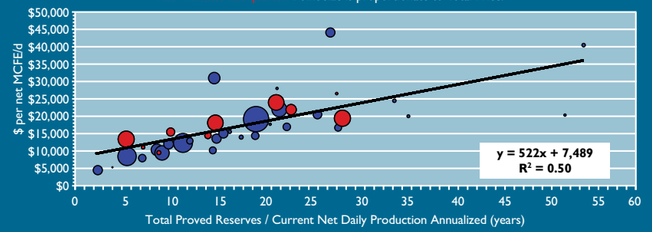
Majority Gas: Net Production Rate Multiple ($ per MCFE/d) vs. Proved R/P

All property sales ($10 MM - $2B) announced in the last 12 months

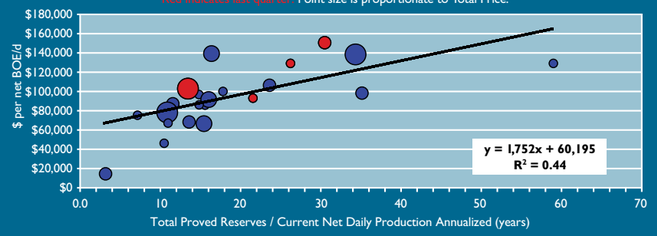
Red indicates last quarter. Point size is proportionate to Total Price.



Majority Oil: Net Production Rate Multiple ($ per BOE/d) vs. Proved R/P

All property sales ($10 MM - $1B) announced in the last 12 months

Red indicates last quarter. Point size is proportionate to Total Price.



Proved R/P as Predictor of Sale Price

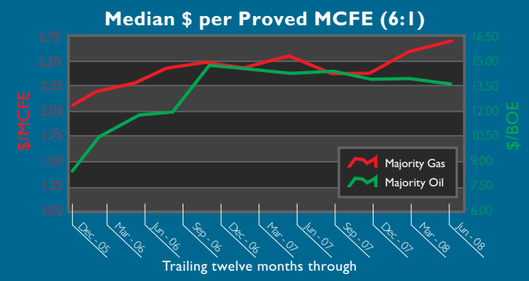
Why does one property trade for $4,000 per net MCFE/d and another for $50,000 per net MCFE/d? Using statistical analysis, Energy Spectrum Advisors has identified a positive correlation between Proved R/P and dollar paid per daily unit of production.

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 above, one can see that a majority-gas transaction with an R/P of 15 years would trade **on average** for $15,319 per net MCFE/d.

R^2 is the statistical measure of how well a regression line approximates real data points. An R^2 of 1.0 indicates a perfect fit. As shown in the graphs above, the gas coefficient was better than the oil 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.

Median $ per Proved MCFE (6:1)



Median $ per MCFE/d (6:1)

ENERGY SPECTRUM ADVISORS INC.

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

Energy Spectrum Advisors' Current Advisory Transactions

JOINT RESOURCES COMPANY Sale of Barnett Shale properties Co-Divestiture Agent	**Undisclosed Sellers** Sale of Mineral and Royalty interests Exclusive Divestiture Agent	**Hassie Hunt Exploration Company** **Hassie Hunt Production Company** Sale of Company Exclusive Financial Advisor
Aspect | Abundant Sale of Barnett Shale properties Exclusive Divestiture Agent	**Rubicon Energy Partners, LLC** Negotiated Sale of North Central Texas and West Texas properties Exclusive Financial Advisor	ROYALTY CLEARINGHOUSE Sale of Mineral and Royalty interests Exclusive Divestiture Agent

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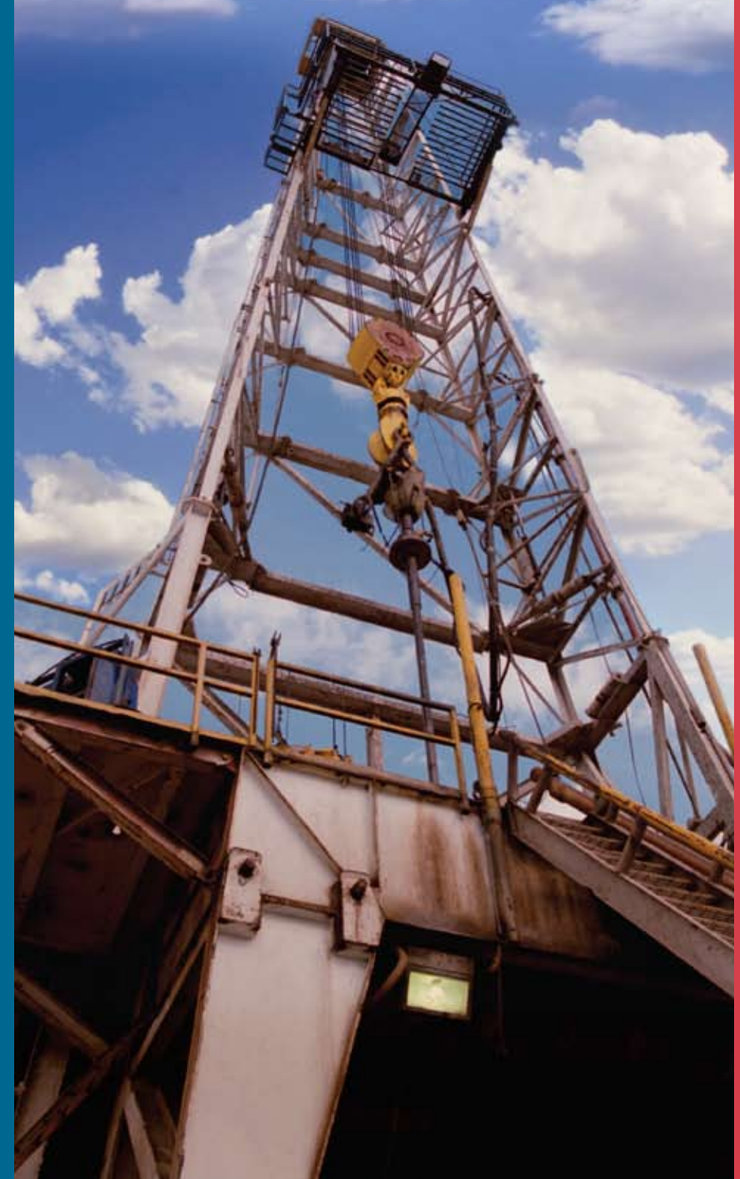
ENERGY SPECTRUM ADVISORS INC.

U.S. Upstream **M&A Activity Report**



SECOND QUARTER 2008

Trailing Twelve Months through June 2008

MAJORITY GAS

ALL U.S. FROM $10 MILLION TO $2 BILLION

Announced Date	Buyer	Seller	Total Price* ($MM)	Reserves Price ($/MM)	Proved Reserves (BCFE)	Value* ($/MCFE)	Production (MMCFE/d)	Net Value* ($/MCFE/d)	Region	% Gas	Source	Proved R/P	Crude Oil Pricing**	Natural Gas Pricing**
6/11/08	Berry Petroleum Co.	undisclosed	$620	$620	335	$1.85	32.0	$19,375	ETX	>50%	Buyer PR	28.7	131.69	12.33
6/5/08	Cabot Oil & Gas Corp.	undisclosed	$603	$577	176	$3.28	32.0	$18,031	ETX	>50%	Buyer PR	15.1	127.89	12.33
6/3/08	Laredo Petroleum Inc.	Linn Energy LLC	$185	$185	45	$4.11	12.0	$15,417	MC	>50%	Buyer PR	10.3	124.69	12.15
5/30/08	Goodrich Petroleum Corp.	Caddo Resources LP	$32	$32	12	$2.60	1.2	$26,667	MC	>50%	Buyer PR	28.1	126.73	11.72
5/27/08	ABC Funding Inc.	Voyager Gas Corp.	$42	$42	16	$2.59	NA	NA	STX	69%	Buyer PR		128.56	12.05
5/7/08	Providence Resources Plc	Triangle Oil and Gas Inc.	$68	$68	NA	NA	7.8	$8,654	GOM	>50%	Buyer PR		121.07	11.58
5/6/08	undisclosed	Comstock Resources Inc.	$122	$122	44	$2.75	8.5	$14,353	ETX,STX	>50%	Seller PR	14.3	118.97	11.50
5/5/08	undisclosed	Chesapeake Energy Corp.	$623	$623	94	$6.60	47.0	$13,249	MC	>50%	Buyer PR	5.5	117.06	11.41
5/1/08	Crimson Exploration Inc.	undisclosed	$65	$65	23	$2.83	7.0	$9,286	STX	96%	Buyer PR	9.0	118.97	11.41
4/24/08	Newfield Exploration Co.	undisclosed	$227	$227	NA	NA	19.0	$11,947	STX	>50%	Buyer PR		112.66	11.29
4/15/08	XTO Energy Inc.	Linn Energy LLC	$600	$600	197	$3.05	25.0	$24,000	APP	99%	Buyer PR	21.6	110.34	10.60
4/3/08	XTO Energy Inc.	Southwestern Energy Co.	$520	$520	NA	NA	10.5	$49,524	MC	>50%	Buyer PR		100.79	9.86
4/2/08	Constellation Energy Partners LLC	Constellation Energy	$53	$53	13	$4.08	4.9	$10,898	MC	>50%	Buyer PR	7.3	102.12	10.22
4/1/08	Forest Oil Corp.	undisclosed	$285	$285	110	$2.59	13.0	$21,923	MC	>50%	Seller PR	23.2	98.51	10.10
3/28/08	Smith Production Inc.	El Paso Exploration & Production	$312	$312	NA	NA	50.0	$6,240	STX	>50%	Seller PR		103.78	10.19
3/27/08	St. Mary Land and Exploration Co.	undisclosed	$49	$49	25	$1.96	2.0	$24,500	ETX	>50%	Buyer PR	34.2	103.78	10.19
3/25/08	undisclosed	El Paso Corp.	$752	$752	309	$2.43	NA	NA	GOM	>50%	Seller PR		99.22	10.01
3/4/08	Plains Exploration & Production Co.	undisclosed	$335	$335	106	$3.16	33.0	$10,152	STX	>50%	Buyer PR	8.8	97.62	9.82
2/12/08	XTO Energy Inc.	undisclosed	$1,000	$1,000	212	$4.72	NA	NA	RM (San Juan)	>50%	Buyer PR		91.91	8.91
2/1/08	Questar Corp.	undisclosed	$655	$655	276	$2.37	NA	NA	MC	>50%	Buyer PR		88.44	8.23
1/31/08	PetroQuest Energy, Inc.	undisclosed	$20	$20	2	$8.33	NA	NA	ETX	>50%	Buyer PR		91.03	8.46
1/22/08	Unit Corp.	undisclosed	$17	$17	5	$3.43	3.3	$5,047	GC	>50%	Buyer PR	4.0	87.75	7.99
1/16/08	undisclosed	El Paso Exploration & Production	$517	$517	191	$2.71	56.0	$9,232	GC	>50%	Seller PR	9.3	89.00	8.35
1/8/08	MDU Resources Group, Inc.	EnerVest Ltd.	$235	$235	97	$2.42	17.5	$13,429	ETX	>50%	Buyer PR	15.2	94.16	8.29
1/8/08	Petrohawk Energy Corp.	undisclosed	$223	$223	50	$4.45	5.0	$44,500	MC	>50%	Buyer PR	27.4	94.16	8.29
1/4/08	Contango Oil & Gas Co.	undisclosed	$200	$200	29	$6.90	NA	NA	GOM	>50%	Buyer PR		95.81	8.14
12/28/07	Mariner Energy, Inc.	StatoilHydro ASA	$243	$243	52	$4.64	58.2	$4,175	GOM	>50%	Buyer PR	2.5	93.16	7.87
12/12/07	Petrohawk Energy Corp.	various	$169	$169	83	$2.04	10.0	$16,900	NLA	>50%	Buyer PR	22.7	92.50	7.74
12/10/07	Range Resources Corp.	DTE Energy Co.	$305	$305	NA	NA	14.0	$21,786	Barnett	>50%	Buyer PR		86.89	7.46
11/27/07	Petrohawk Energy Corp.	Contango Oil & Gas Co.	$343	$343	60	$5.72	11.0	$31,182	MC	>50%	Buyer PR	14.9	90.52	7.82
11/26/07	Comstock Resources Inc.	Shell Exploration & Production	$170	$170	58	$2.94	21.9	$7,763	STX	>50%	Buyer PR	7.2	93.12	7.96
11/19/07	EV Energy Partners, LP	EnerVest Ltd.	$60	$60	28	$2.13	4.3	$13,837	APP	100%	Buyer PR	17.8	90.29	8.00
11/9/07	undisclosed	EXCO Resources, Inc.	$23	$23	8	$2.88	2.0	$11,500	MC, GC	>50%	Seller PR	11.0	91.99	8.13
11/6/07	Pioneer Natural Resources Co.	undisclosed	$150	$150	81	$1.85	15.0	$10,000	Barnett	>50%	Buyer PR	14.8	91.96	8.09
10/25/07	Penn Virginia Corp.	undisclosed	$45	$45	22	$2.05	1.1	$40,818	ETX	>50%	Buyer PR	54.5	85.85	7.91
10/23/07	XTO Energy Inc.	undisclosed	$550	$550	200	$2.75	25.0	$22,000	MC	>50%	Buyer PR	21.9	83.08	7.65
10/19/07	undisclosed	Denbury Resources Inc.	$180	$180	NA	NA	28.8	$6,250	MC, GC	85%	Seller PR		83.59	7.80
10/17/07	Quest Resource Corp.	Pinnacle Gas Resources Inc.	$205	$205	26	$7.92	NA	NA	RM (Powder, Green River)	>50%	Buyer PR		82.69	8.08
10/16/07	undisclosed	Petrohawk Energy Corp.	$825	$825	204	$4.04	100.0	$8,250	GC	>50%	Seller PR	5.6	83.21	7.95
10/15/07	Petroleum Development Corp.	Castle Gas Co., Inc.	$53	$53	NA	NA	3.0	$17,667	APP	>50%	Buyer PR		82.16	7.99
10/12/07	Penn Virginia Resource Partners, LP	Penn Virginia Corp.	$31	$31	9	$3.56	1.1	$28,182	APP	>50%	Buyer PR	21.7	80.13	7.74
10/9/07	EXCO Resources, Inc.	undisclosed	$157	$157	60	$2.61	NA	NA	PER	>50%	Buyer PR		77.61	7.69
9/28/07	undisclosed	Brigham Exploration Co	$36	$36	24	$1.53	1.8	$20,000	MC	>50%	Seller PR	35.8	77.93	7.75
9/25/07	undisclosed	Newfield Exploration Co.	$56	$56	NA	NA	5.0	$11,200	MC	>50%	Seller PR		76.99	7.66
9/19/07	Equitable Resources, Inc.	Penn Virginia Corp.	$30	$30	13	$2.31	1.7	$17,647	APP	>50%	Buyer PR	21.0	77.82	7.48
9/12/07	BreitBurn Energy Partners LP	Quicksilver Resources Inc.	$1,454	$1,454	539	$2.70	76.0	$19,132	APP, MI (Atrim)	96%	Buyer PR	19.4	75.80	7.76
9/5/07	Swift Energy Co.	Escondido Resources, LP	$250	$250	77	$3.24	21.0	$11,881	STX	85%	Buyer PR	10.0	72.14	7.41
9/4/07	Atlas Energy Resources, LLC	undisclosed	$11	$11	5	$2.06	NA	NA	MI (Atrim)	>50%	Buyer PR		72.21	7.34
8/30/07	Penn Virginia Corp.	undisclosed	$48	$48	19	$2.55	3.1	$15,452	MC	>50%	Buyer PR	16.6	70.71	7.36
8/17/07	El Paso Corp.	Peoples Energy Production Co.	$879	$879	305	$2.88	72.0	$12,208	MC, GC, RM (San Jaun)	94%	Buyer PR	11.6	70.38	8.06
8/16/07	Baseline Oil & Gas Corp.	DSX Energy Ltd., LLP	$97	$97	42	$2.29	NA	NA	STX	77%	Buyer PR		69.63	8.02
8/3/07	St. Mary Land and Exploration Co.	Rockford Energy Partners II, LLC	$153	$153	95	$1.61	9.2	$16,641	STX	>50%	Buyer PR	28.2	74.15	7.69
8/3/07	Constellation Energy Partners LLC	Newfield Exploration Co.	$128	$128	45	$2.84	10.0	$12,800	MC	>50%	Buyer PR	12.3	74.15	7.69
8/2/07	Linn Energy, LLC	undisclosed	$23	$23	11	$2.05	NA	NA	Panhandle	>50%	Buyer PR		74.93	7.76
7/30/07	Pioneer Natural Resources Co.	Petrogulf Corp.	$205	$205	95	$2.16	10.0	$20,500	RM (Raton)	>50%	Buyer PR	26.0	74.00	8.10
7/18/07	EV Energy Partners, LP	Plantation Petroleum Holdings III, LLC	$160	$160	79	$2.02	11.2	$14,286	PER	93%	Buyer PR	19.3	74.17	7.84
7/13/07	Constellation Energy Partners LLC	Amvest Osage, Inc.	$240	$240	93	$2.58	16.0	$15,000	MC	>50%	Buyer PR	15.9	73.87	7.85
7/2/07	Penn Virginia Corp.	undisclosed	$33	$33	31	$1.06	1.6	$20,313	ETX, GC	>50%	Buyer PR	52.6	72.37	7.92
	Per MCFE	**Median**				**$2.70**		**$15,000**						
		Simple Average				$3.16		$17,102						

MAJORITY OIL

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

Announced Date	Buyer	Seller	Total Price* ($MM)	Reserves Price ($/MM)	Proved Reserves (MMBOE)	Value* ($/BOE)	Production (MBOE/d)	Net Value* ($/BOE/d)	Region	% Oil	Source	Proved R/P	Crude Oil Pricing**	Natural Gas Pricing**
6/5/08	Arena Resources Inc.	undisclosed	$10	$10	1	$8.58	NA	NA	CA	>50%	Buyer PR		127.89	12.33
6/5/08	Concho Resources Inc.	Henry Petroleum	$565	$565	27	$20.77	5.5	$102,727	PER	70%	Buyer PR	13.5	127.89	12.33
5/21/08	undisclosed	Pacific Energy Resources Ltd.	$135	$135	10	$13.50	0.9	$150,000	CA	>50%	Seller PR	30.4	134.12	11.97
4/15/08	EV Energy Partners LP	undisclosed	$18	$18	1	$13.43	0.1	$128,571	STX	100%	Buyer PR	26.2	110.34	10.60
4/4/08	Eagle Rock Energy Partners, LP	Stanolind Oil and Gas Corp.	$79	$79	7	$11.79	0.9	$92,941	PER	53%	Buyer PR	21.6	103.35	9.77
3/13/08	Legacy Reserves LP	undisclosed	$82	$82	4	$20.00	0.8	$103,405	PER	>50%	Buyer PR	14.2	105.38	10.43
2/26/08	Teton Energy Corp.	undisclosed	$53	$53	2	$28.25	0.7	$75,211	MC	92%	Buyer PR	7.3	98.87	9.65
2/22/08	Isramco, Inc.	GFB Acquisition I, LP	$103	$103	5	$20.45	1.2	$86,982	GC, PER, RM, ETX	54%	Buyer PR	11.7	96.89	9.53
2/17/08	Dynamic Offshore Resources LLC	SPN Resources LLC	$165	$165	14	$12.22	11.0	$15,000	GOM	>50%	Buyer PR	3.4	94.26	9.06
1/14/08	Continental Resources Inc.	Chesapeake Energy Corp.	$60	$60	4	$15.00	0.7	$85,714	RM	>50%	Buyer PR	15.7	90.24	8.41
12/28/07	Mariner Energy, Inc.	undisclosed	$123	$123	16	$7.66	1.3	$98,000	PER	75%	Buyer PR	35.1	93.16	7.87
12/28/07	Encore Energy Partners LP	Encore Acquisition Co.	$250	$250	11	$23.15	1.8	$138,889	PER, RM (Williston)	65%	Buyer PR	16.4	93.16	7.87
12/27/07	Linn Energy, LLC	Lamamco Drilling Co.	$552	$552	50	$11.04	4.0	$138,000	MC	88%	Buyer PR	34.2	93.61	7.57
12/26/07	W&T Offshore Inc.	Apache Corp.	$116	$116	10	$11.60	NA	NA	GOM	83%	Buyer PR		92.77	7.52
12/21/07	Vanguard Natural Resources, LLC	Apache Corp.	$78	$78	4	$17.80	0.8	$96,667	PER	83%	Buyer PR	14.9	91.12	7.63
12/17/07	XTO Energy Inc.	Plains Exploration & Production Co.	$200	$200	17	$11.76	3.0	$66,667	PER, RM (San Juan)	>50%	Seller PR	15.5	90.27	7.50
12/11/07	Abraxas Energy Partners LP	St. Mary Land & Exploration Co.	$140	$140	10	$13.66	2.1	$68,293	MC, RM	>50%	Buyer PR	13.7	88.73	7.49
12/3/07	various	ExL Petroleum, LP	$170	$170	14	$12.32	1.6	$106,250	PER	64%	Buyer PR	23.6	87.71	7.49
11/30/07	Llog Exploration Co. LLC	undisclosed	$170	$170	6	$28.49	NA	NA	GC	70%	Buyer PR		86.66	7.55
11/6/07	Pioneer Natural Resources Co.	undisclosed	$90	$90	15	$6.00	0.7	$128,571	PER	>50%	Buyer PR	58.7	91.96	8.09
10/18/07	GeoResources, Inc.	undisclosed	$91	$91	8	$11.99	2.0	$46,432	STX,GC,PER,MC	65%	Buyer PR	10.6	84.27	8.08
10/17/07	RAM Energy Resources, Inc.	Ascent Energy Inc.	$290	$290	19	$15.56	3.2	$91,556	STX, ETX, MC	51%	Buyer PR	16.1	82.69	8.08
9/4/07	Legacy Reserves LP	various	$61	$61	4	$15.32	0.6	$99,835	Panhandle	>50%	Buyer PR	17.9	72.21	7.34
8/30/07	Legacy Reserves LP	various	$21	$21	1	$15.78	0.2	$85,944	PER	>50%	Buyer PR	14.9	70.71	7.36
8/6/07	RTF Realty, Inc.	Toreador Resources Corp.	$19	$19	1	$13.64	NA	NA	PER, MC	51%	Buyer PR		71.17	7.71
7/12/07	Eagle Rock Energy Partners, LP	various	$400	$400	21	$19.51	5.1	$78,278	GC,ETX,STX	>50%	Buyer PR	11.0	73.20	7.73
7/11/07	Legacy Reserves LP	undisclosed	$20	$20	1	$16.64	0.3	$67,219	PER	>50%	Buyer PR	11.1	73.31	7.79
	Per BOE	**Median**				**$13.66**		**$92,941**						
		Simple Average				$15.40		$93,528						

*Total Price may include and Value may exclude consideration for non-E&P assets, such as gathering & processing assets and working capital. **12-month NYMEX Strip as of the transaction announcement date.