

## Proved R/P as Predictor of Sale Price

Why does one property trade for \$3,000 per net Mcfe/d and another for \$16,000 per net Mcfe/d? Using statistical analysis, Energy Spectrum Advisors has identified a positive correlation between Proved R/P and dollar paid per daily unit of production.

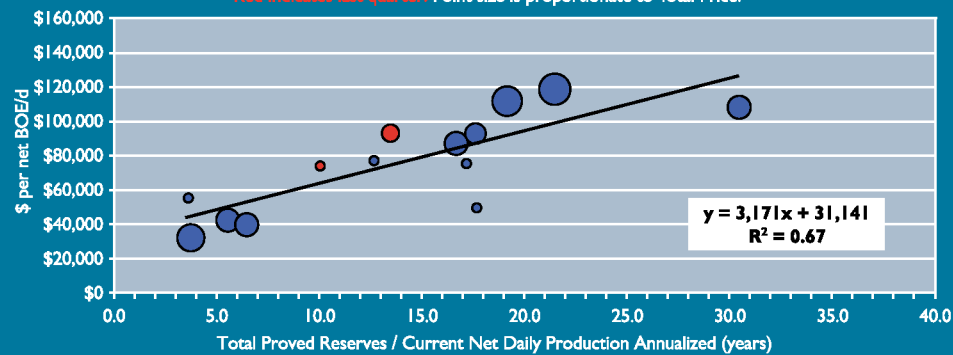
R is defined as Total Proved Reserves. P is defined as Current Net Daily Production Annualized. As indicated in the data table, most reserves information is taken from buyers' press releases.

For example, using the gas chart and formula below, one can see that a majority-gas transaction with an R/P of 15 years would trade on average for \$13,829 per net Mcfe/d.

R<sup>2</sup> is the statistical measure of how well a regression line approximates real data points. An R<sup>2</sup> of 1.0 indicates a perfect fit. As show in the graphs below, the oil coefficient was better than the gas coefficient for the trailing twelve months. From quarter to quarter, the coefficient is affected by a variety of factors, including premiums paid for non-producing reserve categories and changes in commodity price assumptions.

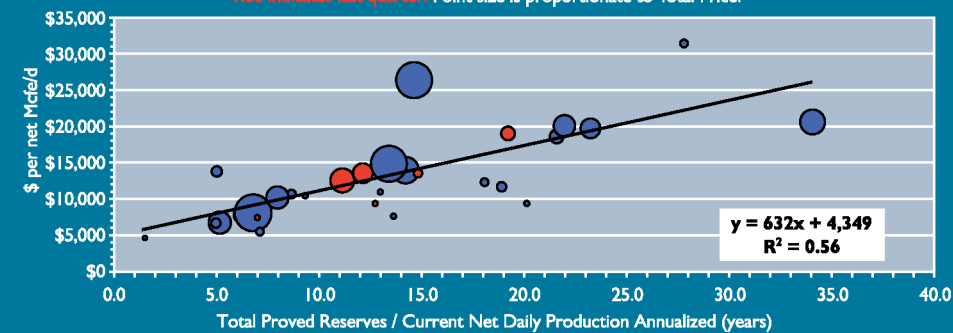
### Majority Oil: Net Production Rate Multiple (\$ per BOE/d) vs. R/P ratio ONLY R/P LESS THAN 40 YEARS

All property sales (\$10 MM - \$1B) announced in the last 12 months  
Red indicates last quarter. Point size is proportionate to Total Price.



### Majority Gas: Net Production Rate Multiple (\$ per Mcfe/d) vs. Proved R/P ONLY R/P LESS THAN 40 YEARS

All property sales (\$10 MM - \$1B) announced in the last 12 months  
Red indicates last quarter. Point size is proportionate to Total Price.



## ENERGY SPECTRUM ADVISORS INC.

- Focused on upstream
- Investment banking services include sales, financings & monetizations
- Staff of nine energy professionals includes two petroleum engineers

### Energy Spectrum Advisors' 2006 Closed Transactions

 <b>NATIONAL ENERGY GROUP, INC.</b> Sale of corporate assets to SandRidge Energy, Inc. November 2006 Exclusive Financial Advisor	 <b>SABER</b> RECAPITALIZATION Recapitalization of Debt and Equity Interests November 2006 Exclusive Financial Advisor	 <b>BOCI</b> <b>Browning</b> OIL COMPANY, INC. Sale of East Texas properties October 2006 Exclusive Divestiture Agent	 <b>ALPINE</b> OIL COMPANY, LLC Sale of Fort Worth Basin properties September 2006 Exclusive Divestiture Agent	<b>Rubicon Energy Partners, LLC</b> Mezzanine Debt and Equity Financing July 2006 Exclusive Financial Advisor
 <b>Aspen</b> Energy Partners Sale of Texas and New Mexico properties July 2006 Exclusive Divestiture Agent	 <b>FIVE STATES</b> ENERGY COMPANY, LLC Sale of Permian Basin properties May 2006 Exclusive Divestiture Agent	 <b>CROWN</b> EXPLORATION, LTD. Sale of Barnett Shale assets May 2006 Exclusive Divestiture Agent	<b>OSYKA CORPORATION</b> Senior Subordinated Notes May 2006 Exclusive Financial Advisor	 <b>PIONEER</b> OIL COMPANY, INC. <b>HUX OIL CORP.</b> BALDWIN & BALDWIN OIL CO. Mr. Gene Lightman, Jr. Sale of Kansas assets April 2006 Exclusive Divestiture Agent
 <b>PRIMEXX</b> Energy Partners Sale of Permian & Mid-Continent properties March 2006 Exclusive Divestiture Agent	 <b>JOINT RESOURCES</b> COMPANY Sale of Barnett Shale properties March 2006 Exclusive Divestiture Agent	 <b>IPC</b> Midcon PETROLEUM CORPORATION Wichita, Kansas Monetization of certain Kansas production March 2006 Exclusive Financial Advisor	 <b>ROYALTY</b> OIL & GAS SERVICES Sale of mineral & royalty interests February 2006 Exclusive Divestiture Agent	 <b>Eagle Oil &amp; Gas Co.</b> Sale of East Texas properties January 2006 Exclusive Divestiture Agent



## ENERGY SPECTRUM ADVISORS INC.

# U.S. Upstream M&A Activity Report



### MAJORITY OIL

ALL U.S. FROM \$10 MILLION TO \$1 BILLION

Announced Date	Buyer	Seller	Total Price* (\$/WT)	Reserves Price (\$/WT)	Proved Reserves (MMBOE)	Value* (\$/BOE)	Production (MMcfe/d)	Net (\$/MMcfe/d)	Value* (\$/BOE/d)	Region	% Oil	Source	Proved R/P
12/14/06	Linn Energy LLC	undisclosed	\$415	\$415	55	\$7.55	NA	NA	NA	MC	>50%	Buyer PR	
11/8/06	Swift Energy Co.	undisclosed	\$20	\$20	1	\$20.40	0.3	\$74,182	GC	86%	Buyer PR	10.0	
11/7/06	St. Mary Land & Exploration Co.	various	\$250	\$250	13	\$19.23	2.7	\$93,773	PER	78%	Buyer PR	13.4	
9/29/06	Ignis Petroleum Group, Inc.	W. B. Osborn Oil & Gas Operations, Ltd.	\$18	\$18	1	\$16.62	NA	NA	Barnett	50%	Buyer PR		
9/19/06	Chaparral Energy Inc.	Calumet Oil Co.	\$510	\$510	52	\$9.90	4.7	\$109,301	MC	93%	Buyer PR	30.2	
8/15/06	Clayton Williams Energy, Inc.	undisclosed	\$58	\$58	6	\$10.51	NA	NA	CA, PER	87%	Buyer PR		
8/15/06	Whiting Petroleum Corp.	undisclosed	\$26	\$26	1	\$18.57	0.6	\$40,752	MI	>50%	Buyer PR	6.0	
7/7/06	Occidental Petroleum Corp.	Plains Exploration & Production Co.	\$865	\$865	56	\$15.45	7.2	\$120,139	CA, PER	>50%	Buyer PR	21.3	
7/24/06	Linn Energy LLC	Blacksand Energy, LLC	\$291	\$291	31	\$9.30	NA	NA	CA (LA)	90%	Buyer PR		
6/29/06	Rex Energy Operating Corp.	Team Energy, LLC	\$23	\$23	3	\$7.90	NA	NA	IN, IL	>50%	Buyer PR		
6/26/06	PrimeWest Energy	Camwest Inc.	\$300	\$300	20	\$14.71	3.2	\$93,750	RM (Williston)	94%	Buyer PR	17.5	
6/22/06	Foothills Resources, Inc.	TARH E&P Holdings, LP.	\$62	\$62	5	\$12.16	0.8	\$75,610	GC	>50%	Buyer PR	17.0	
6/6/06	Lime Rock Resources	undisclosed	\$28	\$28	2	\$16.47	NA	NA	PER	>50%	Buyer PR		
5/19/06	Pacific Energy Resources Ltd.	Carneros Energy, Inc.	\$25	\$25	1	\$16.91	0.3	\$77,538	CA	100%	Buyer PR	12.6	
5/16/06	Coldren Resources LP	Noble Energy Inc.	\$625	\$625	27	\$23.15	20.0	\$31,250	GOM	>50%	Buyer PR	3.7	
5/15/06	New Century Energy Corp.	Manti Resources, Inc.	\$33	\$33	1	\$42.09	0.6	\$55,000	GC	95%	Buyer PR	3.6	
5/1/06	Cano Petroleum, Inc.	undisclosed	\$24	\$23	7	\$3.25	0.4	\$56,875	MC	>50%	Buyer PR	47.9	
4/21/06	Mitsui & Co. Ltd.	Pogo Producing Co.	\$500	\$500	24	\$20.83	12	\$41,667	GOM	67%	Seller PR	5.5	
4/17/06	Pogo Producing Co.	Latigo Petroleum, Inc.	\$750	\$750	46	\$16.30	7	\$113,122	PER, MC	51%	Buyer PR	19.0	
4/13/06	Kinder Morgan Energy Partners LP	Journey Acquisition LP	\$115	\$115	NA	NA	1	\$135,294	PER	>50%	Buyer PR		
3/31/06	Venoco, Inc.	TexCal Energy, LLC	\$456	\$456	31	\$14.52	5.2	\$87,692	CA (Sacramento)	>50%	Buyer PR	16.5	
2/22/06	Citation Investment LP	Meritage Energy Partners, LLC	\$62	\$62	8	\$7.69	1.3	49,200	RM	>50%	Seller PR	17.5	
2/22/06	Energy XXI Gulf Coast, Inc.	Marlin Energy, LLC	\$421	\$421	25	\$16.71	10.8	\$38,991	GOM, GC	64%	Buyer PR	6.4	
1/26/06	Platinum Energy Resources, Inc.	Tandem Energy Holdings, Inc.	\$102	\$102	9	\$11.47	NA	NA	PER	64%	Buyer PR		
<b>Per BOE</b>													
<b>Median</b>						\$14.71		\$75,610					
<b>Simple Average</b>						\$15.14		\$76,126					

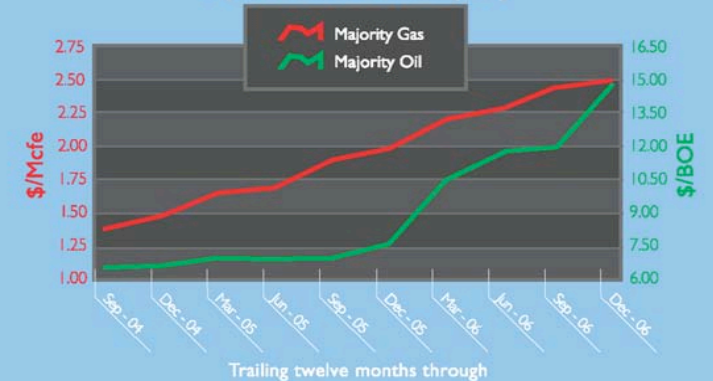
### MAJORITY GAS

ALL U.S. FROM \$10 MILLION TO \$1 BILLION

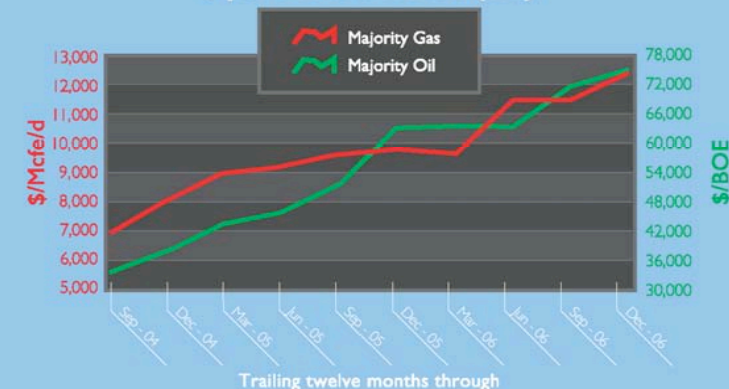
Announced Date	Buyer	Seller	Total Price* (\$/WT)	Reserves Price (\$/WT)	Proved Reserves (Bcf)	Value* (\$/Mcf)	Production (Mcf/d)	Net (\$/MMcfe/d)	Value* (\$/BOE/d)	Region	% Gas	Source	Proved R/P
12/19/06	Edge Petroleum Corp.	undisclosed	\$385	\$385	126	\$3.06	31.0	\$12,419	STX	86%	Buyer PR	11.14	
12/14/06	Linn Energy LLC	various	\$39	\$39	26	\$1.50	NA	NA	APP	99%	Buyer PR		
12/13/06	Edge Petroleum Corp.	Anadarko Petroleum Corp.	\$26	\$26	9	\$2.83	3.6	\$7,222	GC	90%	Buyer PR	7.00	
12/12/06	Petroleum Development Corp.	EXCO Resources Inc.	\$133	\$133	49	\$2.70	7.0	\$18,929	RM (D)	>50%	Buyer PR	19.18	
11/22/06	American Real Estate Holdings LP	National Energy Group Inc.	\$261	\$261	324	\$0.81	NA	NA	Ark-La-Tex, MC, GC, GOM	>50%	Buyer PR		
11/17/06	Isramco Inc.	Five States Energy Co., LLC	\$100	\$100	50	\$2.02	NA	NA	PER	>50%	Buyer PR		
11/14/06	undisclosed	PetroQuest Energy Inc.	\$17	\$17	9	\$1.95	NA	NA	GOM	>50%	Seller PR		
11/13/06	EV Energy Partners	Five States Energy Co., LLC	\$29	\$29	14	\$1.98	3.1	\$9,194	MC, ETX, PER, NLA	62%	Buyer PR	12.73	
11/10/06	El Paso E & P Co.	Laredo Energy III LP	\$255	\$255	84	\$3.04	19.0	\$13,421	GC	>50%	Buyer PR	12.11	
10/2/06	Unik Corp.	Brighton Energy, LLC	\$67	\$67	27	\$2.48	5.0	\$13,400	MC, GC	>50%	Buyer PR	14.79	
9/20/06	Gasco Energy, Inc.	Brek Energy Corp.	\$30	\$30	6	\$5.17	0.2	\$176,471	RM (Green River)	>50%	Buyer PR	93.47	
9/5/06	The Meridian Resource Corp.	various	\$21	\$21	3	\$7.78	4.8	\$4,375	GC, GOM	85%	Buyer PR	1.54	
8/30/06	Black Hills Corp.	undisclosed	\$24	\$24	22	\$1.08	1.4	\$17,593	RM (Piceance)	>50%	Buyer PR	44.80	
8/30/06	Phoenix Exploration Company LP	Cabot Oil & Gas Corp.	\$340	\$340	98	\$3.47	52.0	\$6,538	GC	70%	Buyer PR	5.16	
8/28/06	Bois d'Arc Energy, Inc.	undisclosed	\$19	\$19	9	\$2.16	NA	NA	GOM	52%	Buyer PR		
8/28/06	Swift Energy Co.	BP America Inc.	\$175	\$175	58	\$3.01	12.0	\$14,583	GC	>50%	Buyer PR	13.29	
8/22/06	undisclosed	Delta Petroleum Corp.	\$31	\$31	NA	NA	2.0	\$15,650	ETX, APP	>50%	Buyer PR		
8/21/06	Comstock Resources Inc.	various	\$67	\$67	20	\$3.33	6.4	\$10,500	GC	>50%	Buyer PR	8.65	
8/8/06	Mariner Energy Resources Inc.	BP America Inc.	\$71	\$71	20	\$3.55	11.0	\$6,445	GOM	>50%	Buyer PR	4.98	
7/31/06	Escondido Resources LP	undisclosed	\$13	\$13	NA	NA	1.2	\$11,000	GC	>50%	Buyer PR		
7/24/06	Linn Energy LLC	Kaiser-Francis Oil Company	\$125	\$125	55	\$2.29	NA	NA	MC	84%	Buyer PR		
7/21/06	Marathon Oil Corp.	Petroleum Development Corp.	\$354	\$354	900	\$0.39	NA	NA	RM (Piceance)	>50%	Buyer PR		
7/18/06	Storm Cat Energy Corp.	Bill Barnett Corp.	\$31	\$31	10	\$3.01	3.0	\$10,233	RM (Powder)	>50%	Buyer PR	9.32	
7/18/06	Stone Energy Corp.	undisclosed	\$189	\$189	57	\$3.32	25.0	\$7,572	GC (MS)	>50%	Buyer PR	6.25	
6/21/06	Apache Corporation	BP America Inc.	\$845	\$845	265	\$3.19	106.9	\$7,905	GOM	>50%	Buyer PR	6.79	
6/7/06	Energy XXI Gulf Coast Inc.	undisclosed	\$330	\$330	96	\$3.44	33.0	\$10,000	GC	90%	Buyer PR	7.97	
6/5/06	Chesapeake Energy Corp.	Four Sevens Oil Co. Ltd.	\$845	\$790	160	\$4.94	30.0	\$26,333	Barnett	>50%	Buyer PR	14.61	
6/1/06	XTO Energy Inc.	Peak Energy Resources Inc.	\$105	\$105	64	\$1.64	NA	NA	Barnett	>50%	Buyer PR		
5/26/06	EXCO Resources, Inc.	undisclosed	\$52	\$52	28	\$1.85	4.3	\$12,163	ETX	99%	Buyer PR	18.03	
5/16/06	Lime Rock Resources	undisclosed	\$21	\$21	9	\$2.39	NA	NA	ETX	>50%	Buyer PR		
5/12/06	Penn Virginia Corp.	Crow Creek Holding Corp.	\$72	\$72	43	\$1.67	6.2	\$11,532	MC	85%	Buyer PR	18.87	
5/11/06	Range Resources Corp.	Stroud Energy Inc.	\$456	\$456	171	\$2.67	33.0	\$13,818	Barnett, ETX, STX, MC	>50%	Buyer PR	14.20	
5/2/06	Whitaker Energy Corp.	various	\$32	\$32	19	\$1.69	3.8	\$8,421	GC, ETX	>50%	Buyer PR	13.63	
5/1/06	undisclosed	Contango Oil & Gas Co.	\$14	\$14	2	\$5.87	NA	NA	GC	>50%	Seller PR		
5/1/06	Fidelity Exploration & Production Co.	undisclosed	\$89	\$89	51	\$1.74	NA	NA	RM (Big Horn)	55%	Buyer PR		
4/28/06	EXCO Resources, Inc.	undisclosed	\$115	\$115	162	\$0.71	5	\$23,000	APP	96%	Buyer PR	88.77	
4/26/06	Superior Energy Services Inc.	Explore Offshore LLC	\$50	\$50	16	\$3.10	2	\$31,438	GOM	85%	Buyer PR	27.74	
4/19/06	Unik Corp.	undisclosed	\$32	\$32	14	\$2.28	3.0	\$10,800	MC, PER	>50%	Buyer PR	12.97	
4/14/06	Bill Barnett Corp.	CFH Corp.	\$82	\$82	11	\$7.45	6.0	\$13,667	RM (Powder)	>50%	Buyer PR	5.02	
4/10/06	The Houston Exploration Co.	undisclosed	\$590	\$590	186	\$3.17	NA	NA	GOM	>50%	Seller PR		
4/6/06	EXCO Resources Inc.	undisclosed	\$86	\$86	33	\$2.60	NA	NA	PER	>50%	Buyer PR		
3/28/06	KCS Energy, Inc.	undisclosed	\$26	\$26	11	\$2.34	NA	NA	NLA	>50%	Buyer PR		
2/28/06	Merit Energy Co.	The Houston Exploration Co.	\$220	\$220	59	\$3.76	45.0	\$4,889	GOM	>50%	Buyer PR	3.6	
2/23/06	Peoples Energy Corp.	undisclosed	\$139	\$139	59	\$2.36	7.5	\$18,533	ETX, NLA, GC	95%	Buyer PR	21.6	
2/13/06	Forest Oil Corp.	Chalkier Energy Partners / various	\$255	\$255	110	\$2.32	13.0	\$19,615	ETX	90%	Buyer PR	23.1	
2/9/06	Noble Energy, Inc.	United States Exploration, Inc.	\$411	\$411	248	\$1.66	20.0	\$20,550	RM (D)	55%	Buyer PR	3	
2/7/06	Northstar GOM, LLC	Petrohawk Energy Corp.	\$53	\$53	26	\$2.02	10.0	\$5,250	GOM	70%	Seller PR	7.1	
2/7/06	XTO Energy Inc.	Total E&P USA, Inc.	\$300	\$300	120	\$2.50	15.0	\$20,000	ETX, GC (MS)	95%	Buyer PR	21.9	
2/2/06	Lime Rock Resources	undisclosed	\$80	\$80	35	\$2.29	NA	NA	ETX	97%	Buyer PR		
1/27/06	Berry Petroleum Co.	undisclosed	\$159	\$159	26	\$6.12	1.0	\$159,000	RM (Piceance)	100%	Buyer PR	71.2	
1/17/06	Cadence Resources Corp.	O.I.L Energy Corp.	\$28	\$28	22	\$1.25	3.0	\$9,167	MI (Antrim)	100%	Buyer PR	20.0	
1/17/06	Chesapeake Energy Corp.	various	\$796	\$796	264	\$3.02	54.0	\$14,741	Barnett, GC, PER, MC, ETX	91%	Buyer PR	13.4	
<b>Per Mcfe</b>													
<b>Median</b>						\$2.49		\$12,910					
<b>Simple Average</b>						\$2.82		\$21,986					

\*Total Price may include and Value may exclude consideration for non-E&P assets, such as gathering & processing assets and working capital. Includes all gas transactions from \$10 million to \$1 billion.

\$ per Proved Mcfe (6:1)



\$ per Proved Mcfe/d (6:1)



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