nokomis-E-0000006 contains my handwritten notes, which state:

HUSA our office 11-24-09 John Terwilliger

21. Line 20 through Line 21 of SEC-Nokomis-E-0000006 contain my handwritten notes, which state:

62 in Sept 09, he wants out by 65 either not operating it or selling out, either requires a much higher stock price.

- 22. To the best of my knowledge and understanding, Lines 20 and 21 of SEC-Nokomis-E-0000006 were taken by me at the November 24, 2009 Meeting and accurately reflect statements about Mr. Terwillger's retirement that Mr. Terwilliger made to me during the Meeting.
- 23. As used in Line 20, the word "he" refers to Mr. Terwilliger.

24. Line 4 through Line 12 of SEC-Nokomis-E-0000008 contain my handwritten notes, which state:

<u>CPO4</u> – 345 acre block has been getting calls from people after they found out he has part of this block. SK energy acquired it a work commitment to the gov't. of \$50MM and agreed to give govt a 31% royalty over and above the standard 8% (Respetrol had bid 30%) SK found over 100 prospects on this block and they estimate mid-range recover of 3.5b barrels HUSA uses a range 1-5 b.

- 25. To the best of my knowledge and understanding, Line 4 through Line 12 of SEC-Nokomis-E-0000008 are notes taken by me at the November 24, 2009 Meeting and accurately reflect statements about the CPO-4 Block that Mr. Terwilliger made to me during the Meeting.
- 26. To the best of my knowledge and understanding, as used in Line 11 and Line 12 of SEC-Nokomis-E-0000008, "b" is an abbreviation for "billion."
- 27. To the best of my knowledge and understanding, as used in Line 8 of SEC-Nokomis-E-0000008, "MM" is an abbreviation for "million."
- 28. To the best of my knowledge and understanding, Line 11of SEC_Nokomis_E-0000008 reflects my notes of Mr. Terwilliger's statement at the November 24, 2009 Meeting that SK. Energy's mid-range estimate of recoverable reserves on the CPO-4 Block was 3.5 billion barrels of oil.
- 29. To the best of my knowledge and understanding, Line 12 of SEC-Nokomis-E-0000008 reflects my notes of Mr. Terwilliger's statement at the November 24, 2009 Meeting that Houston American Energy Corp. estimated that recoverable reserves on the CPO-4 Block were between 1 billion and 5 billion barrels of oil.
- 30. Line 17 through Line 22 of SEC-Nokomis-E-0000008 contain my handwritten notes, which state:

600MM barrels x 25% would be \$150MM put govt royalty nets that to 100MM barrels net to HUSA

CaraCara sold for \$26/barrel in the ground

probably \$100MM of cap ex (but had sold 5MM barrels out) API 21-23

- 31. To the best of my knowledge and understanding, Line 17 through Line 22 of SEC-Nokomis-E-0000008 are notes taken by me at the November 24, 2009 Meeting and accurately reflect statements concerning the valuation of the CPO-4 Block that Mr. Terwilliger made to me during the Meeting
- 32. To the best of my knowledge and understanding, as used in Line 17, Line 18, and Line 20, "MM" is an abbreviation for "million."
- 33. Line 4 through Line 9 of SEC-Nokomis-E-0000010 contain my handwritten notes, which state:

Block sale: Jan 12 is last bid date

31 entities went through the data room and qualified

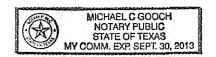
if this does not get done in time they might need to raise some money to fund the initial CPO4 wells.

- 34. To the best of my knowledge and understanding, Line 4 through Line 9 of SEC Nokomis E-0000010 are notes taken by me at the November 24, 2009 Meeting and accurately reflect statements about the CPO-4 Block that Mr. Terwilliger made to me during the Meeting.
- 35. I declare under penalty of perjury that the foregoing is true and correct.

Brett Hendrickson

State of Texas County of Dallas

SWORN to and SUBSCRIBED before me, the undersigned authority, on the <u>30</u> day of ____ _____, 2012 by BRETT HENDRICKSON.



Notary Public, State of Texas

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IN THE MATTER OF HOUSTON AMERICAN ENERGY CORP. (HO-11507)

DECLARATION OF DONG SOO CHOI

I, Dong Soo Choi, hereby declare and state as follows:

1. My name is Dong Soo Choi. I am 56 years old, and I live in Seoul, South Korea. I have personal knowledge of the facts set forth in this declaration based on my employment with SK Energy n/d/b/a SK Innovation ("SK Energy"), a subsidiary of South Korean conglomerate, SK Group, as discussed below.

2. I have a Master's Degree from Seoul National University. I obtained this degree in 1986.

3. I worked at SK Energy from March 1, 1986 to December 31, 2010. During that time, I held several different titles, including the General Manager ("GM") of SK Energy's Houston office.

4. I was the GM of the Houston office from 2005 to 2010. In this position, I was responsible for developing SK Energy's project for the CPO-4 Block, which is an oil and gas exploration and production concession located in the Llanos Basin in the Republic of Colombia.

5. In late 2008 or early 2009, SK Energy bid for, and won, the rights to explore the CPO-4 Block. In connection with that effort, SK Energy retained geologists and engineers to assist SK Energy in evaluating the CPO-4 Block.

6. Over several months in late 2008 or early 2009, I worked closed with the geologists and engineers retained by SK Energy to, among other things, identify potential leads on the CPO-4 Block and evaluate the CPO-4 Block's hydrocarbon resource potential.

7. As part of that process, SK Energy and its consultants, under my supervision, analyzed seismic data for the CPO-4 Block and well-log data for more than fifteen wells that



were drilled on the CPO-4 Block and on blocks adjacent to the CPO-4 Block. SK Energy selected the wells to be analyzed based on their proximity to the CPO-4 Block and the amount of well-log data available for each of them.

8. The well-log data analyzed by SK Energy and its consultants included gamma ray data, sonic data, formation-density-compensated-neutron data, resistivity logs, and mud logs. I was personally involved in this analysis.

9. Some of the data that SK Energy and its consultants analyzed in late 2008 and early 2009 is reflected in the April 2009 Farm-in Opportunity presentation (the "April 2009 Presentation"), which is attached as Exhibit 1. SK Energy gave Houston American Energy a copy of the April 2009 Presentation in April 2009.

10. Slide 12 of the April 2009 Presentation is entitled "Proven Reservoir." This slide reflects SK Energy's analysis of well-log data for five wells drilled on blocks adjacent to the CPO-4 Block. SK Energy reviewed this well-log data as part of its evaluation of the CPO-4 Block's hydrocarbon resource potential.

11. Slides 14, 15, 16, and 17 of the April 2009 Presentation are images of four stratigraphic cross sections that SK Energy created as part of its analysis of the CPO-4 Block. Each cross section is based on the well-log data mentioned above and was used by SK Energy to extrapolate data and information about the geological characteristics of the CPO-4 Block, based on regional data points available from wells on blocks adjacent to the CPO-4 Block.

12. Slide 14 of the April 2009 Presentation is a cross section of the CPO-4 Block that runs from west to east and that is based on SK Energy's analysis of well-log data from four wells: Anconda-1; Vanguardia-1; Guacavia-1; and Metica-1.

13. Slide 15 of the April 2009 Presentation is a cross section of the CPO-4 Block that runs from northwest to southeast and that is based on SK Energy's analysis of well-log data from five wells: Vanguardia-1; Guacavia-1; Negritos-1; Valdivia-1; and Murujuy-1.

14. Slide 16 of the April 2009 Presentation is a cross section of the CPO-4 Block that runs from northeast to southwest and that is based on SK Energy's analysis of well-log data from four wells: Chaparral-1; Metica-1; Negritos-1; and Lina Roja-1.

15. Slide 17 of the April 2009 Presentation is a cross section of the CPO-4 Block that runs through the bottom portion of the block, from west to southeast, and that is based on SK Energy's analysis of well-log data from multiple wells, including: Guatiquia-1; Negritos-1; Valdivia-1; and Murujuy-1.

16. Slide 20 of the April 2009 Presentation is entitled "ISO-Porosity Reservoir Map." This slide reflects SK Energy's estimates of porosity distributions for the CPO-4 Block and is based on SK Energy's evaluation of well-log data from wells drilled on or on blocks adjacent to the CPO-4 Block.

17. All of the slides mentioned above show that SK Energy reviewed and relied upon well-log data for wells on or near the CPO-4 Block when estimating the block's hydrocarbon resource potential.

18. Slide 29 of the April 2009 Presentation is entitled "Total Potential." This slide is based on (a) well-log data and information for wells drilled on or on blocks adjacent to the CPO-4 Block; (b) seismic data for the CPO-4 Block; and (c) other data and information specific to the CPO-4 Block.

19. Based on work done by SK Energy and its consultants, SK Energy in April 2009 estimated the CPO-4 Block's total potential as around 1 billion barrels of oil, with the high-

potential estimated as 639 million barrels of oil. I was directly involved in calculating these estimates for SK Energy.

20. On Slide 29 of the April 2009 Presentation, the term "Unit R.R." refers to the number of barrels of oil that SK Energy estimated could be recovered from an acre foot of net pay on the CPO-4 Block. Unit R.R. is synonymous with the term "Barrels Per Acre Foot."

21. Unit R.R. is calculated by using a volumetric formula that incorporates data and information from SK Energy's analysis of well-log data for wells drilled on or on blocks adjacent to the CPO-4 Block. This formula is as follows: Volume = 7758 * Acres * Height * Geometric Factor * S_o * \emptyset * B_{oi} * Recover Factor * ∂ ; where S_o is oil saturation, \emptyset is porosity (obtained from the porosity-distribution map created by SK Energy in its evaluation of the CPO-4 Block), B_{oi} is Formation Volume Factor, and ∂ is the evaluator's confidence level.

22. On Slide 29 of the April 2009 Presentation, the Unit R.R. of 150 is calculated as follows: 7758 * 1 acre * 1 foot * .7 * .6 * .2 * .9 * .3 * .85 = 150. Other than the evaluator's confidence level, every variable in this formula is included in the key in the upper right-hand corner of Slide 29. In the key, So/Bo is the B_{oi} variable.

23. The oil saturation number used on Slide 29 of the April 2009 Presentation is an empirical value for a reserve calculation used in a reservoir of this character by SK Energy as part of its analysis of the CPO-4 Block and reflected SK Energy's estimates of local porosity values.

24. The porosity number used on Slide 29 of the April 2009 Presentation is based on porosity distribution maps created by SK Energy as part of its analysis of the CPO-4 Block and reflected SK Energy's estimates of local porosity values.

25. The Unit R.R. of 150 on Slide 29 of the April 2009 Presentation reflected local reservoir characteristics for the CPO-4 Block. It did not, and was not intended to, reflect a broad, regional average, or global average, Unit R.R.

26. Other than what is reflected in the April 2009 Presentation, I do not recall having any discussions or other communications with Houston American Energy about the Unit R.R. for the CPO-4 Block.

27. Other than what is reflected in the April 2009 Presentation, I do not recall having any discussions or other communications with Houston American Energy about SK Energy's estimate of "Total Potential" for the CPO-4 Block.

28. I do not recall SK Energy ever using a Unit R.R. of 500 for the CPO-4 Block. I do not believe that SK Energy's analysis of the CPO-4 Block supports a Unit R.R. of 500.

29. Based on its analysis of the CPO-4 Block, SK Energy believed that there was a sealing problem related to the Guadalupe sand, due to a layer of shale present between the Mirador and Guadalupe formations. Accordingly, SK Energy did not consider the reserve potential of the Guadalupe formation in the lead inventory.

30. Between April 2009 and September 2009, SK Energy reprocessed seismic data for the CPO-4 Block. After doing so, SK Energy revised downward its high potential for the CPO-4 Block, from 639 million barrels of oil to 445 million barrels of oil.

31. I do not recall ever using an estimated range of between 1 to 4 billion or 1 to 5 billion barrels of recoverable oil for the CPO-4 Block, nor do I recall anyone else from SK Energy doing so. The largest estimate of recoverable reserve potential of oil from the CPO-4 Block that I recall SK Energy using was approximately 1 billion barrels.

I never authorized, endorsed, or otherwise approved of any claim by Houston 32. American Energy that the CPO-4 Block contained 1 to 4 billion of recoverable reserves, nor am I aware of anyone else at SK Energy doing so.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct, and that this declaration was executed on July 24, 2014.

Dong Soo Choi

and the

UNITED STATES OF AMERICA

Before the

SECURITIES AND EXCHANGE COMMISSION

In the Matter of

HOUSTON AMERICAN ENERGY CORP., JOHN F. TERWILLIGER, JR., UNDISCOVERED EQUITIES INC., and KEVIN T. McKNIGHT,

Respondents.

Administrative Proceeding File No. 3-16000

EXPERT REPORT OF BRANKO JOVANOVIC, PH.D.

November 21, 2014



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# I. Background and scope of analysis

(1) Counsel for the Division of Enforcement of the US Securities and Exchange Commission (Division) has asked me to assess whether the news announcements made between November 10, 2009, and October 12, 2010, concerning Houston American Energy's (HUSA) participation in the CPO-4 Block, an oil and gas exploration and production (E&P) concession in the Llanos Basin of the Republic of Colombia, were important to investors.

# **II.** Qualifications

- (2) I am a Managing Economist with the economic consulting firm of Bates White, LLC. I have provided oral and/or written expert testimony before the International Chamber of Commerce International Court of Arbitration, the American Arbitration Association, and in US District Court for the Eastern District of New York.
- (3) I received a bachelor's degree in Economics from the University of Belgrade, a master's degree in Economics from the Central European University, and a Ph.D. in Economics from Texas A&M University. My research has been published in peer-reviewed journals (*Review of Income and Wealth*, *Economics of Transition*, and the *World Bank Economic Review*) and in other outlets such as Securities Law360. Additionally, I have presented at forums during which attendees earn continuing legal education credits, and I have taught graduate-level econometrics courses at New York University and at Johns Hopkins University.
- (4) My experience and education are more fully set out in my curriculum vitae, attached as Exhibit 1. Bates White is compensated for my time on this matter at a rate of \$465 per hour. In addition to my own time, I directed other Bates White professionals who performed supporting work and analyses in connection with my preparation of this report. My opinions in this matter are in no way dependent on my or Bates White's compensation.

## III. Materials relied upon

(5) The materials considered for the purposes of this report are the documents listed in Exhibit 2.

## **IV. Summary**

- (6) My analysis focused on the period starting on November 10, 2009, the date of HUSA's first announcement of "estimated recoverable reserves" for the CPO-4 Block, and ending on October 12, 2010, when HUSA released an independent prospective resource evaluation for the CPO-4 Block. A systematic approach formally identified five dates within that time period on which news announcements disseminated new information about the CPO-4 Block.<sup>1</sup> In addition to these five dates, counsel for the Division also instructed me to incorporate into my analysis June 28, 2010, when a Sharesleuth article questioning the CPO-4 Block's potential was published. The announcements on each of these six dates (the "announcement dates") contained new information that was potentially important to the company's investors. For the purpose of this report, an announcement date is considered important if it resulted in a statistically significant change in the company's stock price.
- (7) News announcements on two of the six announcement dates had a positive and statistically significant impact on HUSA's stock price, two had a negative and statistically significant impact on HUSA's stock price, and two had a statistically insignificant impact. Figure 1 lists the four significant announcements dates, briefly summarizes their informational content and the corresponding net-of-market movements in HUSA's stock price, and indicates the extent to which these movements deviated from historical trends.

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<sup>&</sup>lt;sup>1</sup> Because this report focuses on the instances in which new information was disseminated, any news announcement that simply repeats already reported information is not included in the analyses.

| Date              | Informational content                                                                                                                                                                                                    | Identification<br>method | Abnormal<br>return (%) |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------|
| November 10, 2009 | HUSA furnished an investor presentation to the SEC (on November 9, 2009), stating that the CPO-4 Block had "estimated recoverable reserves of 1 to 4 billion barrels." <sup>2</sup>                                      | Search criteria          | 10.3                   |
| February 16, 2010 | An article published by Dow Jones Newswire included optimistic quotes about the prospects of the CPO-4 Block from a GHS research analyst in connection with an announcement by Petrominerales on 2/15/2010. <sup>3</sup> | Search criteria          | 13.3                   |
| April 7, 2010     | The financial analysis website Seeking Alpha released two articles that questioned the CPO-4 Block's valuation. <sup>4</sup>                                                                                             | Search criteria          | -27.6                  |
| June 28, 2010     | A Sharesleuth article questioned the CPO-4 Block's potential.5                                                                                                                                                           | Counsel                  | -12.5                  |

#### Figure 1: Summary of news announcements important to investors

## V. Factual bases for opinions

- (8) HUSA is an oil and gas E&P company that focuses its activities in South America (Colombia) and on the US on-shore Gulf Coast Region (Texas and Louisiana).<sup>6</sup> John F. Terwilliger has served as its President, CEO, and Chairman since its inception in April 2001.<sup>7</sup>
- (9) Prior to the investment in the CPO-4 Block, the company invested in a number of oil and gas E&P concessions in Colombia;<sup>8</sup> the company's interest in these and other investments ranged between 1.6% and 12.5%.<sup>9</sup> Between 2006 and 2009, the company's fractional interests produced a total of 376,000 barrels of oil.<sup>10</sup>

<sup>&</sup>lt;sup>2</sup> Houston American Energy Corp., Current Report (Form 8-K) (Nov. 10, 2009), ex. 99.1, HUSA Investor Presentation, Nov. 2009, at 12.

<sup>&</sup>lt;sup>3</sup> Jennifer Cummings, "UPDATE: Houston American Gains on Success of Neighbor's Well," Dow Jones News Service, Feb. 16, 2010.

<sup>&</sup>lt;sup>4</sup> Jennifer Cummings, "UPDATE: Houston American Down; Web Posting Says Co Set for Collapse," Dow Jones News Service, Apr. 7, 2010; Shareholders Unite, "Houston American Energy Priced for Perfection," Seeking Alpha, Apr. 7, 2010; Shareholder Watchdog, "Houston American Energy Corp. Set Up for Collapse," Seeking Alpha, Apr. 7, 2010.

<sup>&</sup>lt;sup>5</sup> Chris Carey, "Small Texas Company Promotes Big South American Oil Venture," Sharesleuth, June 28, 2010, http://sharesleuth.com/investigations/2010/06/both\_of\_the\_oil\_companies.

<sup>&</sup>lt;sup>6</sup> Houston American Energy Corp., Annual Report (Form 10-K) (Mar. 28, 2008), at 3.

<sup>&</sup>lt;sup>7</sup> *Id.* at 27.

<sup>&</sup>lt;sup>8</sup> Houston American Energy Corp., Annual Report (Form 10-K) (Mar. 29, 2010), at 5.

<sup>&</sup>lt;sup>9</sup> Houston American Energy Corp., Current Report (Form 8-K) (Nov. 10, 2009), ex. 99.1, HUSA Investor Presentation, Nov. 2009, at 5.

<sup>&</sup>lt;sup>10</sup> Houston American Energy Corp., Annual Report (Form 10-K) (Mar. 29, 2010), at 8; Houston American Energy Corp., Annual Report (Form 10-K) (Mar. 28, 2008), at 8.

- (10) On October 16, 2009, HUSA announced that it had finalized a "farmout" agreement and a joint operating agreement with SK Energy, a South Korean E&P company.<sup>11</sup> Through these agreements, HUSA acquired a 25% working interest in the CPO-4 Block. The CPO-4 Block was adjacent to a block developed by Petrominerales, an oil and gas E&P company operating in Colombia and Peru.<sup>12</sup>
- (11) HUSA first announced recoverable reserves estimates for the CPO-4 Block on November 10, 2009, in an investor presentation furnished to the SEC.<sup>13</sup> In this presentation, HUSA announced that the "CPO 4 Block consists of 345,452 net acres and contains over 100 identified leads or prospects with estimated recoverable reserves of 1 to 4 billion barrels."<sup>14</sup> At the time, HUSA's most recent annual report stated total proven oil reserves of 213,000 barrels.<sup>15</sup>
- (12) According to HUSA's CEO, the company's investment in the CPO-4 Block "was a transitional moment" for the company.<sup>16</sup> At that time, HUSA's investment in the CPO-4 Block was its largest fractional working interest in any E&P concession.<sup>17</sup>

<sup>&</sup>lt;sup>11</sup> Houston American Energy Corp., Current Report (Form 8-K) (Oct. 16, 2009), ex. 99.1, HUSA Press Release, Oct. 2009. "Under the Farmout Agreement, Houston American has agreed to pay 25.0% of all past and future cost related to the CPO 4 block as well as an additional 12.5% of the Seismic Acquisition Costs incurred during the Phase 1 Work Program, for which Houston American will receive a 25.0% interest in the CPO 4 Block."

A farmout agreement is "a contractual agreement with an owner who holds a working interest in an oil and gas lease to assign all or part of that interest to another party in exchange for fulfilling contractually specified conditions. The farmout agreement often stipulates that the other party must drill a well to a certain depth, at a specified location, within a certain time frame; furthermore, the well typically must be completed as a commercial producer to earn an assignment." Schlumberger Oilfield Glossary, "Farmout," accessed Aug. 8, 2014, http://www.glossary.oilfield.slb.com/en/Terms.aspx?LookIn=term%20name&filter=farmout.

An operating agreement is "[a]n agreement between parties who own a working interest in a well that sets out responsibilities and duties of the operator and nonoperators, including drilling the test well and subsequent wells, and sharing of expenses and accounting methods." Schlumberger Oilfield Glossary, "Operating Agreement," accessed Aug. 22, 2014, http://www.glossary.oilfield.slb.com/en/Terms/o/operating agreement.aspx.

<sup>&</sup>lt;sup>12</sup> Bloomberg, "Petrominerales Ltd," accessed June 11, 2014, http://www.bloomberg.com/quote/PMG:CN.

<sup>&</sup>lt;sup>13</sup> The SEC accepted this presentation after the market closed on November 9, 2009; the filing date was November 10, 2009. Houston American Energy Corp., Current Report (Form 8-K) (Nov. 10, 2009), ex. 99.1, HUSA Investor Presentation, Nov. 2009, at 12.

<sup>&</sup>lt;sup>14</sup> Houston American Energy Corp., Current Report (Form 8-K) (Nov. 10, 2009), ex. 99.1, HUSA Investor Presentation, Nov. 2009, at 12.

<sup>&</sup>lt;sup>15</sup> Houston American Energy Corp., Annual Report (Form 10-K) (Mar. 16, 2009), at 8.

<sup>&</sup>lt;sup>16</sup> Order Instituting Cease-and-Desist Proceedings Pursuant to § 8A of the Sec. Act of 1933 and 21C of the Sec. Exch. Act of 1934, Aug. 4, 2014, ¶ 38.

<sup>&</sup>lt;sup>17</sup> Houston American Energy Corp., Current Report (Form 8-K) (Nov. 10, 2009), ex. 99.1, HUSA Investor Presentation, Nov. 2009, at 5; Houston American Energy Corp., Annual Report (Form 10-K) (Mar. 29, 2010), at 4–5.

- (13) HUSA and its investment bank, Global Hunter Securities (GHS), continued to reach out to potential investors following the release of the November 10, 2009, 8-K, in part to promote HUSA's upcoming public offering.<sup>18</sup> GHS acted as the placement agent for HUSA's December 2009 public offering and also provided analyst coverage of the company.<sup>19</sup> On HUSA's behalf, GHS conducted road show presentations for potential investors in locations throughout the United States, including Dallas on November 24, 2009, and the West Coast on January 25–27, 2010.<sup>20</sup> In addition to road show presentations, both GHS and HUSA emailed potential investors as part of their promotional efforts.<sup>21</sup>
- (14) These emails often highlighted the CPO-4 Block's proximity to successful Petrominerales wells, suggesting that the CPO-4 Block's proximity to Petrominerales's wells would translate into similar success for HUSA.<sup>22</sup> In addition, on several occasions GHS emails referred to estimated quantities as high as 3–5 billion barrels of oil for the CPO-4 Block and attributed the estimates to SK Energy.<sup>23</sup>

<sup>&</sup>lt;sup>18</sup> Order Instituting Cease-and-Desist Proceedings Pursuant to § 8A of the Sec. Act of 1933 and 21C of the Sec. Exch. Act of 1934, Aug. 4, 2014, ¶¶ 57–64.

<sup>&</sup>lt;sup>19</sup> See GRE00039479 (Global Hunter Securities, "Houston American Energy Corp.," Oct. 19, 2009); GRE00117874 (Global Hunter Securities, "Houston American Energy Corp.," Jan. 19, 2010). In its valuation of HUSA, GHS used an estimate of "total gross oil," which increased from 200 million barrels in the Oct. 19, 2009, report to almost one billion barrels (the lower bound of HUSA's own estimate) in the January 19, 2010, report. This change alone accounted for a fourfold increase in HUSA's price target.

<sup>&</sup>lt;sup>20</sup> GRE00066100 (Global Hunter Securities, "Houston American Energy Corp. (HUSA): Global Hunter Securities Non-Deal Dallas Roadshow," Nov. 24, 2009). Dallas Roadshow participants included the following investors: BBS Capital, Delos Investment, Atlas Capital, Hodges Capital, and WS Capital; GRE00118860 (Global Hunter Securities, "Houston American Energy Corp. (HUSA): Global Hunter Securities Non-Deal West Coast Roadshow," Jan. 19, 2010). The West Coast Roadshow participants included Lake Union Capital, TW Asset Management, Roxbury Capital, Fuller & Thaler, Cambrian Capital, Dunlap Equity, Alder Capital, NWQ Investment Management, and 300 North Capital, LLC.

<sup>&</sup>lt;sup>21</sup> See, e.g., GRE00075169 (email from Stephen Mathes at Global Hunter Securities to Kyle Krueger at Apollo Capital Corp, "FW: HUSA-Details," (Dec. 1, 2009)); SEC-HO1107-006062 (email from James Jacobs, Chief Financial Officer, HUSA, to William Doyle, Columbia Management, "Petrominerales Announcement," and attachment 2010\_01\_03\_Candelilla\_Update.pdf (Jan. 4, 2010)); GRE00103882 at 883 (email from Greg Tuerk at Global Hunter Securities to Charles Kist, "HUSA-My Home Run Pick for 2010-Incrimental Positive News Based on Petrominerales Announcement Today," (Jan. 4, 2010)); GRE00123542 (email from Stephen Mathes at Global Hunter Securities to Mike Scholten at Ingalls & Snyder, "Houston American (HUSA): 10+ Bagger in the Making?" (Jan. 25, 2010)); SEC-HO1107-005317 (email from John Terwilliger, Chief Executive Officer, HUSA, to William Doyle, Columbia Management, "Negritos-1" (Feb. 4, 2010)); GRE00141193 (email from Brandon Winkler, Global Hunter Securities LLC, to undisclosed recipients, "For Those Following the HUSA (and You Should Be)" (Feb. 16, 2010)); GRE00165026 (email from Tim Arthurs, Global Hunter Securities LLC, to undisclosed recipients, "HUSA: Petrominerales Drills Candelilla-3 Well, Another Positive Data Point for HUSA and Colombian Oil" (Mar. 18, 2010)).

See, e.g., GRE00075169 (email from Stephen Mathes at Global Hunter Securities to Kyle Krueger at Apollo Capital Corp, "FW: HUSA-Details," (Dec. 1, 2009)); SEC-HO1107-006062 (email from James Jacobs, Chief Financial Officer, HUSA, to William Doyle, Columbia Management, "Petrominerales Announcement," and attachment 2010\_01\_03\_Candelilla\_Update.pdf (Jan. 4, 2010)); GRE00103882 at 883 (email from Greg Tuerk at Global Hunter Securities to Charles Kist, "HUSA-My Home Run Pick for 2010-Incrimental Positive News Based on Petrominerales Announcement Today" (Jan. 4, 2010)); GRE00123542 (email from Stephen Mathes at Global Hunter Securities to Mike Scholten at Ingalls & Snyder, "Houston American (HUSA): 10+ Bagger in the Making?" (Jan. 25, 2010)) SEC-HO1107-005317 (email from John Terwilliger, Chief Executive Officer, HUSA, to William Doyle, Columbia Management, "Negritos-1" (Feb. 4, 2010)); GRE00141193 (email from Brandon Winkler, Global Hunter Securities LLC, to undisclosed recipients, "For Those Following the HUSA (and You Should Be)" (Feb. 16, 2010)); GRE00165026 (email from Tim Arthurs, Global Hunter Securities LLC, to undisclosed recipients, "HUSA:

- (15) On November 5, 2009, HUSA engaged Undiscovered Equities, a public relations company, to
   "increase the investment communities' awareness" of HUSA.<sup>24</sup> From November 9, 2009, to May 9, 2010, HUSA paid Undiscovered Equities \$20,000 per month to promote HUSA to potential investors.<sup>25, 26</sup>
- (16) On April 7, 2010, an article released on Seeking Alpha, a financial analysis website, took issue with HUSA's valuation. The article stated: "one has to believe that a \$15 million investment made just a few months ago is now worth over \$500 million."<sup>27</sup> A second article issued by Seeking Alpha on the same day challenged the validity of a valuation based on the proximity of the CPO-4 Block to Petrominerales's Candelilla-1 and -2 wells: "All of this is a mere pipe dream based on some good wells having been discovered on adjacent properties."<sup>28</sup>
- (17) On June 28, 2010, a Sharesleuth article also questioned the CPO-4 Block's potential by stating:"Although Houston American executives have been talking up the CPO 4 prospect, their counterparts

Petrominerales Drills Candelilla-3 Well, Another Positive Data Point for HUSA and Colombian Oil" (Mar. 18, 2010)).

- <sup>24</sup> See testimony ex. 95 (Undiscovered Equities, Inc., Consulting Agreement between Undiscovered Equities, Inc., and Houston American Energy Corp., Nov. 5, 2009), at 1.
- <sup>25</sup> See testimony ex. 95 (Undiscovered Equities, Inc., Consulting Agreement between Undiscovered Equities, Inc., and Houston American Energy Corp., Nov. 5, 2009), at 1.
- 26 On December 31, 2009, Undiscovered Equities named HUSA one of its top picks for 2010. See testimony ex. 96 (Undiscovered Equities, "Undiscovered Equities' Top Picks for 2010," Undiscovered Equities (blog), Dec. 31, 2009, http://undiscoveredequities.blogspot.com/2009 12 01 archive.html), at 1. On January 5, 2010, Kevin McKnight from Undiscovered Equities sent a HUSA update highlighting positive production news from a Petrominerales well close to the CPO-4 Block. SEC-CKCooper-E-0007399 (email from Kevin McKnight, Undiscovered Equities, to Alex Montano, CK Cooper, "Houston American Energy (NASDAQ:HUSA) Petrominerales Announces 11,500 Barrel Per Day Well in Close Proximity to HUSA's CPO-4 Block" (Jan. 5, 2010)). Soon after, on January 11, 2010, McKnight highlighted HUSA as one of the top performers of the new year. SEC-Northeast-E-0005010 (email from Kevin McKnight, Undiscovered Equities, to Lee Tawes, Northeast Securities, "Undiscovered Equities Top Performers of The New Year" (Jan. 11, 2010)). In addition, McKnight highlighted positive press that HUSA received in other publications, namely the Wall Street Journal. On both February 17, 2010, and March 11, 2010, McKnight highlighted HUSA's recent coverage in the Wall Street Journal. Kevin McKnight, "Houston American Energy Corp Highlighted in the Wall Street Journal (NASDAQ:HUSA)," M2 Communications, Feb. 17, 2010; Kevin McKnight, "Houston American Energy Once Again Highlighted in the Wall Street Journal; Houston American Energy's Stake in Colombia may Pay Off," Undiscovered Equities (blog), Mar. 11, 2010, http://undiscoveredequities.blogspot.com/2010/03/houston-american-energy-onceagain.html.

<sup>&</sup>lt;sup>23</sup> See, e.g., GRE00075169 at 169 (email from Stephen Mathes at Global Hunter Securities to Kyle Krueger at Apollo Capital Corp, "FW: HUSA-Details," (Dec. 1, 2009) ("SK Energy has estimated potential of 3–5 Billion barrels of oil under this property"); GRE00103882 at 883 (email from Greg Tuerk at Global Hunter Securities to Charles Kist, "HUSA-My Home Run Pick for 2010-Incrimental Positive News Based on Petrominerales Announcement Today," (Jan. 4, 2010)) ("we have heard SK Energy estimated reserves of between 3–5Billion Bbls of oil in the ground"); GRE00123542 (email from Stephen Mathes at Global Hunter Securities to Mike Scholten at Ingalls & Snyder, "Houston American (HUSA): 10+ Bagger in the Making?" (Jan. 25, 2010) ("In addition they [HUSA] will run seismic this year and begin drilling next year a property called *CPO-4* that could contain an addition 3–5 *billion* barrels of oil").

<sup>&</sup>lt;sup>27</sup> Shareholder Watchdog, "Houston American Energy Corp. Set Up for Collapse," Seeking Alpha, Apr. 7, 2010.

<sup>&</sup>lt;sup>28</sup> Shareholders Unite, "Houston American Energy Priced for Perfection," Seeking Alpha, Apr. 7, 2010.

at SK Energy have said little about the site's potential."<sup>29</sup> The article specifically questioned the validity of HUSA's claim regarding the CPO-4 Block's reserves.<sup>30</sup>

- (18) On October 12, 2010, HUSA released a report prepared by an independent reserve engineer. In the report, the engineer estimated HUSA's share of the CPO-4 Block's unrisked prospective resources at 24.549 million barrels.<sup>31</sup> The report also noted that HUSA's share of the prospective resources was between 9.344 million and 63.439 million barrels under the low and high estimates, respectively.<sup>32</sup> Following this update on reserves, HUSA stock closed up at \$12.76 on October 12, 2010.<sup>33</sup>
- (19) In June 2011, HUSA announced that a drilling rig had been brought to the first well location in the CPO-4 Block.<sup>34</sup> After a series of setbacks,<sup>35</sup> on March 1, 2012, the company announced that the operator was going to plug the Tamandua-1 well because it had lost "the ability to effectively test the lower zones" but that it would continue to evaluate the C-7 and C-9 formations in the CPO-4 Block.<sup>36</sup> Finally, on April 19, 2012, the company announced that it was also going to "cease efforts to test and complete the C7 and C9 formations."<sup>37</sup>
- (20) Figure 2 plots HUSA's stock price from January 2009 through December 2012. The figure shows that

<sup>30</sup> Id.

<sup>34</sup> "Houston American Energy Moves Rig to CPO Four Block Located in Colombia," M2 EquityBites, June 17, 2011.

<sup>37</sup> Houston American Energy Corp., "Houston American Energy Announces Termination of Testing and Completion Efforts on Tamandua #1 Well, Plans for Next Well on CPO 4 Block in Colombia and Confirms SEC Investigation," news release, Apr. 19, 2012, available at http://www.houstonamericanenergy.com/prview.html?id=284.

<sup>&</sup>lt;sup>29</sup> Chris Carey, "Small Texas Company Promotes Big South American Oil Venture," Sharesleuth, June 28, 2010, http://sharesleuth.com/investigations/2010/06/both\_of\_the\_oil\_companies.

<sup>&</sup>lt;sup>31</sup> Houston American Energy Corp., Current Report (Form 8-K) (Oct. 12, 2010), ex. 99.1, HUSA Investor Presentation, Oct. 2010, at 11.

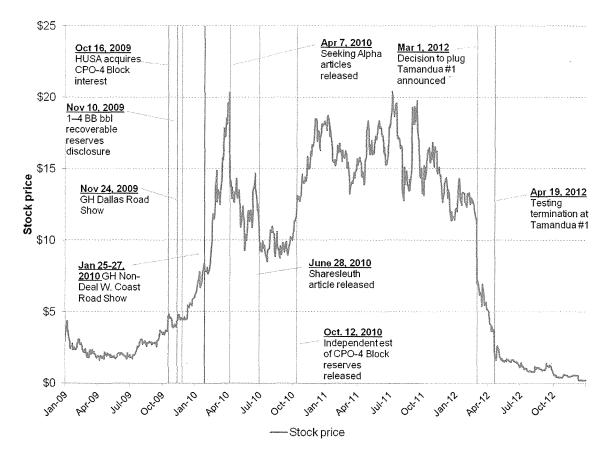
<sup>&</sup>lt;sup>32</sup> Id.

<sup>&</sup>lt;sup>33</sup> Houston American Energy Corp. closing price, via Bloomberg LP, accessed Sept. 3, 2014.

<sup>&</sup>lt;sup>35</sup> In its October 7, 2011, Form 8-K filing, HUSA announced that drilling was stopped in order to stabilize the inflow of hydrocarbons, reducing geological risk. *See* "Form 8-K: Houston American Energy Files Current Report," US Fed News, Oct. 7, 2011. HUSA announced plans to sidetrack the well due to the problems it had experienced. Benjamin Alexander-Bloch, "Gulf of Mexico Natural Gas Rig Blew while Completing 'Sidetrack Well,'" NOLA Media Group, July 23, 2013, http://www.nola.com/traffic/index.ssf/2013/07/gulf\_of\_mexico\_natural\_gas\_rig.html. ("A sidetrack well uses the same hole as the original well but then spreads to a new location at the same depth.") An article from Business News Americas stated that despite drilling taking longer than expected, HUSA was encouraged by "the strong shows of hydrocarbons... in the first objective sand." "Houston sidetracks CPO-4 well on drilling issues," Business News Americas, Oct. 5, 2011. In December 2011, the Tamandua-1 sidetrack was drilled to approximately 14,000 feet of its projected depth of 16,300 feet. In an 8-K filing, HUSA noted that it was encouraged by sands found in the well but that there was no guarantee the well would prove commercially viable. "Form 8-K: Houston American Energy Files Current Report," US Fed News, Dec. 21, 2011. During that same month, drilling was again suspended due to unexpected pressure and hydrocarbon flows. "Houston Suspends Drilling on CPO-4 due to Strong Pressure," Business News Americas, Dec. 21, 2011.

<sup>&</sup>lt;sup>36</sup> Houston American Energy Corp., "Houston American Energy Provides Update on the Tamandua #1 Well – Completion Attempt in the C-9 and C-7 Sands," news release, Mar. 1, 2012, available at <sup>6</sup> http://www.houstonamericanenergy.com/prview.html?id=276.

the stock price began to increase rapidly soon after HUSA first announced the 1 billion to 4 billion barrel recoverable reserves estimate. It continued to increase during the months of HUSA's and GHS's promotional efforts. However, the stock price fell sharply on the days that both the Seeking Alpha and Sharesleuth articles were released. HUSA's share price rose on the day that an engineer released an independent resource estimate for the CPO-4 Block. The stock price fell both on the day of the announcement to plug Tamandua-1 and on the day that testing was terminated at Tamandua-1.



#### Figure 2: HUSA stock price (2009-2012)

Source: Bloomberg data, news articles, and press releases.

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# VI. Analytical bases of opinion

(21) As detailed in the previous section, HUSA made numerous representations to prospective investors regarding its investment in the CPO-4 Block. These representations, which were made in a series of news announcements, had a significant impact on the company's valuation. This section presents the details of my analyses relating to the importance of HUSA's representations to the company's investors. In particular, it describes the methodology used to identify CPO-4 Block-related news announcements and outlines the statistical tests used to examine their importance and statistical significance.

## VI.A. Valuation of an E&P company

- (22) One way to assess the importance of a news announcement to investors is to analyze its effect on the valuation of the company and, consequently, its stock price. Basic financial theory stipulates that the value of any asset is the present value of the expected cash flows from that asset.<sup>38, 39, 40</sup> A company's valuation reflects the best available information and is continually updated as new information that affects the valuation inputs becomes available.<sup>41</sup>
- (23) An E&P company, such as HUSA, generates cash flows from the sale of oil, gas, and related assets.<sup>42, 43</sup> The present value of the cash flows for an E&P company is based on the estimated

<sup>&</sup>lt;sup>38</sup> Aswath Damodaran, Damodaran on Valuation (Hoboken, NJ: Wiley Finance, 2006), at 9–10. This is referred as the discounted cash flow (DCF) approach to valuation. Another approach, the relative valuation approach, "estimates the value of an asset by looking at the pricing of comparable assets relative to a common variable like earnings, cash flows book value or sales."

<sup>&</sup>lt;sup>39</sup> In the case of a firm, the stock price is the discounted present value of the future cash flows of the firm on a per-share basis. In this DCF approach, the value of a firm is estimated based on three inputs: expected cash flows, the timing of the cash flow, and the discount rate to convert the future cash flows to a present value basis. Aswath Damodaran, *Damodaran on Valuation* (Hoboken, NJ: Wiley Finance, 2006), at 13.

<sup>&</sup>lt;sup>40</sup> "While the methods used to value equities differ in technique, they share a common goal of estimating the stock's intrinsic value—a measure of the present value (PV) of the expected future payoffs to shareholders. In our opinion, a combination of two approaches helps to substantiate the best estimate of a firm's equity: direct valuation (discounting of estimated future cash flows, net asset valuation, or options) and relative valuation (market multiples of comparable companies)." Standard and Poor's Industry Surveys, "Oil & Gas: Production & Marketing," Aug. 27, 2009, at 40.

<sup>&</sup>lt;sup>41</sup> Aswath Damodaran, *Damodaran on Valuation* (Hoboken, NJ: Wiley Finance, 2006), at 7. "As new information comes in, [analysts] should update their valuations to reflect the new information."

<sup>&</sup>lt;sup>42</sup> The reserves can be broadly classified as proved (developed and undeveloped) and unproved (probable and possible) reserves. *See* Modernization of Oil and Gas Reporting; Final Rule, 17 C.F.R. pts. 210, 211, 229, and 249 (2009), § D, "Proved Oil and Gas Reserves," § F, "Developed and Undeveloped Oil and Gas Reserves," § H, "Unproved Reserves– 'Probable Reserves' and 'Possible Reserves," *available at* http://www.sec.gov/rules/final/2009/33-8995fr.pdf.

<sup>&</sup>lt;sup>43</sup> Companies in the exploration and production of oil and gas operate in the "upstream" segment of the industry. The other segments are "midstream" ("transportation, storage, and trading of crude oil, refined products, and natural gas") and "downstream" ("refining and marketing of crude oil"). Standard and Poor's Industry Surveys, "Oil & Gas: Production & Marketing," Aug. 27, 2009, at 24.

ultimate recoveries of oil and gas at projected prices minus all costs (exploration costs, development costs, production costs, operating expenses, taxes, etc.) discounted at the estimated cost of capital.<sup>44, 45</sup> Because of uncertainty associated with ultimate recovery, the likelihood of successful extraction is another important consideration in the valuation. Thus, news announcements containing new information about the company's estimated ultimate recoveries or the likelihood of recovery may affect investors' valuation of the company, and therefore its stock price.

- (24) In this case, information regarding the estimates of ultimate recoveries at the CPO-4 Block and the likelihood of their successful extraction were key inputs in the valuation performed by equity research analysts at GHS. On October 19, 2009, GHS estimated that HUSA's investment in the CPO-4 Block added \$2.59 per share in value to HUSA's stock price. To arrive at this estimate, GHS's valuation inputs included net locations, EUR-MBOE for each location,<sup>46</sup> price per BOE,<sup>47</sup> and a discount factor.
- (25) First, GHS projected EUR-MBOE at 1,000 for 50 net locations, which combined for a total EUR-MBOE of 50,000 (50 net locations multiplied by 1,000 EUR-MBOE per location). At a per-barrel price of \$14.55, the CPO-4 Block's value to HUSA was calculated as \$727,500,000 (50,000 EUR-MBOE multiplied by 1,000 multiplied by \$14.55 per barrel).<sup>48</sup> GHS used a discount factor of 90%, resulting in a discounted net asset value (DNAV) of \$72,750,000 (\$727,500,000 value multiplied by 0.1, 1 less 0.9 discount factor).<sup>49</sup> Last, GHS divided DNAV by HUSA's outstanding shares to find the \$2.59 value per share of the CPO-4 Block (\$72,750,000 DNAV divided by 28,062,000 shares).
- (26) Figure 3 depicts the impact of new information provided by HUSA regarding its higher "estimated recoverable reserves" on GHS's estimate of the per-share value of the CPO-4 Block, which contributed to an increase of \$9.12 per share between GHS's October 19, 2009, and January 19, 2010, research reports.<sup>50</sup> The estimated ultimate recovery was not the only input that changed between the

<sup>49</sup> DNAV stands for discounted net asset value.

<sup>&</sup>lt;sup>44</sup> For instance, HUSA reported in its 2009 10-K filing that the present value (before tax and indirect costs) of its proved reserves at a 10% discount rate (PV-10) was \$15.8 million. "The estimated present value of proved reserves does not include indirect expenses such as general and administrative expenses, debt service and future income tax expense or depletion, depreciation, and amortization." Houston American Energy Corp., Annual Report (Form 10-K) (Mar. 29, 2010), at 9–10.

<sup>&</sup>lt;sup>45</sup> For instance, the high prices of oil and gas benefit the E&P or upstream companies. "Finding (or exploration) costs reflect the expense of searching for new oil and gas reserves. Development costs reflect the expense in preparing the reserves for production by obtaining access to the reserves and building the facilities needed. Production (or lifting) costs reflect the efficiency of the company's oil and gas production." Standard and Poor's Industry Surveys, "Oil & Gas: Production & Marketing," Aug. 27, 2009, at 38.

<sup>&</sup>lt;sup>46</sup> EUR-MBOE stands for estimated ultimate recovery, thousands of barrels of oil equivalent

<sup>&</sup>lt;sup>47</sup> BOE stands for barrels of oil equivalent.

<sup>&</sup>lt;sup>48</sup> The 1,000 is included in this calculation because EUR-MBOE is *thousands* of barrels of oil equivalent.

<sup>&</sup>lt;sup>50</sup> GRE00039479 (Global Hunter Securities, "Houston American Energy Corp.," Oct. 19, 2009); GRE00117874 (Global Hunter Securities, "Houston American Energy Corp.," Jan. 19, 2010).

two GHS valuations; projected price per barrel increased by \$0.45, and the number of shares outstanding increased by about 10%.

| Valuation         | HUSA<br>EUR-<br>MBOE <sup>51</sup> | Per<br>BOE <sup>52</sup> | Value              | Discount<br>factor | DNAV             | Shares<br>outstanding | Per share       |
|-------------------|------------------------------------|--------------------------|--------------------|--------------------|------------------|-----------------------|-----------------|
|                   | A                                  | B                        | C = (A × 1000) × B | D                  | $E=C\times(1-D)$ | F                     | G=E/F           |
| Oct. 19, 2009     | 50,00053                           | \$14.55                  | \$727,500,000      | 90%                | \$72,750,000     | 28,062,000            | \$2.59          |
| Jan. 19, 2010     | 242,00054                          | \$15.00                  | \$3,630,000,000    | 90%                | \$363,000,000    | 31,000,000            | \$11.71         |
| Hypothetical scer | narios                             |                          |                    |                    |                  |                       |                 |
| 1                 | 242,000                            | \$14.55                  | \$3,521,100,000    | 90%                | \$352,110,000    | 28,062,000            | <u>\$</u> 12.55 |
| 2                 | 242,000                            | \$15.00                  | \$3,630,000,000    | 99%                | \$36,300,000     | _ 31,000,000          | \$1.17          |
| 3                 | 50,000                             | \$14.55                  | \$727,500,000      | 75%                | \$181,875,000    | 28,062,000            | \$6.48          |

#### Figure 3: CPO-4 Block valuation illustration

Source: GRE00039479 (Global Hunter Securities, "Houston American Energy Corp.," Oct. 19, 2009), at 480; GRE00117874 (Global Hunter Securities, "Houston American Energy Corp.," Jan. 19, 2010), at 882. Both reports provided a valuation of HUSA's stock price, taking into account HUSA's 25% working interest in the CPO-4 Block, and assume a likelihood of success of 10% (equivalent to a discount factor of 90%). While the October 19, 2009, valuation uses the gross oil reserve estimate of 200 million barrels as its input and calculates the value per-share price at \$2.59,<sup>55</sup> the January 19, 2010, valuation increased the gross oil reserve estimates to nearly one billion barrels and calculates the value per-share price at \$11.71.<sup>56</sup>

- (27) To illustrate the sensitivity of valuations to changes in key inputs, Figure 3 also presents three hypothetical valuations by using GHS's methodology. These hypothetical scenarios demonstrate how the CPO-4 Block per-share valuation would change as two inputs (the estimated ultimate recoveries and discount factor) change, while keeping the other inputs constant.
- (28) The first hypothetical scenario illustrates the change to the CPO-4 Block valuation attributable to the increase to the EUR-MBOE between the two reports.<sup>57</sup> In isolation, the increased EUR-MBOE raises the price per share by \$9.96, from \$2.59 to \$12.55.

<sup>&</sup>lt;sup>51</sup> EUR-MBOE stands for estimated ultimate recovery, thousands of barrels of oil equivalent.

<sup>&</sup>lt;sup>52</sup> BOE stands for barrels of oil equivalent.

<sup>&</sup>lt;sup>53</sup> Based on GHS's estimate, HUSA's share of gross oil resource is 50 million (50 net locations multiplied by 1,000 EUR-MBOE) and the total CPO-4 Block gross oil resource is 200 million (i.e., 50 million HUSA share divided by 25% working interest).

<sup>&</sup>lt;sup>54</sup> Based on GHS's estimate, HUSA's share of gross oil resource is 242 million (22 net locations multiplied by 11,000 EUR-MBOE) and the total CPO-4 Block gross oil resource is 968 million (i.e., 242 million HUSA share divided by 25% working interest).

<sup>&</sup>lt;sup>55</sup> GRE00039479 (Global Hunter Securities, "Houston American Energy Corp.," Oct. 19, 2009), at 80. Total gross oil reserves of 200 million = 50 net locations x 1,000 EUR-BOE / 25% discount. EUR stands for estimated ultimate recovery, and BOE stands for barrels of oil equivalent.

<sup>&</sup>lt;sup>56</sup> GRE00117874 (Global Hunter Securities, "Houston American Energy Corp.," Jan. 19, 2010), at 82. Total gross oil reserves of 968 million barrels = 22 net locations x 11,000 EUR-BOE / 25% discount.

<sup>&</sup>lt;sup>57</sup> In other words, its price per BOE and the number of shares outstanding are constant between the two periods.

- (29) Hypothetical scenarios two and three illustrate changes in valuation attributable to changes in the likelihood of successful extraction. Hypothetical scenario two illustrates the change to the January 19, 2010, CPO-4 Block valuation, assuming a likelihood of success of 1% rather than 10%. This change alone would cause the resulting valuation to be ten times smaller, or \$1.17 per share.<sup>58</sup> Hypothetical scenario three illustrates the change to the October 19, 2009, valuation, assuming a likelihood of success of 25% rather than 10%. This change alone would cause the valuation to increase from \$2.59 to \$6.48.
- (30) The hypothetical scenarios illustrate that estimated ultimate recovery and discount rates are key inputs into the valuation of E&P companies. For that reason, other things remaining equal, news announcements containing new, positive information about EUR-MBOE or discount rates should increase HUSA's valuation and stock price.

## VI.B. Identification of the CPO-4 Block-related news announcements

- (31) I developed a systematic approach to formally identify dates on which new information related to the CPO-4 Block was disseminated during the period from November 10, 2009, the date of HUSA's first announcement of the CPO-4 Block's estimated recoverable reserves, to October 12, 2010, when HUSA released an independent resource estimate of the CPO-4 Block's reserves.<sup>59</sup>
- (32) The systematic approach consisted of: 1) a Factiva search to identify news articles containing either "Houston American Energy," "Houston Amer Energy," or "HUSA," and either "CPO-4," "CPO4," or "CPO 4";<sup>60</sup> and 2) a review of HUSA's 8-K filings from that same period for CPO-4 Block-related announcements and their effective dates. With the exception of the June 28, 2010, Sharesleuth article, news disseminated through sources not captured by either Factiva or the company's filings was not included in further analyses.<sup>61</sup>
- (33) The systematic approach identified articles that contained new information and excluded those articles containing only redundant information. For example, on February 16, 2009, Jennifer Cummings of Dow Jones published an article titled "Houston American Gains on Success of

<sup>&</sup>lt;sup>58</sup> A likelihood of 1% is equivalent to a discount factor of 99%.

<sup>&</sup>lt;sup>59</sup> Because I focus on the instances in which new information was disseminated, any news announcements that simply repeat already reported information are not included in the analyses.

<sup>&</sup>lt;sup>60</sup> I used the "remove duplicates" setting in Factiva to eliminate articles with very similar content.

<sup>&</sup>lt;sup>61</sup> The Sharesleuth article was not available on Factiva and therefore could not have been captured by the search algorithm. The search algorithm also cannot identify instances in which the company's prospects were either discussed with investors at road show meetings or via personal communication.

Neighbor's Well." On February 17, 2010, Undiscovered Equities reprinted the article.<sup>62</sup> Because the reprint did not contain any new information, it was not considered as a news announcement.

(34) By using the systematic approach, I identified five announcement dates during the relevant time period. In addition to these five announcement dates, counsel for the Division also instructed me to incorporate into my analysis June 28, 2010, when Sharesleuth posted an article questioning the CPO-4 Block's potential. The news announcements on the six announcement dates are summarized in the following section.

## VI.B.1. CPO-4 Block-related news announcements

- (35) November 10, 2009: HUSA first announced "estimated recoverable reserves" for the CPO-4 Block in the November 10, 2009, investor presentation.<sup>63</sup> In this presentation, HUSA announced that the "CPO 4 Block consists of 345,452 net acres and contains over 100 identified leads or prospects with estimated recoverable reserves of 1 to 4 billion barrels."<sup>64</sup> News regarding the CPO-4 Block's estimated recoverable reserves would have been expected to affect HUSA's valuation and stock price.<sup>65</sup> The presentation appears to have been made public after the market closed on November 9, 2009. For that reason, November 10, 2009, is considered the effective date of the presentation for purposes of this report.<sup>66</sup>
- (36) February 16, 2010: Jennifer Cummings of Dow Jones published an article titled "Houston American Gains on Success of Neighbor's Well." The article reviewed announcements made during the previous day about production at Candelilla-2, a Petrominerales well close to the CPO-4 Block. It included quotes about the prospects of the CPO-4 Block from GHS analyst Philip McPherson and HUSA CFO James Jacobs. Specifically, McPherson calculated that "at the rates the Candelilla wells are producing, a company working in this area could earn back its investment in less than a month." Jacobs stated, "We're very excited about the prospects we have and about recreating some of the success Petrominerales has had." The article also noted that HUSA and SK Energy expected to start drilling their first well in the CPO-4 Block later in 2010.<sup>67, 68</sup> The news regarding Petrominerales's

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<sup>&</sup>lt;sup>62</sup> Kevin McKnight, "Houston American Energy Corp Highlighted in the *Wall Street Journal*," M2 Communications, Feb. 17, 2010.

<sup>&</sup>lt;sup>63</sup> Houston American Energy Corp., Current Report (Form 8-K) (Nov. 10, 2009), ex. 99.1, HUSA Investor Presentation, Nov. 2009, at 12.

<sup>&</sup>lt;sup>64</sup> Id.

<sup>&</sup>lt;sup>65</sup> See supra VI.A.

<sup>&</sup>lt;sup>66</sup> The effective date refers not to the date of publication but to the date when an announcement would be expected to have an impact on HUSA's stock price. In other words, a news announcement that occurred after market close would have an impact on the stock price on the next trading day.

<sup>&</sup>lt;sup>67</sup> Jennifer Cummings, "UPDATE: Houston American Gains on Success of Neighbor's Well," Dow Jones News Service, Feb. 16, 2010.

Candelilla-2 well suggested that the CPO-4 Block's proximity to Petrominerales's wells would translate into similar success and may have caused investors to increase their expected likelihood of success at the CPO-4 Block and therefore lowered their discount factor. This would have had a positive effect on estimated expected cash flows from the CPO-4 Block used in HUSA's valuation and a positive effect on HUSA's stock price.<sup>69</sup> Because this article was published at 12:47 p.m., its effective date is February 16, 2010.<sup>70</sup>

April 7, 2010: Two Seeking Alpha articles questioned HUSA's valuation. One article stated, "one has (37)to believe that a \$15 million investment made just a few months ago is now worth over \$500 million."<sup>71</sup> It also hypothesized that HUSA investors were unaware about, or overlooking, "prior indiscretions by HUSA's management team at a bankrupted company."<sup>72</sup> Related to the CPO-4 Block, the article noted that SK Energy's willingness to "dump" 50% of its interest should be considered "a massive red flag" and that "[a]t the very best, we believe there is a huge disconnect between the valuations of Petrominerales Ltd, who has proven success in Colombia, and the highly speculative investment in HUSA."<sup>73</sup> The other article challenged the validity of a valuation based on the proximity of the CPO-4 Block to Petrominerales's Candelilla-1 and -2 wells. Specifically, the article stated that a recent analyst report valuing HUSA's share of the CPO-4 Block at \$67 to \$269 per share, "or a market cap for HUSA of \$2.2-\$9B," went "completely overboard." It noted that Petrominerales's market cap was \$3.2 billion, meaning that "[e]ven if HUSA would be as successful as Petrominerales, it could only reach roughly 25% of their valuation (or \$800M). And we're pretty close to that already, and all that based on wells on adjacent properties." The analyses and critiques put forth by the articles questioned the reported estimated recoverable reserves and HUSA's

<sup>73</sup> Id.

<sup>&</sup>lt;sup>68</sup> Note that this article was reprinted by the *Wall Street Journal* on February 16 and Undiscovered Equities on February 17, 2010. February 17, 2010, is not included as a news announcement date because the reprint did not contain new information. *See* Kevin McKnight, "Houston American Energy Corp Highlighted in the *Wall Street Journal*," M2 Communications, Feb. 17, 2010; GRE00141413 (company-wide email from Richard D. Hastings, GH Securities, containing *Wall Street Journal* article "GHS in the Media: Phil McPherson – WSJ/Dow Jones – Houston American Gains On Success Of Neighbor's Well" (Feb. 16, 2010)). An article published on March 3, 2010, titled "Houston American's Colombia Stake may Pay Big" contained similarly optimistic quotes about the prospects of the CPO-4 Block from Global Hunter Securities analyst Philip McPherson and HUSA's CFO James Jacobs. GRE00155558 (email from Jennifer Cummings to Philip McPherson containing article "Houston American's Colombia Stake may Pay Big" (Mar. 3, 2010)).

<sup>&</sup>lt;sup>69</sup> See supra VI.A.

<sup>&</sup>lt;sup>70</sup> Jennifer Cummings, "UPDATE: Houston American Gains on Success of Neighbor's Well," Dow Jones News Service, Feb. 16, 2010.

<sup>&</sup>lt;sup>71</sup> Shareholder Watchdog, "Houston American Energy Corp. Set Up for Collapse," Seeking Alpha, Apr. 7, 2010.

<sup>&</sup>lt;sup>72</sup> Id.

likelihood of success, both of which are likely to negatively affect HUSA's stock price.<sup>74</sup> Because the articles were published at 3:21 am and 11:15 am, their effective date is April 7, 2010.<sup>75</sup>

- (38) June 28, 2010: A Sharesleuth article questioned the CPO-4 Block's potential by stating: "Although Houston American executives have been talking up the CPO 4 prospect, their counterparts at SK Energy have said little about the site's potential."<sup>76</sup> The article noted that HUSA's November 10, 2009, investor presentation stated that a field next to the CPO-4 Block was estimated to contain 610 million barrels of recoverable oil. However, Sharesleuth reached out to the owner of that field, which said it did not know where the 610 million barrel estimate came from. In addition, Sharesleuth discussed the CPO-4 Block with an executive at another oil company that had bid on it. The article stated, "He said his company did not see as much potential as Houston American and its partners do. He added that the geology of the area makes it unlikely that anyone will find a giant reservoir of oil there."<sup>77</sup> Because the article further questioned the validity of HUSA's claim regarding the CPO-4 Block's estimated recoverable reserves, it would have likely increased HUSA's discount factor and therefore negatively affected its stock price.<sup>78</sup> Because this article was published at 4:26 a.m., its effective date is June 28, 2010.<sup>79</sup>
- (39) August 2, 2010: On July 31, 2010, HUSA announced that it had reached a deal with SK Energy to acquire an additional 12.5% stake in the CPO-4 Block, bringing its interest from 25% to 37.5%.<sup>80</sup> HUSA agreed to pay a proportional interest in development and operating costs, as well as certain defined past costs.<sup>81</sup> On August 6, 2010, HUSA filed an 8-K related to this agreement.<sup>82</sup> This acquisition increased HUSA's share of estimated recoverable reserves in the CPO-4 Block, an action that could have had an effect on HUSA's per-share CPO-4 Block valuation.<sup>83</sup> Because July 31, 2010, was a Saturday, the effective date of this announcement is Monday, August 2, 2010.
- (40) **October 12, 2010**: HUSA released the executive summary of the independent reserve engineer's report. The summary contained the engineer's estimate that HUSA's interest in the CPO-4 Block

<sup>&</sup>lt;sup>74</sup> See supra VI.A.

<sup>&</sup>lt;sup>75</sup> Shareholders Unite, "Houston American Energy Priced for Perfection," Seeking Alpha, Apr. 7, 2010.

<sup>&</sup>lt;sup>76</sup> Chris Carey, "Small Texas Company Promotes Big South American Oil Venture," Sharesleuth, June 28, 2010, http://sharesleuth.com/investigations/2010/06/both\_of\_the\_oil\_companies.

<sup>&</sup>lt;sup>77</sup> Id.

<sup>&</sup>lt;sup>78</sup> See supra VI.A.

<sup>&</sup>lt;sup>79</sup> Chris Carey, "Small Texas Company Promotes Big South American Oil Venture," Sharesleuth, June 28, 2010, http://sharesleuth.com/investigations/2010/06/both\_of\_the\_oil\_companies.

<sup>&</sup>lt;sup>80</sup> Note that the effective date for this announcement is August 2, the following Monday.

<sup>&</sup>lt;sup>81</sup> "Houston American Energy to Acquire 12.5% Additional Stake in CPO 4 Block," Datamonitor's Financial Deals Tracker, July 31, 2010.

<sup>&</sup>lt;sup>82</sup> Houston American Energy Corp., Current Report (Form 8-K) (Aug. 6, 2010), at 2.

<sup>&</sup>lt;sup>83</sup> See supra VI.A.

consisted of 24.549 million barrels of unrisked prospective resources.<sup>84</sup> The engineer also noted that HUSA's share of the unrisked prospective resources was between 9.344 million and 63.349 million barrels under the low and high estimates, respectively.<sup>85</sup> It is unclear how this report would have affected HUSA's stock price. If investors at the time still gave credence to HUSA's recoverable reserves estimate of 1–4 billion barrels, then this report showing unrisked prospective resources at 24.549 million barrels would be expected to have negatively affected HUSA's stock price. However, if investors had discounted or disregarded HUSA's statements about estimated recoverable reserves, then based on the articles described above or other information known to investors, an independent engineer's report showing unrisked prospective resources could have positively affected HUSA's stock price. <sup>86</sup> A summary of the report was furnished to the SEC as an exhibit to an 8-K filed on October 12, 2010, at 8:03 a.m. For purposes of this report, October 12, 2010, is considered the effective date.

# VI.C. Significance of the CPO-4 Block-related news announcements to the company's investors

(41) To assess whether the news announcements regarding the CPO-4 Block oil quantities identified in the previous section were important to investors, I rely on the event study methodology.<sup>87</sup> The results of event studies are used to calculate the difference between the actual stock price and the price at which the stock would have traded if the announcements had not been made.

## VI.C.1. Event study

(42) An event study, which is designed to measure the price movement of a security in response to new information, is conducted in two stages. First, a market model is created that predicts the returns for a stock based on the returns for a market index.<sup>88</sup> In the second stage, a statistical test is used to determine whether the portion of the stock's return that cannot be explained by the returns for the market index is too large to be due to chance alone and is therefore attributable to the news.

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<sup>&</sup>lt;sup>84</sup> Houston American Energy Corp., Current Report (Form 8-K) (Oct. 12, 2010), ex. 99.1, HUSA Investor Presentation, Oct. 2010, at 11.

<sup>&</sup>lt;sup>85</sup> Id.

<sup>&</sup>lt;sup>86</sup> See supra VI.A.

<sup>&</sup>lt;sup>87</sup> See, e.g., In re Exec. Telecard Ltd. Sec. Litig., 979 F.Supp. 1021 (S.D.N.Y. 1997); In re Imperial Credit Indus., Inc. Sec. Litig., 2003 WL 1563084 (C.D. Cal. 2003).

<sup>&</sup>lt;sup>88</sup> Market models can be used for securities other than stocks and can contain, for example, an industry index in addition to, or in place of, a broad market index. They can also be used to analyze a group of securities rather than just a single security.

- (43) The market model estimated in the first stage of an event study separates the stock's returns into two parts: the portion of returns explained by the market index and the part attributable to companyspecific factors. This latter portion, known as the idiosyncratic or abnormal return, includes any part of the return caused by factors unrelated to the general market movement, such as firm-specific information released on that day.
- (44) The market model also measures the variability of the company-specific portion of the stock's returns, which is known as the standard error. The standard error is used to assess the statistical significance of the price movement following an event, such as a news announcement. The larger the standard error of the market model, the greater the abnormal return will have to be for it to be considered statistically significant or different from what one would expect to see in the absence of important news.
- (45) Market models are often estimated over the year prior to the beginning of an event, or a set of events, and thus do not directly measure the variability of the stock's returns at the time of the event. Insofar as a stock's volatility is similar around the time of the event and during the estimation period, the standard error of the market model may be an accurate measure of company-specific variability at the time of the event.
- (46) If the stock's volatility during the estimation period and at the time of the event differs, then the standard error of the market model may be an inaccurate measure of company-specific variability at the time of the event. This is especially true in instances in which the relevant period (the estimation period and the period in which an event, or a set of events, took place) encompasses periods of market stability and periods of uncertain and tumultuous markets.

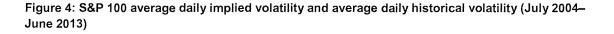
## VI.C.2. Volatility during the relevant period

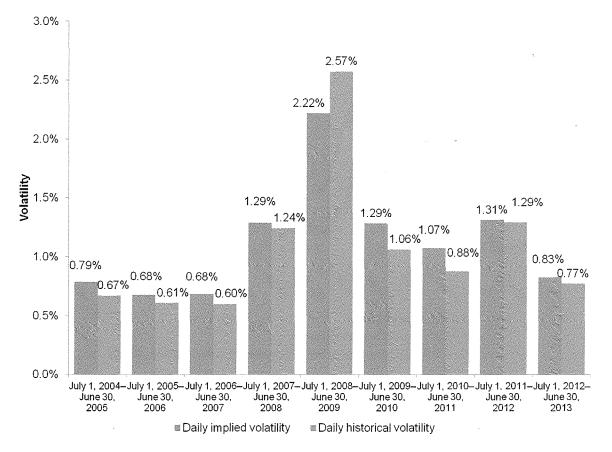
(47) I estimated the model over the year prior to November 10, 2009, when HUSA first announced its recoverable reserves estimate for the CPO-4 Block. Part of this estimation period overlaps with a period of increased market volatility from December 2007 to June 2009 stemming from a recession and financial crisis in the US economy.<sup>89</sup> Figure 4 illustrates the steady increase in 30-day historical (actual) and implied (expected) average daily market volatility, as measured by the volatility of the S&P 100 index.<sup>90</sup> Figure 5 plots daily S&P 100 implied volatility and daily S&P 100 historical

<sup>&</sup>lt;sup>89</sup> National Bureau of Economic Research, Business Cycle Dating Committee, Sept. 20, 2010, *available at* http://www.nber.org/cycles/sept2010.pdf. ("At its meeting, the committee determined that a trough in business activity occurred in the US economy in June 2009. The trough marks the end of the recession that began in December 2007 and the beginning of an expansion. The recession lasted 18 months, which makes it the longest of any recession since World War II.")

<sup>&</sup>lt;sup>90</sup> Implied volatility reflects the market's expectation of daily volatility and is defined as an estimate of volatility based on a stock's option price. Trading an option is essentially taking a bet on the volatility of the stock underlying it. By using

volatility, as well as the historical volatility of the CRB Wildcatters Index during the July 2006–June 2013 time period.<sup>91</sup>

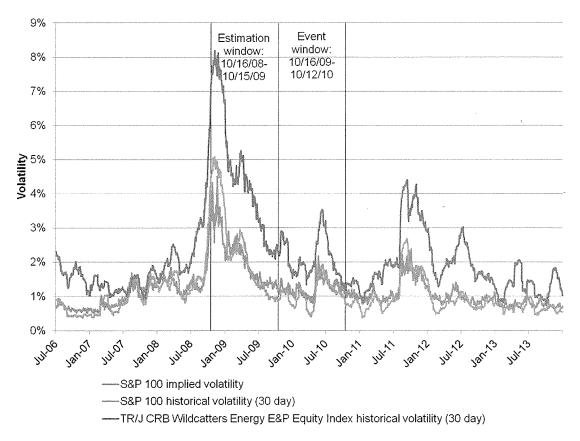




Source: S&P 100 Index historical call implied volatility and historical put implied volatility, via Bloomberg LP, accessed Sept. 3, 2014. The implied volatility is the average of call and put implied volatility. Average implied volatility and historical volatility is the average annual volatility divided by the square root of the number of trading days (252). According to Bloomberg, the implied volatility for the underlying securities is calculated from a weighted average of the volatilities of the two closest options expiring at least 20 business days out. The historical volatility is based on the relative price changes for the 30 most recent trading days.

the well-known Black-Scholes option-pricing formula, the market expectation of volatility can be backed out from the market prices of traded options.

<sup>91</sup> As explained later in this report, the CRB Wildcatters Index is an equities index designed by Thompson Reuters and Jefferies to serve as a benchmark for small-cap and mid-cap American and Canadian companies that are principally engaged in natural gas and oil E&P. Because the options on this index are not traded, the implied volatility is not available.

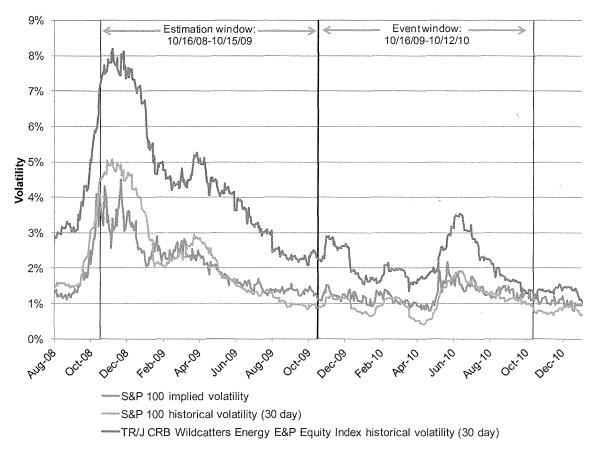


# Figure 5: Daily S&P 100 implied volatility, S&P 100 historical volatility, and TR E&P Energy Index historical volatility (July 2006–June 2013)

Source: S&P 100 Index historical call implied volatility and historical put implied volatility, S&P 100 Index historical volatility (30 day), and Thomson Reuters/Jefferies CRB Wildcatters Energy E&P Equity Index historical volatility (30 day), via Bloomberg LP, accessed Sept. 3, 2014. The implied volatility is the average of call and put implied volatility. The daily implied and historical volatility is the average annual volatility divided by the square root of the number of trading days (252).

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(48) As illustrated in Figure 4 and Figure 5, market volatility was elevated during the period used to estimate the market model (November 10, 2008–November 9, 2009). Figure 6 focuses on the November 10, 2008–October 12, 2010, period, and it shows that the levels of volatility observed during the estimation period and during the event period (November 10, 2009–October 12, 2010) were substantially different. The start of the estimation period coincides with the point at which the market volatility reached its peak. The volatility declined steadily through the estimation period and remained relatively low throughout the event window.



# Figure 6: Daily S&P 100 implied volatility, S&P 100 historical volatility, and TR E&P Energy Index historical volatility (August 2008–December 2010)

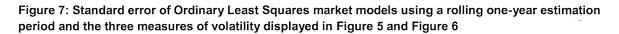
Source: S&P 100 Index historical call implied volatility and historical put implied volatility, S&P 100 Index historical volatility (30 day), and Thomson Reuters/Jefferies CRB Wildcatters Energy E&P Equity Index historical volatility (30 day), via Bloomberg LP, accessed Sept. 3, 2014. The implied volatility is the average of call and put implied volatility. The daily implied and historical volatility is the average annual volatility divided by the square root of the number of trading days (252).

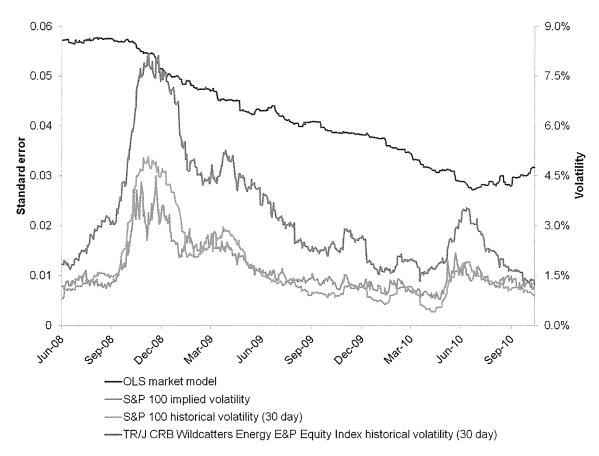
(49) The fact that volatility is changing through time means that the standard error of the estimated market model can also change depending on the time period over which it is estimated. This is important because if the standard error that is used to assess the statistical significance of the event days is overestimated, then the statistical significance of the event days will be understated. To illustrate this point, I estimate the model by using Ordinary Least Squares (OLS) applied to the sequence of one-year periods beginning on June 1, 2008, and ending on October 12, 2010.<sup>92</sup> The standard errors from

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<sup>&</sup>lt;sup>92</sup> Ordinary Least Squares (OLS) is "[a] method for estimating the parameters of a multiple linear regression model. The ordinary least squares estimates are obtained by minimizing the sum of squared residuals." Jeffrey M. Wooldridge, *Introductory Econometrics* (Mason, OH: Thomson Higher Education, 2006), at 867.

this exercise, which I plot in Figure 7,<sup>93</sup> exhibit a marked decline throughout the relevant period, from almost 6% when the market model is estimated over the June 2008–June 2009 estimation period to below 3% when the market model is estimated over the June 2010–June 2011 estimation period. This decline in the standard errors implies that the statistical significance—and, hence, the importance of an event that occurred during the period of lower volatility—would be understated if one relied on the standard error computed from the period of higher volatility. Indeed, a 10% abnormal return would be statistically significant at the 1% level of significance if evaluated by using the standard error from the June 2010–June 2011 estimation period but would be insignificant at this same level of significance if evaluated by using the standard error from the June 2008–June 2009 estimation period.





Source: S&P 100 Index historical call implied volatility and historical put implied volatility, S&P 100 Index historical volatility (30 day), and Thomson Reuters/Jefferies CRB Wildcatters Energy E&P Equity Index historical volatility (30 day), via Bloomberg LP, accessed Sept. 3, 2014. The implied volatility is the average of call and put implied volatility. The daily implied and historical volatility is the average annual volatility divided by the square root of the number of trading days (252).

<sup>&</sup>lt;sup>93</sup> For instance, the value shown for June 1, 2008, is the standard error for the estimation period from June 1, 2008, to May 31, 2009.

#### VI.C.3. Market model estimation

(50) As I explained earlier, a standard approach to assess the importance of news announcements to investors is to estimate a market model, which establishes how the company's returns vary with the returns of the market and industry indices:

$$R_t^A = \alpha + \beta_1 R_t^M + \beta_2 R_t^I + \varepsilon_t, \tag{1}$$

where  $R_t^A$  is a return of Company A on day t,  $R_t^M$  is a return of the broad market index on day t,  $R_t^I$  is a return of the industry index on day t,  $\alpha$  is a constant term that depicts the trend that would be observed in the company's returns if the market were flat,  $\beta_1$  is a coefficient capturing how the stock returns vary relative to the market index,  $\beta_2$  is a coefficient capturing how the stock returns vary relative to the industry index, and  $\varepsilon_t$  is an error term that depicts the movement of the stock's returns that cannot be explained either by the movement in a market or industry indices. The error term is also referred to as the company-specific portion of the stock's return.

- (51) I model HUSA's daily stock returns as a function of the S&P 500 index's daily returns (which capture the returns of a broad market index), the daily returns of the CRB Wildcatters Index (which capture the returns of an industry index), and an error term that captures the movement of the company's returns that cannot be explained either by the movement in the market or industry indices. The CRB Wildcatters Index is an equities index designed by Thompson Reuters and Jefferies to serve as a benchmark for small-cap and mid-cap American and Canadian companies that are principally engaged in natural gas and oil E&P.<sup>94</sup>
- (52) To address the fact that the market volatility changed over the relevant period,<sup>95</sup> I use a statistical approach that allows me to predict the expected return and company-specific volatility in the event window, which can then be used in the tests of statistical significance. The idiosyncratic volatility can be estimated by using a generalized autoregressive conditional heteroskedasticity (GARCH) model.<sup>96</sup>A GARCH model is used to account for scenarios in which the volatility of the market is

<sup>&</sup>lt;sup>94</sup> Both HUSA and Petrominerales were among the constituents of this index in March–December 2010 and January– February 2010, respectively, but their "weights" did not exceed 0.63% and 1.73%, respectively. Thomson Reuters/Jefferies CRB Wildcatters Energy E&P Equity Index, via Bloomberg LP, accessed Sept. 3, 2014.

<sup>&</sup>lt;sup>95</sup> I apply the Breusch–Pagan (1979), Cook–Weisberg (1983), and White (1980) tests to test the null hypothesis that the estimated market model residuals are homoskedastic, meaning that they have a constant variance. The Breusch–Pagan and Cook–Weisberg test suggests that the null hypothesis of homoskedasticity can be rejected at the 7.47% level of significance. The White test provides even stronger evidence against the null hypothesis. It suggests that the null hypothesis of homoskedasticity can be rejected at the 0.01% significance level. Trevor S. Breusch and Adrian R. Pagan, "A Simple Test for Heteroscedasticity and Random Coefficient Variation," *Econometrica* 47, no. 5 (1979): 1287–94; R. Dennis Cook and Sanford Weisberg, "Diagnostics for Heteroscedasticity in Regression," *Biometrika* 70, no. 1 (1983): 1–10; Halbert White, "A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity," *Econometrica* 48, no. 4 (1980): 817–38.

<sup>&</sup>lt;sup>96</sup> Albert Corhay, and A. Tourani Rad, "Conditional Heteroskedasticity Adjusted Market Model and an Event Study,"

time-dependent. In other words, the idiosyncratic portion of the return (depicted by the error term, the difference between the actual return and that implied by the market model) changes over time and is dependent on the previous periods' idiosyncratic returns and their volatility.

(53) A GARCH(1,1) model, a particular form of a GARCH model in which the variation of the error term is directly determined by only one lag term of the error term itself and one lag term of its variation,<sup>97</sup> is shown below.

$$R_t^A = \alpha + \beta_1 R_t^M + \beta_2 R_t^I + \varepsilon_t \tag{2}$$

 $\operatorname{Var}(\varepsilon_t) = \sigma_t^2 = \gamma_0 + \delta_1 \varepsilon_{t-1}^2 + \delta_2 \sigma_{t-1}^2$ 

The first of the above equations represents the baseline market model described in paragraph (50). The error term  $\varepsilon_t$  depicts the movement in the stock's returns that cannot be explained by the movement in either the market or industry indices. The second equation captures how this company-specific variation of Company A's return evolves over time. In this equation,  $\gamma 0$  is a constant,  $\varepsilon_{t-1}^2$  is the lagged error term ("ARCH term"), and  $\sigma_{t-1}^2$  represents the variation of the lagged error term ("GARCH term").<sup>98</sup>

## VI.C.4. Results

(54) As noted above, I estimated the model over the year prior to November 10, 2009, when HUSA first announced its recoverable reserves estimate for the CPO-4 Block. In order to obtain a "clean" benchmark period, any news associated with the CPO-4 Block would have to be excluded from the estimation period. On October 16, 2009, the company announced that it finalized its farmout agreement and joint operating agreement with SK Energy and acquired 25% rights to the CPO-4 Block in the Western Llanos Basin of Columbia. The investment in the CPO-4 Block was the largest

Quarterly Journal of Economics and Finance 36, no. 4 (1996): 529-38.

<sup>&</sup>lt;sup>97</sup> The economic literature provides evidence that the volatility process of financial asset prices can be well approximated by GARCH(1,1). For example, Ashley and Patterson (2010) show that the GARCH(1,1) specification cannot be rejected in the daily series of the "CRSP" equally weighted stock index in the sample period from January 6, 2006, to December 31, 2007. Richard A. Ashley and Douglas M. Patterson, "A Test of the GARCH(1,1) Specification for Daily Stock Returns," *Macroeconomic Dynamics* 14 (2010): 137–44. For another example, Hansen and Lunde (2001) compare 330 different volatility models with the two benchmark models, ARCH(1) and GARCH(1,1), and find that none of the alternative model specifications provide a significantly better forecast than GARCH(1,1). The estimation samples are daily exchange rate data (DM/\$) from October 1, 1992, to September 30, ‡993, and daily IBM stock prices from June 1, 1999, to May 21, 2000. P. Reinhard Hansen and Asger Lunde, "A Comparison of Volatility Models: Does Anything Beat A GARCH(1,1)?" (Working Paper Series No. 84, Center for Analytical Finance, University of Aarhus, Mar. 2001).

<sup>&</sup>lt;sup>98</sup> I tested the significance of the abnormal returns for all CPO-4 Block-related news announcement days based on GARCH models with different orders of ARCH and GARCH terms (ranging from 1 to 5). The significance of the abnormal returns is robust with respect to the choice of GARCH model specification.

working interest in an E&P concession in the company's history. For that reason, I excluded October 16, 2009, from the estimation period.

- (55) The market model estimates are presented in Figure 8. The constant term is small and insignificant at the 5% significance level, which means that after controlling for market and industry movements, the company's stock did not exhibit a trend. The coefficient associated with the S&P 500 index is significant at the 5% significance level and equals 1.5, which implies that a 1% increase in the S&P 500 index, holding all else equal, is associated with a 1.5% increase in HUSA's stock price. Similarly, the coefficient associated with the CRB Wildcatters Index is significant (at the 5% significance level) and equals 0.32, which implies that a 1% increase in the CRB Wildcatters Index, holding all else equal, is associated with an approximately 0.32% increase in HUSA's stock price.<sup>99</sup>
- (56) Figure 8 also includes the estimated coefficients of the GARCH(1,1) model. While the coefficient on the ARCH term ( $\delta_1$  in equation system 2) is insignificant, the coefficient on the GARCH term ( $\delta_2$  in the same system) is statistically significant and shows that on average, the company's volatility on a day *t* equals 0.77 of its volatility on the previous day.

| Statistic                | Coefficient | p-value |
|--------------------------|-------------|---------|
| Constant                 | -0.001      | 0.853   |
| S&P 500 Index            | 1.505       | 0.000   |
| CRB Wildcatters Index    | 0.322       | 0.024   |
| Variance modeling        |             |         |
| Constant                 | 0.000       | 0.283   |
| ARCH                     | 0.074       | 0.186   |
| GARCH                    | 0.773       | 0.000   |
| Number of observations   | 251         |         |
| R-squared <sup>100</sup> | 0.405       |         |

Figure 8: Market model estimated by using GARCH(1,1): November 10, 2008–November 9, 2009

(57) The magnitude of the abnormal returns associated with the news announcements of the company's investment in the CPO-4 Block and their statistical significance are summarized in Figure 9. The second column contains the company's abnormal returns. The third column displays the standard error, which measures the uncertainty regarding the estimated coefficient (similar to a margin of error in a political poll). The p-value, which is displayed in the next-to-last column, describes the level of statistical significance of the estimated coefficient (the p-value is the probability of obtaining a

and a

<sup>&</sup>lt;sup>99</sup> During the estimation period, the two indices have a correlation of 0.85. I estimated the market model by using the industry index alone. The number of statistically significant news dates and the magnitude of the log abnormal returns are robust with respect to the exclusion of the market index.

<sup>&</sup>lt;sup>100</sup> R-squared is calculated by using the residuals implied by the coefficient estimates.

coefficient just as large as, or larger than, the estimated coefficient if, in fact, the true value of the coefficient is zero). The last column indicates whether the abnormal return is statistically significant at the 5% significance level.

| Date          | Abnormal log<br>returns | Standard<br>error | p-value <sup>101</sup> | Statistically significant |
|---------------|-------------------------|-------------------|------------------------|---------------------------|
| Nov. 10, 2009 | 0.098                   | 0.049             | 0.047                  | Yes                       |
| Feb. 16, 2010 | 0.125                   | 0.047             | 0.008                  | Yes                       |
| Apr. 7, 2010  | -0.324                  | 0.049             | 0.000                  | Yes                       |
| June 28, 2010 | -0.133                  | 0.049             | 0.007                  | Yes                       |
| Aug. 2, 2010  | -0.056                  | 0.053             | 0.288                  | No                        |
| Oct. 12, 2010 | 0.075                   | 0.046             | 0.101                  | No -                      |

Figure 9: Abnormal returns for all CPO-4 Block-related news announcement days

### VI.C.5. Sensitivity analyses

- (58) To corroborate the findings from the GARCH model, I also estimated an OLS model over a one-year period starting in November 10, 2009, when HUSA first announced its recoverable reserves estimate for the CPO-4 Block. In order to obtain a "clean" benchmark period, any news associated with the CPO-4 Block would have to be excluded from the estimation period. For that reason, I excluded all days discussed in section VI.B.1.
- (59) The OLS event window model estimates are presented in Figure 10, and the magnitude of the abnormal returns associated with the news announcements of the company's investment in the CPO-4 Block and their statistical significance based on the OLS model are summarized in Figure 11.<sup>102</sup>
- (60) The OLS estimates yield four statistically significant CPO-4 Block news dates: November 10, 2009, February 16, 2010, and April 7, 2010. October 12, 2010, is statistically significant at the 6.16% significance level. The constant term, which captures the company's daily net-of-market log return, equals 0.0054 (approximately 0.5% daily net-of-market return) and is statistically significant.
- (61) Figure 11 shows that the abnormal returns and corresponding p-values for the announcement dates related to the CPO-4 Block are very similar to the results from the GARCH model as depicted in Figure 9.

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<sup>&</sup>lt;sup>101</sup> p-values are calculated by using t-statistic, which assumes that the residuals are normally distributed.

<sup>&</sup>lt;sup>102</sup> The Breusch–Pagan and Cook–Weisberg test suggests that the null hypothesis of homoskedasticity cannot be rejected.

| Statistic              | Coefficient | p-value |
|------------------------|-------------|---------|
| Constant               | 0.005       | 0.029   |
| S&P 500 Index          | 0.574       | 0.167   |
| CRB Wildcatters Index  | 0.639       | 0.006   |
| Number of observations | 246         |         |
| R-squared              | 0.195       |         |

Figure 10: Market model estimated by using OLS: November 10, 2009–November 9, 2010

#### Figure 11: Abnormal returns for all CPO-4 Block-related news announcement days based on OLS model

| Date          | Abnormal log<br>returns | Root mean-<br>squared error | p-value | Statistically significant |
|---------------|-------------------------|-----------------------------|---------|---------------------------|
| Nov. 10, 2009 | 0.092                   | 0.038                       | 0.017   | Yes                       |
| Feb. 16, 2010 | 0.126                   | 0.038                       | 0.001   | Yes                       |
| Apr. 7, 2010  | -0.330                  | 0.038                       | 0.000   | Yes                       |
| June 28, 2010 | -0.136                  | 0.038                       | 0.000   | Yes                       |
| Aug. 2, 2010  | -0.048                  | 0.038                       | 0.209   | No                        |
| Oct. 12, 2010 | 0.072                   | 0.038                       | 0.062   | No                        |

# **VII. Conclusion**

(62) I have analyzed news announcements on six different dates, all related to HUSA's CPO-4 Block investment. Four of these announcement dates are associated with company-specific price returns that are statistically significant at the 5% significance level. Therefore, by using the 5% significance level as an importance threshold, I conclude that the news announcements on November 10, 2009, February 16, 2010, April 7, 2010, and June 28, 2010, contained new information that was important to the company's investors. Figure 12 provides the actual and abnormal (net-of-market) price change and percentage return for the four significant days.

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| Date          |        | Price change | e        | Percentage return |           |          |  |
|---------------|--------|--------------|----------|-------------------|-----------|----------|--|
| Date          | Actual | Predicted    | Abnormal | Actual            | Predicted | Abnormal |  |
| Nov. 10, 2009 | \$0.40 | (\$0.00)     | \$0.41   | 10.2%             | -0.1%     | 10.3%    |  |
| Feb. 16, 2010 | 1.49   | 0.314        | 1.18     | 17.5              | 3.7       | 13.3     |  |
| Apr. 7, 2010  | (5.84) | (0.30)       | (5.54)   | -28.7             | -1.5      | -27.6    |  |
| June 28, 2010 | (1.66) | (0.11)       | (1.55)   | -13.2             | -0.9      | -12.5    |  |

Figure 12: Price change and percent return for statistically significant CPO-4 Block-related news announcement days

- (63) As I explained earlier, on November 10, 2009, HUSA announced that the "CPO 4 Block consists of 345,452 net acres and contains over 100 identified leads or prospects with estimated recoverable reserves of 1 to 4 billion barrels."<sup>103</sup> This was HUSA's first announcement regarding estimated recoverable reserves on the CPO-4 Block, an important input in the company's valuation. In the wake of the announcement, the company's stock price increased from \$3.95 to \$4.35. A price increase of \$0.41 (10.3%) is attributable to the information released in the November 10, 2009, announcement and results in an increase in HUSA's market capitalization of \$11,480,317.<sup>104</sup>
- (64) On February 16, 2010, a Dow Jones article reported recent positive announcements made about production at Candelilla-2, a Petrominerales well close to the CPO-4 Block. This information positively affected investors' expected likelihood of the CPO-4 Block's success and therefore lowered the discount factor. In the wake of the announcement, the company's stock price increased from \$8.52 to \$10.10. A price increase of \$1.18 (13.3%) is attributable to the information released in the February 16, 2010, Dow Jones article and results in an increase in HUSA's market capitalization of \$33,040,911.<sup>105</sup>
- (65) On April 7, 2010, two Seeking Alpha articles questioned HUSA's valuation. One article also hypothesized that HUSA investors were unaware about, or overlooking, management's previous indiscretions. The other challenged the validity of a valuation based on the proximity of the CPO-4 Block to other producing wells. This information negatively affected investors' expected likelihood of the CPO-4 Block's success and therefore increased the discount factor. In the wake of the announcement, the company's stock price fell from \$20.35 to \$15.51. A price drop of \$5.84 (-27.6%)

<sup>&</sup>lt;sup>103</sup> Houston American Energy Corp., Current Report (Form 8-K) (Nov. 10, 2009), ex. 99.1, HUSA Investor Presentation, Nov. 2009, at 12.

<sup>&</sup>lt;sup>104</sup> 28,000,772 shares outstanding multiplied by an abnormal price increase of \$0.41 per share.

<sup>&</sup>lt;sup>105</sup> 28,000,772 shares outstanding multiplied by an abnormal price increase of \$1.18 per share.

is attributable to the information released in the April 7, 2010, Seeking Alpha articles and results in a decrease in HUSA's market capitalization of \$172,187,477.<sup>106</sup>

- (66) On June 28, 2010, a Sharesleuth article further questioned the CPO-4 Block's potential and had a negative effect on the company's valuation. In the wake of the announcement, the company's stock price dropped from \$12.54 to \$10.88. A price drop of \$1.55 (-12.5%) is attributable to the information released in the June 28, 2010, Sharesleuth article and results in a decrease in HUSA's market capitalization of \$48,175,197.<sup>107</sup>
- (67) In this report, I have outlined my opinions and the basis for them. I reserve the right to expand, amend, and/or change this report based upon additional information that may be subsequently provided to or obtained by me.

Branko Jovanovic, Ph.D.

11/21/2014

November 21, 2014

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<sup>106</sup> 31,080,772 shares outstanding multiplied by an abnormal price decrease of \$5.54 per share.

<sup>107</sup> 31,080,772 shares outstanding multiplied by an abnormal price decrease of \$1.55 per share.

# Exhibit 1. Curriculum vitae

# Branko Jovanovic, Ph.D.

#### Education

- Ph.D., Economics, Texas A&M University
- M.A., Economics, Central European University, Prague, Czech Republic
- B.S., Economics, School of Economics, University of Belgrade, Serbia

## **Professional Experience**

- Assistant Adjunct Professor, Microeconometrics, John Hopkins University, May 2014–present
- Principal, AFE Consulting, 2011–2012
- Senior Consultant, NERA, 2005–2011
- Assistant Adjunct Professor, Applied Statistics and Econometrics, New York University, 2007
- Economist, CapAnalysis, 2001–2004
- Consultant, World Bank, 1998–2001
- Teaching Assistant, Department of Economics, Texas A&M University, 1996–2001

#### Expert filings and testimony

- Magic Hours Prod., Inc. v. TIME of My Life Pty Ltd., ICDR Case No. 50 140 T 00647 11.
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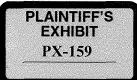
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يني م Independent Technical Expert In the Matter of Houston American Energy Corp., et al, File Number 3-16000

November 2014

**Prepared for** 

The Division of Enforcement of the United States Securities and Exchange Commission

Prepared by NETHERLAND, SEWELL & ASSOCIATES, INC. 



#### INTRODUCTION

- 1. The Division of Enforcement of the United States Securities and Exchange Commission (the Division) has engaged Netherland, Sewell & Associates, Inc. (NSAI) as an independent technical expert for In the Matter of Houston American Energy Corp., et al, File Number 3-16000.
- 2. In 2008, a privately held South Korean conglomerate, SK Energy (SK), acquired a 100 percent interest in the CPO-4 Block (Block), which is located in the western portion of Colombia's Llanos Basin and covers approximately 345,000 acres (540 square miles). In April 2009, SK published a 54-page document titled "Farm-In Opportunity" (Reference 1) that described SK's evaluation of the Block to date. SK appears to have provided the document to prospective farm-in partners (i.e., partners who are brought in to an exploration and production project to defray costs) on the Block, including Houston American Energy Corp. (Houston American). The document depicted the nature and extent of SK's technical evaluation of the Block as of April 2009. It stated that SK had (a) identified "22 structures with 58 horizons" on the Block, (b) estimated the Block's horizons to contain a "Total Potential" of 974 million barrels (MMBBL) of oil, and (c) estimated the Block to have a "High Potential" of 639 MMBBL of oil.
- 3. In mid-2009, Houston American executed a farm-in agreement with SK, pursuant to which it obtained a 25 percent "working interest" in the Block. SK continued to act as the operator of the Block, which meant that it retained control of most decisions related to the Block's development.
- 4. In November 2009, Houston American created a multipage presentation that described the Block and provided an abbreviated overview of SK's evaluation. In addition to including certain slides from SK's "Farm-In Opportunity" document, the presentation stated that the Block "contains over 100 identified leads or prospects with estimated recoverable reserves of 1 to 4 billion barrels" (Reference 2, referred to herein as "the Presentation"). The Presentation did not disclose SK's range of estimates for the Block. Houston American furnished the Presentation as an exhibit to its Form 8-K submission to the United States Securities and Exchange Commission (SEC) on November 9, 2009 (Reference 3).
- 5. In this report, we will first present general information about the oil industry in Colombia, the Llanos Basin, and the Block. Second, we will describe the industry-accepted, standard definitions of the terms "reserves", "leads", and "prospects", and will explain how Houston American's Presentation, by misusing the terms, understated the degree of risk and uncertainty associated with the Block. Third, we will discuss the nature and extent of SK's evaluation of the hydrocarbon potential in the Block, chronologically from April to November 2009, to provide a better understanding of both the information that was available to Houston American prior to the creation of its Presentation in November 2009, and the basis of Houston American's estimates. Fourth, we will assess in detail Houston American's claim that the Block "contains over 100 identified leads or prospects with estimated recoverable reserves of 1 to 4 billion barrels". This report, in its entirety, will provide the basis for the following opinions:
  - a. Houston American's claim that the Block contained an estimated "1 to 4 billion barrels" of recoverable reserves was not supported by available geologic data and exceeded reasonable benchmarks when compared to the volume of discovered hydrocarbons from the entire Llanos Basin.
  - b. Houston American's claim that the Block contained over "100 leads or prospects" also understated the degree of risk and uncertainty associated with the Block. The "100 leads or prospects" described in the Presentation would have made the Block one of the most—if not the most—prolific exploration and production blocks in the entire Llanos Basin. However, the Block did not contain over "100 leads or prospects", but instead contained a few leads and a large number of speculative plays that were insufficiently defined to form the basis of a resources or reserves estimate. By describing the speculative

targets as "leads or prospects", Houston American's Presentation understated the high degree of risk and uncertainty associated with the targets and thus with the successful development of the Block.

- c. Houston American's claim that the Block contained "recoverable reserves" understated the degree of risk and uncertainty associated with the Block. In the petroleum industry, reserves are uniformly understood to be quantities of oil that have been discovered and deemed to be commercially producible. There were no reserves on the Block in November 2009, and we are not aware of any data or information indicating that reserves have since been demonstrated to exist on the Block.
- d. Houston American's claim that the Block contained "1 to 4 billion barrels" of recoverable oil was not supported by SK's evaluation of the Block between April and November 2009. To the contrary, SK's continued evaluation between April and November 2009 reduced the estimated volumes of resources in the Block. The reduction is clearly reflected in documents that were presented at Technical Committee Meetings (TCMs) in September and October 2009 that we understand to have been attended by Houston American's Chief Executive Officer (CEO).

#### QUALIFICATIONS OF NSAI\_\_\_\_\_

- 6. NSAI, established in 1961, has offices in Dallas and Houston and is a firm of professionals dedicated to providing superior consulting services to the international petroleum industry. We are experienced in a full range of reservoir engineering and geologic services, including reservoir simulation, probabilistic modeling, reserves determination, fluid analysis, material balance analysis, well test analysis, wellbore inflow/outflow modeling, production analysis, geologic mapping, 2-D and 3-D seismic interpretation, petrophysical analysis, and economic evaluation. Our professional staff are carefully recruited from the industry's most qualified candidates. The average experience level of our engineering, geoscience, and petrophysical staff exceeds 20 years, with most having 5 to 15 years with a major oil company.
- 7. NSAI offers a complete range of engineering, geological, geophysical, and petrophysical services for a diverse range of projects. We conduct major projects using a multidisciplinary team approach and have experience in most producing basins throughout the world, including basins in Colombia, and strive to fully utilize all geoscience and engineering data available.
- 8. NSAI is one of the most respected names in independent reserves reporting. NSAI provides more SEC reserves reports for public companies than any other firm. We strive to be thorough, accurate, and fair. From a single-well evaluation to a country-wide study, from the smallest request to the largest presentation, we pay attention to the details. In addition to the annual SEC reports for our clients, we also assist with initial public offerings, acquisitions, mergers, divestitures, borrowing base determinations, competent person reports for foreign financial markets, equity determinations, gas storage studies, project finance certification, shale oil and gas developments, and modeling and simulation. Our clients include small privately owned oil and gas companies, major and independent oil and gas companies, national oil and gas companies, financial institutions, and investors.
- 9. The following professional is the primary contributor to this analysis:

Mr. Ruurdjan (Rudi) de Zoeten – Mr. de Zoeten is a Vice President of NSAI. He has been a geoscience consultant with NSAI since 2008 after working for 17 years at Unocal Corporation and 2 years at Kosmos Energy. Work includes oil and gas hydrocarbons classification and estimation using both deterministic and probabilistic methods. He performs integrated field studies with an emphasis on incorporating geological, geophysical, and petrophysical assessments with reservoir engineering and production data. His responsibilities include seismic interpretation, attribute analysis, stratigraphic analysis, reservoir characterization and modeling, prospect generation, and risk assessment. He was recognized at both

previous companies as an expert in developing new opportunities utilizing strong interdisciplinary technical and business skills in a variety of geologic settings. Mr. de Zoeten has conducted studies on properties in Colombia. His resume is included in Appendix A.

- 10. Neither NSAI nor any of its staff has any interest in the outcome of this matter, nor are NSAI's fees in any way related to the outcome of this proceeding. NSAI believes that the facts stated in this report are true, that the analysis herein is fair and reasonable, and that the conclusions and opinions it has expressed are correct.
- 11. NSAI performs work on a time and materials basis. Our costs to conduct studies of this type are based on our litigation hourly rates, as shown in the rate schedule below, plus out-of-pocket expenses. Out-of pocket expenses, including travel costs will be billed separately at cost with appropriate documentation.

Lloumly Data

|                                                                  | Hourly Rate<br>(US\$) |
|------------------------------------------------------------------|-----------------------|
| Senior Engineers, Geologists, Geophysicists, and Petrophysicists | 370 - 510             |
| Staff Engineers, Geologists, Geophysicists, and Petrophysicists  | 245 - 360             |
| Engineering, Geological, and Petrophysical Analysts              | 65 - 210              |
| Computer Systems Analysts/Programmers                            | 120 - 280             |
| Administrative/Support Staff                                     | 35 - 160              |
| Geophysical and Other Workstation Time                           | 40 - 100              |

#### DATA SOURCES

- 12. My opinion is based on the data and documents provided by the Division consisting primarily of reports from the Block operator, including farm-in presentations, TCM presentations and Operating Committee Meeting (OCM) minutes, maps generated from seismic data, selected seismic lines and seismic interpretation reports, regional geological reports and maps, and environmental and contract documents (Appendix B). The data set also contains Houston American's investor presentations, third-party reports from firms hired by Houston American, and a technical expert report also commissioned by and prepared for Houston American. In addition, testimony from Houston American company executives was provided. I also reviewed available public data from various web sites that included data such as technical and regional papers, reports, and news releases. A list of literature and news reports I considered is included in Appendix C. Although basic well log and seismic data were unavailable for independent analysis, the data set provided was large. A list of documents that I considered most useful in preparing this report is in the Table of References.
- 13. In addition, my opinion herein is based on my education, training, and expertise in the evaluation of reserves and resources for projects dedicated to the exploration and development of oil and gas properties around the world, as well as consultation with other technical experts within NSAI.

#### COLOMBIA, LLANOS BASIN, AND CPO-4 BLOCK\_

14. The country of Colombia is located in the northwestern portion of South America. It is bordered by Venezuela, Brazil, Peru, and Ecuador. It also shares a border with Panama on its western coast. While drug trafficking and political instability dominated in years past, Colombia today has one of the fastest growing economies in South America. It is facilitated by political stability and elimination of the drug cartels. Oil exploration and production in Colombia started in the 1930s, but production growth did not occur until the 1980s after discovery of the country's largest fields, and leveled off in the 1990s. Over the past decade the Colombian government has implemented measures to make the investment climate more attractive to foreign oil companies, which has resulted in increasing reserves and a return to production growth.



- 15. According to BP Statistical Review (Colombia Oil Almanac, Reference 4), the country of Colombia had 1.9 billion barrels of proven reserves remaining at the end of 2010. By the end of 2013, BP Statistical Review estimated proven remaining reserves had increased to 2.4 billion barrels (Reference 5). As of November 2007, the entire country of Colombia only contained three giant oil and gas fields, with a giant field characterized by ultimate recoveries (cumulative production plus remaining reserves) of 500 MMBBL of oil or greater.
- 16. The Llanos Basin is one of many oil-bearing basins in Colombia. It is one of the four primary basins; the other three are the Putumayo, Upper Magdalena, and Lower Magdalena Basins (Figure 1). The Llanos Basin is located in the central and eastern part of the country and is approximately 77,200 square miles in size. This compares to the size of the State of Virginia at approximately 42,800 square miles.

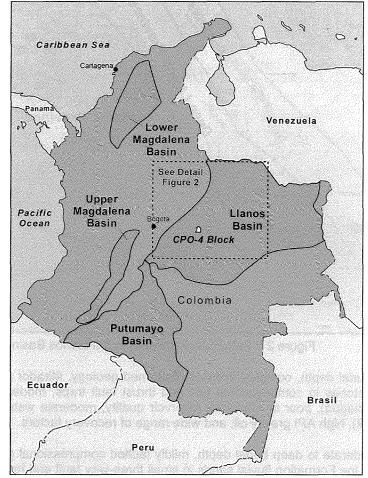


Figure 1 – Primary Petroliferous Basins in Colombia

17. Within the Llanos Basin itself there are four diverse and geologically distinct producing areas or provinces. From west to east these provinces are commonly referred to as the Foothills, the Deep Llanos, the Plains, and the Heavy Oil (Figure 2, Reference 6). Oil gravities, depth of oil, depositional features, geology, and producing horizons vary from area to area and create significantly varying oil recovery characteristics between the various provinces of the Llanos Basin.



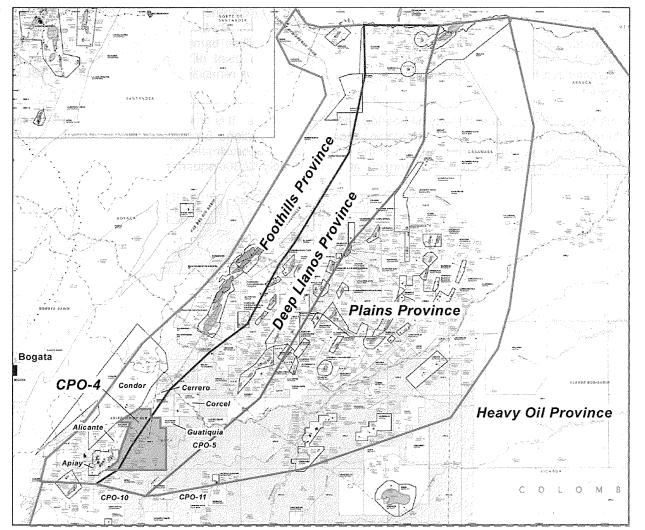
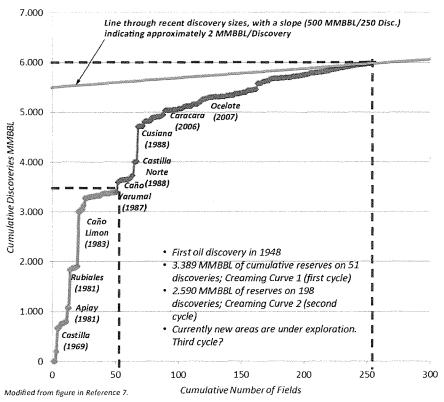


Figure 2 – Petroleum Provinces in the Llanos Basin

- a. <u>Foothills</u>: deep burial depth, complex intensely deformed geology, Mirador Formation naturally fractured tight fluvial sandstones in compressional fold and thrust fault traps, moderate to huge field sizes (i.e., Cusiana and Cupiagua), poor to moderate reservoir quality, moderate water saturation, gas drive, high gas-oil ratio (GOR), high API gravity oil, and wide range of recovery factors.
- b. <u>Deep Llanos</u>: moderate to deep burial depth, mildly faulted compressional geology; Carbonera, Mirador, Guadalupe, and Une Formation fluvial sands in small three-way fault and four-way closure traps; small to moderate field sizes (i.e., Corcel and Guatiquia); good reservoir quality; moderate water saturation; strong aquifer support; low GOR; moderate API gravity oil; and high recovery factors.
- c. <u>Plains</u>: moderate burial depth, mildly faulted extensional geology, Carbonera and Mirador Formation fluvial sands in small three-way fault traps, small field sizes, good reservoir quality, moderate water saturation, strong aquifer support, moderate GOR, moderate API gravity oil, and moderate to high recovery factors.



- d. <u>Heavy Oil</u>: shallow burial depth, westward-dipping undeformed geology, Carbonera and Mirador Formation fluvial sands in regional stratigraphic and fault traps, good to excellent reservoir quality, high water saturation, strong aquifer support, low GOR, low API gravity oil, and low recovery factors.
- 18. The Llanos Basin is a well explored, mature hydrocarbon-producing basin with over 250 discovery wells drilled since the late 1940s (Reference 7). By the end of 2007, a total of 2.9 billion barrels of oil had been produced from the entire Llanos Basin (Reference 8). The cumulative field size distribution in Figure 3 (Reference 7) shows the typical creaming curve distribution of highly explored basins, in which the largest fields are found early on and field size diminishes over time. During 2012, the average field size of new discoveries in the Llanos Basin was estimated to be 2 to 3 MMBBL of oil (Reference 9).



**Oil Reserves Discoveries - Llanos Basin** 

Figure 3 – Discoveries in Llanos Basin (Reference 7)

19. The Block is located in the western corner of the Llanos Basin and comprises an area of approximately 540 square miles (Figure 2). As such, the Block covers less than 0.7 percent of the Llanos Basin. The Foothills province covers the western section of the Block with analog fields Castilla (1969; 265 MMBBL of ultimate recoverable "reserves") and Apiay (1981; 274 MMBBL of ultimate recoverable "reserves") that offset the Block to the southwest (Reference 10). Both fields are in the top ten largest discovered fields in the Llanos Basin. The Deep Llanos province covers the central and eastern portion of the Block with recent discoveries in the Corcel (2007; Corcel A estimated at 13.6 MMBBL and Corcel C at 7.0 MMBBL of ultimate recoverable "reserves") and Guatiquia (2009, Candelilla and Yatay reserves unreported) blocks that offset the Block to the northeast (Reference 10). Although they have high initial production rates and early payout, the size of the discoveries is small.

20. Prior to 2012 there was only one well drilled in the Block. In 1962 International Petroleum Ltd. drilled the 10,569-foot Negritos-1 well through the entire sedimentary section of interest and reached basement. The well encountered reservoir quality rocks in the Carbonera, Mirador, Barco, and Guadalupe Formations with reported oil shows. Additional well penetrations surround the Block. As discussed below, SK relied on well log data from a number of wells to map local changes in reservoir thickness, reservoir quality, and oil properties in the Block (Reference 11). The log data provided SK with a robust database of information from wells directly adjacent to the Block and provided for an informed understanding of the reservoir properties in the area immediately adjacent to the Block.

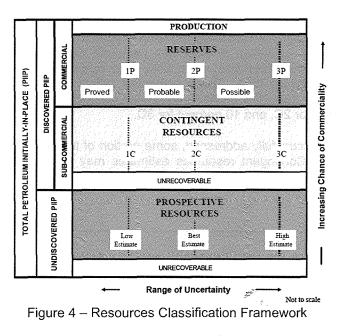
#### STANDARD INDUSTRY TERMINOLOGY

- 21. This section of the report provides a general overview of standard industry definitions of the terms "resources", "reserves", "leads", and "prospects".
- 22. Within the petroleum industry, there is broad consensus about the meaning of each of the terms identified above. International efforts to standardize the definitions of petroleum resources and reserves began as far back as the 1930s. Today, standard definitions and classifications of petroleum resources and reserves are in common use within the petroleum industry. The standard definitions and classifications are "important in creating a universal language of clear terms and definitions that result in reliable and easily comparable reserve estimations for investors, regulators, government agencies and consumers" (Reference 12).
- 23. This report will refer primarily to the specific definitions and classifications of petroleum resources that are set out in the 2007 Petroleum Resources Management System (PRMS), which is sponsored by the Society of Petroleum Engineers (SPE), the American Association of Petroleum Geologists (AAPG), World Petroleum Council (WPC), and the Society of Petroleum Evaluation Engineers (Reference 13). The PRMS is the common reference for the international petroleum industry, and its definitions are in wide use within the industry. A complete copy of the PRMS is in Appendix D.
- 24. Listed below are examples of the widespread, international use within the oil and gas industry of the PRMS or other references with definitions and guidelines consistent with the PRMS:
  - a. The New York Stock Exchange requires all reporting entities to follow SEC standards. The revisions to the SEC guidelines made during 2008, effective January 1, 2010, were designed to be consistent with the PRMS, although the SEC limits disclosure in SEC filings to reserves.
  - b. The Toronto Stock Exchange follows the Canadian Oil and Gas Evaluation Handbook (COGEH), as prepared by the Canadian Institute of Mining, Metallurgy & Petroleum (Petroleum Society of Canada) and the Society of Petroleum Evaluation Engineers (Calgary Chapter). The revision to COGEH in 2007 provided broad alignment between COGEH and the PRMS definitions and guidelines.
  - c. The Singapore Stock Exchange defines the standards for reporting oil and gas volumes to follow the PRMS definitions, along with the Code for Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports, which is also in alignment with the PRMS.
  - d. The Israeli Stock Exchange requires that all reporting entities shall classify resources into the various relevant categories according to the PRMS.
  - e. The Hong Kong Stock Exchange considers the PRMS to be the globally recognized document for making oil and gas evaluations to ensure that oil and gas companies are able to report volumes of resources and reserves under a recognized framework.

- f. The Australian Stock Exchange states that the reporting framework for oil and gas activities is the PRMS as it is an industry-sponsored set of guidelines that provide standardized definitions and comprehensive classification systems for petroleum resources.
- g. The London Stock Exchange allows for flexibility on the part of the reporting entity as long as the reporting entity states the standard that is used for oil and gas reporting. Acceptable standards noted by the London Exchange include CIM (which is the Canadian Institute of Mining, Metallurgy & Petroleum, now the Petroleum Society of Canada and one of the sponsoring parties to the COGEH) and SPE (one of the sponsoring parties for the PRMS).
- 25. As the majority of our reports are done in accordance with the SEC definitions or the PRMS definitions, NSAI's technical staff are very familiar with these two widely recognized sources for reserves and resources definitions. Since the SEC does not recognize contingent or prospective resources in its reporting standards, we have chosen instead to use the terms and definitions from the PRMS to prepare our opinions that are discussed in more detail in this report.

#### **RESOURCES** \_

26. The term "Resources" encompasses "all quantities of petroleum naturally occurring on or within the Earth's crust, discovered and undiscovered (recoverable and unrecoverable), plus those quantities already produced" (References 13, Page 2). The term is thus the principal catch-all term used in reference to any quantity of petroleum. Within the petroleum industry, classifications and sub-classifications of resources are used to describe quantities of petroleum. Those classifications and sub-classifications provide a common vocabulary that allows for a clear understanding of the degree of risk and uncertainty associated with a particular quantity of petroleum. The relationship between the main classifications and sub-classifications is depicted in Figure 4, below.



27. <u>Total Petroleum Initially-In-Place (TPIIP)</u>: Beginning with the broadest category of resources, TPIIP is defined as "that quantity of petroleum that is estimated to exist originally in naturally occurring accumulations. It includes that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production plus those estimated quantities in accumulations yet to be discovered

(equivalent to 'total resources')" (Reference 13, Page 3). This volume is in the ground, prior to recovery through production, and is commonly referred to as original oil-in-place (OOIP). OOIP is inclusive of the expected volume to be recovered and the unrecovered volume.

- 28. <u>Prospective Resources</u>: Within the broad category of TPIIP or OOIP, the term "prospective resources" describes the most speculative category of resources. Prospective resources "are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects" (Reference 13, Page 3). Prospective resources are highly speculative, and a resource is described as such where geological and geophysical data suggest the potential for discovery of petroleum, but where the level of proof is insufficient for classification as reserves or contingent resources (Figure 4). Prospective resources are distinct from reserves because they have neither been discovered nor deemed to be commercial.
- 29. While interpretive (or inherently risky), an estimate of prospective resources is not based on mere guesswork. Prospective resources are potential hydrocarbon volumes entrapped in subsurface structural or stratigraphic features sub-classified by project maturity into prospects, leads, and plays. In general, prospective resources estimates are provided to the investment community in a range that includes a low estimate, best estimate, and high estimate, assuming a discovery is made and development is undertaken. These categories reflect the likelihood that, if discovered, recoverable volumes will equal or exceed the unrisked estimated amounts and generally can be described as 90 percent for the low estimate, 50 percent for the best estimate, and 10 percent for the high estimate.
- 30. <u>Contingent Resources</u>: The resources category above (i.e., with lower risk) prospective resources is "contingent resources", which are "those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, but the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies" (Reference 13, Page 3). Thus, contingent resources are distinguishable from prospective resources because they have been discovered. A "discovered" resource refers to a petroleum accumulation, or several petroleum accumulations collectively, for which one or several exploratory wells have established through testing, sampling, and/or logging the existence of a significant quantity of potentially moveable hydrocarbons. It does not mean that the resource is in fact recoverable, flowing, or known to exist with complete certainty. In general, contingent resources estimates are provided to the investment community in a range that includes a low estimate (1C), best estimate (2C), and high estimate (3C). These categories reflect the likelihood that recoverable volumes, if discovered, will equal or exceed the unrisked estimated amounts and generally can be described as 90 percent for 1C, 50 percent for 2C, and 10 percent for 3C.
- 31. If the contingencies are successfully addressed, some portion of the contingent resources estimated may be reclassified as reserves. Contingent resources estimates may or may not be risked to account for the possibility that the contingencies are not successfully addressed.

#### RESERVES

- 32. Within the petroleum industry, the term "reserves" refers to discovered, commercially recoverable quantities of petroleum. Reserves are more specifically defined as "those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions".
- 33. To be categorized as "reserves", a resource must satisfy four criteria: it must be discovered, recoverable, commercial, and remaining (as of the evaluation date) based on the development project(s) applied (Reference 13, Page 3).



- 34. As depicted on the "Reserves" row of Figure 4, a quantity of reserves can be sub-classified in accordance with the level of certainty associated with the estimates or based on project maturity (Reference 8, Page 3). The principal sub-classifications of reserves are Proved, Probable, and Possible. Each of these categories conveys the relative degree of certainty associated with the estimate and is ordinarily based on development and production status. The specific industry definitions of each of the terms are quoted below:
  - a. "Proved Reserves are those quantities of petroleum, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations." (Reference 13, Page 28)
  - b. "Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves." (Reference 13, Page 28)
  - c. "Possible Reserves are those additional reserves which analysis of geoscience and engineering data indicate are less likely to be recoverable than Probable Reserves." (Reference 13, Page 29)
- 35. These reserves categories are often expressed as Proved (1P), Proved plus Probable (2P), and Proved plus Probable plus Possible (3P). These categories reflect the likelihood that recoverable volumes will equal or exceed the unrisked estimated amounts and generally can be described as 90 percent for 1P, 50 percent for 2P, and 10 percent for 3P.
- 36. Misuse of the term "reserves" or its sub-classifications gives rise to confusion as to the degree of risk and uncertainty associated with a given resource.

#### PROSPECTS, LEADS, AND PLAYS \_\_\_\_

- 37. Prospective resources are potential hydrocarbon volumes entrapped in subsurface structural or stratigraphic features. Prospective resources can be sub-classified by project maturity into prospects, leads, and plays, which are defined in the PRMS as follows:
  - a. <u>Prospect</u>: "A project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target." (Reference 13, Page 26). A prospect reflects a mature project (individual, potential accumulation) that requires actions to move toward commercial production. Therefore, a prospect must (1) have sufficiently well-defined location, shape, and size; (2) have a well-understood risk of discovery; and (3) have sufficient size to have an adequate chance of being commercially developable.
  - Lead: "A project associated with a potential accumulation that is currently poorly defined and requires more data acquisition and/or evaluation in order to be classified as a prospect." (Reference 13, Page 26). A lead reflects a relatively broad category of immature projects with reasonable targets and feasible development scenarios. It is a potential hydrocarbon trap for which available data coverage and quality are not sufficient to permit the clear definition and mapping of the potential accumulation volume.
  - c. <u>Play</u>: "A project associated with a prospective trend of potential prospects, but which requires more data acquisition and/or evaluation in order to define specific leads or prospects." (Reference 13, Page 26). A play reflects a very immature project with hypothetical targets and hypothetical development scenarios. Plays are speculative and do not reflect volumes that can be expected to be recovered and therefore carry no value in financial assessments.
- 38. As with the misuse of the term "reserves", the misapplication or misuse of the terms "lead" or "prospect" gives rise to confusion as to the maturity of a project and as to the degree of risk and uncertainty associated with a given resource.



#### ESTIMATION OF HYDROCARBON VOLUMES

- 39. This section contains a summary of the standard methodology used to calculate hydrocarbon volume estimates. It presents the basic concepts and input parameters that are required in the calculation for determining the volume of OOIP and the quantity of OOIP that is estimated to be recoverable. Figures 5 to 9 help visualize the basic geological terms used in the formula to calculate OOIP. Although the technical terms used in the formula may not be familiar, the equation is simple multiplication and division and the concepts are straightforward. The formula is widely understood and used by technical and nontechnical types alike, and it can be used to calculate petroleum volumes even for areas within sparsely drilled, data-poor basins as well as for producing fields with extensive well control and 3-D seismic data. Naturally, the precision and accuracy of the estimate improves with greater data control.
- 40. In exploration projects where few wells may have been drilled, such as in the Block, reservoir and fluid properties are determined from adjacent or nearby well control data, as long as the data are from wells that are sufficiently analogous to the area of interest. The industry generally employs volumetric calculation methods, which generate a range of estimates that reflect the underlying uncertainties in both the in-place volumes and the recovery efficiency of the applied development project.
- 41. By way of background, hydrocarbons are generated from organic-rich sediments under certain temperature and pressure conditions at depth. Because hydrocarbons are of a lower density than surrounding formation fluids, the hydrocarbons migrate upwards, due to buoyancy effects, to the surface until progress is halted by an impermeable barrier. Fluids then accumulate in a trap. The closure is the vertical distance between the top of the reservoir rock and the accumulation boundary of a trap. The volume of oil that fills the subsurface trap is the OOIP. It is the volume in the ground. For an illustration, see the green "Original Oil-In-Place" on Figure 5. Water is depicted as sitting below the residual oil in the same reservoir space.

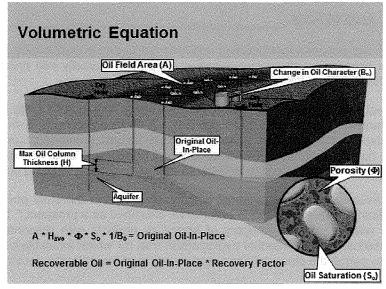


Figure 5 – Volumetric Equation

42. In order to understand the quantity of OOIP in a reservoir space, one must first determine the accumulation volume, or the "gross rock volume" (GRV), in the reservoir, which includes the actual rock, the pore space in the rock, and pore-filling fluids. The GRV is defined by an area (A) and average net pay thickness (H<sub>ave</sub>) in the field or prospect. Commonly the accumulation volume has complex dimensions resulting from the interaction of (1) the structural shape of the container, (2) the changing thickness of the reservoir, and (3) horizontal nature of the fluid contacts between oil and gas and oil and water. Generally in exploration



projects this variability is not well understood and a short cut, called the Geometric Factor (GF), is used to estimate  $H_{ave}$  in the field or prospect. Expected reservoir thickness (H) can be estimated and then multiplied against a GF to derive  $H_{ave}$  and account for the shape of the closure overlying the water-filled portion of the reservoir, as shown on Figure 5. Seismic data provide an image of the subsurface structure or closure and, combined with reservoir thickness data from well control, are used to define the size and shape of a prospect or field. A reduction in the area, thickness, or geometric factor causes GRV to decrease, lowering OOIP. GRV can be described in units of "acre-feet" (i.e., an area one acre square and a certain number of feet thick). A theoretical "acre-foot" that was devoid of any other material (such as rock, sand, water, or gas) would hold approximately 7,758 stock tank barrels of petroleum.

43. The GRV incudes the rock portion and open spaces in the rock in the accumulation, called pores or porosity (Figures 6, 7, and 8). The hydrocarbons are found in the pores. The fluid volume therefore is limited to the amount of porosity represented as a percentage of the rock volume. The amount of porosity, or space for the fluids in the rock, depends on rock grain size, sorting, and packing and the amount of pore-filling cementation and clays (Figure 7). Reservoir porosity can be measured with tools that are lowered down into the well borehole that generate a data set—a "response signature"—that is commonly known as "well logs". In addition rock and core samples can be retrieved from the well and analyzed in the laboratory. The amount of porosity in the reservoir is estimated from petrophysical interpretation of the well logs and core samples if available. The lower the porosity, the less space there is available for fluids, effectively decreasing OOIP.

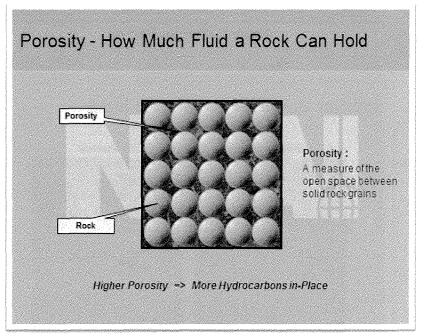


Figure 6 – Porosity

and the state



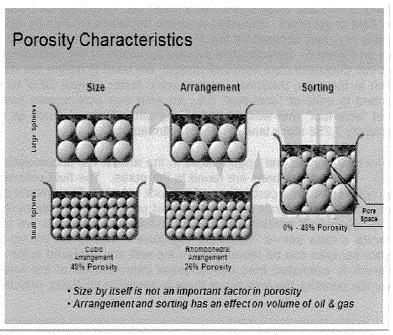


Figure 7 – Porosity Packing

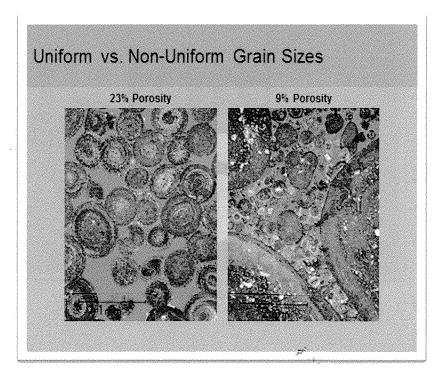


Figure 8 – Porosity Grain Size

44. The pore space is filled with water and hydrocarbons, commonly either oil or gas, but occasionally both oil and gas (Figure 9). The fluid fraction in the pore space is referred to as saturation and is represented as a percentage of the porosity. Water commonly adheres to the rock grains, filling a portion of the porosity with



bound water and might also occur as free water. The remaining pore space is filled with hydrocarbons ( $S_o$  for oil or  $S_g$  for gas). Water saturation ( $S_w$ ) is determined by petrophysical interpretation of various well log tools lowered down the well borehole. Hydrocarbon saturation equals one minus water saturation (1 -  $S_w$ ). The higher the water saturation the less space for hydrocarbons in the pores and the lower the OOIP. If the water saturation (bound or free water content) is too high then oil may never flow or may not flow at high enough rates to be commercial.

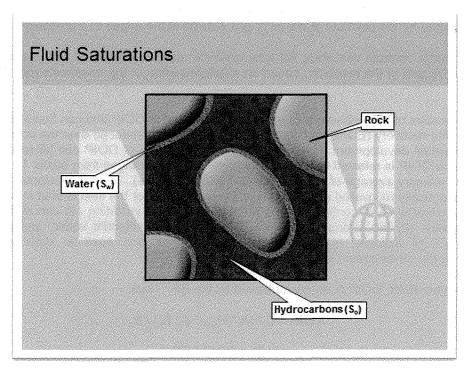


Figure 9 - Fluid Saturations

- 45. Finally, OOIP volumes are reported at surface conditions, so a formation volume factor (B<sub>o</sub> for oil and B<sub>g</sub> for gas) is used to convert the estimated volume from reservoir pressure and temperature to surface conditions. Laboratory analysis of hydrocarbon fluid composition and properties is typically used to determine the formation volume factor.
- 46. The standard industry equation to calculate in-place hydrocarbon volumes in a field or prospect is as follows:

$$OOIP = C * (A * H_{ave} * \phi * S_o) / B_o$$

where in the case of SK's exploration Block the volume formula parameters for leads and prospects would be:

OOIP = undiscovered original oil-in-place, barrels (BBL)

- C = conversion factor from acre-feet to barrels, 7,758 BBL/ac-ft
- A = expected area, acres
- H<sub>ave</sub> = expected average net pay thickness, feet (ft)
- $\phi$  = predicted average porosity, expressed as a decimal
- S<sub>o</sub> = predicted average oil saturation, expressed as a decimal
- B<sub>o</sub> = expected oil formation volume factor, reservoir barrels per stock tank barrel (RB/STB)



47. In order to calculate H<sub>ave</sub>, H is multiplied by GF, as shown below:

$$H_{ave} = H * GF$$

where:

H = expected net pay thickness, feet (ft)

- GF = estimated geometric factor, expressed as a decimal (a factor applied to rock volumes to account for the pinchout of the oil or gas column at the edges of a prospect)
- 48. Thus, the volumetric formula describes the total reservoir size, as calculated from seismic and well control data, and what fraction of the reservoir, based on a determination of the reservoir's rock and fluid properties, holds oil.
- 49. The ultimate objective of this analysis is to estimate the amount of OOIP that can flow to the surface—i.e., the estimated ultimate recovery (EUR) volume that is expected to be produced over the economic life of the field using the conceptual development plan. Generally only a fraction of OOIP can be recovered. The ratio of recoverable oil to OOIP is referred to as recovery factor (RF) and ranges from below 10 percent to above 50 percent with an industry average of about 30 percent (Reference 14). Thus a substantial amount of the OOIP cannot be economically recovered and remains in the reservoir after the field is shut in and abandoned. The quantity of recoverable oil is controlled by a number of factors, including (1) connectivity between pores, called permeability; (2) the strength of natural drives such as adjacent water, gas presence, or gravity displacing oil; (3) oil viscosity; (4) enhanced oil recovery methods, such as water, gas, steam, or CO<sub>2</sub> injection; and (5) the development plan.
- 50. In order to calculate EUR, OOIP is simply multiplied by the RF. Thus:

OOIP = C \* (A \*  $H_{ave}$  \*  $\phi$  \*  $S_{o}$ ) /  $B_{o}$ 

EUR = OOIP \* RF

51. Therefore, as will be relevant in the following section, we note that, as a function of simple arithmetic, EUR can also be expressed as:

EUR = RF \* [C \* (A \*  $H_{ave}$  \*  $\phi$  \*  $S_o$ ) /  $B_o$ ]

or

 $EUR = RF * [C * (A * (H * GF) * \phi * S_o) / B_o]$ 

#### SK VOLUME ESTIMATION AS OF APRIL 2009 \_\_\_\_

52. In April 2009 SK sought a partner to farm in to the Block, presumably to help offset costs and reduce risk associated with the project. The farm-in presentation (Reference 1) that SK provided to potential farm-in partners demonstrates that SK attempted to conduct a valid appraisal of the Block's potential based on available seismic and extensive regional well data. SK appears to have used an industry-standard methodology to evaluate the prospectivity of the Block.



- 53. Specifically for the Block, SK incorporated in its analysis 15 wells and 1,825 kilometers of 2-D seismic data in mapping regional trends of the primary input parameters used in the formula to calculate in-place and potentially recoverable resources volumes, including the following (Reference 1):
  - a. Reservoir presence
  - b. Gross and net pay thickness
  - c. Porosity
  - d. Fluid API gravity
  - e. Structural closures
- 54. In addition, the well and field data allowed SK to estimate average water saturation, formation volume factor, and recovery factor.
- 55. In the April 2009 farm-in presentation (Reference 1, Page 29) SK used a version of the standard volumetric formula described in the forgoing section. SK first solved for the expected rate of recovery from each acre-foot of reservoir space (RO) and then multiplied the RO by the reservoir volume; i.e., A \* H<sub>ave</sub> (Figure 10).

| 1.000 |      |                  |      |           |                     |                               |           |                              |
|-------|------|------------------|------|-----------|---------------------|-------------------------------|-----------|------------------------------|
| Lead  |      | Acres<br>Mirador | Une  | Unit R.R. | Net Pay<br>(C9+M+U) | Recoverable<br>Reserve (MMBO) | Remark    | Unit R.F                     |
| 1     | 1055 | 724              | 899  | 150       | 50'+100'+75'        | 29                            | Synthetic |                              |
| 2     | 556  | 212              | 417  | 150       | 50'+100'+75'        | 12                            | Synthetic | - Porosity : 20<br>- So : 60 |
| з     | 420  | 291              | a    | 150       | 50'+100'+75'        | 8                             | Synthetic | -So/Bo :0.9                  |
| 4     | 6358 | 6506             | 3495 | 150       | 50'+100'+75'        | 185                           | Thrust    | - GF : 0.7                   |
| 5     | 1018 | 2119             | 1435 | 150       | 50'+100'+75'        | 56                            | Thrust    | -RF : 30                     |
| 6     | 531  | 114              | 388  | 150       | 50'+100'+75'        | 10                            | Inversion | GEO ISAN KENE                |
| 7     | 1097 | 657              | 311  | 150       | 50'+100'+75'        | 22                            | Inversion | Net Pay                      |
| 8     | 1606 | 1074             | 694  | 150       | 50'+100'+75'        | 36                            | Inversion |                              |
| 9     | 3821 | 7037             | 420  | 150       | 50'+100'+75'        | 139                           | Inversion | - Avg. Thickne               |
| 10    | 469  | 0                | ٥    | 150       | 50'+100'+75'        | 4                             | Inversion | -From Net Sd                 |
| 11    | 447  | 622              | 509  | 150       | 50'+100'+75'        | 18                            | Inversion |                              |
| 12    | 664  | 659              | . 0  | 150       | 50'+100'+75'        | 15                            | Inversion |                              |
| 13    | 2687 | 936              | 761  | 150       | 50'+100'+75'        | 43                            | Inversion | nter sie lieser si           |
| 14    | 882  | 3399             | 1625 | 150       | 50'+100'+75'        | 76                            | Drapeover |                              |
| 15    | 993  | 1692             | 605  | 150       | 50'+100'+75'        | 40                            | Inversion |                              |
| 16    | 284  | 847              | 452  | 150       | 50'+100'+75'        | 20                            | Inversion |                              |
| 17    | Q    | 420              | 326  | 150       | 50'+100'+75'        | 10                            | Inversion |                              |
| 15    | q    | 818              | ۵    | 150       | 50'+100'+75'        | 12                            | Inversion | 영상 전 소리 한                    |
| 19    | q    | 0                | 1247 | 150       | 50'+100'+75'        | 14                            | inversion | 승규는 사람이 있다.                  |
| 20    | 3320 | 4029             | 2364 | 150       | 50'+100'+75'        | 112                           | Thrust    | A Martinetter                |
| 21    | 2510 | 2611             | 3162 | 150       | 50'+100'+75'        | 94                            | Thrust    |                              |
| 22    | 790  | 1102             | 0    | 150       | 50'+100'+75'        | 22                            | Thrust    |                              |

Figure 10 – SK Estimation of "Total Potential"

56. To illustrate, as discussed above, EUR can be expressed as:

EUR = RF \* [C \* (A \* (H \* GF) \*  $\phi$  \* S<sub>o</sub>) / B<sub>o</sub>]

57. Therefore, EUR can also be expressed as:

EUR = [A \* H] \* RO,

where RO = RF \* [C \* (GF \*  $\phi$  \* S<sub>o</sub>) / B<sub>o</sub>]



- 58. In solving for RO, SK relied on data from its petrophysical evaluation of nearby well control in analog fields and reservoirs:
  - $\begin{array}{rcl} \mathsf{RF} &=& 0.30 \\ \mathsf{C} &=& 7,758 \; \mathsf{BBL/ac-ft} \\ \mathsf{GF} &=& 0.70 \\ \phi &=& 0.20 \\ \mathsf{S}_{o} &=& 0.60 \\ \mathsf{B}_{o} &=& 0.90 \end{array}$
- 59. The product of the specific input parameters equals 175 BBL/ac-ft. We understand based on representations made by SK's counsel that SK then multiplied its RO by 85 percent to reflect its "confidence level", which yields the 150 BBL/ac-ft used in SK's volume estimates (Reference 15). Thus, SK calculated EUR by multiplying the reservoir volume (i.e., A \* H<sub>ave</sub>) by the RO of 150 BBL/ac-ft.
- 60. As discussed above, SK's estimate is derived from an analysis of available well data and seismic data in accordance with the standard volumetric formula. In light of other data points available for the Llanos Basin, there is nothing to suggest that SK's RO estimate was overly conservative or that its calculation suffered from any methodological flaws. In fact, third-party work and reports suggest an RO of 150 BBL/ac-ft is reasonable for this area in the basin.
  - a. Houston American's own expert, Lonquist & Co. LLC, provided data with ROs as low as 56 BBL/ac-ft (Reference 16).
  - b. Other fields that Houston American had interests in, such as Leona, Las Garzas, and La Cuerva, had purported prospective resources ROs of 149, 255, and 236 BBL/ac-ft, respectively (Reference 17).
  - c. According to Tudor, Pickering, Holt & Co., LLC (Reference 6), the ROs can range approximately from 60 to 215 BBL/ac-ft in the Foothills province to 230 to 500 BBL/ac-ft in the Deep Llanos province. The Block straddles both the Foothills and Deep Llanos province areas (Figure 2).
- 61. While SK's calculation of RO appears to have conformed to industry norms, SK appears to have adopted a highly aggressive approach in mapping potential closure areas on the 2-D seismic data. Thus, while the RO half of the EUR equation appears to be methodologically and geologically valid, the reservoir volume (i.e., A \* H<sub>ave</sub>) half of the equation may have overstated the Block's prospectivity, particularly if SK's estimates were disclosed without proper qualifications.
- 62. In its April 2009 farm-in presentation, SK identified 22 "structures" on its map and then referred to these features as "leads" through the remainder of the document (Reference 1). Most of these "leads" have three stacked reservoir "horizons" of interest, resulting in "58 horizons" as referenced in the presentation. The term closures more accurately describes geologic features on SK's map than the term horizons. In the context of this report, a closure is a potential hydrocarbon trapping feature with a vertical component of pooling. I will use the term closure hereinafter. It appears that SK's closure count is incorrect. When I count the closures on SK's "Total Potential" page, the sum is 56 "horizons" (Figure 10).
- 63. It appears that SK penciled in all possible closures on the Block, including closures outside the data control and closures based on incomplete data (Appendix E). SK did not discriminate the risk and uncertainty between better-documented closures (leads) and the more hypothetical features (plays).
- 64. A large portion of the potential closures shown on the maps do not qualify as leads, as shown in Appendix E. About 20 percent of the closures fall outside seismic control and are unsupportable by any data provided by SK or Houston American (Appendix E). Approximately another 25 percent of the potential closures are

observed on a single seismic line only. One 2-D seismic line is insufficient to define the presence, location, shape, or size of a closure. Approximately another 10 percent are off lease or on a structural ramp with no conceivable way to form a closure as illustrated on the map. The generation of ideas and concepts is a vital process in the evaluation of any exploration project, but 55 percent of the 56 potential closures are merely speculative targets that are poorly constrained by data and are at a very immature stage of understanding and thus "require more data acquisition and/or evaluation in order to define specific leads or prospects" (PRMS definition of a play, Reference 13, Page 26). According to the PRMS, these features should be defined as plays, which therefore carry considerably more risk than a lead or prospect. With their existence uncertain, they have no basis for being included in volumetric resources estimates let alone reserves estimates.

- 65. It is my opinion that none of the closures identified on the Block by SK fit the PRMS definition of a prospect (Reference 13, Page 8), which requires accumulations to be "sufficiently well-defined to represent a viable drilling target". The Block partners were not going to drill any of the opportunities shown on SK's maps without first acquiring 3-D seismic data to better define the presence, location, shape, and size of the closures.
- 66. It is standard industry practice to assign a probability of success, or risk, to a project based on its maturity and uncertainty. Commonly, risk is represented by a percentage and multiplied against a volume estimate to determine risked volume. The oil and financial industries use risked volumes to compare the risk and reward of plays, leads, and prospects. Thus, higher risk closures require larger volumes to compare favorably to lower risk projects. Naturally the more data available over a closure the better understanding of its shape, size, reservoir, and hydrocarbon potential and the greater the understanding and chance of success. Plays without seismic coverage or identified from a single seismic line are considered very high risk, having less than 1 in 20 chance of success, or 5 percent. As additional data are collected and analyzed during the evaluation process, more is learned about the plays, elevating some of them to be classified as leads and even prospects. The chance of success should improve along with the reclassification from plays to leads and prospects.
- 67. In its April 2009 presentation (Reference 1), SK failed to define its volumetric estimates as a low, best, or high case value. It appears, based on the inclusion of speculative closures, that SK's volume estimates featured only best and high case estimates for area and reservoir thickness. SK provided the following two volume estimates:
  - a. SK presented the "High Potential" in the Block based on the 7 best "leads" with 21 closures (Reference 1), which had cumulative area of 56,681 acres and 639 MMBBL of oil (using an RO of 150 BBL/ac-ft).
  - b. Cumulative area from 56 closures in all 22 "leads" was 84,487 acres, with 974 MMBBL (using an RO of 150 BBL/ac-ft) of "Total Potential" (Reference 1).
- 68. If we were to remove the highly speculative closures, including features with no seismic data coverage and single seismic line features drawn on SK's maps, we find that the potential on the Block is more limited.
  - a. SK's "High Potential" in the Block decreases to 4 "leads" with 9 closures (Appendix E), which have cumulative area of 20,014 acres and possibly 225 MMBBL of oil (using an RO of 150 BBL/ac-ft).
  - b. SK's "Total Potential" decreases to 28 closures in 13 "leads" with a cumulative area of 36,490 acres and 412 MMBBL of oil (using an RO of 150 BBL/ac-ft) (Reference 1).



#### SK VOLUME ESTIMATION AS OF SEPTEMBER, OCTOBER, AND NOVEMBER 2009

- 69. Between the time of SK's farm-in presentation in April 2009 and Houston American's investor presentation in November 2009, two major pieces of new work were completed that affected the potential in the Block. Approximately two-thirds (1,284 km, 1,150 km inside the Block) of the 2-D seismic data were reprocessed to improve imaging and correlation between seismic lines and the regional study of 823 wells in the basin (24 wells adjacent to the Block were worked in detail) to provide reservoir property information and map trends through the Block. Subsequently SK reinterpreted the new seismic data, redefined closures on the Block, recalculated closure areas, modified the RO, and presented the resulting volumes in four documents: (1) TCM September 2009 (Reference 18); (2) TCM October 2009 (Reference 19); (3) SK Farm-In Opportunity, October 21, 2009 (Reference 20); and (4) SK CPO-4 Final Report (Reference 11).
- 70. We understand that TCM September 2009 and TCM October 2009 were presented at TCMs attended by Houston American's CEO (Reference 21).
- 71. Following seismic reprocessing, SK reinterpreted the new data and changed its designation of "horizons" to "AOIs" (areas of interest) in October 2009 (References 19 and 20). I will continue to use the term closure instead of horizon and/or AOI. As expected, a number of the originally identified closures were dropped and new ones emerged, resulting in a net increase in the absolute number of closures as follows:
  - a. 33 closures identified in the upper reservoir,
  - b. 42 closures identified in the middle reservoir, and
  - c. 47 closures identified in the lower reservoir.
- 72. These closures are individual potential traps in distinct reservoirs that may or may not have additional objectives above or below (References 19 and 20). SK identified over 100 individual closures. There appear to be 18 separate locations on SK's maps on which a single well could penetrate three stacked closures and 15 more locations where a single well could penetrate two stacked closures. Collectively those 33 locations contain 84 stacked closures, comparable to the 22 "leads" containing 56 closures as presented by SK in the April 2009 farm-in presentation.
- 73. Only a small percentage of SK's closures qualify as "leads". None qualify as "prospects", and none form a valid basis for a reserves estimate.
- 74. Although the number of individual closures increased from 56 to over 100 following the reprocessing of the 2-D seismic data in October 2009, the cumulative size of all closures decreased from 84,487 acres (Reference 1) to 59,672 acres (References 11, 18, 19, and 20), a 30 percent reduction. The average size of each closure decreased even more significantly from 1,509 acres to 489 acres, or 68 percent. The obvious overall reduction in area is visually apparent for the closures depicted in the following Figure 11 from the September 2009 TCM (Reference 18, Page 52). This figure shows a number of closures with purple borders from September 2009 that fit within the closures with orange borders from April 2009.

and a

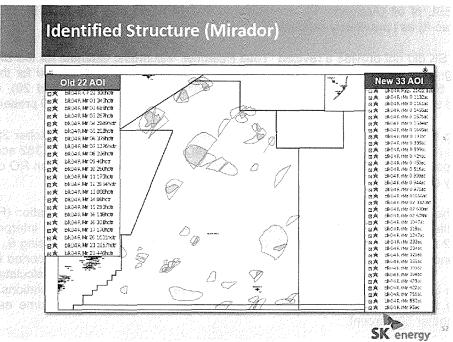


Figure 11 – SK-Identified Closures

- 75. In my opinion, it would have been clear to an experienced industry professional reviewing the project that the 66 percent decrease in average closure size would offset the increase in the number of closures. This is simply a function of arithmetic. EUR is calculated by multiplying the reservoir volume (i.e., A \* H<sub>ave</sub>) by the recovery (RO); therefore, a significant decrease in the reservoir area has a direct and calculable effect on the EUR.
- 76. After April 2009, SK used the same aggressive approach in its mapping of potential closures on the reprocessed 2-D seismic data. It appears that SK penciled in all possible closures on the Block, including closures outside the data control and closures based on incomplete data (Reference 1). About 21 percent of the closures fall outside seismic control and are unsupportable by any data provided by SK or Houston American (References 18, 19, and 20 and Appendix E). Approximately another 22 percent of the potential closures are observed on a single seismic line, which is insufficient to define the presence, location, shape, or size of a closure. Thus, at least 43 percent of the 122 potential closures are merely speculative targets that are poorly constrained by data, are at a very immature stage of understanding, and, according to the PRMS, are plays, which therefore carry considerably more risk than a lead or prospect. With their existence uncertain, they have no basis for being included in volumetric resources estimates unless risked appropriately, let alone included in reserves estimates.
- 77. In October 2009, SK updated its volumetric estimates on the Block following the reinterpretation of the reprocessed 2-D seismic data and increased the RO to 300 BBL/ac-ft (References 19 and 20):
  - a. The "High Potential" in the 7 best "leads" with 21 closures had a cumulative area of 20,894 acres with 445 MMBBL of oil, compared to 56,681 acres and 639 MMBBL of oil (using an RO of 150 BBL/ac-ft) in SK's April 2009 presentation. Note that these "leads" no longer consist of stacked closures, rather they are an assortment of closures that are likely to require many more than 7 wells to prove up potential hydrocarbon volumes (Reference 20).
  - b. Removing the closures that in my opinion are speculative plays from SK's "High Potential" volume estimates reduces the number of "leads" to 6 with 9 closures with a cumulative area of 11,913 acres and

300 MMBBL of oil (Appendix E), compared to 20,014 acres and 225 MMBBL of oil (using an RO of 150 BBL/ac-ft) as I previously calculated.

- c. Although SK did not provide a revised "Total Potential" volumetric estimate for the Block, it did provide all the background data necessary to calculate the cumulative area and volume for the now 122 potential closures, 59,672 acres and 1,274 MMBBL, respectively (References 19 and 20), compared to 84,487 acres and 974 MMBBL of oil (using an RO of 150 BBL/ac-ft) in SK's April 2009 presentation.
- d. Removing the closures that in my opinion are speculative plays from the October 2009 "Total Potential" estimates reduces the number of closures to 69 with a cumulative area of 34,382 acres and 794 MMBBL of oil (Appendix E), compared to 36,490 acres and 412 MMBBL of oil (using an RO of 150 BBL/ac-ft) as I previously determined.
- 78. SK doubled the RO in its updated calculations for its October 2009 TCM presentation (Reference 18) to 300 BBL/ac-ft, while the areal size of the closures was substantially reduced in the interpretation of the newly reprocessed 2-D seismic data. The doubling of RO occurred as a result of increasing S<sub>o</sub> to 70 percent, GF to 90 percent, and RF to 40 percent. We cannot discern if these changes are supported by additional data or interpretation. They do, however, represent the upper limits of GF and RF. The calculated RO is actually 305 BBL/ac-ft, but SK rounded down to 300 BBL/ac-ft for its revised volumetric calculations. If in October 2009 SK had used the same RO of 150 BBL/ac-ft used in April 2009, then its volume estimates would have decreased another 50 percent:
  - a. The "High Potential" volumetric estimate in October 2009 would be reduced from 445 MMBBL to 223 MMBBL of oil, and
  - b. The "Total Potential" volumetric estimate in October 2009 would be reduced from 1,274 MMBBL to 637 MMBBL.
- 79. Also, it appears SK did not do any economic screening because some of the isolated closures are likely to have been noncommercial following the reduction in closure sizes from April 2009 (Reference 1) to October 2009 (References 19 and 20) and certainly by September 2010 (Reference 22) following the dramatic reduction in closure sizes according to a report by Petrotech (Reference 23), Houston American's consultant.
- 80. At no time in September, October, or November 2009 were there adequate data available to upgrade any of SK's closures to fit the PRMS definition of a prospect (Reference 13, Page 8), which requires accumulations to be "sufficiently well defined to represent a viable drilling target". Rather, the reprocessing results reconfirmed the partner's commitment to acquire additional 3-D seismic data prior to drilling any of the opportunities shown on SK's maps.

#### HOUSTON AMERICAN INVESTOR PRESENTATION

- 81. By the second quarter of 2009 Houston American had entered into a joint operating agreement with SK on the Block. In November 2009 Houston American made an investor presentation touting the benefits of expanding its operations in Colombia, working with a world class company in SK, and the assets of their new joint venture in the Block (Reference 2). The presentation combined a series of bullet points backed by high-level supporting maps and other documentation.
- 82. Pages 1 through 5 of the Presentation provide an overview of Houston American and its assets and business strategy. Pages 6 through 8 provide an overview of Colombia and the Llanos Basin. Pages 9 through 24 focus on the Block, starting with an overview of SK and its exploration and production experience in South America on Pages 10 and 11. Page 12 discusses the farm-out agreement and summarizes the most

important information about the Block for purposes of determining the asset value; i.e., that the "CPO 4 Block . . . contains over 100 identified leads or prospects with estimated recoverable reserves of 1 to 4 billion barrels".

- 83. The subsequent pages in the Presentation provide background data that appear to support the statements made by Houston American on Page 12. Page 13 describes the Block location and provides basic farm-out and contract terms. Pages 14 through 18 show maps and geological cross sections indicating the Block (1) is surrounded by oil discoveries, some with very large in-place volumes; (2) is likely to contain multiple reservoir targets; and (3) has had some level of work completed in order to define play types and possible closures. Pages 19 through 22 appear to have been taken from a Petrominerales presentation and focus on Corcel Field as a possible analog to the Block. Corcel Field was discovered in 2007, and while the wells have very high initial deliverability rates, they also exhibit rapid decline. The section of the Presentation covering the Block concludes with a map of closures and proposed location for 3-D seismic acquisition with these data superimposed on a satellite image of the Block.
- 84. Aside from the references to SK's evaluation of the Block, the Presentation does not provide any information about the work Houston American had done to arrive at its "1 to 4 billion" barrel reserves estimate, nor does the Presentation provide information sufficient to describe the level of uncertainty or the risk profile of the project. The Presentation does not indicate (1) that the Block is an exploration project, (2) that the only well drilled on the Block was a dry hole, (3) that there are no discoveries or discovered commercial volumes on the Block, (4) that a large number of the closures shown on the map on Pages 18 and 23 are highly speculative and not based on any geological or geophysical data, and (5) that Houston American's volumetric estimates for the Block are four times higher than the operator's high case.

#### HOUSTON AMERICAN ESTIMATES\_

- 85. In April 2009, SK published its Farm-In Opportunity document dated April 13, 2009 (Reference 1), that was to be used by prospective farmees in evaluating the merits of the Block. Houston American reviewed this document as part of its determination of whether to bid to obtain an interest in the block. In the middle of 2009, following its review of the farm-in document, Houston American executed a farm-in agreement with SK for a portion of the interest in the Block.
- 86. In our review of the data provided to the SEC by Houston American, we see no indication that Houston American conducted its own analysis of the Block prior to November 2009. To the contrary, Houston American appears to have adopted wholesale (and to have improperly recharacterized) SK's aggressive interpretation of potential closures and to have more than tripled SK's original RO without conducting its own volumetric assessment of the Block. As a result, Houston American's estimate that the Block contained "over 100 identified leads or prospects with estimated recoverable reserves of 1 to 4 billion barrels" failed to accurately convey the degree of risk and uncertainty on the Block in the following respects.
- 87. The Presentation Mischaracterized Closures and Plays as "Leads or Prospects": None of the closures identified on the Block by SK were "prospects" (Reference 13, Page 8) because they were not "sufficiently well-defined to represent a viable drilling target". Houston American's Presentation adopted SK's aggressive assessment of potential AOIs on the Block without performing any verification of the technical foundation for the closures or of their validity or size. Houston American added further confusion by referring to the AOIs as "leads or prospects" that held "recoverable reserves". As discussed above, the misapplication of these terms could easily lead to significant misunderstanding of the degree of risk and uncertainty associated with the Block.
- 88. The "1 to 4 Billion" Reserves Estimate Was Not Supported By a Valid Volumetric Analysis: Without any technical support, Houston American substituted SK's RO of 150 BBL/ac-ft with its own RO of 500 BBL/ac-ft,

which more than tripled SK's April 2009 "Total Potential" estimate, taking it from 974 MMBBL to over 3,200 MMBBL. Moreover, Houston American then rounded the high end of this new estimate up to 4,000 MMBBL, adding on more than 700 MMBBL, or the equivalent of a giant field.

89. The statement "1 to 4 billion barrels" grossly overstates the range of hydrocarbon volumes in the Block as of November 2009 (Reference 2, Page 12). Houston American's claims are inconsistent with and higher than those presented by the Block operator in TCM, OCM, and farm-in presentations dated September and October 2009 (References 18, 19, and 20). No data in the Presentation, or in the information Houston American and SK provided to the SEC, substantiate Houston American's inflated volume estimates. In fact the data support estimates even lower than those used by SK.

| Volume Topics                                                                              | SK Farm-In<br>Document<br>April 2009 | SK Farm-In<br>Document<br>October 2009 | Houston American<br>Presentation<br>November 2009 |
|--------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------|---------------------------------------------------|
| Total Number of Targets                                                                    | 56                                   | 122                                    | >100                                              |
| RO (BBL/ac-ft)                                                                             | 150                                  | 300                                    | 500                                               |
| Area (acres)                                                                               | 84,487                               | 59,672                                 |                                                   |
| Average Area per Target (acres)                                                            | 1,509                                | 489                                    |                                                   |
| Recoverable Oil (MMBBL) of Targets                                                         | 974                                  | 1,274                                  | 4,000                                             |
| Number of High-Potential Leads/Closures<br>Recoverable Oil (MMBBL) of High-Potential Leads | 21<br>639                            | 21<br>445                              |                                                   |

- 90. <u>The "1 to 4 Billion Barrels" Estimate Is Not Consistent With Expected Recoveries in Colombia</u>: Not only is an estimate of 1 to 4 billion barrels of recoverable oil from the Block not supported by industry standard practices or data available to Houston American, but it also defies common logic. For instance:
  - a. According to BP Statistical Review, the country of Colombia had 1.9 billion barrels of proven reserves remaining at the end of 2010 (Reference 4) and 2.4 billion barrels in 2014 (Reference 5). It is difficult to imagine how the small Block—which accounts for just 0.7 percent of the Llanos Basin—could contain enough recoverable oil to double the reserves base of the entire country.
  - b. Since the late 1940s, the Llanos Basin (77,220 square miles) has produced 2.9 billion barrels of oil from approximately 250 discoveries (Reference 8). It defies logic to suggest that the Block (540 square miles) alone, covering less than 1 percent of the basin, could produce more oil than the entire Llanos Basin has produced in over 60 years. Or that one should expect the Block to contain an additional 65 percent of all the oil discovered (6 billion barrels) in the entire Llanos Basin (Reference 7).
  - c. The Llanos Basin has had long and vibrant exploration and production history. As is typical for mature basins, the largest fields are discovered early and the field size distribution steadily decreases over time (Reference 7, Figure 3). In 2012, the average field size of new discoveries in the Llanos Basin was estimated to be 2 to 3 MMBBL of oil (Reference 9).
  - d. Recoverable reserves of 4 billion barrels are equivalent to eight giant fields (a giant field is characterized as greater than 500 MMBBL) in the Block alone. As of November 2007, there were only three giant fields in the entire country of Colombia.
- 91. Additional Analysis By SK Between April and November 2009 Did Not Provide Support for the "1 to 4 Billion Barrels" Reserves Estimate: Following the 2-D seismic reprocessing and interpretation in the second and third quarters of 2009 and prior to publication of the Presentation by Houston American, SK identified additional closures associated with a substantial decrease in closure size. The average size of each closure decreased from 1,509 acres in April 2009 to 489 acres in October 2009, or a 68 percent reduction in individual closure sizes. This trend where closure sizes decrease as seismic data quality is improved continues following the acquisition of the 3-D seismic data in 2010 (Reference 23).

- 92. The reprocessing also caused a reduction in the number of stacked closures, thus rendering many more targets, without the benefit of single wells hitting multiple targets, potentially noncommercial. This further reduces the available volumes of resources in the Block even beyond the approximately 50 percent reduction noted previously in this report due to the inclusion of speculative plays.
- 93. The preponderance of new information available in November 2009 resulted from SK's interpretation of the newly reprocessed 2-D seismic data on the Block. This important work had an overwhelmingly negative impact, substantially reducing closure sizes and volume estimates. All of this information was available prior to November 2009, but none of it was documented in Houston American's Presentation (Reference 2).
- 94. In my opinion, it would have been clear to an experienced industry professional reviewing the project that the 66 percent decrease in average closure size would offset the increase in the number of closures and would have added concern going forward.
- 95. Less than 10 months after the Presentation was published, Houston American's own reserves consultant, Petrotech, prepared a report (Reference 23) that included a gross recoverable "Best Estimate" of only 65 MMBBL of "Unrisked Prospective Resources" (not "recoverable reserves") on the Block. This volume estimate was attributed to 54 "prospects" identified on the recently acquired 3-D seismic data (Reference 23). Petrotech attributed no "recoverable reserves" to the Block at that time. The 3-D seismic data were limited to the northern third of the Block where the partners had predicted to have over 60 percent of the prospective volume in the Block and was immediately adjacent to the recent Corcel Area discoveries (References 18, 19, and 20). The average "Best Estimate" case recoverable volume per "prospect" is 1.9 MMBBL, using Petrotech's "Best Estimate" RO of 298 BBL/ac-ft, with 2 to 3 closures per "prospect" averaging 70 acres and 30 feet of pay thickness per closure. My limited review of Petrotech's report suggests that Petrotech followed standard industry practices to estimate volumes. In addition to the significant clarification of volume classification from reserves to prospective resources, the extent of Houston American's overstatement of the Block's prospectivity is exposed. The volumes dropped by over 90 percent in just 10 months and this absent any new drilling data.
- 96. Even though Petrotech did not perform an economic evaluation of the 54 "prospects", we estimated that an economic threshold for a discovery is approximately 1 MMBBL cumulative recovery from all zones in any likely single drill location. It is significant that 52 percent of Petrotech's "Best Estimate" "prospect" sizes fall below this 1 MMBBL economic threshold to drill and develop. As noted previously, the 1 MMBBL economic limit compares to an average discovery size of 2 to 3 MMBBL in the basin during 2012 (Reference 9). Only 27 "Best Estimate" "prospects" met the economic criteria of 1 MMBBL with viable resources ranges (Reference 23).
- 97. The specific use of the term "recoverable resources" by Petrotech is a very important correction, as Houston American had used "recoverable reserves" until that point. The use of the term "recoverable reserves" in the Presentation significantly understates the high degree of risk and uncertainty associated with the Block. Individuals involved in the oil industry along with investors typically use and rely on the PRMS definitions and guidelines to describe hydrocarbon volumes. The stated purpose of the PRMS (Reference 13) is to "provide a common reference for the international petroleum industry... They are intended to improve clarity in global communications regarding petroleum resources." Our experience is that the majority of oil and gas investors rely on at least the PRMS definitions. They typically understand the difference between reserves and resources and their impact on property valuation. Furthermore, they also understand that reserves refer to a mature project with commercially developable volumes that are assigned actual monetary values and expected returns. Exploration projects with prospective resources, on the other hand, are speculative and have a risk of not finding hydrocarbons. They do not reflect volumes that can be expected to be recovered and are therefore assigned limited to no value in financial assessments. In spite of any disclaimers, the use of the term "reserves" by Houston American would have been confusing. Even Houston American's subsequent technical experts and reserves consultants (References 23 and 24) refer to all the volumes in the Block as resources.

Houston American's Disclaimer Does Not Inform Investors That It Intends to Use the Term "Reserves" In a 98. Manner That Is Inconsistent With Industry Norms: At the time the Presentation was furnished as an exhibit to Houston American's Form 8-K, the SEC permitted oil and gas companies to report in SEC filings only proved reserves, which is the sub-classification of reserves that has the highest degree of certainty, However, companies were not prohibited from disclosing their "probable" or "possible" reserves-or from disclosing their "contingent" and "prospective" resources-in documents that were not filed with the SEC. such as on company websites or in company presentations. The Presentation was not filed with the SEC but was instead merely furnished. In response to guidance provided by the SEC, some companies used a disclaimer when their websites or presentations referred to a quantity other than "proved reserves", explaining that those other quantities had a higher degree of associated risk. Houston American's Presentation included such a disclaimer, which makes the relatively simple point that the Presentation may disclose quantities other than "proved reserves". The disclaimer does not define what the terms reserves, resources, prospects, or leads mean in the context of the Presentation or offer any alternate document as a reference to clarify the terms. Accordingly, nothing in the disclaimer indicates or suggests that Houston American intended to use any term in a way that deviated from the well-established definitions within the petroleum industry.

#### CONCLUSION\_

- 99. Based on the foregoing, I conclude:
- 100. Houston American's claim that the Block contained an estimated "1 to 4 billion barrels" of recoverable reserves was not supported by available geologic data and exceeded reasonable benchmarks when compared to the volume of discovered hydrocarbons from the entire Llanos Basin.
- 101. The Block did not contain over "100 leads or prospects" but instead contained a few leads and a large number of speculative plays that were insufficiently defined to form the basis of a resources or reserves estimate. Moreover, by describing the speculative targets as "leads or prospects", Houston American's Presentation understated the high degree of risk and uncertainty associated with the closures and thus with the successful development of the Block.
- 102. Houston American's claim that the Block contained "recoverable reserves" understated the degree of risk and uncertainty associated with the Block. There were no reserves on the Block in November 2009.
- 103. Houston American's claim that the Block contained "1 to 4 billion barrels" of recoverable oil was not supported by SK's evaluation of the Block between April and November 2009. To the contrary, SK's continued evaluation between April and November 2009 reduced the available volumes of resources in the Block.
- 104. SK's "High Potential" volume of 639 MMBBL in April 2009 was reduced to 225 MMBBL in October 2009 due to a combination of a reduction in average closure size and the removal of speculative closures.

#### BASIS OF OPINION \_\_\_\_\_

105. This document must be considered in its entirety. It reflects our informed professional judgment based on accepted standards of professional investigation and, as applicable, the data and information provided by the Client, the scope of engagement, and the time permitted to conduct the evaluation.

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106. In line with those accepted standards, this document does not in any way constitute or make a guarantee or prediction of results, and no warranty is implied or expressed that any actual outcome will conform to the



outcomes presented herein. We have not independently verified any information provided by or at the direction of the Client and have accepted the accuracy and completeness of these data.

107. The opinions expressed herein are subject to and fully qualified by the generally accepted uncertainties associated with the interpretation of geoscience and engineering data. The opinions and statements contained in this report are made in good faith and in the belief that such opinions and statements are representative of prevailing physical and economic circumstances.

Sincerely,

OF By: Rudi) de Zoeten, P.G 3/179 Ruurdjar Vice Prevident RUURDJAN DE ZOETEN PROY Date Signed: November 21, 2014 GEOLOGY 3179

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