

# PetroBase Explorer Scorecard

## Top Kansas Oil Producers

PetroBase

| Rank  | Operator                                 | Prior Year Production | 05/18-04/19 Production | Percent Decline | Reported Prod Wells | Reported KDOR #'s |
|-------|--|-----------------------|------------------------|-----------------|---------------------|-------------------|
| # 1.  | Merit Energy Company, LLC                | 3,351,186             | 3,271,107              | -2.4%           | 514                 | 254               |
| # 2.  | BEREXCO LLC                              | 1,543,779             | 1,604,338              | 3.9%            | 1,056               | 612               |
| # 3.  | Murfin Drilling Co., Inc.                | 1,244,882             | 1,259,958              | 1.2%            | 867                 | 466               |
| # 4.  | Vess Oil Corporation                     | 1,078,457             | 1,069,309              | -0.9%           | 1,084               | 356               |
| # 5.  | American Warrior, Inc.                   | 835,465               | 827,119                | -1.0%           | 875                 | 578               |
| # 6.  | Palomino Petroleum, Inc.                 | 567,744               | 521,009                | -8.2%           | 178                 | 169               |
| # 7.  | Mai Oil Operations, Inc.                 | 512,467               | 471,927                | -7.9%           | 480                 | 226               |
| # 8.  | Lario Oil & Gas Company                  | 410,956               | 461,286                | 12.3%           | 181                 | 121               |
| # 9.  | Citation Oil & Gas Corp.                 | 456,243               | 439,510                | -3.7%           | 350                 | 94                |
| # 10. | HERMAN L. LOEB, LLC                      | 457,753               | 438,687                | -4.2%           | 459                 | 167               |
| # 11. | Shakespeare Oil Co., Inc.                | 441,902               | 425,289                | -3.8%           | 190                 | 144               |
| # 12. | Ritchie Exploration, Inc.                | 404,482               | 411,803                | 1.8%            | 368                 | 231               |
| # 13. | Hartman Oil Co., Inc.                    | 412,277               | 376,870                | -8.6%           | 195                 | 77                |
| # 14. | Vincent Oil Corporation                  | 381,680               | 365,171                | -4.3%           | 121                 | 91                |
| # 15. | SandRidge Exploration and Production LLC | 501,237               | 354,123                | -29.4%          | 200                 | 200               |
| # 16. | Trans Pacific Oil Corporation            | 379,749               | 337,559                | -11.1%          | 320                 | 198               |
| # 17. | Carmen Schmitt, Inc.                     | 240,685               | 303,582                | 26.1%           | 186                 | 107               |
| # 18. | Farmer, John O., Inc.                    | 298,612               | 300,426                | 0.6%            | 290                 | 183               |
| # 19. | Mull Drilling Company, Inc.              | 253,555               | 292,768                | 15.5%           | 167                 | 134               |
| # 20. | McCoy Petroleum Corporation              | 279,648               | 286,428                | 2.4%            | 140                 | 88                |
| # 21. | L. D. Drilling, Inc.                     | 293,678               | 266,847                | -9.1%           | 305                 | 201               |
| # 22. | Pantera Energy Company                   | 277,894               | 263,743                | -5.1%           | 105                 | 59                |
| # 23. | Downing-Nelson Oil Co Inc                | 215,309               | 256,836                | 19.3%           | 241                 | 180               |
| # 24. | BCE-Mach LLC                             | 290,602               | 245,208                | -15.6%          | 61                  | 60                |
| # 25. | Casillas Petroleum Corp                  | 240,107               | 242,762                | 1.1%            | 95                  | 44                |

## Top Kansas Gas Producers

PetroBase

| Rank  | Operator                                 | Prior Year Production | 05/18-04/19 Production | Percent Decline | Reported Prod Wells | Reported KDOR #'s |
|-------|--|-----------------------|------------------------|-----------------|---------------------|-------------------|
| # 1.  | Riviera Operating, LLC                   | 48,204,313            | 44,029,475             | -8.7%           | 3,738               | 3,712             |
| # 2.  | Merit Energy Company, LLC                | 33,752,035            | 34,099,693             | 1.0%            | 2,851               | 2,756             |
| # 3.  | Scout Energy Management LLC              | 15,413,545            | 19,710,589             | 27.9%           | 2,204               | 2,200             |
| # 4.  | SandRidge Exploration and Production LLC | 13,776,159            | 11,099,404             | -19.4%          | 201                 | 199               |
| # 5.  | River Rock Operating, LLC                | 10,701,978            | 9,300,049              | -13.1%          | 1,989               | 1,922             |
| # 6.  | RedBud Oil & Gas Operating, LLC          | 5,524,435             | 5,325,429              | -3.6%           | 1,490               | 942               |
| # 7.  | Casillas Petroleum Corp                  | 5,040,885             | 4,786,571              | -5.1%           | 410                 | 410               |
| # 8.  | Edison Operating Company LLC             | 4,295,667             | 3,939,787              | -8.3%           | 373                 | 369               |
| # 9.  | Woolsey Operating Company, LLC           | 4,224,594             | 3,561,863              | -15.7%          | 311                 | 276               |
| # 10. | Pantera Energy Company                   | 2,780,157             | 2,859,378              | 2.9%            | 250                 | 246               |
| # 11. | BCE-Mach LLC                             | 2,596,995             | 2,394,705              | -7.8%           | 38                  | 38                |
| # 12. | Tapstone Energy, LLC                     | 2,149,127             | 2,140,821              | -0.4%           | 31                  | 31                |
| # 13. | HERMAN L. LOEB, LLC                      | 2,177,452             | 1,943,100              | -10.8%          | 216                 | 169               |
| # 14. | Kansas Natural Gas Operating, LC         | 1,944,649             | 1,861,866              | -4.3%           | 195                 | 191               |
| # 15. | Chieftain Oil Co., Inc.                  | 2,076,314             | 1,731,302              | -16.6%          | 203                 | 99                |

## Kansas Lease & Well Counts

PetroBase

| Title                     | Nov 18 | Dec 18 | Jan 19 | Feb 19 | Mar 19 | Apr 19     | May 19 | Jun 19 | Jul 19 |
|---------------------------|--------|--------|--------|--------|--------|------------|--------|--------|--------|
| New Oil Leases/KDOR       | 15     | 11     | 32     | 29     | 12     | <b>31</b>  |        |        |        |
| New Gas Leases/KDOR       | 0      | 3      | 8      | 6      | 6      | <b>3</b>   |        |        |        |
| Totals                    | 15     | 14     | 40     | 35     | 18     | <b>34</b>  |        |        |        |
| Outstanding Intents Filed | 39     | 13     | 11     | 7      | 12     | <b>19</b>  | 21     | 41     | 68     |
| Prod. Spuds/Completions   | 91     | 93     | 60     | 62     | 76     | <b>101</b> | 54     | 73     | 37     |
| SWD/Inj Completions       | 22     | 26     | 9      | 7      | 18     | <b>16</b>  | 9      | 10     | 19     |
| D&A'd                     | 30     | 19     | 18     | 19     | 25     | <b>27</b>  | 25     | 17     | 21     |
| P&A'd                     | 112    | 154    | 100    | 76     | 129    | <b>207</b> | 130    | 141    | 108    |
| Totals                    | 294    | 305    | 198    | 171    | 260    | <b>370</b> | 239    | 282    | 253    |

## Top Kansas Oil Leases (Apr '19)

PetroBase

| Rank  | Operator                | Lease                         | County   | Sec-Twn-Rng | Prod. Wells | Time on Prod. | Cumulative Prod. | 04/19 BOPM |
|-------|-------------------------|-------------------------------|----------|-------------|-------------|---------------|------------------|------------|
| # 1.  | Merit Energy Company... | GRIFFIN COX CHR               | Haskell  | 11-28S-33W  | 9           | 3.2 yr.       | 2,302,372        | 67,443     |
| # 2.  | Merit Energy Company... | Hylbom 'a' 1                  | Finney   | 30-23S-34W  | 4           | 7 yr.         | 602,465          | 14,112     |
| # 3.  | Merit Energy Company... | ONION UNIT                    | Haskell  | 3-29S-34W   | 15          | 4.2 yr.       | 570,966          | 12,789     |
| # 4.  | Merit Energy Company... | Sequoyah Morrow Unit, Was Gar | Finney   | 22-23S-34W  | 16          | 25.6 yr.      | 1,577,695        | 11,433     |
| # 5.  | Merit Energy Company... | LNGCRSSTLOUISUT               | Grant    | 10-29S-38W  | 8           | 1.7 yr.       | 245,047          | 11,325     |
| # 6.  | ELK Energy Holdings ... | LIPPELMANN                    | Thomas   | 14-10S-33W  | 1           | 1.5 yr.       | 62,859           | 10,767     |
| # 7.  | BEREXCO LLC             | Patterson Unit                | Kearny   | 23-22S-38W  | 13          | 9.5 yr.       | 1,295,488        | 10,210     |
| # 8.  | Murfin Drilling Co I... | GAMBLIN                       | Cheyenne | 22-2S-37W   | 1           | 4 mo.         | 27,767           | 9,415      |
| # 9.  | Casillas Petroleum C... | Pleasant Prairie              | Finney   | 29-26S-34W  | 32          | 53.3 yr.      | 16,866,302       | 9,156      |
| # 10. | Murfin Drilling Co I... | BANISTER A                    | Cheyenne | 22-2S-37W   | 1           | 10 mo.        | 70,300           | 8,862      |
| # 11. | Merit Energy Company... | ATKINS MORROW U               | Haskell  | 4-27S-33W   | 6           | 3.8 yr.       | 225,018          | 8,195      |
| # 12. | Griffin Charles N       | ADDIE 1                       | Pratt    | 28-29S-15W  | 1           | 1 mo.         | 8,091            | 8,091      |
| # 13. | Shakespeare Oil Co I... | SW DIGHTON WATE               | Lane     | 21-18S-29W  | 21          | 3 yr.         | 226,866          | 7,569      |
| # 14. | Carmen Schmitt Inc      | WERTH 1                       | Trego    | 7-14S-25W   | 1           | 1.2 yr.       | 86,846           | 7,457      |
| # 15. | Merit Energy Company... | LBSLU                         | Grant    | 18-30S-38W  | 9           | 4.2 yr.       | 844,408          | 6,981      |
| # 16. | Merit Energy Company... | Eubank North Ut               | Haskell  | 4-29S-34W   | 18          | 14.9 yr.      | 3,187,198        | 5,681      |
| # 17. | Merit Energy Company... | Wilburton Morrow              | Morton   | 28-34S-41W  | 11          | 53.3 yr.      | 10,861,458       | 5,614      |
| # 18. | Pantera Energy Compa... | STIRUP RCVRY UT               | Morton   | 3-33S-40W   | 14          | 3.7 yr.       | 300,295          | 5,578      |
| # 19. | Merit Energy Company... | BOCK A-2                      | Haskell  | 15-28S-34W  | 3           | 2.1 yr.       | 63,815           | 5,442      |
| # 20. | McCoy Petroleum Corp... | O'BRATE-UM1H-17               | Meade    | 17-30S-30W  | 1           | 6 mo.         | 32,309           | 5,388      |
| # 21. | Merit Energy Company... | EMMA WARD 1                   | Haskell  | 35-27S-34W  | 1           | 3 mo.         | 14,362           | 5,300      |
| # 22. | PetroSantander (USA)... | CONGDON NORTHUT               | Finney   | 33-23S-32W  | 14          | 9 mo.         | 33,285           | 5,227      |
| # 23. | PetroSantander (USA)... | Mackey (stewart Morrow Unit)  | Finney   | 12-23S-31W  | 1           | 23.7 yr.      | 6,259,264        | 5,206      |
| # 24. | Citation Oil & Gas C... | Weiland W.f.uni               | Russell  | 1-13S-16W   | 0           | 28.8 yr.      | 2,938,074        | 5,126      |
| # 25. | BEREXCO LLC             | JENNIE 1-24                   | Finney   | 24-26S-34W  | 1           | 4.2 yr.       | 98,930           | 5,121      |

## Top Kansas Oil Leases (May '18-Apr '19)

PetroBase

| Rank  | Operator                | Lease                         | County   | Sec-Twn-Rng | Prod. Wells | Time on Prod. | Cumulative Prod. | BOPY    |
|-------|-------------------------|-------------------------------|----------|-------------|-------------|---------------|------------------|---------|
| # 1.  | Merit Energy Company... | GRIFFIN COX CHR               | Haskell  | 11-28S-33W  | 9           | 3.2 yr.       | 2,302,372        | 895,526 |
| # 2.  | Merit Energy Company... | Hylbom 'a' 1                  | Finney   | 30-23S-34W  | 4           | 7 yr.         | 602,465          | 183,930 |
| # 3.  | Merit Energy Company... | ONION UNIT                    | Haskell  | 3-29S-34W   | 15          | 4.2 yr.       | 570,966          | 162,855 |
| # 4.  | Merit Energy Company... | LNGCRSSTLOUISUT               | Grant    | 10-29S-38W  | 8           | 1.7 yr.       | 245,047          | 160,379 |
| # 5.  | BEREXCO LLC             | Patterson Unit                | Kearny   | 23-22S-38W  | 13          | 9.5 yr.       | 1,295,488        | 137,688 |
| # 6.  | Merit Energy Company... | LBSLU                         | Grant    | 18-30S-38W  | 9           | 4.2 yr.       | 844,408          | 115,831 |
| # 7.  | Casillas Petroleum C... | Pleasant Prairie              | Finney   | 29-26S-34W  | 32          | 53.3 yr.      | 16,866,302       | 97,497  |
| # 8.  | Shakespeare Oil Co I... | SW DIGHTON WATE               | Lane     | 21-18S-29W  | 21          | 3 yr.         | 226,866          | 94,075  |
| # 9.  | Merit Energy Company... | ATKINS MORROW U               | Haskell  | 4-27S-33W   | 6           | 3.8 yr.       | 225,018          | 89,622  |
| # 10. | Carmen Schmitt Inc      | WERTH 1                       | Trego    | 7-14S-25W   | 1           | 1.2 yr.       | 86,846           | 78,819  |
| # 11. | Merit Energy Company... | Sequoyah Morrow Unit, Was Gar | Finney   | 22-23S-34W  | 16          | 25.6 yr.      | 1,577,695        | 77,246  |
| # 12. | Merit Energy Company... | S COXCHESTER UT               | Haskell  | 14-28S-33W  | 2           | 1.5 yr.       | 102,720          | 74,768  |
| # 13. | Merit Energy Company... | Eubank North Ut               | Haskell  | 4-29S-34W   | 18          | 14.9 yr.      | 3,187,198        | 72,000  |
| # 14. | PetroSantander (USA)... | Mackey (stewart Morrow Unit)  | Finney   | 12-23S-31W  | 1           | 23.7 yr.      | 6,259,264        | 71,708  |
| # 15. | Murfin Drilling Co I... | BANISTER A                    | Cheyenne | 22-2S-37W   | 1           | 10 mo.        | 70,300           | 70,300  |
| # 16. | Citation Oil & Gas C... | Weiland W.f.uni               | Russell  | 1-13S-16W   | 0           | 28.8 yr.      | 2,938,074        | 68,472  |
| # 17. | Merit Energy Company... | Wilburton Morrow              | Morton   | 28-34S-41W  | 11          | 53.3 yr.      | 10,861,458       | 67,078  |
| # 18. | Pantera Energy Compa... | STIRUP RCVRY UT               | Morton   | 3-33S-40W   | 14          | 3.7 yr.       | 300,295          | 65,532  |
| # 19. | HERMAN L LOEB LLC       | Stockholm Unit                | Greeley  | 11-16S-43W  | 29          | 31.3 yr.      | 2,045,602        | 62,399  |
| # 20. | Merit Energy Company... | ENTERPRISES HSU               | Haskell  | 16-30S-32W  | 11          | 2.9 yr.       | 172,958          | 59,458  |
| # 21. | Vess Oil Corporation    | Wilson                        | Butler   | 8-25S-5E    | 67          | 54.3 yr.      | 26,580,396       | 58,042  |
| # 22. | Laymon Oil II LLC       | Glades                        | Woodson  | 9-24S-16E   | 99          | 49.3 yr.      | 870,104          | 57,230  |
| # 23. | Lario Oil & Gas Comp... | KNOBBE 1-4                    | Wichita  | 4-19S-37W   | 1           | 1.5 yr.       | 79,423           | 53,442  |
| # 24. | ELK Energy Holdings ... | LIPPELMANN                    | Thomas   | 14-10S-33W  | 1           | 1.5 yr.       | 62,859           | 53,325  |
| # 25. | Merit Energy Company... | Longbow 1-10                  | Grant    | 10-29S-38W  | 4           | 2.8 yr.       | 196,889          | 50,157  |

## Kansas Oil Leases Top Month-Over-Month Increases (Apr '19) **PetroBase**

| Rank  | Operator                | Lease                         | County   | Sec-Twn-Rng | Time on Prod. | 03/19 BOPM | 04/19 BOPM | BOPM Incr. |
|-------|-------------------------|-------------------------------|----------|-------------|---------------|------------|------------|------------|
| # 1.  | Griffin Charles N       | ADDIE 1                       | Pratt    | 28-29S-15W  | 1 mo.         |            | 8,091      | 8,091      |
| # 2.  | ELK Energy Holdings ... | LIPPELMANN                    | Thomas   | 14-10S-33W  | 1.5 yr.       | 4,819      | 10,767     | 5,948      |
| # 3.  | Merit Energy Company... | Sequoyah Morrow Unit, Was Gar | Finney   | 22-23S-34W  | 25.6 yr.      | 8,463      | 11,433     | 2,969      |
| # 4.  | BEREXCO LLC             | JENNIE 1-24                   | Finney   | 24-26S-34W  | 4.2 yr.       | 2,320      | 5,121      | 2,800      |
| # 5.  | Merit Energy Company... | KELLS I-1                     | Haskell  | 32-27S-33W  | 1.6 yr.       | 2,213      | 4,567      | 2,354      |
| # 6.  | RUSSELL OIL INC         | NUSS D 33-1                   | Russell  | 32-15S-14W  | 1 mo.         |            | 2,321      | 2,321      |
| # 7.  | Lawco Holdings LLC      | Radcliff 1-5                  | Cowley   | 5-33S-7E    | 4 yr.         | 2,313      | 4,551      | 2,238      |
| # 8.  | Murfin Drilling Co I... | GAMBLIN                       | Cheyenne | 22-2S-37W   | 4 mo.         | 7,382      | 9,415      | 2,033      |
| # 9.  | Palomino Petroleum I... | Pete 1                        | Ness     | 8-20S-25W   | 5.8 yr.       | 153        | 2,127      | 1,974      |
| # 10. | Taos Resources Opera... | Maddix Unit                   | Cowley   | 10-33S-5E   | 9.2 yr.       | 1,888      | 3,674      | 1,786      |
| # 11. | BEREXCO LLC             | SIX M FRMS A522               | Finney   | 22-22S-34W  | 2 mo.         | 98         | 1,573      | 1,476      |
| # 12. | Unit Petroleum Compa... | STROBERG 24-1H                | Reno     | 24-25S-10W  | 2.2 yr.       | 510        | 1,869      | 1,359      |
| # 13. | John Roy Evans Oil C... | PENKA 26-1                    | Barton   | 26-17S-12W  | 1 mo.         |            | 1,318      | 1,318      |
| # 14. | Carmen Schmitt Inc      | Louise                        | Lane     | 1-19S-30W   | 11.3 yr.      | 969        | 2,250      | 1,281      |
| # 15. | Palomino Petroleum I... | Brownie                       | Gove     | 7-14S-30W   | 3.9 yr.       | 805        | 2,034      | 1,229      |
| # 16. | Palomino Petroleum I... | BOB 1                         | Gove     | 12-15S-26W  | 1 mo.         |            | 1,156      | 1,156      |
| # 17. | Landmark Resources I... | LEE 1-21                      | Wichita  | 21-17S-36W  | 4 mo.         | 1,283      | 2,418      | 1,136      |
| # 18. | Blake Exploration LL... | SCHMITT 1                     | Logan    | 11-11S-32W  | 1 mo.         |            | 1,127      | 1,127      |
| # 19. | StrataKan Exploratio... | MORROW 2734H                  | Harper   | 34-33S-8W   | 3 mo.         | 460        | 1,552      | 1,092      |
| # 20. | BEREXCO LLC             | Heaton                        | Stafford | 17-21S-12W  | 55.3 yr.      | 995        | 2,015      | 1,020      |
| # 21. | Suemaur Exploration ... | SCHROEDER 1-35                | Sheridan | 35-6S-28W   | 2.8 yr.       | 434        | 1,451      | 1,017      |
| # 22. | SNR Kansas Operating... | HNDRSN-BLNDR 33               | Cowley   | 33-33S-5E   | 2 mo.         | 486        | 1,465      | 978        |
| # 23. | Ritchie Exploration ... | LEWIS TRUST 3C1               | Wichita  | 3-17S-37W   | 8 mo.         | 324        | 1,297      | 973        |
| # 24. | MAREXCO INC             | LUNDGREN 32-28                | Gove     | 28-14S-29W  | 1 mo.         |            | 972        | 972        |
| # 25. | Palmer Oil Inc          | Laura 21-1                    | Stevens  | 21-32S-37W  | 8.4 yr.       | 749        | 1,672      | 923        |

## Kansas Oil Leases (May '18-Apr '19) Top Year-Over-Year Increases

**PetroBase**

| Rank  | Operator                | Lease            | County   | Sec-Twn-Rng | Time on Prod. | Prior BOPY | Current BOPY | BOPM Incr. |
|-------|-------------------------|------------------|----------|-------------|---------------|------------|--------------|------------|
| # 1.  | Merit Energy Company... | Hylbom 'a' 1     | Finney   | 30-23S-34W  | 7 yr.         | 45,995     | 183,930      | 137,936    |
| # 2.  | Merit Energy Company... | LNGCRSSTLOUISUT  | Grant    | 10-29S-38W  | 1.7 yr.       | 84,668     | 160,379      | 75,711     |
| # 3.  | Carmen Schmitt Inc      | WERTH 1          | Trego    | 7-14S-25W   | 1.2 yr.       | 8,027      | 78,819       | 70,792     |
| # 4.  | Murfin Drilling Co I... | BANISTER A       | Cheyenne | 22-2S-37W   | 10 mo.        |            | 70,300       | 70,300     |
| # 5.  | Merit Energy Company... | S COXCHESTER UT  | Haskell  | 14-28S-33W  | 1.5 yr.       | 27,952     | 74,768       | 46,816     |
| # 6.  | ELK Energy Holdings ... | LIPPELMANN       | Thomas   | 14-10S-33W  | 1.5 yr.       | 9,535      | 53,325       | 43,790     |
| # 7.  | Merit Energy Company... | ATKINS MORROW U  | Haskell  | 4-27S-33W   | 3.8 yr.       | 49,716     | 89,622       | 39,906     |
| # 8.  | PetroSantander (USA)... | CONGDON NORTHUT  | Finney   | 33-23S-32W  | 9 mo.         |            | 33,285       | 33,285     |
| # 9.  | McCoy Petroleum Corp... | O'BRATE-UM1H-17  | Meade    | 17-30S-30W  | 6 mo.         |            | 32,309       | 32,309     |
| # 10. | BEREXCO LLC             | Craft Trust 1-25 | Finney   | 25-26S-33W  | 10.9 yr.      | 2,533      | 33,558       | 31,025     |
| # 11. | BCE-Mach LLC            | KENNEDY 2H       | Harper   | 14-34S-9W   | 1.1 yr.       | 3,649      | 34,556       | 30,907     |
| # 12. | Murfin Drilling Co I... | GAMBLIN          | Cheyenne | 22-2S-37W   | 4 mo.         |            | 27,767       | 27,767     |
| # 13. | Lario Oil & Gas Comp... | KNOBBE 1-4       | Wichita  | 4-19S-37W   | 1.5 yr.       | 25,981     | 53,442       | 27,461     |
| # 14. | RUSSELL OIL INC         | BOWIE 29-1       | Logan    | 29-11S-32W  | 1.7 yr.       | 8,567      | 34,512       | 25,944     |
| # 15. | Merit Energy Company... | MACE, H W 1      | Haskell  | 9-28S-34W   | 1.6 yr.       | 13,209     | 38,608       | 25,399     |
| # 16. | Lotus Operating Comp... | Bergner          | Pratt    | 7-29S-14W   | 7.8 yr.       | 5,705      | 29,775       | 24,070     |
| # 17. | BEREXCO LLC             | JENNIE 1-24      | Finney   | 24-26S-34W  | 4.2 yr.       | 19,097     | 43,125       | 24,027     |
| # 18. | Lario Oil & Gas Comp... | LANG A 1-12      | Wichita  | 12-20S-35W  | 12 mo.        |            | 22,292       | 22,292     |
| # 19. | Shelby Resources LLC    | W-s 1-15         | Barton   | 15-18S-14W  | 5.8 yr.       | 7,487      | 28,002       | 20,515     |
| # 20. | Destiny Petroleum LL... | LINDA 3504 SL 2  | Sumner   | 5-35S-4W    | 1.4 yr.       | 162        | 20,590       | 20,429     |
| # 21. | Raydon Exploration I... | ROCK 1-27        | Seward   | 27-33S-31W  | 1.1 yr.       | 199        | 18,647       | 18,448     |
| # 22. | Phillips Exploration... | PURINTON 1-8SHR  | Trego    | 8-14S-25W   | 11 mo.        |            | 17,717       | 17,717     |
| # 23. | American Warrior Inc    | HUBIN 1-10       | Hodgeman | 10-23S-23W  | 9 mo.         |            | 17,683       | 17,683     |
| # 24. | American Warrior Inc    | SUNRAY 1-12      | Greeley  | 12-16S-42W  | 9 mo.         |            | 17,373       | 17,373     |
| # 25. | Raydon Exploration I... | ROCK #1-23       | Seward   | 23-33S-31W  | 2.2 yr.       | 16,313     | 33,262       | 16,949     |

## Top Kansas Gas Leases (Apr '19)

PetroBase

| Rank  | Operator                | Lease                | County   | Sec-Twn-Rng | Prod. Wells | Time on Prod. | Cumulative Prod. | 04/19 MCFPM |
|-------|-------------------------|----------------------|----------|-------------|-------------|---------------|------------------|-------------|
| # 1.  | Wynn-Crosby Operatin... | Mayberry 'b' 1       | Stevens  | 12-33S-38W  | 1           | 24.4 yr.      | 2,069,447        | 43,374      |
| # 2.  | Tapstone Energy LLC     | Cooper 14-35-9 1H    | Harper   | 11-35S-9W   | 1           | 4.6 yr.       | 2,476,930        | 35,656      |
| # 3.  | BCE-Mach LLC            | KENNEDY14349_2H      | Harper   | 23-34S-9W   | 1           | 1.1 yr.       | 342,464          | 28,067      |
| # 4.  | SandRidge Exploratio... | LEFORCE 1-11H2       | Harper   | 11-34S-8W   | 1           | 3.8 yr.       | 1,539,925        | 26,551      |
| # 5.  | SandRidge Exploratio... | WHARTON 3408 1-      | Harper   | 3-34S-8W    | 1           | 3.8 yr.       | 898,033          | 25,181      |
| # 6.  | SandRidge Exploratio... | TERESIA 2-9H         | Harper   | 16-35S-9W   | 1           | 4.3 yr.       | 1,395,325        | 23,789      |
| # 7.  | CMX Inc                 | Bartender 1          | Barber   | 18-35S-11W  | 1           | 5.4 yr.       | 1,270,640        | 21,886      |
| # 8.  | Becker Oil Corporati... | Burke                | Hodgeman | 30-23S-22W  | 1           | 11.2 yr.      | 320,162          | 19,858      |
| # 9.  | BCE-Mach LLC            | Rosseau 13-35-9 1H   | Harper   | 1-35S-9W    | 1           | 4.8 yr.       | 1,405,553        | 18,642      |
| # 10. | SandRidge Exploratio... | SCHNACKE1-23H14      | Harper   | 23-34S-8W   | 1           | 3.8 yr.       | 1,489,200        | 18,312      |
| # 11. | SandRidge Exploratio... | Jones Trust 1-28H 1L | Harper   | 21-34S-8W   | 1           | 4.6 yr.       | 1,347,262        | 17,848      |
| # 12. | Tapstone Energy LLC     | Chain Land 1-3H      | Harper   | 1-35S-9W    | 1           | 4.8 yr.       | 1,647,548        | 17,274      |
| # 13. | Bear Petroleum LLC      | BRYANT 1             | Pawnee   | 9-22S-20W   | 1           | 4 mo.         | 47,554           | 17,091      |
| # 14. | SandRidge Exploratio... | BASCOM FM1-4H33      | Harper   | 9-34S-8W    | 1           | 3.8 yr.       | 432,303          | 16,817      |
| # 15. | Shell Gulf of Mexico... | Chain Land 1 1h      | Harper   | 1-35S-9W    | 1           | 6.2 yr.       | 2,404,990        | 16,050      |
| # 16. | BEREXCO LLC             | Cutter #8            | Stevens  | 1-31S-35W   | 1           | 11.2 yr.      | 426,935          | 16,038      |
| # 17. | SandRidge Exploratio... | BROWNING 3408        | Harper   | 14-34S-8W   | 1           | 8 mo.         | 133,864          | 15,722      |
| # 18. | SandRidge Exploratio... | RICHARD 2-30H1L      | Harper   | 30-32S-6W   | 1           | 4.2 yr.       | 1,221,504        | 15,646      |
| # 19. | Palmer Oil Inc          | Light 24-1           | Stevens  | 24-33S-39W  | 1           | 11.9 yr.      | 8,368,369        | 15,623      |
| # 20. | SandRidge Exploratio... | Nona 1-23h           | Sumner   | 23-32S-4W   | 1           | 4.9 yr.       | 701,345          | 15,327      |
| # 21. | SandRidge Exploratio... | Richard 3-30h        | Harper   | 25-32S-7W   | 1           | 5.3 yr.       | 785,303          | 15,315      |
| # 22. | Ritchie Exploration ... | Stephenson 4b        | Ford     | 4-28S-22W   | 1           | 8.8 yr.       | 2,153,576        | 15,258      |
| # 23. | Tapstone Energy LLC     | Senff 3308 19-1h     | Harper   | 19-33S-8W   | 1           | 7.2 yr.       | 1,017,002        | 15,145      |
| # 24. | Indian Oil Co Inc       | Stateline 1-13       | Barber   | 13-35S-12W  | 1           | 7.1 yr.       | 1,305,613        | 14,813      |
| # 25. | Chieftain Oil Co Inc    | AHS CATTLE CO 6      | Barber   | 12-35S-12W  | 1           | 4.3 yr.       | 887,287          | 14,169      |

## Top Kansas Gas Leases (May '18-Apr '19)

PetroBase

| Rank  | Operator                | Lease                       | County   | Sec-Twn-Rng | Prod. Wells | Time on Prod. | Cumulative Prod. | MCFPY   |
|-------|-------------------------|-----------------------------|----------|-------------|-------------|---------------|------------------|---------|
| # 1.  | Tapstone Energy LLC     | Cooper 14-35-9 1H           | Harper   | 11-35S-9W   | 1           | 4.6 yr.       | 2,476,930        | 451,543 |
| # 2.  | SandRidge Exploratio... | LEFORCE 1-11H2              | Harper   | 11-34S-8W   | 1           | 3.8 yr.       | 1,539,925        | 395,446 |
| # 3.  | Wynn-Crosby Operatin... | Mayberry 'b' 1              | Stevens  | 12-33S-38W  | 1           | 24.4 yr.      | 2,069,447        | 350,208 |
| # 4.  | BCE-Mach LLC            | KENNEDY14349_2H             | Harper   | 23-34S-9W   | 1           | 1.1 yr.       | 342,464          | 335,257 |
| # 5.  | SandRidge Exploratio... | TERESIA 2-9H                | Harper   | 16-35S-9W   | 1           | 4.3 yr.       | 1,395,325        | 307,968 |
| # 6.  | SandRidge Exploratio... | WHARTON 3408 1-             | Harper   | 3-34S-8W    | 1           | 3.8 yr.       | 898,033          | 304,665 |
| # 7.  | SandRidge Exploratio... | SCHNACKE1-23H14             | Harper   | 23-34S-8W   | 1           | 3.8 yr.       | 1,489,200        | 273,886 |
| # 8.  | Destiny Petroleum LL... | LOUISE 3504 SL2             | Sumner   | 8-35S-4W    | 1           | 1.2 yr.       | 404,874          | 270,952 |
| # 9.  | CMX Inc                 | Bartender 1                 | Barber   | 18-35S-11W  | 1           | 5.4 yr.       | 1,270,640        | 268,579 |
| # 10. | Tapstone Energy LLC     | Chain Land 1-3H             | Harper   | 1-35S-9W    | 1           | 4.8 yr.       | 1,647,548        | 252,168 |
| # 11. | Becker Oil Corporati... | Burke                       | Hodgeman | 30-23S-22W  | 1           | 11.2 yr.      | 320,162          | 250,684 |
| # 12. | Shell Gulf of Mexico... | Chain Land 1 1h             | Harper   | 1-35S-9W    | 1           | 6.2 yr.       | 2,404,990        | 239,723 |
| # 13. | BCE-Mach LLC            | Rosseau 13-35-9 1H          | Harper   | 1-35S-9W    | 1           | 4.8 yr.       | 1,405,553        | 234,176 |
| # 14. | SandRidge Exploratio... | Jones Trust 1-28H 1L        | Harper   | 21-34S-8W   | 1           | 4.6 yr.       | 1,347,262        | 233,188 |
| # 15. | Indian Oil Co Inc       | Stateline 1-13              | Barber   | 13-35S-12W  | 1           | 7.1 yr.       | 1,305,613        | 219,482 |
| # 16. | Ritchie Exploration ... | Stephenson 4b               | Ford     | 4-28S-22W   | 1           | 8.8 yr.       | 2,153,576        | 214,629 |
| # 17. | O'Brien Energy Resou... | KEYSTONE 3-4                | Meade    | 4-33S-29W   | 1           | 1.2 yr.       | 333,163          | 203,649 |
| # 18. | Palmer Oil Inc          | Light 24-1                  | Stevens  | 24-33S-39W  | 1           | 11.9 yr.      | 8,368,369        | 196,910 |
| # 19. | SandRidge Exploratio... | RICHARD 2-30H1L             | Harper   | 30-32S-6W   | 1           | 4.2 yr.       | 1,221,504        | 185,811 |
| # 20. | SandRidge Exploratio... | Richard 3-30h               | Harper   | 25-32S-7W   | 1           | 5.3 yr.       | 785,303          | 183,351 |
| # 21. | SandRidge Exploratio... | M KITTS 1-20H               | Harper   | 20-34S-8W   | 1           | 4.1 yr.       | 745,150          | 167,387 |
| # 22. | SandRidge Exploratio... | NICOLE 1-33H                | Harper   | 33-34S-6W   | 1           | 3.6 yr.       | 815,212          | 167,303 |
| # 23. | SandRidge Exploratio... | Eve 3306 1-22H              | Harper   | 15-33S-6W   | 1           | 4.6 yr.       | 783,353          | 166,296 |
| # 24. | N-10 Exploration LLC    | Medicine River Ranch 'e' Tb | Barber   | 22-34S-11W  | 7           | 8.2 yr.       | 2,556,057        | 162,388 |
| # 25. | SandRidge Exploratio... | Carothers 2-34H             | Harper   | 3-33S-6W    | 1           | 4.4 yr.       | 941,777          | 159,842 |

## Kansas Gas Leases Top Month-Over-Month Increases (Apr '19) PetroBase

| Rank  | Operator                | Lease                  | County   | Sec-Twn-Rng | Time on Prod. | 03/19 MCFPM | 04/19 MCFPM | MCFPM Incr. |
|-------|-------------------------|------------------------|----------|-------------|---------------|-------------|-------------|-------------|
| # 1.  | Wynn-Crosby Operatin... | Mayberry 'b' 1         | Stevens  | 12-33S-38W  | 24.4 yr.      | 23,284      | 43,374      | 20,090      |
| # 2.  | SandRidge Exploratio... | NICOLE 1-33H           | Harper   | 33-34S-6W   | 3.6 yr.       | 2,222       | 12,101      | 9,879       |
| # 3.  | Tapstone Energy LLC     | Senff 3308 19-1h       | Harper   | 19-33S-8W   | 7.2 yr.       | 5,608       | 15,145      | 9,537       |
| # 4.  | Palmer Oil Inc          | Rozelle 1-2            | Seward   | 1-34S-33W   | 11.6 yr.      | 4,194       | 13,711      | 9,517       |
| # 5.  | Merit Energy Company... | BOCK A-2               | Haskell  | 15-28S-34W  | 2 yr.         | 6,353       | 13,734      | 7,381       |
| # 6.  | Unit Petroleum Compa... | STROBERG 24 1-H        | Reno     | 24-25S-10W  | 2.2 yr.       | 3,635       | 10,168      | 6,533       |
| # 7.  | Merit Energy Company... | A I WATKINS            | Haskell  | 20-30S-32W  | 3.8 yr.       | 3,949       | 10,444      | 6,495       |
| # 8.  | Palmer Oil Inc          | Laura 21-1             | Stevens  | 21-32S-37W  | 8.4 yr.       | 50          | 5,926       | 5,876       |
| # 9.  | Merit Energy Company... | Kerr 'b' 1h            | Stevens  | 14-34S-39W  | 28.3 yr.      | 5,244       | 11,024      | 5,780       |
| # 10. | Merit Energy Company... | Newlin 1-31            | Morton   | 31-32S-42W  | 14 yr.        | 5,614       | 11,202      | 5,588       |
| # 11. | Pantera Energy Compa... | Sullivan 'b' 1 Md      | Stevens  | 35-34S-39W  | 30.3 yr.      | 5,041       | 10,268      | 5,227       |
| # 12. | McCoy Petroleum Corp... | West Trust 'a' 1-23    | Edwards  | 23-26S-19W  | 11.5 yr.      | 191         | 5,250       | 5,059       |
| # 13. | Merit Energy Company... | ANDREW 17-2            | Haskell  | 17-30S-32W  | 3.8 yr.       | 5,233       | 10,264      | 5,031       |
| # 14. | Fastrak Energy LLC      | Lorenz 14              | Labette  | 33-31S-18E  | 11.7 yr.      | 4,835       | 9,746       | 4,911       |
| # 15. | Merit Energy Company... | JACQUART 4             | Haskell  | 15-28S-34W  | 2 yr.         | 5,823       | 10,662      | 4,839       |
| # 16. | SandRidge Exploratio... | NICOLE 2-33H           | Harper   | 33-34S-6W   | 4.4 yr.       | 886         | 5,661       | 4,775       |
| # 17. | Tapstone Energy LLC     | Chainland 11-2h        | Harper   | 11-35S-9W   | 6.5 yr.       | 364         | 5,011       | 4,647       |
| # 18. | Pantera Energy Compa... | Mlp Simmons 'a' 1      | Stevens  | 15-32S-39W  | 20 yr.        | 4,931       | 9,428       | 4,497       |
| # 19. | Merit Energy Company... | Wilburton Purs1        | Morton   | 28-34S-41W  | 51.3 yr.      | 4,554       | 8,912       | 4,358       |
| # 20. | McCoy Petroleum Corp... | Speirs 'a' 2-30 & 3-30 | Edwards  | 30-26S-20W  | 18.2 yr.      | 2,915       | 7,173       | 4,258       |
| # 21. | Merit Energy Company... | Interstate 1-21        | Morton   | 21-34S-43W  | 51.3 yr.      | 3,802       | 7,898       | 4,096       |
| # 22. | Becker Oil Corporati... | Jetmore-brad #1        | Hodgeman | 18-24S-23W  | 13.2 yr.      | 6,939       | 10,972      | 4,033       |
| # 23. | Pantera Energy Compa... | Boles 'b' 5            | Seward   | 4-35S-34W   | 20.2 yr.      | 2,540       | 6,540       | 4,000       |
| # 24. | Extreme Energy Co       | M. R. Johns 1          | Morton   | 11-32S-41W  | 51.3 yr.      | 4,052       | 8,010       | 3,958       |
| # 25. | Merit Energy Company... | Rademacher 'a' 3       | Grant    | 27-28S-36W  | 31.3 yr.      | 4,218       | 8,146       | 3,928       |

## Kansas Gas Leases (May '18-Apr '19) Top Year-Over-Year Increases PetroBase

| Rank  | Operator                | Lease                | County   | Sec-Twn-Rng | Time on Prod. | Prior MCFPY | Current MCFPY | MCFPY Incr. |
|-------|-------------------------|----------------------|----------|-------------|---------------|-------------|---------------|-------------|
| # 1.  | BCE-Mach LLC            | KENNEDY14349_2H      | Harper   | 23-34S-9W   | 1.1 yr.       | 7,207       | 335,257       | 328,050     |
| # 2.  | Becker Oil Corporati... | Burke                | Hodgeman | 30-23S-22W  | 11.2 yr.      | 28,101      | 250,684       | 222,583     |
| # 3.  | Tapstone Energy LLC     | WARNER 11349 1H      | Harper   | 11-34S-9W   | 1.1 yr.       | 946         | 151,664       | 150,718     |
| # 4.  | Destiny Petroleum LL... | LOUISE 3504 SL2      | Sumner   | 8-35S-4W    | 1.2 yr.       | 133,922     | 270,952       | 137,030     |
| # 5.  | SandRidge Exploratio... | BROWNING 3408        | Harper   | 14-34S-8W   | 8 mo.         |             | 133,864       | 133,864     |
| # 6.  | BCE-Mach LLC            | PATTERSON 13349      | Harper   | 24-34S-9W   | 1.1 yr.       | 1,469       | 122,999       | 121,530     |
| # 7.  | CMX Inc                 | Bartender 1          | Barber   | 18-35S-11W  | 5.4 yr.       | 158,086     | 268,579       | 110,493     |
| # 8.  | BEREXCO LLC             | POWELL 10-22         | Haskell  | 22-29S-33W  | 8 mo.         |             | 101,378       | 101,378     |
| # 9.  | BEREXCO LLC             | Cutter #8            | Stevens  | 1-31S-35W   | 11.2 yr.      | 2,349       | 103,292       | 100,943     |
| # 10. | Becker Oil Corporati... | Hermann              | Hodgeman | 36-23S-22W  | 11.2 yr.      | 2           | 88,240        | 88,238      |
| # 11. | Vincent Oil Corporat... | MALONEY 1-15         | Kingman  | 15-28S-8W   | 7 mo.         |             | 86,030        | 86,030      |
| # 12. | SandRidge Exploratio... | Kenneth 3306 2-11H   | Harper   | 11-33S-6W   | 4.8 yr.       |             | 74,690        | 74,690      |
| # 13. | O'Brien Energy Resou... | KEYSTONE 3-4         | Meade    | 4-33S-29W   | 1.2 yr.       | 129,514     | 203,649       | 74,135      |
| # 14. | O'Brien Energy Resou... | PREEDY 2-8           | Meade    | 8-33S-29W   | 12 mo.        |             | 72,543        | 72,543      |
| # 15. | SandRidge Exploratio... | Jones Trust 1-28H 1L | Harper   | 21-34S-8W   | 4.6 yr.       | 163,829     | 233,188       | 69,359      |
| # 16. | Merit Energy Company... | JACQUART 4           | Haskell  | 15-28S-34W  | 2 yr.         | 26,358      | 86,940        | 60,582      |
| # 17. | Ramshorn Resources L... | Osage Hc-1           | Barber   | 25-33S-15W  | 6.5 yr.       | 12,134      | 68,779        | 56,645      |
| # 18. | Becker Oil Corporati... | Gleason              | Hodgeman | 32-23S-21W  | 13.2 yr.      | 6,516       | 60,274        | 53,758      |
| # 19. | SandRidge Exploratio... | LAURA3408 1-26H      | Harper   | 23-34S-8W   | 4.3 yr.       | 90,340      | 140,360       | 50,020      |
| # 20. | Dixon Operating Comp... | Kirkbride 4          | Barber   | 20-32S-12W  | 48.3 yr.      |             | 49,899        | 49,899      |
| # 21. | Vincent Oil Corporat... | FRINK 1-28           | Ford     | 28-28S-23W  | 1.2 yr.       | 6,298       | 55,744        | 49,446      |
| # 22. | Bear Petroleum LLC      | BRYANT 1             | Pawnee   | 9-22S-20W   | 4 mo.         |             | 47,554        | 47,554      |
| # 23. | SandRidge Exploratio... | Kenneth 3306 1-11H   | Harper   | 11-33S-6W   | 4.8 yr.       | 1,967       | 46,716        | 44,749      |
| # 24. | Tapstone Energy LLC     | Lockwood Farms 3307  | Harper   | 14-33S-7W   | 7 yr.         | 98,779      | 140,237       | 41,458      |
| # 25. | Pantera Energy Compa... | Swalar A-1           | Stevens  | 7-31S-38W   | 16.3 yr.      | 1,333       | 40,622        | 39,289      |