

Daily TAQ Client Specification

Version 1.0c

Data files dated October 2, 2006 to July 31, 2012 inclusive

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PREFACE

DOCUMENT HISTORY

| Document Version | Date | Change Description | |
|---------------------|------------|-----------------------------------------------------------------------------------------------------|--|
| 1.0 | 07/07/2011 | Approved version for release | |
| 1.0a | 07/26/2011 | Updated exchange codes | |
| 1.0b | 07/28/2011 | Added Appendix D (NYSE Industry Codes) | |
| 1.0c | 12/07/2011 | Updated description of "CUSIP" fields Updated Exchange codes Amended "Alternative Products" section | |

CONTACT INFORMATION

Service Desk

Telephone: +1 212 383 3640 (International)
Telephone: 866 873 7422 (Toll free, US only)

Email: service.desk@nyx.com

FURTHER INFORMATION

For additional information about the product, visit: http://www.nyxdata.com/Data-Products/Daily-TAQ
For updated capacity figures, visit our capacity pages at: http://www.nyxdata.com/capacity
For details of IP addresses, visit our IP address pages at: http://www.nyxdata.com/ipaddresses
For a full glossary, visit: http://www.nyxdata.com/glossary/

DISCUSSION BOARD

There is a TAQ discussion board available <u>here</u>.

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V1.0c

1 INTRODUCTION

Daily TAQ (Trades and Quotes) provides users with FTP access to trades and quotes for all issues traded on all CTA Participating Markets for the previous trading day.

The file contains the Master File with Primary Exchange Indicator, the "NBBO file" containing continuous National Best Bid and Offer updates, and consolidated trades and quotes for all listed and non-listed issues.

Historical information is available for an additional fee.

1.1 MARKETS COVERED

The Daily TAQ product covers:

- All CTA Participating Markets Tapes A, B and C
- NYSE
- Nasdaq (OTC)
- All regionals

1.2 INSTRUMENTS COVERED

The Daily TAQ product covers Equities.

1.3 DATASET

The dataset includes:

- Daily Trades File (Daily @ 9:00 PM EST; History: 24 Apr 2002 present.) Every trade reported to the consolidated tape, from all CTA participants. Each trade identifies the time, exchange, security, volume, price, sale condition, and more. For sample data, see Daily Trades File.
- Daily Quotes File (Daily @ 12:00 AM EST; History: 11 Apr 2002 present.) Every quote reported to the consolidated tape, from all CTA participants. Each quote identifies the time, exchange, security, bid/ask volumes, bid/ask prices, NBBO indicator, and more. For sample data, see Daily Quotes File.
- Daily TAQ Master File (Daily @ 8:45 PM EST; History: 10 Sep 2003 present.) All master securities information in NYSE-listed and non-listed stocks, including Primary Exchange Indicator. For sample data, see Daily TAQ Master File.

Note: This Specification also includes details of the Daily TAQ Master File Beta.

• **Daily NBBO File** (Daily @ 11:00 PM EST; History: 10 Sep 2003 – present.) An addendum to the Daily Quotes file, containing continuous National Best Bid and Offer updates and consolidated trades and quotes for all listed and non-listed issues. For sample data, see <u>Daily NBBO File</u>.

The following is also available:

Regulation SHO Data (History: 3 Jan 2005 - 5 Oct 2007.) In response to SEC Regulation SHO, SRO's
must make Short Sale transactions data available on a monthly basis for trade dates beginning January
2005 through the pilot period ending April 2006. NYSE has released its Short Sale data to users of NYSE
historical TAQ at no additional fee. For details see the Regulation Sho Daily File Specification.

1.4 DELIVERY

Clients can download the files via FTP.

1.4.1 File Details

Table 1 Daily TAQ File Details describes the format, size and availability of the daily files.

Note: File sizes, number of rows, and file time availability are an approximation that will increase or decrease according to the day's trading volume.

Table 1 Daily TAQ File Details

| File | Format | Record Size (Bytes) | FTP Size in KB (Compressed) | Number of Rows | File Time Availability (EST) |
|-----------------|--------|------------------------------|--------------------------------------------------|-------------------|---------------------------------|
| TAQ Master | ASCII | 252 | 386 | 8500 | 7pm (19:00) |
| TAQ Master Beta | ASCII | Variable – Pipe Delimited | Approximately: *.txt - 750kb *.xls - 2.6mb | 8500 | |

| File | Format | Record Size (Bytes) | FTP Size in KB (Compressed) | Number of Rows | File Time Availability (EST) |
|------------|--------|------------------------|--------------------------------|-------------------|---------------------------------|
| TAQ Quotes | ASCII | 89 | 1 | 100 million | 1am (01:00) |
| TAQ Trades | ASCII | 71 | 110 | 13 million | 10pm (22:00) |
| TAQ NBBO | ASCII | 142 | 550 | 50 million | 12am (12:00) |

1.4.2 FTP Information

Files are placed in the directories described in Table 2 FTP Details.

Table 2 FTP Details

| File | FTP Directory |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------|
| TAQ Master | /EQY_US_ALL_REF_MASTER/EQY_US_ALL_REF_MASTER_yyyy/EQY_US_ALL_REF_MASTER_yyyymm/EQY_US_ALL_REF_MASTER_yyyymmdd.ext |
| TAQ Master Beta | /EQY_US_ALL_REF_MASTER_PD/EQY_US_ALL_REF_MASTER_PD_yyyy/EQY_US_ALL_REF_MASTER_PD_yyyymm/EQY_US_ALL_REF_MASTER_PD_yyyymmdd.ext |
| TAQ Quotes | /EQY_US_ALL_BBO/EQY_US_ALL_BBO_yyyy/EQY_US_ALL_BBO_yyyymm/EQY_US_ALL_BBO_yyyymmdd.ext |
| TAQ Trades | /EQY_US_ALL_TRADE/EQY_US_ALL_TRADE_yyyy/EQY_US_ALL_TRADE_yyyymm/EQY_US_ALL_TRADE_yyyymmdd. ext |
| TAQ NBBO | /EQY_US_ALL_NBBO/EQY_US_ALL_NBBO_yyyy/EQY_US_ALL_NBBO_yyyymm/EQY_US_ALL_NBBO_yyyymmdd.ext |

1.5 ALTERNATIVE PRODUCTS

For details of related TAQ products and the full range of TAQ offerings, please refer to the Historical Data Products section of NYXData at: http://www.nyxdata.com/Data-Products/Historical-Data.

2 DAILY TAQ MASTER FILE DATA FIELDS

Table 3 Daily TAQ Master File Data Fields describes the data fields available in the TAQ Master File. The file contains a header row that has two spaces, an eight-character date (mmddyyyy) and 201 spaces (including a Record Count).

Table 3 Daily TAQ Master File Data Fields

| Field | Offset | Size | Format | Description |
|----------------------------------|--------|------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Blank | 0 | 1 | Text | Blank space |
| CUSIP | 1 | 13 | Text | Committee on Uniform Securities Identification Procedures (CUSIP) code. This field consists of the following: • Digit 1-9 = CUSIP Code • Digit 10 = Special Condition Code • Digit 11 = Foreign Company Designation • Digit 12+13 = Exchange Designation |
| Symbol (OTC) | 14 | 12 | Text | Symbol for OTC securities |
| Symbol | 26 | 15 | Text | Stock symbol |
| Security Description | 41 | 60 | Text | Full name/description of Security |
| Unit of Trading | 101 | 1 | Number | The number of shares that the security trades in |
| Specialist Clearing Agent | 102 | 4 | Number | Specialist Clearing Agent (NYSE) |
| Specialist Clearing Number | 106 | 4 | Number | Specialist Clearing Number |
| Specialist Post Number | 110 | 2 | Number | Post (NYSE) where the security trades |
| Specialist Panel | 112 | 2 | Text | Panel (NYSE) where the security trades |
| Reason Code | 114 | 4 | Number | Reserved for future use |
| Status Indicator | 118 | 1 | Number | Defines the status of the security: • '1' = Active • '2'=Deletion • '3'=Suspension • '4'=Halt • '5'=Code • '3 or 4' = Status Lifted |
| Status Date | 119 | 8 | Date | (CCYYMMDD) Date that the status indicator was applicable |
| Date Admitted Trading | 127 | 8 | Date | (CCYYMMDD) Date that the issue began trading |
| Date Traded – Reg Way | 135 | 8 | Date | (CCYYMMDD) Date that the security traded |
| Date Traded – Settlement Date | 143 | 8 | Date | (CCYYMMDD) Security Settlement Date |
| CCS Indicator | 151 | 1 | Number | Corresponding Clearing Services indicator: • '0'=Non - CCS • '1'= CCS |

| Field | Offset | Size | Format | Description |
|-----------------------------|--------|------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fail Clearance Eligible | 152 | 1 | Number | '0'=Non-Eligible'1'=Eligible |
| Reason Code | 153 | 3 | Number | Reserved for future use |
| Source – Listed Exchange | 156 | 2 | Number | Primary Exchange Codes: • '00' = NEW YORK • '01' = BOSTON • '02' = CINCINNATI • '03' = ISE • '04' = MIDWEST • '05' = NYSE Arca (PC) • '06' = PHILADELPHIA • '07' = NASDAQ (NA) • '08' = AMERICAN (AM) • '09' = CBOE (WT) • '10' = NYSUPPLEMENTAL(NS) • '11' = NASD (ND) |
| Space | 158 | 2 | Text | Blank |
| Symbol | 160 | 10 | Text | Uncompressed Security symbol (six-character root, ten-character suffix). |
| Source Info | 170 | 1 | Text | 'H'= Halted '0'=Delayed |
| Local Ind. | 171 | 1 | Number | Did the security trade ONLY at the local exchange: • 'N'=No • 'Y'=Yes |
| ITS Issue | 172 | 1 | Text | Did the issue trade over ITS: • 'N'=No • 'Y'=Yes |
| NYSE Industry Code | 173 | 4 | Text | The issue's industry code; see NYSE Industry Codes. |
| Shares Outstanding | 177 | 10 | Number | Issue's shares outstanding (NYSE only) |
| Unit of Trade | 187 | 4 | Number | Issue's unit of trade in Round-Lot value |
| Denominator | 191 | 1 | Text | This field is no longer used. DENOM values: • I = Whole Dollars (no decimals or fraction) • 3 = 8ths (fraction) (e.g. 7/8) • 4 = 16ths (fraction) (e.g. 15/16) • 5 = 32nds (fraction) (e.g. 31/32) • 6 = 64ths (fraction) (e.g. 63/64) • 7 = 128ths (fraction) (e.g. 127/128) • 8 = 256ths (fraction) (e.g. 255/256) • A = 10ths (1 decimal place) (e.g10000000) • B = 100ths (2 decimal places) (e.g11000000) • C = 1000ths (3 decimal places) (e.g11100000) |

| Field | Offset | Size | Format | Description |
|--------------------------|--------|------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | D = 10000ths (4 decimal places) (e.g11110000) E = 100000ths (5 decimal places) (e.g11111000) F = 1000000ths (6 decimal places) (e.g11111100) G = 100000000ths (7 decimal places) (e.g111111110) H = 100000000ths (8 decimal places) (e.g111111111) |
| Issue Type | 192 | 1 | Text | Issue Type: 1 = Common Stock 1 = Fund 1 = ADS Common 1 = Basket 1 = Global Registered Share 1 = New York Registered Share 1 = Unit 1 = Liquidating Trust 2 = Preferred Stock 2 = ADS Preferred 3 = ADS Warrant 3 = Warrant 4 = ADS Rights 4 = Right 7 = Index 8 = ADS Corporate Bond 8 = Treasury Bond 0 = Structured Product |
| Listing Type | 193 | 8 | Date | Date that the issue was listed on its home exchange (CCYYMMDD) |
| NYSE Trade Today | 201 | 1 | Number | Did the issue trade on the NYSE today: • '0'=No • '1'=Yes |
| AMEX Trade Today | 202 | 1 | Number | Did the issue trade on the Amex today: • '0'=No • '1'=Yes |
| Boston Trade Today | 203 | 1 | Number | Did the issue trade on Boston today: • '0'=No • '1'=Yes |
| Not Used | 204 | 1 | Number | Blank |
| Not Used | 205 | 1 | Number | Blank |
| NYSE Arca Trade Today | 206 | 1 | Number | Did the issue trade on the Pacific today: • '0'=No |

| Field | Offset | Size | Format | Description |
|-----------------------------|--------|------|--------|-----------------------------------------------------------------|
| | | | | • '1'=Yes |
| Philadelphia Trade Today | 207 | 1 | Number | Did the issue trade on Philadelphia today: • '0'=No • '1'=Yes |
| NASD Trade Today | 208 | 1 | Number | Did the issue trade on the NASD today: • '0'=No • '1'=Yes |
| OTC Trade Today | 209 | 1 | Number | Did the issue trade OTC today: • '0'=No • '1'=Yes |
| CBOE Trade Today | 210 | 1 | Number | Did the issue trade on the CBOE today: • '0'=No • '1'=Yes |
| Position Filler Lines | 211 | 39 | Number | Reserved for future use |
| Line Change | 250 | 1 | Number | New Line indicator |

3 DAILY TAQ MASTER FILE BETA DATA FIELDS

Table 4 Daily TAQ Master File Beta Data Fields describes the data fields available in the Daily TAQ Master File Beta. This file is delivered in pipe-delimited format; for reference, the order in which the fields appear is listed the table.

Table 4 Daily TAQ Master File Beta Data Fields

| Field | Field Order | Format | Description |
|--------------|----------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Symbol | 1 | Text | Stock symbol |
| CQS Symbol | 2 | Text | Identifier of the security used to disseminate data via the SIAC Consolidated Quotation System (CQS) and Consolidated Tape System (CTS) data feeds. Typical identifiers have 1-5 character root symbol and then 1-3 characters for suffixes. For more information, see: http://www.nasdaqtrader.com/trader.aspx?id=CQSsymbolconvention |
| CompanyName | 3 | Text | Name of listing |
| ListedMarket | 4 | Number | Primary Exchange Codes: • '00' = NEW YORK • '01' = BOSTON • '02' = CINCINNATI • '03' = ISE • '04' = MIDWEST • '05' =NYSE Arca (PC) • '06' = PHILADELPHIA • '07' = NASDAQ (NA) • '08' = AMERICAN (AM) • '09' = CBOE (WT) • '10' = NYSUPPLEMENTAL(NS) • '11' = NASD (ND) |
| Таре | 5 | Text | Tape A, B or C |
| UOT | 6 | Number | Unit of Trade |
| BBG_BSID | 7 | Number | Bloomberg Security ID |
| BBG_GlobalID | 8 | Number | The Bloomberg Global ID – see http://bsym.bloomberg.com/sym/pages/bbgid-fact-sheet.pdf |
| CUSIP | 9 | Text | Committee on Uniform Securities Identification Procedures (CUSIP) code. This field consists of the following: • Digit 1-9 = CUSIP Code • Digit 10 = Special Condition Code • Digit 11 = Foreign Company Designation • Digit 12+13 = Exchange Designation |
| SymbolRoot | 10 | Text | The symbol that indicates the root of the security. |
| SymbolSuffix | 11 | Text | The NYSE or NASDAQ stock symbol suffix. See Appendix B and Appendix C. |
| TradedOnBX | 12 | Number | Did the issue trade on the Boston Stock Exchange (BX) today: • '0'=No • '1'=Yes |

| Field | Field Order | Format | Description |
|----------------|----------------|--------|---------------------------------------------------------------------------------------------------------|
| TradedOnNSX | 13 | Number | Did the issue trade on the National Stock Exchange (NSX) today: • '0'=No • '1'=Yes |
| TradedOnFinra | 14 | Number | Did the issue trade on the Financial Industry Regulatory Authority (FINRA), today: • '0'=No • '1'=Yes |
| TradedOnISE | 15 | Number | Did the issue trade on the International Securities Exchange (ISE) today: • '0'=No • '1'=Yes |
| TradedOnEdgeA | 16 | Number | Did the issue trade on the Direct Edge A Stock Exchange today: '0'=No '1'=Yes |
| TradedOnEdgeX | 17 | Number | Did the issue trade on the Direct Edge X Stock Exchange today: '0'=No '1'=Yes |
| TradedOnCHX | 18 | Number | Did the issue trade on the Chicago Stock Exchange (CHX) today: o '0'=No o '1'=Yes |
| TradedOnNYSE | 19 | Number | Did the issue trade on the New York Stock Exchange (NYSE) today: • '0'=No • '1'=Yes |
| TradedOnArca | 20 | Number | Did the issue trade on the NYSE Arca ("Archipelago Exchange") today: • '0'=No • '1'=Yes |
| TradedOnNasdaq | 21 | Number | Did the issue trade on Nasdaq today: o '0'=No o '1'=Yes |
| TradedOnCTS | 22 | Number | Did the issue trade on the Consolidated Tape System (CTS) today: • '0'=No • '1'=Yes |
| TradedOnCBOE | 23 | Number | Did the issue trade on the Chicago Board Options Exchange (CBOE) today: • '0'=No • '1'=Yes |
| TradedOnPSX | 24 | Number | Did the issue trade on the NASDAQ OMX Price-Size Exchange (PSX) today: • '0'=No • '1'=Yes |
| TradedOnBATSY | 25 | Number | Did the issue trade on the BATSY today: • '0'=No |

| Field | Field Order | Format | Description |
|--------------|----------------|--------|---------------------------------------------------------------------------------|
| | | | • '1'=Yes |
| TradedOnBATS | 26 | Number | Did the issue trade on the BATS Y-Exchange Exchange today: • '0'=No • '1'=Yes |

4 DAILY QUOTES FILE DATA FIELDS

Table 5 Daily Quotes File Data Fields describes the data fields available in the Daily Quotes File. The file contains a header row that has two spaces, an eight-character date (mmddyyyy) and 79 spaces (including a Record Count).

Table 5 Daily Quotes File Data Fields

| Field | Offset | Size | Format | Description |
|-----------------|--------|------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time | 0 | 9 | Date | Time of quote with milliseconds (HHMMSSXXX) |
| Exchange | 9 | 1 | Text | The Exchange that issued the quote: A – NYSE AMEX Stock Exchange B – NASDAQ OMX BX Stock Exchange C – National Stock Exchange D – FINRA I – International Securities Exchange J – Direct Edge A Stock Exchange K – Direct Edge X Stock Exchange K – Chicago Stock Exchange N – New York Stock Exchange T – NASDAQ OMX Stock Exchange P – NYSE Arca SM S – Consolidated Tape System T/Q – NASDAQ Stock Exchange W – CBOE Stock Exchange X – NASDAQ OMX PSX Stock Exchange Y – BATS Y-Exchange |
| Symbol | 10 | 16 | Text | Security symbol (six-character root, ten-character suffix) |
| Bid Price | 26 | 11 | Number | Bid price, seven characters for the whole number, four characters for decimals |
| Bid Size | 37 | 7 | Number | Bid size in units of trade, seven characters |
| Ask Price | 44 | 11 | Number | Ask price, seven characters for the whole number, four characters for decimals |
| Ask Size | 55 | 7 | Number | Ask size in units of trade, seven characters |
| Quote Condition | 62 | 1 | Text | Condition of Quote issued: • 'A' = Slow on the Ask Side • 'B' = Slow on the Bid Side • 'C' = Closing • 'D' = News Dissemination • 'E' = Slow on the Bid due to LRP or GAP Quote • 'F' = Slow on the Ask due to LRP or GAP Quote • 'G' = Trading Range Indication • 'H' = Slow on the Bid and Ask side • 'I' = Order Imbalance |

| Field | Offset | Size | Format | Description |
|--------------|--------|------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | 'J' = Due to a Related Security - News Dissemination 'K' = Due to a Related Security - News Pending 'L' = Closed Market Maker (NASD) 'M' - Additional Information 'N' = Non-firm quote 'O' = Opening Quote 'P' = News Pending 'Q' = Additional Information - Due to Related Security 'R' = Regular, two-sided open quote 'S' = Due to Related Security 'T' = Resume 'U' = Slow on the Bid and Ask due to LRP or GAP Quote 'V' = In View of Common 'W' - Slow Quote due to a Set Slow list on both the bid and offer sides 'X' = Equipment Changeover 'Y' = Regular - One Sided Quote (NASDAQ) 'Z' = No open/no resume |
| Market Maker | 63 | 4 | Number | NASDAQ Market Maker ID, four characters |
| Bid Exchange | 67 | 1 | Text | The Exchange associated with the Bid: A – NYSE AMEX Stock Exchange B – NASDAQ OMX BX Stock Exchange C – National Stock Exchange D – FINRA I – International Securities Exchange K – Direct Edge A Stock Exchange K – Direct Edge X Stock Exchange M – Chicago Stock Exchange N – New York Stock Exchange T – NASDAQ OMX Stock Exchange P – NYSE Arca SM S – Consolidated Tape System T/Q – NASDAQ Stock Exchange W – CBOE Stock Exchange X – NASDAQ OMX PSX Stock Exchange Y – BATS Y-Exchange Z – BATS Exchange |
| Ask Exchange | 68 | 1 | Text | The Exchange associated with the Ask: A – NYSE AMEX Stock Exchange B – NASDAQ OMX BX Stock Exchange C – National Stock Exchange |

| Field | Offset | Size | Format | Description |
|------------------|--------|------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | D – FINRA I – International Securities Exchange J – Direct Edge A Stock Exchange K – Direct Edge X Stock Exchange M – Chicago Stock Exchange N – New York Stock Exchange T – NASDAQ OMX Stock Exchange P – NYSE Arca SM S – Consolidated Tape System T/Q – NASDAQ Stock Exchange W – CBOE Stock Exchange X – NASDAQ OMX PSX Stock Exchange Y – BATS Y-Exchange Z – BATS Exchange |
| Sequence Number | 69 | 16 | Number | Message sequence number |
| National BBO Ind | 85 | 1 | Number | CQS Only - National BBO Indicator: '0' = No National BBO change - Current quote does not affect the BBO. No National appendage is required. '1' = Quote Contains all National BBO Information – Current quote is itself the new National BBO. No National appendage is required. '2' = No National BBO - There is no calculation of National BBO such as before Market Open or after Market Close. No National appendage is required. '4'= Long Format of National BBO Appendage - A new National BBO is generated and the new BBO information is contained in the Long National BBO appendage. '6' = Expanded Price Short Format of National BBO Appendage - a new National BBO is generated and the new BBO information is contained in the Expanded Price Short National BBO appendage. |
| NASDAQ BBO Ind | 86 | 1 | Number | NASD BBO Indicator(CQS): '0'=No NASD BBO Change, current quote does not affect the BBO. No NASD appendage is required. '1'= Quote Contains all NASD BBO Information - Current quote is itself the new NASD BBO. No NASD appendage is required. '2'= No NASD BBO - There is no calculation of NASD BBO such as before Market Open or after Market Close. No NASD appendage is required. '3'= NASD BBO Appendage - A new NASD BBO is generated and the new BBO information is contained in the NASD BBO appendage. |

| Field | Offset | Size | Format | Description |
|----------------------------|--------|------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | NASDAQ NBBO Appendage Indicator: '0'=No National BBO change - Current quote does not affect the BBO. No National appendage is required. '1' = No National BBO Can be Calculated- The National BBO cannot be calculated therefore vendors should show National BBO fields as blank. No Appendage is required. '2'= Short Form National BBO Appendage Attached – A new National BBO was generated as a result of the UTP participant's quote update and the new information is contained in the short form appendage (NBBO FILE) '3'= Long Format of National BBO Appendage - A new National BBO is generated and the new BBO information is contained in the Long National BBO appendage (NBBO FILE) '4'= Quote Contains all NASD BBO Information - Current quote is itself the new NASD BBO. No NASD appendage is required. |
| Quote Cancel/Correction | 87 | 1 | Text | CQS only: 'A' = Not a Cancel Quote 'B'= Cancel quote/Cancel Price Indication/Cancel Trading Range Indication 'C'=Corrected Price Indication |
| Source of Quote | 88 | 1 | Text | 'C'= CQS'N'= NASDAQ |
| Line Change | 89 | 2 | Text | New Line Indicator |

5 DAILY TRADES FILE DATA FIELDS

Table 6 Daily Trades File Data Fields describes the data fields available in the Daily Trades File. The file contains a header row that has two spaces, an eight-character date (mmddyyyy), and 60 spaces (including a Record Count).

Table 6 Daily Trades File Data Fields

| Field | Offset | Size | Format | Description |
|----------------|--------|------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time | 0 | 9 | Date | Time of quote with milliseconds (HHMMSSXXX) |
| Exchange | 9 | 1 | Text | The Exchange where the trade took place: • A – NYSE AMEX Stock Exchange • B – NASDAQ OMX BX Stock Exchange • C – National Stock Exchange • D – FINRA • I – International Securities Exchange • J – Direct Edge A Stock Exchange • K – Direct Edge X Stock Exchange • M – Chicago Stock Exchange • N – New York Stock Exchange • T – NASDAQ OMX Stock Exchange • P – NYSE Arca SM • S – Consolidated Tape System • T/Q – NASDAQ Stock Exchange • W – CBOE Stock Exchange • X – NASDAQ OMX PSX Stock Exchange • Y – BATS Y-Exchange • Z – BATS Exchange |
| Symbol | 10 | 16 | Text | Security symbol (six-character root, ten-character suffix) |
| Sale Condition | 26 | 4 | Text | A Sale Condition (applies to all exchanges). Up to four codes are displayed per trade. CTS issues: Blank or '@' - Regular Sale (no condition) 'B' = Average Price Trade 'C' = Cash Trade (same day clearing) 'E' = Automatic Execution 'F' = Intermarket Sweep Order 'G' = Opening/Reopening Trade Detail 'H' = Intraday Trade Detail 'I' = CAP Election Trade 'K' = Rule 127 trade (NYSE only) or Rule 155 trade (AMEX only) 'L' = Sold Last (late reporting) 'N' = Next Day Trade (next day clearing) 'O' = Market Center Opening Trade 'R' = Seller |

| Field | Offset | Size | Format | Description |
|-------------------------------|--------|------|--------|---------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | 'T'= Extended Hours Trade |
| | | | | 'U' = Extended Hours (Sold Out of Sequence) |
| | | | | • 'Z' = Sold (out of sequence) |
| | | | | '4' - Derivatively Priced |
| | | | | '5' – Market Center Re-opening Prints |
| | | | | '6' – Market Center Closing Prints |
| | | | | NASD issues: |
| | | | | '@' = Regular Trade |
| | | | | 'A' = Acquisition |
| | | | | 'B' = Bunched Trade |
| | | | | 'C' = Cash Trade |
| | | | | 'D' = Distribution |
| | | | | 'F' – Intermarket Sweep |
| | | | | 'G' = Bunched Sold Trade |
| | | | | 'K' = Rule 155 Trade (AMEX Only) |
| | | | | • 'L' = Sold Last |
| | | | | 'M' = Market Center Close Price |
| | | | | 'N' = Next Day |
| | | | | 'O' = Opening Prints |
| | | | | 'P' = Prior Reference Price |
| | | | | 'Q' = Market Center Open Price |
| | | | | 'R' = Seller (Long-Form Message Formats |
| | | | | Only) |
| | | | | 'S' = Split Trade |
| | | | | • 'T' = Form - T Trade |
| | | | | • 'U' = Extended Hours (Sold Out of Sequence) |
| | | | | 'W' = Average Price Trade |
| | | | | 'Y' – Yellow Flag |
| | | | | 'Z' = Sold (Out of Sequence) |
| | | | | '1' = Stopped Stock - Regular Trade |
| | | | | '2' = Stopped Stock - Sold Last |
| | | | | '3' = Stopped Stock - Sold Last 3 = Stopped Stock - Sold |
| | | | | (Out of Sequence) |
| | | | | '4' Derivatively Priced |
| | | | | '5' – Re-opening Prints |
| | | | | '6' – Closing Prints |
| | | | | '7' – Placeholder for 611 Exempt |
| | | | | '8' - Placeholder for 611 Exempt |
| | | | | '9' - Placeholder for 611 Exempt |
| Trade Volume | 30 | 9 | Number | The total volume of shares traded in the trade that is represented by that line in the report (each line in the report represents a trade). |
| Trade Price | 39 | 11 | Number | The price of the trade (seven characters for the whole number, four characters for decimals). |
| Trade Stop Stock Indicator | 50 | 1 | Text | This value indicates that this Trade (NYSE only) is indicated as a Stop Stock. Possible values are: |

| Field | Offset | Size | Format | Description |
|----------------------------|--------|------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Blank = N/A (Correction or NASDAQ) N = Not Indicated as Stop Stock Y = Indicated as Stop Stock Note: For a detailed explanation of "Stopped Stock," a useful resource is the Glossary (Appendix B) in the CTA Output Multicast Interface Specification. |
| Trade Correction Indicator | 51 | 2 | Text | Trade Correction Indications. Possible values are: 00 = Regular trade which was not corrected, changed or signified as cancel or error 01 = Original trade which was late corrected (This record contains the original time - HHMM and the corrected data for the trade) 07 = Original trade which was later signified as error 08 = Original trade which was later signified as error 10 = Cancel record (This record follows '08' records) 11 = Error record (This record follows '07' records) 12 = Correction record (This record follows '01' records and contains the correction time and the original "incorrect" data) |
| Trade Sequence Number | 53 | 16 | Number | Unique sequence number for both CTS and NASDAQ trade messages |
| Source of Trade | 69 | 1 | Text | Source of Trade Message. Possible values are: • C = CTS • N = NASDAQ NTDS |
| Trade Reporting Facility | 70 | 1 | Text | The Trade Reporting Facility (TRF) / Exchange where trade was reported, if applicable. Possible values are: Blank = The trade was reported directly by the participant A - NYSE AMEX Stock Exchange B - NASDAQ OMX BX Stock Exchange C - National Stock Exchange D - FINRA I - International Securities Exchange J - Direct Edge A Stock Exchange K - Direct Edge X Stock Exchange M - Chicago Stock Exchange N - New York Stock Exchange T - NASDAQ OMX Stock Exchange P - NYSE Arca SM S - Consolidated Tape System T/Q - NASDAQ Stock Exchange X - NASDAQ OMX PSX Stock Exchange X - NASDAQ OMX PSX Stock Exchange Y - BATS Y-Exchange |

| Field | Offset | Size | Format | Description |
|-------------|--------|------|--------|--------------------|
| | | | | |
| Line Change | 71 | 2 | Text | New Line Indicator |

6 DAILY NBBO FILE DATA FIELDS

Table 7 Daily NBBO File Data Fields describes the data fields available in the Daily NBBO File. The file contains a header row that has two spaces, an eight-character date (mmddyyyy), and 79 spaces (including a Record Count).

Table 7 Daily NBBO File Data Fields

| Field | Offset | Size | Format | Description |
|-----------------|--------|------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time | 0 | 9 | Date | Time of quote with milliseconds (HHMMSSXXX) |
| Exchange | 9 | 1 | Text | The Exchange that issued the quote: A – NYSE AMEX Stock Exchange B – NASDAQ OMX BX Stock Exchange C – National Stock Exchange D – FINRA I – International Securities Exchange J – Direct Edge A Stock Exchange K – Direct Edge X Stock Exchange K – Chicago Stock Exchange N – New York Stock Exchange T – NASDAQ OMX Stock Exchange P – NYSE Arca SM S – Consolidated Tape System T/Q – NASDAQ Stock Exchange W – CBOE Stock Exchange X – NASDAQ OMX PSX Stock Exchange Y – BATS Y-Exchange |
| Symbol | 10 | 16 | Text | Security symbol (sic-character root, ten-character suffix) |
| Bid Price | 26 | 11 | Number | Bid price, seven characters for the whole number, four characters for decimals |
| Bid Size | 37 | 7 | Number | Bid size in units of trade, seven characters |
| Ask Price | 44 | 11 | Number | Ask price, seven characters for the whole number, four characters for decimals |
| Ask Size | 55 | 7 | Number | Ask size in units of trade, seven characters |
| Quote Condition | 62 | 1 | Text | Condition of Quote issued: • 'A' = Slow on the Ask Side • 'B' = Slow on the Bid Side • 'C' = Closing • 'D' = News Dissemination • 'E' = Slow on the Bid due to LRP or GAP Quote • 'F' = Slow on the Ask due to LRP or GAP Quote • 'G' = Trading Range Indication • 'H' = Slow on the Bid and Ask side • 'I' = Order Imbalance |

| Field | Offset | Size | Format | Description |
|--------------|--------|------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | 'J' = Due to a Related Security - News Dissemination 'K' = Due to a Related Security - News Pending 'L' = Closed Market Maker (NASD) 'M' - Additional Information 'N' = Non-firm quote 'O' = Opening Quote 'P' = News Pending 'Q' = Additional Information - Due to Related Security 'R' = Regular, two-sided open quote 'S' = Due to Related Security 'T' = Resume 'U' = Slow on the Bid and Ask due to LRP or GAP Quote 'V' = In View of Common 'W' - Slow Quote due to a Set Slow list on both the bid and offer sides 'X' = Equipment Changeover 'Y' = Regular - One Sided Quote (NASDAQ) 'Z' = No open/no resume |
| Market Maker | 63 | 4 | Number | NASDAQ Market Maker ID, 4 characters |
| Bid Exchange | 67 | 1 | Text | The Exchange associated with the Bid: A – NYSE AMEX Stock Exchange B – NASDAQ OMX BX Stock Exchange C – National Stock Exchange D – FINRA I – International Securities Exchange J – Direct Edge A Stock Exchange K – Direct Edge X Stock Exchange K – Direct Edge X Stock Exchange N – Chicago Stock Exchange N – New York Stock Exchange T – NASDAQ OMX Stock Exchange P – NYSE Arca SM S – Consolidated Tape System T/Q – NASDAQ Stock Exchange W – CBOE Stock Exchange X – NASDAQ OMX PSX Stock Exchange Y – BATS Y-Exchange Z – BATS Exchange |
| Ask Exchange | 68 | 1 | Text | The Exchange associated with the Ask: • A – NYSE AMEX Stock Exchange • B – NASDAQ OMX BX Stock Exchange • C – National Stock Exchange • D – FINRA |

| Field | Offset | Size | Format | Description |
|------------------|--------|------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | I – International Securities Exchange J – Direct Edge A Stock Exchange K – Direct Edge X Stock Exchange M – Chicago Stock Exchange N – New York Stock Exchange T – NASDAQ OMX Stock Exchange P – NYSE Arca SM S – Consolidated Tape System T/Q – NASDAQ Stock Exchange W – CBOE Stock Exchange X – NASDAQ OMX PSX Stock Exchange Y – BATS Y-Exchange Z – BATS Exchange |
| Sequence Number | 69 | 16 | Number | Message sequence number |
| National BBO Ind | 85 | 1 | Number | CQS only - National BBO Indicator: '0' = No National BBO change - Current quote does not affect the BBO. No National appendage is required. '1' = Quote Contains all National BBO Information —Current quote is itself the new National BBO. No National appendage is required. '2' = No National BBO - There is no calculation of National BBO such as before Market Open or after Market Close. No National appendage is required. '4'= Long Format of National BBO Appendage - A new National BBO is generated and the new BBO information is contained in the Long National BBO appendage. '6' = Expanded Price Short Format of National BBO Appendage - a new National BBO is generated and the new BBO information is contained in the Expanded Price Short National BBO appendage. UTP only - National BBO Indicator: '0' =No National BBO Change - The participant's quote does not affect the National BBO. '1' =No National BBO Can be Calculated - The National BBO cannot be calculated. '2' =Short Form National BBO Appendage Attached - A new National BBO was generated as a result of the UTP participant's quote update and the new National BBO information is contained in the attached short form appendage. '3' =Long Form National BBO Appendage Attached - A new National BBO was generated as a result of the UTP participant's quote update and the new National BBO information is contained in the attached long information is contained in the attached long |

| Field | Offset | Size | Format | Description |
|----------------------------|--------|------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | form appendage. |
| | | | | '4' =Quote Contains All National BBO Information – Current UTP participant's quote is itself the National BBO. |
| NASDAQ BBO Ind | 86 | 1 | Number | NASD BBO Indicator (CQS only): |
| | | | | '0'=No NASD BBO Change, current quote does not affect the BBO. No NASD appendage is required. |
| | | | | '1'= Quote Contains all NASD BBO Information – Current quote is itself the new NASD BBO. No NASD appendage is required. |
| | | | | '2'= No NASD BBO - There is no calculation of NASD BBO such as before Market Open or after Market Close. No NASD appendage is required. |
| | | | | '3'= NASD BBO Appendage - A new NASD BBO is generated and the new BBO information is contained in the NASD BBO appendage. |
| | | | | NASDAQ NBBO Appendage Indicator: |
| | | | | '0'=No National BBO change - Current quote does not affect the BBO. No National appendage is required. |
| | | | | '1' = Quote Contains all National BBO Information – Current quote is itself the new National BBO. No National appendage is required. |
| | | | | '2'= No National BBO - There is no calculation of National BBO such as before Market Open or after Market Close. No National appendage is required. |
| | | | | '4'= Long Format of National BBO Appendage - A new National BBO is generated and the new BBO information is contained in the Long National BBO appendage. |
| | | | | '6' = Expanded Price Short Format of National BBO Appendage - A new National BBO is generated and the new BBO information is contained in the Expanded Price Short National BBO appendage. |
| Quote Cancel/Correction | 87 | 1 | Text | CQS only: • 'A' = Not a Cancel Quote |
| | | | | 'B'= Cancel quote/Cancel Price Indication/Cancel Trading Range Indication |
| | | | | 'C'=Corrected Price Indication |
| Source of Quote | 88 | 1 | Text | 'C'= CQS 'N'= NASDAQ |
| NBBO Quote | 89 | 1 | Text | Condition of Quote issued: |
| Condition | | | | 'A' = Slow on the Ask Side |
| | | | | 'B' = Slow on the Bid Side |
| | | | | 'C' = Closing 'D' = News Discomination |
| | | | | 'D' = News Dissemination 'E' = Slow on the Bid due to LRP or GAP |
| | | | | ■ E - Slow on the blu due to ERP of GAP |

| Field | Offset | Size | Format | Description |
|-------------------|--------|------|--------|-------------------------------------------------------------------------------------------------|
| | | | | Quote |
| | | | | 'F' = Slow on the Ask due to LRP or GAP Quote |
| | | | | 'G' = Trading Range Indication |
| | | | | 'H' = Slow on the Bid and Ask side |
| | | | | 'I' = Order Imbalance |
| | | | | 'J' = Due to a Related Security - News Dissemination |
| | | | | 'K' = Due to a Related Security - News Pending |
| | | | | 'L' = Closed Market Maker (NASD) |
| | | | | 'M' - Additional Information |
| | | | | 'N' = Non-firm quote |
| | | | | 'O' = Opening Quote |
| | | | | 'P' = News Pending |
| | | | | 'Q' = Additional Information - Due to Related Security |
| | | | | 'R' = Regular, two-sided open quote |
| | | | | 'S' = Due to Related Security |
| | | | | • 'T' = Resume |
| | | | | 'U' = Slow on the Bid and Ask due to LRP or GAP Quote |
| | | | | • 'V' = In View of Common |
| | | | | 'W' – Slow Quote due to a Set Slow list on both the bid and offer sides |
| | | | | 'X' = Equipment Changeover |
| | | | | 'Y' = Regular - One Sided Quote (NASDAQ) |
| | | | | 'Z' = No open/no resume |
| Best Bid Exchange | 90 | 1 | Text | The Exchange associated with the Best Bid: |
| | | | | A – NYSE AMEX Stock Exchange |
| | | | | B – NASDAQ OMX BX Stock Exchange |
| | | | | C – National Stock Exchange |
| | | | | D – FINRA |
| | | | | I – International Securities Exchange |
| | | | | J – Direct Edge A Stock Exchange |
| | | | | K – Direct Edge X Stock Exchange |
| | | | | M – Chicago Stock Exchange |
| | | | | N – New York Stock Exchange |
| | | | | T – NASDAQ OMX Stock Exchange |
| | | | | P – NYSE Arca SM |
| | | | | S – Consolidated Tape System |
| | | | | T/Q – NASDAQ Stock Exchange |
| | | | | W – CBOE Stock Exchange |
| | | | | X – NASDAQ OMX PSX Stock Exchange |
| | | | | Y – BATS Y-Exchange |
| | | | | Z – BATS Exchange |
| | | | | |
| | | | | |

| Field | Offset | Size | Format | Description |
|------------------------------|--------|------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Best Bid Price | 91 | 11 | Number | Best Bid price, seven characters for the whole number, four characters for decimals |
| Best Bid Size | 102 | 7 | Number | Best Bid size in units of trade, seven characters |
| Best Bid Market Maker | 109 | 4 | Text | Best Bid NASDAQ Market Maker ID (Long Appendage) |
| Best Bid MM Location | 113 | 2 | Text | Best Bid NASDAQ Market Maker geographic location (Long Appendage) |
| Best Bid MM Desk Location | 115 | 1 | Text | Best Bid NASDAQ Market Maker desk location (Long Appendage) |
| Best Ask Exchange | 116 | 1 | Text | The Exchange associated with the Best Ask: • A – NYSE AMEX Stock Exchange • B – NASDAQ OMX BX Stock Exchange • C – National Stock Exchange • D – FINRA • I – International Securities Exchange • J – Direct Edge A Stock Exchange • K – Direct Edge X Stock Exchange • M – Chicago Stock Exchange • N – New York Stock Exchange • T – NASDAQ OMX Stock Exchange • P – NYSE Arca SM • S – Consolidated Tape System • T/Q – NASDAQ Stock Exchange • W – CBOE Stock Exchange • X – NASDAQ OMX PSX Stock Exchange • Y – BATS Y-Exchange • Z – BATS Exchange |
| Best Ask Price | 117 | 11 | Number | Best offer price, seven characters for the whole number, four characters for decimals |
| Best Ask Size | 128 | 7 | Number | Best Offer size in units of trade, seven characters |
| Best Ask Market Maker | 135 | 4 | Text | Best Offer NASDAQ Market Maker ID (Long Appendage) |
| Best Ask MM Location | 139 | 2 | Text | Best Offer NASDAQ Market Maker geographic location (Long Appendage) |
| Best Ask MM Desk Location | 141 | 1 | Text | Best Offer NASDAQ Market Maker desk location (Long Appendage) |
| Line Change | 142 | 2 | Text | New Line Indicator |

APPENDIX A BBO QUALIFYING CONDITIONS

Table 8 BBO Qualifying Conditions contains the quote conditions that are eligible to be the best bid or offer.

Table 8 BBO Qualifying Conditions

| Code | BBO Qualifying Quote Conditions |
|------|-------------------------------------------------------------------|
| Α | Slow Quote on the Offer Side |
| В | Slow Quote on the Bid Side |
| Н | Slow Quote on the Bid and Offer Sides |
| 0 | Opening Quote |
| R | Regular Quote |
| W | Slow Quote due to a Set Slow list on both the bid and offer sides |

APPENDIX B NYSE STOCK SYMBOL SUFFIXES

Table 9 NYSE Stock Symbol Suffixes

| Suffix | Description |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <v></v> | <v> represents a character; Series (or Class) A-T & V-Z; Examples include the following: ZZZ A is the same as ZZZ/A ZZZ T is the same as ZZZ/T</v> |
| <v>CL</v> | Series (or Class) A-T & V-Z Called. Examples include the following: ZZZ ACL is the same as ZZZ/A/CL |
| <v>CV</v> | Series (or Class) A-T & V-Z Convertible. Examples include the following: ZZZ ACV is the same as ZZZ/A/CV |
| <v>WI</v> | Series (or Class) A-T & V-Z When Issued. Examples include the following: ZZZ AWI is the same as ZZZ/Aw |
| CL | Called. Examples include the following: ZZZ CL is the same as ZZZ/CL |
| СТ | Certificates. Examples include the following: ZZZ CT is the same as ZZZ/CT |
| CV | Convertible. Examples include the following: ZZZ CV is the same as ZZZ/CV (ZZZ/CV) |
| CVR | Contingent Value Right. Examples include the following: ZZZ CVR is the same as ZZZ/CVR |
| CVCL | Convertible Called. Examples include the following: ZZZ CVCL is the same as ZZZ/CV/CL |
| DP | Amount of most-recent dividend to go "ex-distribution". Examples include the following: ZZZ DP is the same as ZZZ/DP |
| DV | Accumulated dividend per share, net of expenses, through and including the previous day's close of trading. Examples include the following: ZZZ DV is the same as ZZZ/DV |
| EC | Emerging Company Marketplace. Examples include the following: ZZZ EC is the same as ZZZ/EC |
| EU | Estimated cash amount for creation unit. Examples include the following: ZZZ EU is the same as ZZZ/EU |
| FN | Foreign News. Examples include the following: ZZZ FN is the same as ZZZ/F/N |
| ID | Index – differentiates an index from a stock with the same root symbol. Examples include the following: III ID is the same as III/ID |
| IV | Intra-day Net Asset Value per share. Examples include the following: ZZZ IV is the same as ZZZ/IV |
| NV | Net Asset Value per share, as of the close on the previous trading day. Examples include the following: ZZZ NV is the same as ZZZ/NV |
| PP | Partial Paid. Examples include the following: ZZZ PP is the same as ZZZ/PP |
| PTCL | Part Called. Examples include the following: ZZZ PTCL is the same as ZZZ/PT/CL |
| PR | Preferred. Examples include the following: ZZZ PR is the same as ZZZp |
| PR <v></v> | <v> represents a character; Preferred Series A-T & V-Z. Examples include the following: ZZZ PRA is the same as ZZZpA ZZZ, PRB is the same as ZZZpB</v> |
| PR <v>CL</v> | <v> represents a character; Preferred Series A-T & V-Z Called. Examples include the following: ZZZ PRACL is the same as ZZZpA/CL ZZZ, PRBCL is the same as ZZZpB/CL</v> |
| PR <v>CV</v> | <v> represents a character; Preferred Series A-T & V-Z Convertible. Examples include the following: ZZZ PRACV is the same as ZZZpA/CV ZZZ, PRBCV is the same as ZZZpB/CV</v> |
| PR <v>WI</v> | <v> represents a character; Preferred Series A-T & V-Z When Issued. Examples include the following: ZZZ PRAWI is the same as ZZZpAw ZZZ, PRBWI is the same as ZZZpBw</v> |
| PRWI | Preferred When Issued. Examples include the following: ZZZ PRWI is the same as ZZZpw |

| Suffix | Description |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PRCL | Preferred Called. Examples include the following: ZZZ PRCL is the same as ZZZp/CL |
| PRCV | Preferred Convertible. Examples include the following: ZZZ PRCV is the same as ZZZp/CV |
| PRWD | Preferred When Distributed. Examples include the following: ZZZ PRWD is the same as ZZZp/WD |
| PRC <v></v> | Indicates Class A; could also be B-K and M-S; Second Category of Preferred. Examples include the following: ZZZ PRCA is the same as ZZZpCA ZZZ, PRCB is the same as ZZpCB |
| RT | Rights. Examples include: ZZZ R is the same as ZZZr |
| RWI | Rights When Issued. Examples include: ZZZ RWI is the same as ZZZrw |
| SC | Small Corporate Offering Registration. Examples include the following: ZZZ SC is the same as ZZZ/SC |
| SP | Special. Examples include the following: ZZZ SP is the same as ZZZ/SP |
| SD | Stamped. Examples include the following: ZZZ SD is the same as ZZZ/SD |
| so | Current Shares Outstanding, in thousands. Examples include the following: ZZZ SO is the same as ZZZ/SO |
| тс | Total cash amount per creation unit, in thousands. Examples include the following: ZZZ TC is the same as ZZZ/TC |
| TEST | Exclusive suffix used for intraday test message. Examples include the following: ZZZ TEST is the same as ZZZ/TEST |
| TT | Tier II Securities. Examples include the following: ZZZ TT is the same as ZZZ/TT |
| U | Units (a combination of securities composed of two or more of warrants, common stocks, preferred stocks and/or bonds). Examples include the following: ZZZ U is the same as ZZZ/U |
| VR | Variable Common Rights. Examples include the following: ZZZ VR is the same as ZZZ/VR |
| WD | When Distributed. Examples include the following: ZZZ WD is the same as ZZZ/WD |
| WI | When Issued. Examples include the following: ZZZ WI is the same as ZZZw |
| ws | Warrants. Examples include the following: ZZZ WS is the same as ZZZ/WS |
| wws | With Warrants. Examples include the following: ZZZ WWS is the same as ZZZ/W/WS |
| WS <v></v> | Warrants Series <v>; Series A-T & V-Z. Examples include the following: ZZZ WSA is the same as ZZZ/WSA</v> |
| WSWI | Warrants When Issued |

Table 10 Suffix Definitions

| Suffix | Definition |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Called | An issue being redeemed by its issuing corporation under definite conditions before maturity. |
| Certificate | Refers to a negotiable certificate representing deposit of stock with a pending change in its condition. |
| Convertible | A preferred share which its owner may convert into common stock or another security, usually in the same company, in accordance with the terms of issue. |
| Preferred | A class of stock with priority over common stock in regard to earnings and/or liquidations. |

| Suffix | Definition |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rights | Represent the privilege to subscribe (in proportion to the number of shares owned) to new or additional securities, usually at or below the current market price. Rights ordinarily have market values of their own and are traded actively. In most cases they must be exercised within a relatively short period of time. |
| Stamped | Indicates rights and privileges different from securities of the same issue, class, or series not stamped. |
| Warrant | Indicates a certificate giving its holder the right to purchase securities at a stipulated price, either within a specified time limit or in perpetuity. |
| When Distributed | Signifies a short form of "when, as, and if distributed" (see 'When Issued'). |
| When Issued | Means a short form of "when, as, and if issued"; indicates a transaction in a security authorized for issuance, but not yet issued. All "When Issued" transactions are on an "if" basis, to be settled if and when the actual security is issued. |
| With Warrants | A security with a warrant attached that entitles the holder to purchase another security at stipulated price(s), either within a specified time or in perpetuity. Warrants may be immediately detachable from their underlying securities or detachable after specified periods. |
| Without Warrants | A security from which the warrant(s) has been removed. |

APPENDIX C NASDAQ STOCK SYMBOL SUFFIXES

Source: Nasdaq web site: http://www.nasdaq.com/reference/glossary.stm

Table 11 NASDAQ Stock Symbol Suffixes

| Suffix | Description |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Α | Class A |
| В | Class B |
| С | Issuer qualification exception – the issuer has been granted a continuance in NASDAQ under an exception to the qualification standards for a limited period. |
| D | New |
| E | Delinquent in required filings with the SEC |
| F | Foreign |
| G | First convertible bond |
| Н | Second convertible bond, same company |
| 1 | Third convertible bond, same company |
| J | Voting |
| K | Nonvoting |
| L | Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units |
| М | Fourth preferred, same company |
| N | Third preferred, same company |
| 0 | Second preferred, same company |
| Р | First preferred, same company |
| Q | Bankruptcy - the issuer is involved in bankruptcy proceedings. |
| R | Rights |
| S | Shares of beneficial interest |
| Т | With warrants or with rights |
| U | Units |
| V | When-issued and when-distributed |
| W | Warrants |
| Υ | ADR (American Depositary Receipt) |
| Z | Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units |

APPENDIX D NYSE INDUSTRY CODES

Table 12 NYSE Industry Codes

| Industry Group | Sector | Division | Code |
|----------------|--------------------------------|------------------------------------------|------|
| Industrials | | | 100 |
| | Aerospace | | |
| | | Aircraft | 102A |
| | | Parts and Equipment | 102B |
| | Business Supplies and Services | | 104 |
| | | Machines and Equipment (Excl. Computers) | 104A |
| | | Supplies | 104B |
| | | Services | 104C |
| | Chemicals | | 106 |
| | | Diversified Chemicals | 106A |
| | | Specialized | 106B |
| | Computers, Data Processing | | 108 |
| | | Computer Systems | 108A |
| | | Data Processing, Software | 108B |
| | | Peripheral Devices and Supplies | 108C |
| | Construction | | 110 |
| | | Residential | 110A |
| | | Industrial | 110B |
| | | Cement | 110C |
| | | Lumber, Wood | 110D |
| | | Other Building Materials and Products | 110E |
| | Electrical Equipment | | 112 |
| | Electronics | | 114 |
| | | Semi Conductors and Other Components | 114A |
| | | Telecommunications Equipment | 114B |
| | | Test, Control Instruments and Systems | 114C |
| | | Other Systems and Equipment | 114D |
| | Environmental Control | | 116 |
| | Foods, Beverages | | 118 |
| | | Beverages | 118A |
| | | Branded Food Products | 118B |
| | | Processing and Production | 118C |

| Industry Group | Sector | Division | Code |
|----------------|-----------------------------------|-----------------------------------|------|
| | | Wholesalers | 118D |
| | Health and Beauty Products | | 120 |
| | | Personal Health Products | 120A |
| | | Toiletries, Cosmetics, Perfumes | 120B |
| | Health Care Services | | 122 |
| | | Equipment and Supplies | 122A |
| | | Health Care Facilities | 122B |
| | Household Goods | | 124 |
| | | Appliances | 124A |
| | | Furnishings and Fixtures | 124B |
| | | Housekeeping Products | 124C |
| | | House-wares | 124D |
| | Industrial Machinery and Equipmen | t | 126 |
| | | Heavy Machinery | 126A |
| | | Machine Tools | 126B |
| | | Measuring and Control Devices | 126C |
| | | Transmissions and Engines | 126D |
| | | Other Industrial Equipment | 126E |
| | Lodging, Restaurants | | 128 |
| | | Hotels, Motels | 128A |
| | | Restaurants | 128B |
| | Mining, Refining, Fabricating | | 130 |
| | | Aluminum | 130A |
| | | Coal | 130B |
| | | Gold, Silver | 130C |
| | | Steel, Iron | 130D |
| | | Other Non-Ferrous Metals | 130E |
| | Motor Vehicles | | 132 |
| | | Auto and Truck | 132A |
| | | Parts and Equipment | 132B |
| | Oil and Gas | | 134 |
| | | Crude Production | 134A |
| | | Contract Drilling, Exploration | 134B |
| | | Integrated Domestic Refiners | 134C |
| | | Integrated International Refiners | 134D |
| | | Non-Integrated Refiners | 134E |

| Industry Group | Sector | Division | Code |
|----------------|----------------------------------|---------------------------------------------|------|
| | | Services and Equipment | 134F |
| | Packaging | | |
| | | Glass | 136A |
| | | Metal | 136B |
| | | Paper | 136C |
| | | Other | 136D |
| | Paper Production | | 138 |
| | Pharmaceuticals | | 140 |
| | Publishing | | 142 |
| | | Newspaper Chains | 142A |
| | | Magazines | 142B |
| | | Books | 142C |
| | Recreation Services and Products | | 144 |
| | | Broadcasting | 144A |
| | | Gaming Operations and Services | 144B |
| | | Leisure Time Products | 144C |
| | | Motion Pictures, Entertainment Services | 144D |
| | | Outdoor Recreational Vehicles and Equipment | 144E |
| | Retail Trade | | 146 |
| | | Department Store Chains | 146A |
| | | Discount Variety Chains | 146B |
| | | Drug Store Chains | 146C |
| | | Supermarkets, Food Stores | 146D |
| | | Hardware, Furniture Stores | 146E |
| | | Specialty Apparel Ships | 146F |
| | | Other Retail Operations | 146G |
| | Textiles, Apparel | | 148 |
| | | Textile and Mill Products | 148A |
| | | Clothing Companies | 148B |
| | | Shoes | 148C |
| | Tires, Rubber | | 150 |
| | Tobacco | | 152 |
| | Wholesalers, Distributors | | 154 |
| | | Consumer Products (Non-Food) | 154A |
| | | Industrial Products | 154B |

| Industry Group | Sector | Division | Code |
|----------------------|---------------------------------|----------------------------------------------------|-------|
| | Multi-Industry | | |
| | Other | | 180 |
| | | Manufacturing | 180A |
| | | Services | 180B |
| Transportation | | | 200 |
| | Air | | 202 |
| | | Passenger Airlines | 202A |
| | | Freight Airlines | 202B |
| | Rail | | 204 |
| | Trucking | | 206 |
| | Other Transportation Services | | 208 |
| Utilities | | | 300 |
| | Electric Services | | 302 |
| | Gas Services | | 304 |
| | | 6.1.2 Distribution and Integrated Natural Gas Cos. | 6.1.3 |
| | | 6.1.4 Natural Gas Transmission Companies | 6.1.5 |
| | | 6.1.6 Other Gas Services | 6.1.7 |
| | Telecommunications | ļ | 306 |
| | Water Supply Companies | | 308 |
| | Multi-Service Companies | | 310 |
| Finance, Real Estate | | | 400 |
| | Banks | | 402 |
| | | Multinational | 402A |
| | | Regional | 402B |
| | | Savings and Loan Associations | 402C |
| | Brokerage Services | ! | 404 |
| | Closed-End Investment Companies | | 406 |
| | | Bond Funds | 406A |
| | | Stock Funds | 406B |
| | | Specialty Funds | 406C |
| | Finance Companies | | 408 |

| Industry Group | Sector | Division | Code |
|----------------|--------------------------------|---------------------------------------|------|
| | Insurance | | 410 |
| | | Brokers, Agents | 410A |
| | | Carriers | 410B |
| | Trusts | | 412 |
| | | Real Estate Investment Trusts (REITS) | 412A |
| | | Oil Royalty Trust | 412B |
| | | Other Trusts | 412C |
| | Real Estate | | 414 |
| | Diversified Financial Services | | 416 |