



|                                                 |  |    |  |
|-------------------------------------------------|--|----|--|
| <b>CDX.NA.HY.31-V1</b>                          |  |    |  |
| Reference Obligations Being Replaced            |  | 3  |  |
| Reference Entities Being Updated                |  | 3  |  |
| New Reference Entity and Obligation Being Added |  | 4  |  |
| Unchanged Reference Entities and Obligations    |  | 90 |  |

|                                |  |
|--------------------------------|--|
| <b>Removed Entities</b>        |  |
| Continental Resources, Inc.    |  |
| Meritor, Inc.                  |  |
| The ServiceMaster Company, LLC |  |
| THE WILLIAMS COMPANIES, INC.   |  |

**CDX.NA.HY.31-V1**  
Reference Obligations Being Replaced: **03**

| Reference obligations for the index constituents listed below are no longer suitable for inclusion. |                        |                        |              |                       |                        |              |        |
|-----------------------------------------------------------------------------------------------------|------------------------|------------------------|--------------|-----------------------|------------------------|--------------|--------|
| Currently in Index                                                                                  |                        |                        |              | Expected replacements |                        |              |        |
| Market ticker                                                                                       | Name                   | Instrument Name        | ISIN         | Tier                  | Instrument Name        | ISIN         | Tier   |
| AMKR                                                                                                | Amkor Technology, Inc. | AMKR (3) 6.625 01Jun21 | US031652BE90 | SNRFOR                | AMKR (2) 6.375 01Oct22 | US031652BG49 | SNRFOR |
| AVP                                                                                                 | Avon Products, Inc.    | AVP 6.5 01Mar19        | US054303AW29 | SNRFOR                | AVP 5 15Mar23          | US054303BA99 | SNRFOR |
| BZH                                                                                                 | BEAZER HOMES USA, INC. | BZH 6.75 15Mar25       | US07556QBL86 | SNRFOR                | BZH (3) 6.75 15Mar25   | US07556QBM69 | SNRFOR |

Reference Entities Being Updated: **03**

| The index constituents listed below have gone through a corporate action or credit event. |                                             |                          |              |        |                       |                             |                           |              |        |
|-------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------|--------------|--------|-----------------------|-----------------------------|---------------------------|--------------|--------|
| Currently in Index                                                                        |                                             |                          |              |        | Expected replacements |                             |                           |              |        |
| Market ticker                                                                             | Name                                        | Instrument Name          | ISIN         | Tier   | New Market ticker     | New Market Name             | Instrument Name           | ISIN         | Tier   |
| ARCOINC                                                                                   | Arconic Inc.                                | ARCOINC (4) 5.72 23Feb19 | US013817AP64 | SNRFOR | ARCOINC               | Arconic Inc.                | ARCOINC 5.125 01Oct24     | US013817AW16 | SNRFOR |
| DYNEGIN                                                                                   | Dynegy Inc.                                 | DYNEGIN (3) 6.75 01Nov19 | US26817RAM07 | SNRFOR | VISTREN               | Vistra Energy Corp.         | VISTREN (5) 7.375 01Nov22 | US26817RAN89 | SNRFOR |
| VALPIT                                                                                    | VALEANT PHARMACEUTICALS INTERNATIONAL, INC. | VALPIT (3) 5.5 01Mar23   | US91911KAE29 | SNRFOR | BAUSHEA               | Bausch Health Companies Inc | BAUSHEA (2) 5.5 01Mar23   | US91911KAE29 | SNRFOR |

New Reference Entity and Obligation Being Added: **04**

| Below is the new entity being added to this index, along with the relevant reference obligation. |                       |                         |              |        |
|--------------------------------------------------------------------------------------------------|-----------------------|-------------------------|--------------|--------|
| Currently in Index                                                                               |                       |                         |              |        |
| Market ticker                                                                                    | Name                  | Instrument Name         | ISIN         | Tier   |
| ASHLLC                                                                                           | Ashland LLC           | ASHLLC (4) 4.75 15Aug22 | US044209AF18 | SNRFOR |
| MDC                                                                                              | M.D.C. Holdings, Inc. | MDC 5.625 01Feb20       | US552676AP38 | SNRFOR |
| PBI                                                                                              | Pitney Bowes Inc.     | PBI 4.7 01Apr23         | US724479AN00 | SNRFOR |
| TESLINC                                                                                          | Tesla, Inc.           | TESLINC (2) 5.3 15Aug25 | US88160RAE18 | SNRFOR |

Unchanged Reference Entities and Obligations: **92**

| The index constituents and their associated reference obligation listed below are expected to remain unchanged |                                      |                                |               |        |
|----------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------|---------------|--------|
| Currently in Index                                                                                             |                                      |                                |               |        |
| Market ticker                                                                                                  | Market Name                          | Instrument Name                | ISIN          | Tier   |
| AMD                                                                                                            | ADVANCED MICRO DEVICES, INC.         | AMD (4) 7.5 15Aug22            | US007903AX53  | SNRFOR |
| AKS-Corp                                                                                                       | AK Steel Corporation                 | AKS-Corp 7 15Mar27             | US001546AJ45  | SNRFOR |
| ALLYFI                                                                                                         | ALLY Financial Inc.                  | ALLYFI (2) 7.5 15Sep20         | US002005NAJ90 | SNRFOR |
| AMERAI                                                                                                         | American Airlines Group Inc.         | AMERAI 5.5 01Oct19             | US02376RAA05  | SNRFOR |
| AXL-inc                                                                                                        | American Axle & Manufacturing, Inc.  | AXL-inc 6.625 15Oct22          | US02406PAL40  | SNRFOR |
| ARAMSER                                                                                                        | Aramark Services, Inc.               | ARAMSER (2) 4.75 01Jun26       | US038522AN85  | SNRFOR |
| AVBDGT                                                                                                         | Avis Budget Group, Inc.              | CD-AvisBdgt 5.25 15Mar25       | USU05375AN77  | SNRFOR |
| BLL                                                                                                            | Ball Corporation                     | BLL 4 15Nov23                  | US058498AS54  | SNRFOR |
| BOBMBINC                                                                                                       | BOBMBARDIE INC.                      | BOBMBINC (3) 7.45 01May34      | USC10802AJ68  | SNRFOR |
| BYD                                                                                                            | Boyd Gaming Corporation              | BYD 7.125 01Feb16 BondCall     | US096898AA77  | SUBLT2 |
| CALIRES                                                                                                        | CALIFORNIA RESOURCES CORPORATION     | CALIRES (4) 6 15Nov24          | US13057QAF46  | SNRFOR |
| CPN                                                                                                            | Capline Corporation                  | CPN 5.375 15Jan23              | US131347CE49  | SNRFOR |
| CHTR-CCOH                                                                                                      | CCO Holdings, LLC                    | CHTR-CCOH 5.75 15Jan24         | US1248EPBE24  | SNRFOR |
| CLINKI                                                                                                         | CenturyLink, Inc.                    | CLINKI 6.15 15Sep19            | US156700NA63  | SNRFOR |
| CHK                                                                                                            | Chesapeake Energy Corporation        | CHK 6.625 15Aug20              | US165161CF27  | SNRFOR |
| CIT                                                                                                            | CIT Group Inc.                       | CIT 5 15Aug22                  | US125881Q655  | SNRFOR |
| CYH                                                                                                            | Community Health Systems, Inc.       | COMMHS (5) 8 15Nov19           | US12543DAL47  | SNRFOR |
| CVSHLD                                                                                                         | CSC Holdings, LLC                    | CVSHLD 10.875 15Oct25          | US64072TA434  | SNRFOR |
| DAVITIN                                                                                                        | DaVita Inc.                          | DAVITIN 5.75 15Aug22           | US23918KAP30  | SNRFOR |
| DELLN                                                                                                          | Dell Inc.                            | DELLN 7.1 15Apr28              | US247025AE93  | SNRFOR |
| DO                                                                                                             | Diamond Offshore Drilling, Inc.      | DO 3.45 01Nov23                | US25271CAM47  | SNRFOR |
| DISHN-DOBSC                                                                                                    | DISH DBS Corporation                 | DISHN-DOBSC (2) 6.75 01Jun21   | US25470XAE58  | SNRFOR |
| ETE                                                                                                            | Energy Transfer Equity, L.P.         | ETE 5.875 15Jan24              | US29273VAD29  | SNRFOR |
| EQIX                                                                                                           | Equinix, Inc.                        | EQIX 5.375 01Apr23             | US29444UAM80  | SNRFOR |
| FDC                                                                                                            | First Data Corporation               | FDC 7 01Dec23                  | US319963BP82  | SNRFOR |
| FREEPIN                                                                                                        | Freeport-McMoRan Inc.                | FREEPIN 3.56 01Mar22           | US35671DAU90  | SNRFOR |
| FRCA                                                                                                           | FRONTIER COMMUNICATIONS CORPORATION  | FRCA 9 15Aug31                 | US17453BAJ08  | SNRFOR |
| GENWHOL                                                                                                        | Genworth Holdings, Inc.              | GENWHOL 7.7 15Jun20            | US37247DAM83  | SNRFOR |
| HCA                                                                                                            | HCA Inc.                             | HCA 7.5 15Feb22                | US40421AD718  | SNRFOR |
| HDSJU                                                                                                          | HD SUPPLY, INC.                      | HDSJU 5.75 15Apr24             | US40415RAR66  | SNRFOR |
| HNTINL                                                                                                         | Huntsman International LLC           | HNTINL 4.875 15Nov20 Struc     | US44701QZ454  | SNRFOR |
| ISTAINC                                                                                                        | iStar Inc.                           | ISTAINC 5 01Jul19              | US45031UBU43  | SNRFOR |
| JCP                                                                                                            | J. C. Penney Company, Inc.           | JCP 6.375 15Oct36              | US708130AC31  | SNRFOR |
| HOV-K                                                                                                          | K. Hovnanian Enterprises, Inc.       | HOV-K 7 15Jan19                | US442488BV31  | SNRFOR |
| KBH                                                                                                            | KBAH Inc.                            | KBH 7 15Dec21                  | US48668KA760  | SNRFOR |
| LBRAAA                                                                                                         | L Brands, Inc.                       | LBRAAA 5.625 15Oct23           | US501797AJ37  | SNRFOR |
| LEN                                                                                                            | Lennar Corporation                   | LEN 4.75 01Apr21               | US526057BX14  | SNRFOR |
| LITLC                                                                                                          | Liberty Interactive LLC              | LITLC 8.5 15Jul29              | US530715AD31  | SNRFOR |
| MBI                                                                                                            | MBIA Inc.                            | MBI 6.625 01Oct28              | US55262CAF77  | SNRFOR |
| MGIC                                                                                                           | MGIC Investment Corporation          | MGIC 5.75 15Aug23              | US552848AF09  | SNRFOR |
| MGMRI                                                                                                          | MGM Resorts International            | MGMRI (3) 6.75 01Oct20         | US552953BV63  | SNRFOR |
| MUR                                                                                                            | MURPHY OIL CORPORATION               | MUR 4 01Jun22                  | US56717AD43   | SNRFOR |
| NBR-inc                                                                                                        | Nabors Industries, Inc.              | NBR-inc (3) 5.5 15Jan23        | US62957HAC97  | SNRFOR |
| NAVIECO                                                                                                        | Navient Corporation                  | NAVIECO 5.5 25Jan23            | US78442FEQ72  | SNRFOR |
| NEALBE                                                                                                         | New Albertsons L.P.                  | NEALBE 8 01May31               | US01310AL86   | SNRFOR |
| NCX                                                                                                            | NOVA Chemicals Corporation           | NCX (3) 5.25 01Aug23           | USC67111AF82  | SNRFOR |
| XEL-NRGinc                                                                                                     | NRG Energy, Inc.                     | XEL-NRGinc (4) 6.25 15Jul22    | US629377BW10  | SNRFOR |
| OLN                                                                                                            | Olin Corporation                     | OLN 5.5 15Aug22                | US680665AH97  | SNRFOR |
| PACTLLC                                                                                                        | Pactiv LLC                           | PACTLLC 7.96 15Dec25           | US69039AA481  | SNRFOR |
| PKD                                                                                                            | Parker Drilling Company              | PKD (2) 7.5 01Aug20            | US701081AY70  | SNRFOR |
| POL                                                                                                            | PolyOne Corporation                  | POL (2) 5.25 15Mar23           | US73179PAK21  | SNRFOR |
| PHMG                                                                                                           | PulteGroup, Inc.                     | PHMG 7.875 15Jun32             | US745867AM30  | SNRFOR |
| DNY                                                                                                            | R.R. Donnelley & Sons Company        | DNY 7.875 15Mar21              | US74978DA28   | SNRFOR |
| RDN                                                                                                            | Radian Group Inc.                    | RDN 5.25 15Jun20               | US750236AS04  | SNRFOR |
| RAD                                                                                                            | Rite Aid Corporation                 | RAD 7 15Feb27                  | US767784AJ35  | SNRFOR |
| TSG                                                                                                            | Sabre Holdings Corporation           | SABRGLB 5.375 15Apr23          | US78573NAA00  | SECDOM |
| SWY                                                                                                            | Safeway Inc.                         | SWY 7.25 01Feb31               | US786514BA67  | SNRFOR |
| SANMCOR                                                                                                        | Sanmina Corporation                  | SANMCOR 8.125 01Mar16 BondCall | US800907AK37  | SUBLT2 |
| SEE                                                                                                            | Sealed Air Corporation               | SEE 6.875 15Jul33              | US81211KAK60  | SNRFOR |
| SHC-Acceptance                                                                                                 | SEARS ROEBUCK ACCEPTANCE CORP.       | SHC-Acceptance 6.5 01Dec28     | US812404BE03  | SNRFOR |
| SPRFINCO                                                                                                       | Springleaf Finance Corporation       | SPRFINCO (2) 7.75 01Oct21      | US85172FAD15  | SNRFOR |
| SPRICOM                                                                                                        | Sprint Communications, Inc.          | SPRICOM 7 15Aug20              | US852061AR17  | SNRFOR |
| SPLS                                                                                                           | Staples, Inc.                        | SPLS (3) 8.5 15Sep25           | US03939PAA21  | SNRFOR |
| SVU                                                                                                            | SUPERVALU INC.                       | SVU (3) 6.75 01Jun21           | US868536AV55  | SNRFOR |
| DT-TMobileUS                                                                                                   | T-Mobile USA, Inc.                   | DT-TMobileUS 4 15Apr22         | US87264AAR68  | SNRFOR |
| TALEENE                                                                                                        | Talen Energy Supply, LLC             | TALEENE 4.6 15Dec21            | US69352JAN72  | SNRFOR |
| TGRI-Ptmr                                                                                                      | Targa Resources Partners LP          | TGRI-Ptmr (3) 4.125 15Nov19    | US87612BAR33  | SNRFOR |
| TECKRS                                                                                                         | Teck Resources Limited               | TECKRS 5.375 01Feb23           | US87842AJY10  | SNRFOR |
| TEGNINC                                                                                                        | TEGNA Inc.                           | TEGNINC 4.875 15Sep21          | US364725BB67  | SNRFOR |
| THC                                                                                                            | TENET HEALTHCARE CORPORATION         | THC (2) 6.875 15Nov31          | US88033GAV23  | SNRFOR |
| THEADT                                                                                                         | THE ADT CORPORATION                  | THEADT (3) 6.25 15Oct21        | US00101JAK25  | SNRFOR |
| AES                                                                                                            | The AES Corporation                  | AES 4.875 15May23              | US00130HBT14  | SNRFOR |
| GPS                                                                                                            | THE GAP, INC.                        | GPS 5.95 12Apr21               | US364760AK48  | SNRFOR |
| F-Hertz                                                                                                        | THE HERTZ CORPORATION                | F-Hertz 5.875 15Oct20          | US428040CP20  | SNRFOR |
| MCLTHY                                                                                                         | THE MCLATHY COMPANY                  | MCLTHY 5.875 15Mar29           | US49040AL76   | SNRFOR |
| THENEI                                                                                                         | The Neiman Marcus Group LLC          | THENEI 7.125 01Jun28           | US640204AB95  | SECDOM |
| TOL                                                                                                            | Toll Brothers, Inc.                  | TOL-FinCorp 4.375 15Apr23      | US88947EAN04  | SNRFOR |
| TRADIG                                                                                                         | TransDigm Inc.                       | TRADIG (4) 6 15Jul22           | US893647AW74  | SUBLT2 |
| RIG                                                                                                            | Transocean Inc.                      | RIG 3.8 15Oct22                | US893830BC25  | SNRFOR |
| UIS                                                                                                            | Unisys Corporation                   | UIS (2) 5.5 01Mar21            | US909214BS68  | SNRFOR |
| UCOHL                                                                                                          | UNITED CONTINENTAL HOLDINGS, INC.    | UCOHL 5 01Feb24                | US910047AD22  | SNRFOR |
| UNITREN                                                                                                        | UNITED RENTALS (NORTH AMERICA), INC. | UNITREN 5.75 15Nov24           | US911365BB94  | SNRFOR |
| X                                                                                                              | UNITED STATES STEEL CORPORATION      | X 6.65 01Jun37                 | US912909AD03  | SNRFOR |
| UNITIGR                                                                                                        | Uniti Group Inc.                     | UNITIG (3) 8.25 15Oct23        | US20341WAD74  | SNRFOR |
| UHS                                                                                                            | Universal Health Services, Inc.      | UHS 3.75 01Aug19               | US913903AP52  | SECDOM |
| UVN                                                                                                            | UNIVISION COMMUNICATIONS INC.        | UVN (2) 8.5 15May21            | US91505AD64   | SNRFOR |
| WFT                                                                                                            | Weatherford International Ltd.       | WFT 4.5 15Apr22                | US94707VAC46  | SNRFOR |
| WHPEEC                                                                                                         | Weatherford Petroleum Corporation    | WHPEEC 6.25 01Apr23            | US965807AE71  | SNRFOR |
| WINDSSE                                                                                                        | Windstream Services, LLC             | WINDSSE (4) 7.5 01Jun22        | US97381WAX20  | SNRFOR |
| YUM                                                                                                            | YUM! Brands, Inc.                    | YUM 3.875 01Nov20              | US988498AG64  | SNRFOR |