



- Level of Use:**
- Information
 - Reference
 - Continuous

Guidance Document References:
TD-MAOP-P-20 MAOP Validation Assign Document Types

Table 1: Gas Keywords

Definition	Gas Keywords
Several document types can be recognized by the presence of keywords associated with components of gas pipelines. The presence of these Gas Keywords can assist the individual assigning document type in determining whether certain documents are relevant in developing the pipeline features list required to perform MAOP validation.	<ul style="list-style-type: none"> • Filter • Flange • Elbow (Ell) • Nipple • Pipe • Union • Weld(ing) • Plate • Regulator • Meter • Pressure Control Fitting (PCF) • Valve • Coating • Wrapping • Diameter (OD, ID) • Wall Thickness (WT)

Table 2: Drawings

Document Type	Definition	Key Words
Construction	Construction Drawings are drawings or schematics useful to the construction phase of the project (they typically include pipeline components such as pipe segments, valves, regulators, filters, etc.). They are typically red-lined versions of the engineering drawings and represent the location and related specifications associated with the pipeline components installed on a respective job number.	•As built
Detail	Detail Drawings are comprehensive drawings depicting certain pipe components within or outside of a pipeline system. It includes components such as double bell joints, pipe bends, elbows, regulators, tees, or other pipeline components.	
Distribution Plat	Distribution Plats are maps of distribution pipelines (in a plan view) that connect neighborhoods or small buildings to transmission pipelines. These drawings detail the distribution system network and individual service lines (service to customers).	
Index	Index Drawings (Index Maps) are typically found for larger stretches of pipe and typically show the areas covered by the Transmission Plats. Index Drawings can either be formatted like a drawing or as a document in list format.	• Index in the title block
Plan & Profile Sheet	Plan & Profile Drawings are drawings that contain two views: plan (bird's eye view), and profile (cross-section), of a particular geographic area pertaining to a pipeline project.	• Plan and Profile • Profile
Transmission Plat	Transmission Plats are maps of transmission pipelines. The plat sheets are based on an integration of various construction drawings and include information on components such as pipe, elbows, tees, or other pipeline components.	• Plat
Vicinity	Drawing-Vicinity documents depict how the pipeline is positioned in relation to adjacent geographical features, and typically cover a fairly wide area.	• Vicinity • Area Map
Other	Drawing-Other documents are drawings and schematics that cannot be identified by any of the aforementioned drawing document types. Operating maps and diagram are Drawings-Other.	

**Table 3: Job Estimates**

Document Type	Definition	Key Words
Detail Sheet	<p>Detail Sheets typically follow Face Sheets and contain expenditure details for the proposed or completed work. Detail Sheets are clearly labeled as such.</p> <p>Assign the Journal Voucher-Gas document type to documents titles Detail of Expenditures or Summary of Expenditures if they contain pipe key words, Material codes with pipe descriptions, or Material codes without descriptions. Otherwise, assign the Non-PFL document type.</p>	<ul style="list-style-type: none"> • Detail Sheet [For Plant to be Installed] • Estimate
Face Sheet	<p>Face Sheets are summaries that provide information about the project (including the proposed location and type/amount of material to be installed or completed work). They are the first sheet in a job estimate package.</p>	<ul style="list-style-type: none"> • Estimate for Appropriation • Estimate for Authorization • Job Estimate • Main Installation Record • Work Order • Job Order • Story of Necessity

Table 4: Materials

Document Type	Definition	Key Words
Bill of Material	<p>Bill of Material documents contain itemized lists of pipeline features or components used on a project. Such documents typically include item number, quantity, and description of each component.</p>	<ul style="list-style-type: none"> • Bill of Material • Material Analysis Worksheet
Engineering Materials Memo (EMM)	<p>Engineering Materials Memos (EMMs) are documents used to request quotes from suppliers to obtain pipeline components needed to complete specific projects.</p>	<ul style="list-style-type: none"> • Engineers Materials Memo
Invoice – Gas	<p>Invoice – Gas documents contain pipeline features/ components (e.g. pipes, valves, fittings) or services provided by an outside vendor. The header of these documents may be on PG&E or non-PG&E stationary. These types of invoices typically detail materials and items purchased for gas pipelines.</p> <p>Invoice-Gas documents with a stamp or notation indicating material was received should be categorized as Transport Tag-Gas.</p> <p>Evaluate these documents to determine if they fall under the Invoice-Gas or Non-PFL (non-gas invoices have words like Fence, Vaults, Gasoline, or Equipment Rental) document types.</p>	<ul style="list-style-type: none"> • Invoice • [Gas keywords]



Table 4: Materials (continued)

Document Type	Definition	Key Words
Material Requisition – Gas	<p>Material Requisition-Gas documents contain pipeline features/components being requested for purchase. The header of these documents will be on PG&E stationary.</p> <p>Evaluate these documents to determine if they fall under the Material Requisition-Gas or Non-PFL document types. If “Job Estimate” appears in the header, the document should not be considered as a Material Requisition (as it is most likely part of the Job Estimate document package).</p> <p>A credit requisition is a Material Requisition-Gas only if an item on the Credit Requisition was salvaged then installed on the same or another job. Otherwise, it is a Non-PFL document type.</p> <p>Material Requisition-Gas documents with a stamp or notation indicating material was received should be categorized as Transport Tag-Gas.</p>	<ul style="list-style-type: none"> • Order Modification • Purchase Order (PO, MPO) • Credit Requisition • Procurement • Transfer Requisition • Materials Requisition • Requisition on Storekeeper • [Gas Keywords]
Mill Test	<p>Mill Tests are furnished to PG&E by the pipe manufacturer and include: chemical test, tensile test, hardness test and method used. Mill test reports should include the name of the original steel maker and describe the specification and grade to which the steel was ordered. Any document mentioning x-rays, radio, or hydrostatic information should NOT be identified as a Mill Test.</p>	<ul style="list-style-type: none"> • Certified Report of Physical Properties • Chemical Analysis of Pipe • Mill Test • Tensile strength • Elongation • Yield point • Moody Report
Specifications	<p>Specifications documents detail the manufacturing procedure and material requirements for pipeline features/components.</p>	<ul style="list-style-type: none"> • Construction Specification • Material Specification • [Gas Keywords]
Transport Tag – Gas	<p>Transport Tag documents contain pipeline components that were delivered. The Transport Tag – Gas documents deal with pipeline system components or services exclusively.</p> <p>Invoice-Gas and Material Requisition-Gas documents that indicate material was actually received should be categorized as Transport Tag-Gas.</p>	<ul style="list-style-type: none"> • Combined Shipping Notice and Transfer • Partial Shipment Acknowledgment • Shipping Notice • Freight • Truck No. • Hauling • Delivery • Received • [Gas Keywords]



Table 5: Reports and Forms

Document Type	Definition	Key Words
A-Form & Leak Test/Report	An A-Form is submitted when pipe is inspected, tested, or repaired, often for a leak. It can also be used to document the installation of weld patches to repair leaks or third-party damage (i.e., dig ins). Leak Tests or Reports are summaries of a leak test or survey. They contain pre-test pipeline data, as well as actual test data, often in the form of a leak test pressure chart. A leak test will typically run for several days, at fairly low pressure, and will have very stable pressure readings compared to an Operating Pressure Chart.	<ul style="list-style-type: none"> • A Form • Leak number • "Leak Survey, Repair, Inspection" and Gas Quarterly Incident Report • Initial Leak Data • Field Leak Test Report • Form for Recording Failure • "Pipeline Inspection, Leak and/or Shut Down Report" • Purge Procedure
H-Form	H-Forms are Direct Examination Data Sheets. These forms provide information about the examination of pipe segments in the field.	
Hydrostatic Test Plan	A Hydrostatic Test Plan is a comprehensive plan for hydrostatically testing a section of pipeline. It includes a sequence of operations that lists all of the steps for hydrostatic testing, the types of test heads and positions, where the water is coming from, and where it will be de-watered to. A Hydrostatic Test Plan does NOT include test results.	<ul style="list-style-type: none"> • Hydrotest • Graph • Sequence of Operations (not Shutdown/Clearance Procedures) • Water and de-water
Inspection/Test-Other	Inspection/Test – Other documents provide insight into the periodic inspections or tests completed on pipe segments.	<ul style="list-style-type: none"> • Corrosion Inspection • Hazardous Test • Inspection Report • Mainline and Tie-In Welds • Test Certificate • Visual Inspection • Welder Qualification Test • [Gas Keywords]
MAOP Document	MAOP Documents contain pressure information for pipelines. These documents establish the maximum pressure at which a gas pipeline, pipeline segment, or component in operation prior to July 1, 1970 is qualified to operate according to the requirements of 49 CFR 192 (grandfather clause). It usually lists the highest pressure the gas pipeline, pipeline segment, or component was operated at during the 1965-1970 period.	<ul style="list-style-type: none"> • Establishing MAOP • Initial Report of Pipeline and Mains Operating at or Above 20% SMYS • MAOP Documentation • Pipeline Information
Operating Pressure Chart (Front and Back)	Operating Pressure Charts are placed in various locations in the system to monitor pressure. They resemble STPR Charts, but the unit of measurement on the perimeter of the chart is generally in days as opposed to hours for STPR charts. The pressure readings on Operating Pressure Charts are highly variable compared to the readings on STPR charts and leak test charts.	
Operating Pressure Log	Operating Pressure Logs contain the same information as Operating Pressure charts but it are presented in a tabular format. The data may be hand written from a mechanical recorder or a print out from an electronic recorder.	



Table 5: Reports and Forms (continued)

Document Type	Definition	Key Words
STPR	Strength Test Pressure Reports are pressure tests used to prove the mechanical strength of the pipeline. Coding for STPR includes anything that states Strength Test Pressure Report in the title, excluding the back of the STPR Chart (circle diagram chart).	<ul style="list-style-type: none"> • Field Pressure Test Report • Hydrostatic Test Results • Strength Test Pressure Report • Test Pressure Report • Emergency Pipe Test Information Form
STPR Chart (Front and Back)	STPR Charts are circle graphs that contain information about the duration and pressure measurements of the pressure test. Both the front and back image should be coded as "STPR Chart". The back of the chart may or may not appear to be within a circle. It will state Strength Test Pressure Report in the title, but because it is a STPR Chart, it should be labeled STPR Chart.	
STPR Log	STPR Logs typically follow the STPR and/or STPR Chart and contain a list of times (usually 15 to 30 minute intervals) and corresponding pressure readings.	<ul style="list-style-type: none"> • Deadweight Test (Log) • Hydro Test Data Sheet • Hydrotest (Log) • Hydrostatic Test (Log)
STPR Sketch	STPR sketches usually follow STPRs (i.e., the sketch is often drawn on the reverse side of the STPR form). They are sometimes located on the same page as the STPR (in which case the document would be doc typed as a STPR).	<ul style="list-style-type: none"> • Hydrostatic Test Sketch • Test head
Weld Map	Weld Maps are schematics showing the locations of welds on the pipe segment and contain information about the weld type as well as who completed and supervised the work. Weld Maps may appear as tables on a separate page from the schematic.	<ul style="list-style-type: none"> • W-##
Uprate Procedure	Uprate Procedure documents detail the process of increasing the maximum allowable operating pressure (MAOP) on certain pipe sections. They include a description and purpose of the uprate, specifications of the pipeline, date of uprate, requirements, and work to be done following the uprate. They are usually followed by pre- and post-uprate surveys.	<ul style="list-style-type: none"> • 1 Week After Uprate – Post-Survey • Pre-Survey & Day of Uprate Survey • Uprating Maximum Allowable Operating Pressure
X-Ray Document	X-Ray documents contain results of x-ray examinations for a specified segment of pipe. This includes total number of welds tested and total number of welds rejected. X-ray inspections also involve visual inspections. Although the word radiographic is replaced with visual, this is still an X-Ray document.	<ul style="list-style-type: none"> • Certified Radiographic Field Report • Inspection Report of Welds on Piping Systems Intended to Operate at 20% or more of Specified Minimum Yield Strength • Nondestructive Testing of Welds on Facilities Designed to Operate at 20% or More of Specified Minimum Yield Strength • Weld Inspection
Gas Service Record	A Gas Service Record is a description of small jobs performed on pipelines for installing taps to tie in a customer to a distribution feeder main (DFM) or transmission line.	<ul style="list-style-type: none"> • Gas Service Record
Regulator Data Sheet	Used for maintenance of the pressure regulator, periodic maintenance of the calibration on the regulators and verification of proper performance.	<ul style="list-style-type: none"> • Regulator Station Data Sheet • District Regulator Data Sheet • Class A (Diagnostic) and Class B (Internal) Inspections • Form 62-6321, 62-6321A, or 62-6271

**Table 5: Reports and Forms (continued)**

Document Type	Definition	Key Words
Valve Maintenance Record	49 CFR Paragraph 192.745, requires inspection and partial operation of each transmission line valve that might be required during any emergency at intervals not exceeding 15 months, but at least once each calendar year. These inspections are recorded on the Valve Maintenance Record or Card. General valve information is on the front of the card and the service history is on the back.	<ul style="list-style-type: none"> • Scheduled maintenance • Service History • Valve Data • Form F-4430-04-1

Table 6: Accounting

Document Type	Definition	Key Words
Journal Voucher – Gas	<p>Accounting documents with material codes that could be for pipeline components are to be typed Journal Voucher-Gas. If an accounting document has material codes with non-pipeline descriptions or no material codes at all, it should be typed as Non-PFL.</p> <p>Journal Voucher-Gas documents are written authorizations prepared for any financial transfer between accounts in order to distribute interdepartmental charges, reclassify, adjust, or correct financial data for gas-related items. Typically will have Journal Voucher or Journal Entry as a header.</p> <p>Does not include "Excerpt of Journal Entry" (Non-PFL).</p>	<ul style="list-style-type: none"> • Journal Voucher • Journal Entry • Material Code (typically six digits, aka Commodity Code, Cost Element, Reference Number) • [Gas Keywords]

Table 7: Miscellaneous – Job Related

Document Type	Definition	Key Words
Soils/Trenching Information	Soils or Trenching Information documents contain information about the specific area where the project is being completed including but not limited to any type of soil testing.	<ul style="list-style-type: none"> • Compaction Test Results • Trenching Requests • Trench Excavation Requirements • Soil Test Report • Analytical Report • Soil Test Report/Analytical Report
Miscellaneous	The Miscellaneous document type category is reserved for all documents that cannot be identified as one of the aforementioned document types and includes pipe or feature specification required for PFL preparation. This includes the outer diameter, wall thickness (W.T.), seam type, grade or yield strength, and ANSI pressure rating.	<ul style="list-style-type: none"> • [Gas Keywords]
Non-PFL Document	<p>These are any documents not needed for PFL preparation.</p> <p>If an accounting document has material codes with non-pipeline descriptions or no material codes at all, it should be a Non-PFL document type. Any document dealing only with pipeline components that have been Abandoned, Retired, Destroyed, Removed, or Overdrawn is a Non-PFL document.</p>	<ul style="list-style-type: none"> • Does NOT contain Gas Keywords • Blank forms