

**NYSE AMERICAN OPTIONS / NYSE ARCA OPTIONS
GEMS BATCH / ONLINE EXTRACT LAYOUT (700 BYTES)**

| Field# | Field Name | Length | Position | Type | OCC field (if available) | Field Description |
|--------|-----------------------|--------|----------|------|---|--|
| 1 | Extract Number | 10 | 1 | N* | NA | Transmission Sequence Number |
| 2 | OCC Sequence Number | 10 | 11 | N* | Exchange Matched Trade Clearing Sequence Number | Uniquely identifies the trade in OCC; it is assigned by the Exchange. |
| 3 | Event ID | 32 | 21 | A/N | NA | Uniquely identifies an executed order. It is assigned by the Exchange. |
| 4 | Execution ID | 20 | 53 | A/N | NA | Uniquely identifies a trade (execution of buy and sell orders). It is assigned by the Exchange. |
| 5 | Original Execution ID | 20 | 73 | A/N | NA | Allows multiple adjustments on 1 trade or re-allocation to be grouped. |
| 6 | Exchange Code | 2 | 93 | A/N | NA | Exchange identifier. 02 = AMERICAN; 04 = ARCA |
| 7 | Entry Date | 26 | 95 | N | Activity date (MMDDYYYY only) | The date the trade was entered or adjusted in GEMS. Format: YYYY-MM-DD HH:MM:SS.SSS SSS** (See note below relative to PTAs ***) |
| 8 | Trade Date | 26 | 121 | N | As Of Date + Execution Time | The as-of date in which the trade is assumed to be in effect. Format: YYYY-MM-DD HH:MM:SS.SSS SSS** (See note below relative to PTAs ***) |
| 9 | Action Type | 1 | 147 | A | NA | Status of the trade: A = Added Clearing Record D = Deleted Clearing Record (only available for Online Extract and not Batch Extract). |
| 10 | Security Symbol | 15 | 148 | A/N | Symbol (6 chars only) | Underlying Security. |
| 11 | Expiration Date | 8 | 163 | N | Expiration Year, Expiration Month, Expiration Day | The date when the Option expires. Format: YYYYMMDD |
| 12 | Call Put | 1 | 171 | A | Call/Put Code | An alphabetic field that identifies the type of transaction. C = Call P = Put |

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|--------|-----------------------|--------|----------|------|--|---|
| 13 | Strike Price | 9 | 172 | N* | Strike Price Dollar, Strike Price Decimal | The strike price of the option. The dollar amount occupies the first five positions and the decimal amount the next 4 positions. Format: \$\$\$\$\$ddd |
| 14 | Buy/Sell Indicator | 1 | 181 | N | NA | The side of the trade. 1 = Buy 2 = Sell Fix Tag 54 |
| 15 | Original Amount | 10 | 182 | N* | NA | Number of contracts ordered. |
| 16 | Trade Volume | 10 | 192 | N* | Trade Quantity | Number of contracts traded. |
| 17 | Premium | 18 | 202 | N* | Trade Price Dollar, Trade Price Decimal | Price of the option traded. Format: \$\$\$\$\$\$\$\$\$ddddd |
| 18 | Open Close | 1 | 220 | A | Open/Close Code | Position as either open or closed. C = Close O = Open |
| 19 | Executing TPID | 8 | 221 | A/N | NA | The firm acronym assigned by the Exchange. |
| 20 | Clearing TPID | 8 | 229 | A/N | NA | The clearing firm acronym assigned by the Exchange. |
| 21 | Executing Firm Symbol | 6 | 237 | A/N | NA | Firm's billing symbol |
| 22 | Clearing Firm Symbol | 6 | 243 | A/N | NA | Clearing firm's billing symbol |
| 23 | OCC Clearing Number | 5 | 249 | N* | Sell or Buy Side Clearing Member | OCC clearing number for the firm through which the trade clears. |
| 24 | Executing Domain | 32 | 254 | A/N | NA | Firm buying or selling the option. |
| 25 | MM Account ID | 4 | 286 | A/N | Sell or Buy Side Account Number | The local or away exchange market maker/specialist or provided by the firms. |
| 26 | Floor Broker | 10 | 290 | A/N | Sell or Buy Side Executing Broker | Individual (Floor broker) who executes the trade on the trading floor. |
| 27 | CMTA | 5 | 300 | A/N | Sell or Buy Side CMTA Give-up Clearing Member | OCC clearing number on whose behalf the trade was executed. |
| 28 | Optional Data | 32 | 305 | A/N | Sell or Buy side Optional Data (16 chars only) | Information provided by the firm and passed to the OCC. Fix Tag 526. |

| Field# | Field Name | Length | Position | Type | OCC field (if available) | Field Description |
|--------|------------------------------------|--------|----------|------|---|--|
| 29 | Customer/Firm Capacity | 1 | 337 | A | NA | The trading capacity provided: 0 = Customer 1 = Firm 2 = Broker Dealer (BD) 3 = Market Maker (MM) 8 = Professional customer Fix Tag 204 |
| 30 | Execution Type | 1 | 338 | A | NA | How the trade was executed: B = Liquidity Adding Trade (Resting Order) C = Manual Trade Add - GEMS F = Liquidity Removing Trade (Non-resting Order) H = MM Side of Open Outcry Trade S = Floor Broker – Single Leg Trade Y = Floor Broker – Multi-Leg Trade X = OX Crossing Trade M = Complex Orders Stock + Options O = Opening Auction Trade T = Complex Orders Options Only |
| 31 | Cross Type | 1 | 339 | A | NA | F = Facilitation S = Solicitation P = PI Auction Q = QCC |
| 32 | Exposed/Covered | 1 | 340 | A | NA | E = Exposed C = Covered |
| 33 | Account Type | 1 | 341 | A | Sell or Buy Side Account Type | Clearing account type. C = Cust F = Firm M = MM |
| 34 | Client Order ID | 50 | 342 | A/N | Sell or Buy Side Branch Sequence (20 chars only) | Order ID assigned by the firm and sent to the Exchange for execution. Fix Tag 11 |
| 35 | Customer ID | 50 | 392 | A/N | Sell or Buy Side – Account Number (10 chars only) | Customer data that is a pass-through to the exchange. Customers pass it via Fix Tag 1. |
| 36 | Related TPID | 8 | 442 | A/N | NA | TPID of the representing firm. For a Floor Broker trade, this will be the TPID of the Floor Broker firm. |
| 37 | Non-ATP/OTP Market Maker Indicator | 1 | 450 | A/N | NA | Space = Cust/Firm (not Market Maker) A = Away MM (non-ATP/OTP MM Symbol) L = Local MM (ATP/OTP MM Symbol) |

| Field# | Field Name | Length | Position | Type | OCC field (if available) | Field Description |
|--------|-------------------------|--------|----------|------|-----------------------------------|--|
| 37A | Liquidity Flag | 1 | 451 | A | NA | A = Add Liquidity; R = Remove Liquidity. O = Opening Auction, X = Routed Order, Blank = Floor Trade, P = BOLD Adding****, F = BOLD Removing **** |
| 37B | Time in Force | 1 | 452 | A/N | NA | 0 = Day; 1 = GTC; 3 = IOC, 5 = GTX |
| 37C | Complex Trade ID | 20 | 453 | N | NA | Complex Trade Id that can be used to group all legs of the single complex order execution. |
| 37D | Cabinet Trade Indicator | 3 | 473 | A | 828 | CAB - Designates that a trade is a cabinet trade |
| 37E | Global Execution ID | 20 | 476 | N | 1003 | Trade ID assigned by the exchange that can be used to identify all transactions relating to an original order. |
| 37F | Filler | 54 | 496 | | | Filler |
| 38 | Contra Clearing TPID | 8 | 550 | A/N | NA | The contra clearing firm acronym assigned by the Exchange. |
| 39 | Contra OCC Number | 5 | 558 | N* | Sell or Buy Side Clearing Member | The Contra clearing firm OCC number. |
| 40 | Contra MM Account ID | 4 | 563 | A/N | Sell or Buy Side Account Id | The local or away exchange market maker/specialist on the contra side |
| 41 | Contra Floor Broker | 10 | 567 | A/N | Sell or Buy Side Executing Broker | The individual buying or selling the trade. |
| 42 | Contra Executing TPID | 8 | 577 | A | NA | The contra firm acronym assigned by the Exchange. |
| 43 | Contra Executing Domain | 32 | 585 | A/N | NA | The firm buying/selling a trade. |
| 44 | Contra Execution Type | 1 | 617 | A | NA | How the trade was executed: B = Liquidity Adding Trade (Resting Order) C = Manual Trade Add - GEMS F = Liquidity Removing Trade (Non-resting Order) H = MM Side of Open Outcry Trade S = Floor Broker – Single Leg Trade Y = Floor Broker – Multi-Leg Trade X = OX Crossing Trade M = Complex Orders Stock + Options O = Opening Auction Trade T = Complex Orders Options Only |

| Field# | Field Name | Length | Position | Type | OCC field (if available) | Field Description |
|--------|-------------------------------|--------|----------|------|-------------------------------|--|
| 45 | Contra Customer/Firm Capacity | 1 | 618 | A | NA | The trading capacity provided: 0 = Customer 1 = Firm 2 = Broker Dealer (BD) 3 = Market Maker (MM) 8 = Professional customer Fix Tag 204 |
| 46 | Contra Open/Close | 1 | 619 | A | Open/Close | Position as either open or closed. C = Close O = Open |
| 47 | Contra Account Type | 1 | 620 | A | Sell or Buy Side Account Type | Clearing account type. C = Customer F = Firm M = MM |
| 48 | Contra Routed Exchange Code | 1 | 621 | A | NA | A = AMERICAN B = BOX C = CBOE E = EDGX H = ISE2 I = ISE J = MERCURY M = MIAX Q = NDQ R = MIAX Pearl T = NASD P = ARCA W = C2 X = PHLX Z = BATS |
| 49 | Contra Liquidity Flag | 1 | 622 | A | NA | A = Add Liquidity; R = Remove Liquidity O = Opening Auction, X = Routed Order, Blank = Floor Trade, P = BOLD Adding****, F = BOLD Removing **** |
| 49A | Contra Time In Force | 1 | 623 | A/N | NA | 0 = Day; 1 = GTC; 3 = IOC, 5 = GTX |
| 49B | Contra Cross Type | 1 | 624 | A | NA | F = Facilitation S = Sollicitation P = PI Auction Q = QCC |
| 49C | Contra Covered/Exposed | 1 | 625 | A | NA | C = Covered: E = Exposed |

| Field# | Field Name | Length | Position | Type | OCC field (if available) | Field Description |
|--------|------------|--------|----------|------|--------------------------|-------------------|
| 49D | Filler | 75 | 626 | A | NA | Filler |

* **Note that where applicable, numeric fields will be padded with zeroes**

** **GEMS will ultimately carry microseconds following planned upgrades to upstream systems – until then these will be padded with zeroes.**

*** **Note that trades resulting from Post Trade Allocation messages (PTAs) via FIX for CUBE orders will reflect the time of the Post Trade Allocation not the original execution time. Firms needing to match off the PTAs with their original executions can utilize the Original Execution ID (Field #5) for that purpose.**

**** **AMERICAN Only**