

Downstream eBusiness Work Group Petroleum Data Exchange Bill of Lading

The following is a detail listing of the new PDXBOL format version 4.0 which will be used to replace the existing bill of lading format used by the PDXR protocol, **P**etroleum **D**ata **eX**change **R**eal-time, and the PDXB format, **P**etroleum **D**ata **eX**change **B**atch. In lieu of separate standards one is being promoted to provide finished bill of lading information.

There is a Type 'A' header record and a Type 'B' detail record format. The detail record type "B"s will be keyed or tied together to the corresponding type "A" record by the Sending Company Code and BOL Data Provider Record Key. For each Sending Company Code and BOL Data Provider Record Key there will be one Type A Record for the entire load or Bill of lading (BOL) and an individual Type B Record for each product on the BOL. Blended Products will be handled through multiple B records grouped by Product Batch Id, see below. This PDXBOL format supercedes PDXR 2.0 and PDXB 3.1, both of which will cease to be updated or maintained.

Conventions and Editing

The **Ref** column provides "**S/M**" indicators as follows:

- "**S**" indicator shows which data fields are to be populated in a Supplier bill of lading.
- "**M**" indicator shows which data fields are to be populated in a Marketer bill of lading.

The "**AN**" and "**N**" indicators in the **Length** column describe usage of the field, not the acceptable values. Some fields are defined as alpha-numeric with only numeric values accepted.

The **Cols** field provides begin and ending column position, as well as, whether the field is required

- "**M**" = mandatory field,
- "**O**" = optional field

If mandatory fields are left blank, data should be rejected. When data is rejected for a blank mandatory field, totals not matching PDXB calculated totals, or missing record types, the entire transaction file should be rejected. Data should NOT be distributed until the entire transaction file has passed edit validation.

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

Record type = "A"

Ref #	Field Name	Cols	Length	Description	Edits
S/M	Sender Company Code	1-3 M	3 AN	<p>An alpha-numeric field used to identify the sending company. The 3 digit Company Code is assigned by PIDX and identifies a unique company.</p> <p>While the version bridge exists, only 2 left justified character codes will be used.</p> <p>(In the BL record of the real-time protocol, this is the Owner Code; the BL record is sent from the terminal. Within the BL record this is the Owner Code. The Owner Code is then translated to the Company Code by the service provider before being sent to the Receiving Company.)</p>	<p>Left justify and validate against Company Code Database on the PIDX website: http://www.pidx.org/standards/pidx-maintained-codes-list.cfm</p>
S/M	BOL Data Provider Record Key	4-16 M	13 N	<p>This is a unique sequential number assigned by the originator of the PDXBOL transaction used to associate related Header A records to Product B records, See B format.</p>	<p>Must be unique within the Sender Company code for the current transmission of data.</p>
S/M	Record Type	17 M	1 AN	<p>An alpha-numeric code used to identify and separate different PDXBOL formats.</p>	<p>Must be "A" = Type A Header records</p>
S/M	Version	18-21 M	4 N	<p>Numeric version of the format. Decimal point is implied. '0400' = version 4 new A, B e.g. 04.00</p>	

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

Record type = "A"

S/M	BOL Type	22 M	1 AN	This identifies whether the record was generated and batched by an ERP system or sent in near real time from an terminal automation system.	"B"=Batch "R"=Real-time
S/M	Receiver Company Code	23-25 M	3 AN	An alpha-numeric field used to identify the receiving company. While the version bridge exists, only 2 character codes will be used. (In the BL record of the real-time protocol, this is the Seller Code)	Left justify and validate against Company Code Database on the PIDX website: http://www.pidx.org/standards/pidx-maintained-codes-list.cfm
S/M	SPLC Code	26-34 M	9 N	A numeric field used to identify the physical location of the terminal from which the product was withdrawn. Use 000 as the default SPLC extension. Standard Point Location Code is assigned by the NMFTA (National Motor Freight Traffic Association) and is used to identify a product terminal. Currently only the first 6 digits of the SPLC Code is being utilized. The remaining 3 are typically left justified 0 filled, however, that does not preclude the use of these three characters, if one so desires.	
S/M	Terminal Control Number	35-43 M	9 AN	An alpha-numeric field identifying the Internal Revenue Service's Terminal Control Number (TCN) for of the terminal or facility. (Use "NON-IRS " if not applicable, such as for an asphalt terminal or refinery.)	Must not be blanks. Each position must be equal to 0-9 and/or A-Z. Allow 000000000 to represent unknown.
S/M	BOL Number	44-59 M	16 AN	An alpha-numeric field, which contains the bill of lading number. Right justify and fill with leading zeros.	Each position must be equal to 0-9 and/or A-Z and/or leading, no trailing or embedded blanks. Will not accept 16 blanks.

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

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S/M	BOL Version	60-61 M	2 N	If the BOL is a revision of a previously transmitted BOL, this specifies what revision (01-99). For the first occurrence of the BOL, the value will be 00. Data providers will process in the order of receipt.	Must be 0 through 99
S/M	Start Load Date	62-69 M	8 N	The date that the load commenced formatted YYYYMMDD	Valid date less than or equal to today, Year > 1995
S/M	Start Load Time	70-73 M	4 N	The time of day in terminal's local time when the load commenced, formatted (HHMM) based on the 24-hour clock.	Hour 00-23, Minute 00-59
S/M	End Load Date	74-81 M	8 N	The date of load completion, formatted YYYYMMDD.	Valid date less than or equal to today and greater than or equal to Start Load Date.
S/M	End Load Time	82-85 M	4 N	The time of day in terminal's local time when the load completed, formatted (HHMM) based on the 24-hour clock.	Hour 00-23, Minute 00-59

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

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S	Final Shipper Transaction Sequence	86-94 O	9 N	<p>A optional field representing a sequential number assigned within the Receiving Company Code and TCN. The number begins at 1 and goes until it rolls over to 1 again. It is assigned by transaction, i.e. a new sequence is generated for BOL versions beyond "00". Since the BOL number is not sequentially assigned to a Receiving Company at a terminal, this number is created by the sending terminal or the sending ERP system. Each number is unique within the given Receiving Company for the given TCN. When provided, it must span from one day to the next. Receivers of data can now conduct continuity checks to ensure all data has been received from a given sending site.</p>	No duplicates within Receiving Company
S/M	Authorization Number	95-102 O	8 N	<p>A numeric field which contains the authorization number assigned during the load authorization check in the real-time protocol. Only valid for a transaction that originates from a load authorizing rack system (not to be confused with an order number or PO number). If this field is zero, this transaction was issued without an authorization.</p>	

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

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S	Third Party	103-105 O	3 AN	If BOL Type=B, Insert a valid PIDX Company Code in this field to have a copy of the transaction forwarded to that company by the data service. While the version bridge exists, only 2 character codes will be used. Example: "ZZb"	Left justify and validate against Company Code table on the PIDX website: http://www.pidx.org/standards/pidx-maintained-codes-list.cfm
S/M	Consignee Number	106-119 M	14 AN	An alpha-numeric field which identifies the consignee as it appears on the BOL.	Each position must be equal to 0-9 and/or A-Z and/or leading, no trailing or embedded blanks. Will not accept 14 blanks.
S/M	Carrier Code	120-123 M	4 AN	Alpha-numeric field containing the Standard Carrier Alpha Code (SCAC) to identify the carrier. The SCAC codes are maintained and distributed by the National Motor Freight Traffic Association as Continental Directory NMF101.	Must not be blank
S/M	Carrier FEIN	124-132 M	09 AN	Use the 9 digits of the Carrier's Federal Employer Identification Number . If the carrier does not have a FEIN, use the carrier owner's Social Security Number. If unknown, use 000000000.	Must equal 0-9
S/M	FEIN type	133-33 M	1 AN	Identifies whether the Carrier FEIN is a an FEIN , a Social Security number or Unknown .	Valid values are "F", "S", and "U"
S/M	Vehicle Driver Name	134-153 O	20 AN	This should be the transport operator's last name followed by a comma, a space, than the first name; all of which is 20 characters or less. Truncate on the right if necessary. Although this is more appropriate for truck deliveries from a terminal; it may be used for other Vehicle Types.	

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

Record type = "A"

S/M	Vehicle Type	154 M	1 AN	Type of vehicle used to move the product. B = Barge D = Dray Truck P = Pipeline R = Rail S = Vessel / Tanker T = Tank Truck X = Book Transfer	Must be: 'B', 'D', 'P', 'R', 'S', 'T', or 'X'
S/M	Vehicle Number	155-174 O	20 AN	For truck related configurations, this field represents the tractor or the tank truck. Any trailers will be identified in the following Container-1, -2 fields. For non-truck related movement this is the transport's id number.	
S/M	Container Number-1	175-194 O	20 AN	For a Vehicle type of truck this would be the trailer number.	
S/M	Container Number- 2	195-214 O	20 AN	For a Vehicle type of truck this would be a second trailer number.	
S/M	Purchase Order Number	215-244 O	30 AN	An alpha-numeric field containing the purchase order number. Many Bills of Lading may be issued under the same Purchase Order	Each position must be equal to 0-9, A-Z or blanks
S/M	Release/Order Number	245-260 O	16 AN	An alpha-numeric field containing the release or order number. This field is associated with one or more suppliers	Each position must be equal to 0-9 or blanks
S	Supplier Contract Number	261-292 O	32 AN	The contract for which an order is assigned.	

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

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S/M	Split Load Flag	293 O	1 AN	A split load indicates instances where compartments on the same truck are loaded from different lanes at a terminal requiring the driver to card in and card out as he moves from lane to lane to complete a load. Y indicates split load. Leave blank if not used.	Must be blank or "Y".
S/M	Shipper Info	294-303 O	10 AN	Various shipper definable information.	
S/M	Authorized Load	304 M	1 N	This identifies if the BOL is from an authorized load or an unauthorized load. 0 – Authorized 1 – Unauthorized)	Must be 0 or 1.
S/M	Destination State Code	305-306 O	2 AN	The two character state abbreviation (Requires a separate bill of lading to deliver in more than 1 state)	Valid state abbreviation code
S/M	Destination County	307-336 O	30 AN	County name (Currently does not support multiple in-state county destination)	
S/M	Destination City	337-366 O	30 AN	City name (Currently does not support multiple in-state city destination)	
S/M	Destination Zip Code	367-375 O	9 N	Standard 5 and 4 postal zip code associated with destination of product.	

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

Record type = "A"

S/M	Products Transmitted	376-377 M	2 N	The number of Product "B" detail records being transmitted for this "A" header record. There should be at least 1 "B" record for this "A".	Numeric must be greater than zero.
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Total Record Length 377

Approved

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

Record type = "B"

Ref #	Field Name	Cols	Length	Description	Edits
S/M	Sender Company Code	1-3 M	3 AN	<p>An alpha-numeric field used to identify the sending company. The 3 digit Company Code is assigned by PIDX and identifies a unique company.</p> <p>While the version bridge exists, only 2 left justified character codes will be used.</p> <p>(In the BL record of the real-time protocol, this is the Owner Code; the BL record is sent from the terminal. Within the BL record this is the Owner Code. The Owner Code is then translated to the Company Code by the service provider before being sent to the Receiving Company.)</p>	<p>Left justify and validate against Company Code Database on the PIDX website: http://www.pidx.org/standards/pidx-maintained-codes-list.cfm</p>
S/M	BOL Data Provider Record Key	4-16 M	13 N	<p>A unique identifier for all B record types that are associate with a Record Type A, See Record Type A.</p>	<p>Must be the same for all "B" detail records associated with an "A" Header record.</p>
S/M	Record Type	17 M	1 AN	<p>An alpha-numeric code used to identify and separate different PDXBOL formats. (A for Type A Header Records, B for Type B Detail records, etc.)</p>	<p>Must be "B" = Type B Detail records</p>

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

Record type = "B"

Ref #	Field Name	Cols	Length	Description	Edits
S/M	Finished Product Batch-Id	18-20 M	3 AN	A 3 character field which indicates a grouping of component base products or additives which were combined to create a blended product. It may represent a compartment or the sum of the volumes for a given product on a bill of lading. For Truck and Trailer loads, this field could effectively be the compartment id or number.	If the product was not blended, Finished Product Batch-id must not match any other Finished Product Batch ID within the BOL Data Provider Record Key, else it be treated as a component of that Finished Product Batch ID should it be a blend. It is unique to the product. You may accumulate like products when not blended into a single Finished Product Batch Id.
S/M	Product Code Type	21 M	1 AN	An indicator that describes this "B" record's product relationship to other "B" records within a given Finished Product Batch-ID All Finished Product Batch-ID groups of records must have an "F" Product Code Type, whether blended or not. If there was no blend, the "C" component product's volume will match that of the "F" Product Code Type unless of course it also includes the additive, see Edits to the right.	<ul style="list-style-type: none"> • A =Additives (injected) • F = Finished Product • C = Component Product (Products that are not injected) <p>Sum of the "A" and "C" records should add up to the "F" records within the Finished Product Batch-ID. Should there be an imbalance; the variance may be due to the Additive volume ("A" Product Code Type), if any, being included. Some rack systems will inject before the meter, others after.</p>

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

Record type = "B"

Ref #	Field Name	Cols	Length	Description	Edits
S/M	PIDX Product Code	22-24 M	3 AN	A code which identifies the product loaded. Codes used are the oil industry common PIDX Product Codes. The Finished Product and Component Product codes are maintained and available from the Downstream E-Business Subcommittee. If the Product Type Code is an additive, use "ADD" here and identify custom value for additive in the Additive Code below.	Must be valid on PIDX Product table at: http://www.pidx.org/standards/pidx-maintained-codes-list.cfm
S/M	Additive Code	25-44 O	20 AN	The user-specified Additive product code. This field would be used when Product Code Type is A=Additive.	Only valid for Product Type "A" and blank otherwise. Values are defined by business partners.
S/M	Gross Quantity	45-54 M	10 N	A numeric un-signed field which represents the gross (metered) quantity of product loaded. Front fill with zeroes. Last 2 characters are implied decimal positions (ex. 1453 gallons would be represented as 0000145300).	
S/M	Gross Credit Sign	55 M	1 AN	If the Gross Quantity is negative, enter a minus '-' sign. Leave blank if positive.	Must be equal to blank or '-'

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

Record type = "B"

Ref #	Field Name	Cols	Length	Description	Edits
S/M	Net Quantity	56-65 M	10 N	A numeric unsigned field which represents the Net volume (adj. to 60 degrees) of product loaded, front filled with zeroes. For Net quantity, the last 2 characters are implied decimal positions (ex. 1453.00 gallons would be represented as 0000145300).	
S/M	Net Credit Sign	66 M	1 AN	If the Net Quantity negative, enter a minus '-' sign. Leave blank if positive.	Must be equal to blank or '-'
S/M	Temperature	67-70 O	4 N	Temperature has one implied decimal position, for example 98.6 degrees = 0986	
S/M	Temperature Measurement Type	71 O	1 AN	Refers to unit of measure for temperature: <ul style="list-style-type: none"> • F = Fahrenheit • C = Celsius Conditionally optional, i.e. if temperature is populated then it is required.	Must be "C" or "F" if temperature is non-zero
S/M	Gravity	72-75 O	4 N	Gravity has two implied decimal position. Example: 42.38 = 4238	

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

Record type = "B"

Ref #	Field Name	Cols	Length	Description	Edits
S/M	Blend Or Alteration Indicator	76-77 M	2 AN	A code which indicates that there has been some modification to the product. Legacy information retained for compatibility since with the addition of the "A" Product Type Code and the Additive Code fields, this field is not only more restrictive but redundant.	Must be a valid entry on the Blend indicator table at: http://www.pidx.org/standards/pidx-maintained-codes-list.cfm
S/M	Unit of Measure	78-80 M	3 AN	Indicator defining the product measurement used for volumes or weight, e.g. GAL, BBL, TON, etc.	Must be a valid entry on the Units of measure table: http://www.pidx.org/standards/pidx-maintained-codes-list.cfm
S	Component Contract Number	81-112 O	32 AN	Contract number for the component product in this "B" record. Intended for transactions supplied by multiple shippers this is the supply contract of the component.	
S	Sub-Company ID	113-121 O	9 AN	A 9 character identifier sub-ordinate to the Company code. It can be viewed as the stockholder in the terminal, i.e. many companies create multiple stockholders (shippers) within rack automation systems to track inventory. Or, supplier of the component in this particular finished product.	

Total Record Length **121**

**Downstream eBusiness Work Group
Petroleum Data Exchange Bill of Lading
PDXBOL 4.0**

Record type = "T"

Ref #	Field Name	Cols	Length	Description	Edits
S/M	Total Indicator	1-6 M	6 AN	Value: "TOTAL=". Represents the total number of "A" and "B" records in this file or transmission.	Hardcoded per description
S/M	Total Rows in file	7-11 M	5 N	Count of records preceeding	
S/M	Blank	12-16	5 AN	Blanks	
S/M	Record Type	17 M	1 AN	Value = 'T'	

Total Record Length 17