

# Reconstitution

## Russell 3000® Index - Additions

| Company                  | Symbol | Sector                 |
|--------------------------|--------|------------------------|
| ABEONA THERAPEUTICS INC  | ABEO   | Health Care            |
| ACHAOGEN INC             | AKAO   | Health Care            |
| ADVANCED EMISSIONS SLTNS | ADES   | Producer Durables      |
| AKOUSTIS TECHNOLOGIES    | AKTS   | Technology             |
| ALTERYX INC              | AYX    | Technology             |
| ANTARES PHARMA INC       | ATRS   | Health Care            |
| APPROACH RESOURCES INC   | AREX   | Energy                 |
| ARCH COAL INC            | ARCH   | Energy                 |
| ARDAGH GROUP SA          | ARD    | Materials & Processing |
| ASB BANCORP INC NC       | ASBB   | Financial Services     |
| ASSEMBLY BIOSCIENCES INC | ASMB   | Health Care            |
| AXT INC                  | AXTI   | Technology             |
| BANK COMM HLDGS          | BOCH   | Financial Services     |
| BASIC ENERGY SERVICES    | BAS    | Energy                 |
| BCB BANCORP INC          | BCBP   | Financial Services     |
| BEASLEY BROADCAST GROUP  | BBGI   | Consumer Discretionary |
| BG STAFFING INC          | BGSF   | Producer Durables      |
| BIOHAVEN PHARMACEUTICAL  | BHVN   | Health Care            |
| BLACK DIAMOND INC        | BDE    | Consumer Discretionary |
| BONANZA CREEK ENER INC   | BCEI   | Energy                 |
| C&J ENERGY SERVICES INC  | CJ     | Energy                 |
| CADENCE BANCORP          | CADE   | Financial Services     |
| CADIZ INC                | CDZI   | Consumer Staples       |
| CALITHERA BIOSCIENCES    | CALA   | Health Care            |
| CARDCONNECT CORP         | CCN    | Financial Services     |
| CARVANA CO               | CVNA   | Consumer Discretionary |
| CASCADIAN THERAPEUTICS   | CASC   | Health Care            |
| CASTLE BRANDS INC        | ROX    | Consumer Staples       |
| CATALYST PHARMACEUTICALS | CPRX   | Health Care            |
| CENTENNIAL RESOURCE DEV  | CDEV   | Energy                 |
| CHERRY HILL MORTGAGE INV | CHMI   | Financial Services     |
| CIVISTA BANCSHARES INC   | CIVB   | Financial Services     |
| CLOUD PEAK ENERGY INC    | CLD    | Energy                 |
| CLOUDERA INC             | CLDR   | Technology             |
| COMMERCE UNION BANCSHARE | CUBN   | Financial Services     |
| COMMERCIAL VEH GROUP INC | CVGI   | Producer Durables      |
| COMMUNITY BANKERS TRUST  | ESXB   | Financial Services     |
| COMMUNITY FINL CORP MD   | TCFC   | Financial Services     |
| CONATUS PHARMACEUTICALS  | CNAT   | Health Care            |
| CORBUS PHARMACEUTICALS   | CRBP   | Health Care            |
| CORE MOLDING TECHN       | CMT    | Materials & Processing |
| CORIUM INTL INC          | CORI   | Health Care            |
| CYBEROPTICS CORP         | CYBE   | Technology             |
| DASEKE INC               | DSKE   | Producer Durables      |
| DNB FINL CORP            | DNBF   | Financial Services     |
| DRIVE SHACK              | DS     | Consumer Discretionary |
| EAGLE BULK SHIPPING INC  | EGLE   | Producer Durables      |
| EASTERN CO               | EML    | Materials & Processing |
| ELEVATE CREDIT INC       | ELVT   | Financial Services     |

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| ELLINGTON RESIDENTIAL    | EARN   | Financial Services     |
| EMERALD EXPOSITIONS      | EEX    | Consumer Discretionary |
| ENERGY XXI GULF COAST    | EXXI   | Energy                 |
| ENTEGRA FINANCIAL CORP   | ENFC   | Financial Services     |
| ENVIROSTAR INC           | EVI    | Producer Durables      |
| EVANS BANCORP INC        | EVBN   | Financial Services     |
| EVERI HOLDINGS INC       | EVRI   | Financial Services     |
| FARMERS & MERCHANTS BNCP | FMAO   | Financial Services     |
| FATE THERAPEUTICS INC    | FATE   | Health Care            |
| FIRST BANCSHARES INC MS  | FBMS   | Financial Services     |
| FIRST GUARANTY BANCSHARE | FGBI   | Financial Services     |
| FLOOR & DECOR HOLDINGS   | FND    | Consumer Discretionary |
| FNB BANCORP              | FNBG   | Financial Services     |
| FONAR CORP               | FONR   | Health Care            |
| FOSTER L B CO            | FSTR   | Materials & Processing |
| GARDNER DENVER HOLDINGS  | GDI    | Producer Durables      |
| GASTAR EXPL INC          | GST    | Energy                 |
| GENCO SHIPPING & TRADING | GNK    | Producer Durables      |
| GENOCEA BIOSCIENCES INC  | GNCA   | Health Care            |
| GSI TECHNOLOGY           | GSIT   | Technology             |
| GUARANTY BANCSHARES INC  | GNTY   | Financial Services     |
| GULF ISLAND FABRICATION  | GIFI   | Energy                 |
| HALCON RESOURCES CORP    | HK     | Energy                 |
| HALLADOR ENERGY CO       | HNRG   | Energy                 |
| HAMILTON LANE INC        | HLNE   | Financial Services     |
| HEALTH INS INNOVATIONS   | HIIQ   | Financial Services     |
| HOSTESS BRANDS INC       | TWNK   | Consumer Staples       |
| HOWARD BANCORP INC       | HBMD   | Financial Services     |
| HUDSON TECHNOLOGIES INC  | HDSN   | Producer Durables      |
| HUTTIG BUILDING PRODUCTS | HBP    | Materials & Processing |
| IHS MARKIT LTD           | INFO   | Technology             |
| INSPIRED ENTERTAINMENT   | INSE   | Consumer Discretionary |
| INTERNAP CORPORATION     | INAP   | Technology             |
| INTEVAC INC              | IVAC   | Technology             |
| INTREPID POTASH INC      | IPI    | Materials & Processing |
| INVESTAR HOLDING CORP    | ISTR   | Financial Services     |
| ITERIS INC               | ITI    | Technology             |
| JERNIGAN CAP INC         | JCAP   | Financial Services     |
| JJILL INC                | JILL   | Consumer Discretionary |
| KEMET CORP               | KEM    | Technology             |
| KEY ENERGY SERVICES INC  | KEG    | Energy                 |
| KINDRED BIOSCIENCES INC  | KIN    | Health Care            |
| KINGSTONE COS INC        | KINS   | Financial Services     |
| KKR REAL ESTATE FINANCE  | KREF   | Financial Services     |
| KLONDEX MINES LTD        | KLDX   | Materials & Processing |
| KURA ONCOLOGY INC        | KURA   | Health Care            |
| LANTHEUS HOLDINGS INC    | LNTH   | Health Care            |
| LEAF GROUP LTD           | LFGR   | Technology             |
| LILIS ENERGY INC         | LLEX   | Energy                 |

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| LIVANOVA PLC             | LIVN   | Health Care            |
| LMI AEROSPACE INC        | LMIA   | Producer Durables      |
| MADRIGAL PHARMACEUTICALS | MDGL   | Health Care            |
| MALVERN BANCORP INC      | MLVF   | Financial Services     |
| MATINAS BIOPHARMA HLDG   | MTNB   | Health Care            |
| MAUI LAND & PINEAPPLE CO | MLP    | Financial Services     |
| MICROVISION INC          | MVIS   | Technology             |
| MIDDLEFIELD BANC CORP    | MBCN   | Financial Services     |
| MIDSOUTH BANCORP INC     | MSL    | Financial Services     |
| MIDSTATES PETROLEUM CO   | MPO    | Energy                 |
| MIRAGEN THERAPEUTICS     | MGEN   | Health Care            |
| MULESOFT INC             | MULE   | Technology             |
| NAPCO SEC TECHNOLOGIES   | NSSC   | Producer Durables      |
| NAVIOS MARITIME HOLDINGS | NM     | Producer Durables      |
| NCS MULTISTAGE HOLD      | NCSM   | Energy                 |
| NEXEO SOLUTIONS INC      | NXEO   | Materials & Processing |
| NI HOLDINGS INC          | NODK   | Financial Services     |
| NORTHEAST BANCORP        | NBN    | Financial Services     |
| NORTHWEST PIPE CO        | NWPX   | Materials & Processing |
| NORWOOD FINANCIAL CORP   | NWFL   | Financial Services     |
| NOVELION THERAPEUTICS    | NVLN   | Health Care            |
| NXP SEMICONDUCTORS NV    | NXPI   | Technology             |
| NYMOX PHARMACEUTICAL     | NYMX   | Health Care            |
| OCONEE FEDERAL FINANCIAL | OFED   | Financial Services     |
| OHIO VY BANC CORP        | OVBC   | Financial Services     |
| OKTA INC                 | OKTA   | Technology             |
| OLD POINT FINL CORP      | OPOF   | Financial Services     |
| OMINTO INC               | OMNT   | Technology             |
| ONCOCYTE CORPORATION     | OCX    | Health Care            |
| OOMA INC                 | OOMA   | Technology             |
| OVID THERAPEUTICS INC    | OVID   | Health Care            |
| PARKE BANCORP INC        | PKBK   | Financial Services     |
| PCM INC                  | PCMI   | Technology             |
| PCSB FINANCIAL CORP      | PCSB   | Financial Services     |
| PEABODY ENERGY CORP      | BTU    | Energy                 |
| PENDRELL CORP            | PCO    | Technology             |
| PENN VIRGINIA CORP       | PVAC   | Energy                 |
| PEOPLES BANCORP N C INC  | PEBK   | Financial Services     |
| PIERIS PHARMACEUTICALS   | PIRS   | Health Care            |
| PIXELWORKS INC           | PXLW   | Technology             |
| PRESIDIO INC             | PSDO   | Technology             |
| PROPETRO HOLDING CO      | PUMP   | Energy                 |
| PRUDENTIAL BANCORP INC   | PBIP   | Financial Services     |
| PULSE BIOSCIENCES INC    | PLSE   | Health Care            |
| PURECYCLE CORP           | PCYO   | Utilities              |
| QUANTUM CORP             | QTM    | Technology             |
| QUOTIENT LIMITED         | QTNT   | Health Care            |
| R1 RCM INC               | RCM    | Health Care            |
| RCI HOSPITALITY HLDGS    | RICK   | Consumer Discretionary |

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| RECRO PHARMA INC         | REPH   | Health Care            |
| RESOLUTE ENERGY CORP     | REN    | Energy                 |
| REVOLUTION LIGHTING TECH | RVLT   | Technology             |
| RGC RES INC              | RGCO   | Utilities              |
| RIVERVIEW BANCORP INC    | RVSB   | Financial Services     |
| ROCKET FUEL INC          | FUEL   | Technology             |
| ROSEHILL RESOURCES INC   | ROSE   | Energy                 |
| SAFE BULKERS INC         | SB     | Producer Durables      |
| SANDRIDGE ENERGY INC     | SD     | Energy                 |
| SCHNEIDER NATIONAL INC   | SNDR   | Producer Durables      |
| SELECT ENERGY SERVICES   | WTTR   | Energy                 |
| SENSATA TECHNOLOGIES     | ST     | Producer Durables      |
| SHILOH INDUSTRIES INC    | SHLO   | Materials & Processing |
| SIENTRA INC              | SIEN   | Health Care            |
| SILVERBOW RESOURCES      | SBOW   | Energy                 |
| SIMULATIONS PLUS INC     | SLP    | Technology             |
| SMARTFINANCIAL INC       | SMBK   | Financial Services     |
| SOLARIS OILFIELD         | SOI    | Energy                 |
| STARTEK INC              | SRT    | Producer Durables      |
| STERIS PLC               | STE    | Health Care            |
| STERLING CONSTRUCTION CO | STRL   | Producer Durables      |
| STONE ENERGY CORP        | SGY    | Energy                 |
| STRONGBRIDGE BIOPHARMA   | SBBP   | Health Care            |
| SUNSHINE BANCORP INC     | SBCP   | Financial Services     |
| SUTHERLAND ASSET MGMT    | SLD    | Financial Services     |
| TELLURIAN INC            | TELL   | Energy                 |
| TIMBERLAND BANCORP INC   | TSBK   | Financial Services     |
| TOCAGEN INC              | TOCA   | Health Care            |
| TRANSCONTINENTAL REALTY  | TCI    | Financial Services     |
| TUCOWS INC               | TCX    | Technology             |
| TWIN DISC INC            | TWIN   | Producer Durables      |
| TWO RIVER BANCORP        | TRCB   | Financial Services     |
| ULTRA PETROLEUM CORP     | UPL    | Energy                 |
| UNITED SECURITY BANC     | UBFO   | Financial Services     |
| UNITY BANCORP INC        | UNTY   | Financial Services     |
| UPLAND SOFTWARE INC      | UPLD   | Technology             |
| URANIUM ENERGY CORP      | UEC    | Materials & Processing |
| VBI VACCINES INC         | VBIV   | Health Care            |
| VERITONE INC             | VERI   | Technology             |
| VERSO CORPORATION        | VRS    | Materials & Processing |
| VISTRA ENERGY CORP       | VST    | Utilities              |
| VIVEVE MEDICAL INC       | VIVE   | Health Care            |
| VOXX INTERNATIONAL CORP  | VOXX   | Consumer Discretionary |
| WARRIOR MET COAL INC     | HCC    | Energy                 |
| WILLDAN GROUP INC        | WLDN   | Producer Durables      |
| WILLIS TOWERS WATSON PLC | WLTW   | Financial Services     |
| YEXT INC                 | YEXT   | Technology             |
| ZYNERBA PHARMACEUTICALS  | ZYNE   | Health Care            |



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