Comparison of Pipeline Performance Tracking System (PPTS) and Office of Pipeline Safety RSPA 7000-1 (OPS) Reporting Forms, June 2002

Item	PPTS	PPTS Language	OPS	OPS Language	Comparison Notes
Description	Part		Section		

1.	Report Type			Part A	☐ Original Report ☐ Supplemental Report ☐ Final Report	PPTS: no equiv OPS: all reports
2.	Operator ID	Beginning	API-assigned User Name	Part A	Operator's OPS 5-digit ID	For all reports
					Pipeline owner's OPS 5-digit ID if operator not owner	
l					Name and address of Operator	
3.	Date	<u>DS</u>	Date of release	Part A	Time and date of the accident Hr/month/day/year	OPS also asks for time
4.	Inter/Intra	DS	Is pipeline or facility: ☐ interstate ☐ intrastate	Part C	Is pipeline interstate? O Yes O No	Inter/Intra v Y/N; PPTS asks question for all, OPS only for Long Form
5.	Gathering	<u>DS</u>	Is pipeline/facility a gathering line (acc. to function not Part 195 defn.)			No OPS equiv.; OPS doesn't regulate rural gathering lines (≤8" Ndiam)
ļ			Under Part 195 or state equiv., is it □ regulated □ unregulated			(So Nulaili)
6.	DOT 7000-1	DS	Was or will a DOT 7000-1 report be submitted?			No OPS equiv. necessary.
	Ot-t- Deport	100	Yes No Don't know			ODO:
7.	State Report	<u>DS</u>	Was or will a telephonic or written release report be made to any State agency? ☐ Yes ☐ No ☐ Don't know			OPS: no equiv.
8.	NRC Report	DS	Was a telephonic report made to the National Response Center for this incident? ☐ Yes ☐ No ☐ Don't know	Part A	Telephone Report NRC Report Number month/day/year	Y/N v report reference number and date
9.	Spill			Part A	Commodity Spilled OYes O No	PPTS only covers releases. Incidents can be reportable to OPS for other reasons, e.g. injury.
10.	Commodity Type	DS	Transported commodity released (check one): HVL's etc./CO2, N2 etc./Petroleum products/Crude oil	Part A	Classification of commodity spilled: HVL's etc./CO2 etc./Petroleum products/Crude oil	Commodity class detail identical except PPTS lists N2 as well as CO2 as example for its Commodity Class 2.
11.	Commodity		productor crude cr	Part A	Name of commodity spilled	PPTS only requires

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						commodity class
	1			1	,	
12.	Property	SM, CQ	Was the area affected by the release contained on the company-controlled facility (excluding right-of-way)? ☐ Yes ☐ No ☐ Don't know	Part C2	Location of system involved (check all that apply) ☐ Operator's Property ☐ Pipeline Right of Way + 1 other option (see next)	Company property info: PPTS collects for all incidents. <i>OPS only for larger spills</i> . OPS also asks about right-of-way
13.		<u>DS</u>	Did this release reach any "high consequence areas" (HCA's) (49 CFR Part 195.452)? Yes No Don't know If yes, specify HCA types (Comm navig.; High pop; Other pop; USA water; USA ecological) and whether identified/not identified in Integrity Management Program	Part C2	Location of system involved (<i>check all that apply</i>) ☐ High Consequence Area (HCA) + 2 other options (see previous) If HCA, describe	PPTS collects info on HCA for all incidents, and requires more detail. OPS asks only for larger spills.
14.	Size range	<u>DS</u>	Approximate size range of release: □ <1 gal sheen on water (Part SM) □ 1 gal – 4.99 bbls (Part SM) □ ≥5 bbls			OPS requires specific volume for each release; for spills <5 barrels, PPTS relies on size range alone and directs user to Part SM (Short Form)
15.	Amounts Released and Recovered	<u>DS</u>	Estimated size of release: bbls Amount of commodity recovered: bbls	Part A	Estimated amount of commodity involved : O Barrels O Gallons (check only if spill is less than one barrel) Amounts Spilled : Amounts Recovered:	PPTS only requires specific volumes for spills of ≥5 barrels; all units are barrels. OPS requires reporting in gallons for spills <1 barrel
16.	Additional Recovery	<u>DS</u>	Is recovery of additional commodity anticipated? ☐ Yes ☐ No ☐ Don't know			No specific OPS question, but Supplemental or Final report to OPS could provide actual
17.	J J			Part C	Line segment name/ID	No PPTS equiv. OPS: all larger spills
18.	Federal			Part C	Accident on Federal land other than Outer Continental Shelf O Yes O No	No PPTS equiv. OPS: all larger spills
19.	Onshore/ Offshore	DS, SM	Did release occur: ☐ Onshore ☐ Offshore	Part C	(Is pipeline) Offshore: O Yes O No	On/Off v Y/N. On 7000-1, must use detailed form for any spill to water
20.	Onshore	<u>DS</u>	State	Part A	Location of accident:	Onshore spills only. PPTS for

	Item Description	PPTS Part	PPTS Language	OPS Section	OPS Language	Comparison Notes
	Location				Latitude; Longitude; City; County or Parish; State; Mile post/valve station or survey station no.	larger spills only; less detail than OPS
21.	Onshore Non- rural	DS, SM	Did release occur in "non-rural" area (Part 195 definition)? ☐ Yes ☐ No ☐ Don't know			No OPS equiv.
22.	Offshore	<u>DS</u>	☐ Federal OCS waters ☐ State waters Offshore area (without block number e.g. Ship Shoal) Approximate water depth: feet	Part C	Area Block # State //_/ or Outer Continental Shelf □	Offshore spills only. PPTS for larger spills only; does not require Block #. OPS requires detailed form for all spills to water.
23.	Accident Area			Part E	Area of accident O Open ditch O Under pavementO Above ground O UndergroundO Under water O Inside/under building O Other	OPS: all larger spills PPTS: no direct equiv., but some detail in Part FA
24.		CQ, SM	Was there a fire? □ No □ Yes	Part F	Product ignited OYes O No	N/Y v Y/N. PPTS covers any fire linked to incident; OPS limits to fire involving the transported product. If fire/explosion linked to spill <5 gallons, PPTS user switched back to Long Form. Separately, may report fire or explosion to OPS (Part H4) or fire to PPTS (Part TP, Pop-up #3) as the primary cause of a Third Party accident
25.	Explosion	CQ, SM	Was there an explosion? □ No □ Yes	Part F	Explosion OYes O No	N/Y v Y/N For spill <5 gallons (Part SM), PPTS combines with prior question on fire, and participant is redirected to Long Form. See also note in previous section on Third Party accidents.
26.	Death/Injury	CQ, SM	Any deaths or injuries? □ No □ Yes			If death/injury linked to spill <5 gallons, PPTS user switched back to Long Form. Part CQ is a portal to Part PB in PPTS.

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27.	Numbers dead/injured	<u>PB</u>	Fatalities and/or injuries: Number of operator employees/Number of contractor employees working for the operator/Number of others/Total killed injured	Part F	Same as PPTS (but with slightly different wording)	All reportable incidents with a death or injury.
28.	Evacuation	CQ	Public evacuation necessary? □ No □ Yes (below)	Part F	☐ Evacuation (general public only) / / / / people	Only OPS requires numbers of people evacuated
29.	Evacuation type	<u>PB</u>	Public evacuation undertaken (check all that apply): □ Precautionary evacuation undertaken by company □ Evacuation required by or initiated by a public official	Part F	Reason for Evacuation: Same choices as PPTS (but with slightly different wording)	
30.	Water Impact	CQ, SM	Type of water impacted (check all that apply): None Surface water, Was intake shut? Groundwater, Was well shut? Drinking water for human cons. Unusually environmentally sensitive drinking water source	Part F	Water Contamination: O Yes O No (If Yes, provide the following) Amount in water barrels Ocean/Seawater O NoO Yes Surface O No O Yes Groundwater O No O Yes Drinking water O No O Yes If Yes, O Private well O Public water intake	For small releases (Part SM), PPTS asks this for onshore spills only.
31.	Ecological Impact	CQ	Type of ecology impacted (check all that apply): None Vegetation/plant life Fish/aquatic life (excl livestock) Birds (excl. livestock) Other wildlife (excl. livestock) Livestock	Part F	Wildlife Impact: Fish/aquatic O Yes O No Birds O Yes O No Terrestrial O Yes O No	All larger spills OPS is limited to wildlife impacts. PPTS also includes impacts to vegetation and livestock.
32.	Soil Contamination			Part F	Soil Contamination O Yes O No If Yes, estimated number of cubic yards:	No PPTS equivalent, even though has subsequent question on soil remediation.
33.	Remediation	CQ	Remediation activities undertaken related to the following (check all that apply): None needed; Vegetation /plant life; Soil; Surface water; Ground-water;	Part F	Anticipated remediation O Yes ONo If Yes, check all that apply: □ Surface water □ Groundwater □ Soil □ Vegetation □ Wildlife	PPTS refers to work done and OPS to work anticipated. PPTS breakout is more detailed.

	Item	PPTS	PPTS Language	OPS	OPS Language	Comparison Notes
	Description	Part	11 10 Language	Section	Of 5 Language	Companson Notes
	Decemption	T uit		Geotion	<u> </u>	
			Drinking water; Fish/aquatic life; Birds;			
			Other wildlife; Livestock			
34.	Other	CQ	Were other environmental projects			PPTS: larger spills
	Environmental		performed?			No OPS equiv
			□ No □ Yes □ Unknown			
			If Yes Is it:			
			☐ Underway ☐ Anticipated			
			□ Planned			
35.	Endangered	CQ	Were threatened or endangered species			PPTS: larger spills
	Species		or plants injured (animal, plant, fish, or			No OPS equiv
	'		bird)?			·
			□ No □ Yes □ Don't know			
36.	Damage	CQ	Has a Natural Resources Damage	Part F	Long term impact assessment	N/Y v Y/N
	Assessment		Assessment been performed? ☐ No		performed:	Larger spills only.
			☐ Yes ☐ Don't know		O Yes O No	Only PPTS specifies NRDA
			If Yes, Corrective action performed or			and asks about corrective
			planned? □ No □ Yes			action
37.	Property	CQ	Public or commercial property disrupted			No direct equiv. in OPS, but
	Damage		or damaged?			OPS Part A asks for
			□ No □ Yes □ Don't know			estimated cost for damage to
			If Yes, check all that apply:			public/private property.
			(Residential-Personal/Recreation/Bus-			
	Financial	1	Comm'l/Comm'lNavig/Farm-Agric.)	D A	1 (5-6	No DDTO amin
38.	Financial Losses			Part A	Losses (Estimated) Public/Community Losses reimbursed	No PPTS equiv. OPS requires for all
	LUSSES				by operator: (property	reportable spills
					damage/emergency response/	reportable spills
					remediation/Other)	
					Operator Losses:(product lost/Op.	
					property damage/Other)	
					(specify in \$ by type)	

	Item	PPTS	Comparison of PPTS and OF PPTS Language	OPS	OPS Language	Comparison Notes
	Description	Part		Section		
39.	Facility Involved	SM, FA	Part of system involved (check one) □Aboveground storage tank □Cavern/ belowground storage	Part C	Part of system involved in accident Same choices as PPTS plus "Other".	OPS: larger spills only. PPTS for both Short and Long Forms, but in different
			□Pump station/terminal/tankfarm piping & equipment, including sumps □Onshore pipeline, including valve site □Offshore pipeline, including platforms			locations
40.	Facility Detail	FA	Part of system involved (check one main category & one subcategory)			For larger spills, PPTS requires additional detail on
			Each system category in Q.39 expanded with 2-4 subcategories e.g. □Aboveground storage tank □ Low pressure □pressurized			facility where spill happened. No OPS equiv.
41.	SMYS	FA	Does facility operate above 20% SMYS? ☐ Yes ☐ No			PPTS: Large spills at pump station/terminal/ tank farm or pipeline. PPTS asks specifics only for pipe (see below). OPS: Wants specifics, not range, for all (see below)
42.	SMYS level	PI	SMYS (psi) □ Don't know	Part D	SMYS / / / / / /	PPTS: If spill covered by Q.41 is at pipe or pipe seam, needs specific SMYS OPS: All large spills
43.	Type of Failed Item	FA	Item involved (check one): Pipe/Pipe Seam Weld Valve Pump Meter Prover Scraper Trap Sump/Separator Weld Fitting Repair Fitting Threaded or Other Fitting Other	Part C	Failure occurred on O Body of Pipe O Pipe Seam O Scraper Trap O Pump O Sump O Joint O Component O Valve O Metering Facility O Repair Sleeve O Welded Fitting O Bolted Fitting O Girth Weld O Other (specify)	Differences in item lists are numerous. PPTS: Large spills involving pump station/terminal/ tank farm or pipeline. OPS: All large spills
44.	Seam Failure	PI	Was this a seam-related failure? ☐ Yes ☐ No ☐ Don't know			PPTS: Large spills involving pipe or pipe seam. 'Pipe seam' separate failure category for OPS in Q.43

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	Item Description	Part	PPTS Language	Section	OPS Language	Comparison Notes
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45.		<u>FA</u>	Year item was installed (actual or	Part C	Year the component that failed was	PPTS: Large spills at pump
	Install Date		estimated if necessary)		installed: <u>yyyy</u>	station/terminal/ tank farm or
						pipeline.
40	Dina Dataila	DI	Naminal pipa sina inghas	Part D	Naminal pina sina	OPS: All large spills PPTS: Large spill involving
46.	Pipe Details	<u>PI</u>	Nominal pipe size inches	Part D	Nominal pipe size in.	pipe or pipe seam.
			Wall thickness inches		Wall thickness in.	OPS: All large spills
			Type of pipe (check one):		Specification	For pipe type, PPTS has 13
			(13 options)		Seam type	options; OPS has open
			Manufacturer		Valve type	response.
			Year of manufacture		Manufactured byin year <u>yyyy</u>	Тобронов
	T	1				
47.	Pipe Failure	<u>PI, WL</u>	For Pipe/Pipe Seam: Nature of failure	Part C	Type of leak or rupture	PPTS: Large spill from
			(check one):		OLeak:	pipe/pipe seam or where girth
			☐ Pinhole leak or crack		O Pinhole O Connection Fail	weld, fabrication or repair weld is involved
			Rupture		O Puncture, diam. (inches) ORupture:	OPS: Any large spill where
			□ Puncture		O Circumferential – Separation	system failure on pipeline
			☐ Other		O Longitudinal	Only OPS asks for size detail.
			For Girth, Fabrication or repair weld: Nature of failure (check one):		Tear/Crack (inches)	Only of o dono for 6126 detail.
			□ Pinhole leak or crack		Propagation (feet)	
			☐ Total separation of weldment		ON/A	
			□ Partial separation of weldment		OOther	
			Partial Separation of Weldinent			
48.	Release Cause	<u>CA, TK,</u>	Primary cause of release (check one):	Part A	Causes for small spills only (5 gallons	PPTS uses same list of first-
		<u>SM</u>	☐ 3rd party damage (current/ past)		to under 5 barrels)	level causes for both small
			□ Corrosion			and large spills, then looks for
			☐ Pipe matl/seam/weld, repair weld		Matches PPTS list except Third Party	second-level causes for larger
			☐ Equip malfn/failure non-pipe		Damage split into Excavation and Other	spills.
			☐ Operator error/other incorrect op.		Outside Force	OPS does not specifically ask
			☐ Natural forces			for first level causes for large
			□ Other			spills, but Part H groups second level causes
						according to first-level list.
49.	Operating	CD	Max. op. pressure of failed comp.	Part C	Max operating pressure (MOP)	OPS: all large spills
	Pressure		(psig): □ Don't Know		Est. at point/time accidentPSIG	PPTS: large spills at pipeline
			Est. pressure at time/location failure		MOP at time accident:PSIG	or pump station/terminal/ tank
			(psig): □ Don't know			farm excl. sumps/separators
50.	Pressure Test	CD	Had there been a pressure test on the	Part H	Was part which leaked pressure tested	OPS: all large spills caused
l			system?		before accident occurred? OYes, ONo	by material or weld failures.
	1	1		1	1	1

Comparison of PPTS and OPS Reporting Forms, June 2002

PPTS Language

OPS OPS Language

	Item	PPTS	PPTS Language	OPS	OPS Language	Comparison Notes
	Description	Part		Section		
			☐ Yes ☐ No ☐ Don't know If Yes (answer for most recent test) Duration (hrs.) ☐ Don't know Max. press (psig) ☐ Don't know Year ☐ Don't know		(If yes, answer following about test) Date: yr/mo/day Medium: Water/Inert Gas/Other Time held at test pressure:hr. Press. at accident point:PSIG	PPTS: all large spills at pipeline or pump station/terminal/ tank farm excl. sumps/separators, regardless of cause OPS seeks more test detail.
51.	Inspection Device (cont'd)	CD	Had an in-line internal inspection device been run at point of failure? Yes No If Yes, specify all types (High res. mag. flux; Low res. mag. flux; UT; Geometry; Caliper; Crack; Hard spot; Other) tools run and year each last run	Part C	Is segment configured for internal inspection tools? OYes O No Had an in-line inspection device been run at point of failure? O Yes O No O Don't Know O Not Possible due to physical constraints in the system If Yes, specify (This part identical to second part of PPTS question)	Both OPS and PPTS for large spills from a pipeline. PPTS: also for spills at a pump station/terminal/ tank farm excl. sumps/separators OPS allows for infeasible inspection
52.	Initial Leak Detection	<u>CD</u>	Was the release initially detected by? (Check one) CPM/SCADA; Remote operator. personnel; Pressure/leak test; Local op personnel/Proc/equip; Air/ground surveillance; Third party; Other	Part G	Identical to PPTS question	OPS: all large spills PPTS: large spills at pipeline or pump station/terminal/ tank farm excl. sumps/separators
53.	Leak Confirmation	CD	Was the presence of the release confirmed by? (Check one) (Same list as in prior question)			PPTS: large spills at pipeline or pump station/terminal/ tank farm excl. sumps/separators No OPS equiv.
54.	Detection Tool Performance	CD	Did the applied leak detection tools perform as expected? ☐ Yes ☐ No ☐ Don't know If No, Reason for non-performance (check one): Field instrumentation failure/ Communications failure/ Software failure/ Human error/ Other			PPTS: large spills at pipeline or pump station/terminal/ tank farm excl. sumps/separators No OPS equiv.
55.	Leak Duration			Part G	Estimated leak duration days hours	OPS: All Large spills No PPTS equiv
56.	based Capability			Part G	Computer based leak detection capability in place? O Yes O No	OPS: All Large spills No direct PPTS equiv.
57.	Federal Control	CD	Did the Federal Government take control			PPTS: large spills at pipeline

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PPTS Language

OPS OPS Language

	Item	PPTS	PPTS Language	OPS	OPS Language	Comparison Notes
	Description	Part		Section		
			of the response? ☐ Yes ☐ No ☐ Don't know			or pump station/terminal/ tank farm excl. sumps/seps No OPS equiv.
58.	Isolation Isolation (cont'd)	CD	Was there an isolation? ☐ Yes ☐ No (if No, skip remainder of section) Approx. distance between valves closed for initial isolation? ☐ miles ☐ Don't know How long from release detection/ confirmation to initial isolation? ☐ mins ☐ Don't know Approx. distance between valves closed for final isolation, if needed? ☐ miles ☐ Don't know How long from release detection/ confirmation to final isolation? ☐ mins ☐ Don't know	Part C	Type of block valve used for isolation of immediate section: Upstream/Downstream Manual/ Automatic/Remote Control/ Check Valve Length of segment isolated ft Distance between valves ft	OPS: large spills from a pipeline PPTS: spills ≥ 50 barrels that involve a pipeline. OPS assumes any pipeline incident involves an isolation. OPS focus is equipment and distance; PPTS focus is time and distance
59.	Weld Failure	<u>WL</u>	Nature of failure (check one): □ Pinhole leak or crack □ Total separation of weldment □ Partial separation of weldment Was this an acetylene weld? □ Yes □ No □ Don't know			PPTS: large spills "involving a weld, including heat-affected zone" No OPS equiv.
60.	AST Release	TK	Description of failure (check one): Single Bottom System; Double Bottom System; Shell or Head; Overfill/overpressure (Operator error/ Equipment malfunction/ Other); Appurtenance (Roof drain failure/Other); Damage by Third Party/Operator/Natural Force; Other Was this a catastrophic failure? Yes No Don't know			PPTS: Large spills from aboveground storage tanks OPS: No equiv.
61.	AST Testing	<u>TK</u>	Tank hydrotested/pressure tested upon construction or major repair? Bottom cathodically protected? internally			PPTS: Large spills from aboveground storage tanks OPS: No direct equiv., but

	Item Description	PPTS Part	PPTS Language	OPS Section	OPS Language	Comparison Notes
			lined/coated? Year most recent API 653 internal tank inspectn. and shell thickness external tank inspectn. (or equiv)			pressure test question in section on material and weld failure, H5
62.	Type Third Party Damage	<u>TP</u>	Failure occurred due to (check one): 3rd party excavation/constrn etc. at time Prior 3rd party excvn/constn. Other (vandalism, 3rd party vehicle contact with facility, other intentional/unintentional acts)	<u>Part</u> <u>H3/H4</u>	Excavation Damage Operator [not Third Party] Third Party Other Outside Force Damage Rupture of Prev. Damaged Pipe + fire/expl, vehicle, vandalism	PPTS has three broad categories (Excavation at the time, Prior excavation, other). OPS has two broad categories (Excavation and Other), with Rupture of Prev. Dmgd Pipe a subcategory in Other.
63.	Third Party Excavation	TP	Damaging party or activity (check one): Pipeline operator; Underground facility operator (7 subclasses); Agriculture; Homeowner; Resid/comml dev; Road; Railroad; Waterway/reservoir; Offshore; Inland waterway; Other	Part H3	Excavator group: O General Public O Government O Excavator not Op./subcontractor Type: Road; Pipeline; Water; Electric; Sewer; Phone/Cable; Landowner; Farming; Railroad; Pipeline op/ subcontractor; Nautical Ops; Other (specify)	PPTS: large spills due 3 rd party activity at time failure OPS: large spills due 3 rd party excavation Only OPS identifies broad excavator group: Gen'l Public/Gov't / Excavator. Excavation types not identical, but will largely allow comparison.
64.	Depth of Cover	TP, TP	If on land, depth cover at damage site: inches □ Don't know	Part E	Depth of cover: inches	PPTS: large spills due 3 rd party activity (Q for both concurrent and prior damage) OPS: all large spills
65.	Type of Excavation	<u>TP</u>	Did damage result from(check one): ☐ Drilling, boring, augering ☐ Blasting, tunnelling, mining ☐ Trenching, grading, backfilling ☐ Other	Part H3	Excavation was: O Open Trench O Sub-strata (boring, directional drilling, etc)	PPTS: large spills due 3 rd party at time accident. OPS: large spills due 3 rd party excavation. PPTS 4 poss, OPS 2
66.	One-Call	<u>TP</u>	Was OneCall system utilized? □ None Available □ Yes □ No Pipeline oper's response to One-Call notifcn. (check all that apply): Marked centerline; On-site during excvn; Excv. line for 3rd party; Unaware excvn. (Patrol frequency: Weekly/Bi-	Part H3	Excavation was ongoing (≥month) OYes mm/dd/yyyy ○ No Prior notification of excavation? O Yes mm/dd/yyyy; ○ No Notification received from: O One Call System ○ Excavator O Contractor ○ Landowner	PPTS: large spills due 3 rd party at time accident. OPS: large spills due 3 rd party excavation. PPTS does not ask about duration of excavation; OPS allows for other than One Call notification; PPTS asks

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			weekly/Other) Pipeline ROW permanently marked and visible to 3rd party at site? ☐ Yes ☐ No ☐ Don't know Job-specific excvn. plan in effect? ☐ Yes ☐ No ☐ Don't know		Was pipeline marked as result of location request for excavation? O No O Yes (Temporary (how?) Permanent; Accurate/Inaccurate; within required time)	additional detail about response to One-Call and about patrol frequency [if unaware excavation].
67.	Cause for 3 rd Party damage at time failure	<u>TP</u>	Apparent primary cause of damage (check one): Failure of 3rd party to: Use One-Call; Wait; Respect pipeline directions/proc; Protect facilities Failure of pipeline operator to respond/properly mark pipeline Other			PPTS: large spills due 3 rd party at time accident. OPS: no equiv.
68.	Cause Prior 3rd Party Damage	<u>TP</u>	Poss cause damage (check one): Onshore constrn/excvn equip. Offshore/inland waterway activity Approx. water depth:ft Other □ No clues to cause			PPTS: large spills due prior 3 rd party activity. OPS: no equiv.
69.	Evidence Of Prior Damage	<u>TP</u>	Evidence of damage (check one): Coating; Dent/buckle w/o metal loss; Gouge/metal loss; Other Posn damage on pipe (check one): Top (10-2 o'clock); Side (8-10 & 2-4 o'clock); Bottom (4-8 o'clock)			PPTS: large spills due prior 3 rd party activity. OPS: No direct equiv.
70.	Cause Other 3rd Party Damage	<u>TP</u>	Cause 3rd party damage (check one): Vandalism/theft/mischief; Sabotage; Vehicle (not driven by op employee); Other party; Fire Other	Part H4	☐ Fire/Explosion: ○ Man made ○ Natural ☐ Vehicle unrelated to excavation damaging pipe ☐ Rupture of Previously Damaged Pipe ☐ Vandalism	PPTS: large non-work related 3 rd party spills OPS: Large spills (sub set of primary cause options) No direct OPS equiv. to PPTS Sabotage; Part H4 is the place to report Rupture of Prev. Dmgd Pipe as a cause in OPS; no add'l detail
71.	Corrosion Location	CR	Location of corrosion □ External □ Internal	Part H1	☐ External Corrosion ☐ Internal Corrosion	PPTS: large non-AST spills due corrosion OPS: Large spills (sub set of primary cause options)

	Item Description	PPTS Part	Comparison of PPTS and OF PPTS Language	OPS Section	OPS Language	Comparison Notes
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72.	Corrosion Near Prior Damage			Part H1	Pipe previously damaged in area of corrosion? O No O Yes If yes, time prior to accident:: yearsmonths Unknown □	PPTS: No equiv. OPS: Large spills from pipeline due to corrosion
73.	External Corrosion	CR	Type of corrosion (check one): Galvanic; Microbiologically-induced; Atmospheric; Stress corrosion cracking; Stray current Selective seam; Other	Part H1	Cause of Corrosion Same as PPTS options + "Cathodic Protection Disrupted"	PPTS: large non-AST spills due external corrosion OPS: Large spills due any corrosion No "CP Disrupted" question in PPTS.
74.	Cathodic Protection	CR	Facility under cathodic protection? ☐ Yes ☐ No ☐ Don't know Year CP installed: Close Interval Survey performed? ☐ Yes ☐ No ☐ Don't know Year of most recent CIS:	Part H1	Was corroded part of pipeline under cathodic protection prior to discovering accident? O No O Yes Year Protection Started yyyy	PPTS: large non-AST spills due external corrosion OPS: Large spills due any corrosion No CIS question in OPS
75.	Coating	CR	Facility externally coated/painted? Yes No Don't know Type (check one): Coal Tar; Tape; Extruded plastic; Fusion-bonded epoxy; Paint; Other; Unknown Was shielding/tenting/ disbonded coating a factor in this failure? Yes No Don't know Was damaged coating a factor in this failure? Yes No Don't know	Part H1	Pipe Coating O Bare O Coated	PPTS: large non-AST spills due external corrosion OPS: Large spills due any corrosion PPTS asks for much more detail on coatings, coating defect and coating failures
76.	Operating Temperature	CR	Was pipeline or equipment at site of failure operating > 100 degrees F? ☐ Yes ☐ No ☐ Don't know			PPTS: large non-AST spills due external corrosion. OPS: no equiv.
77.	Visible Corrosion			Part H1	Visual Examination O Localized Pitting O General Corrosion O Other	PPTS: No equiv. OPS: Large spills from pipeline due to corrosion
78.	Road Crossing	CR	Did failure occur within or just outside of a road crossing casing? ☐ Yes ☐ No ☐ Don't know			PPTS: large non-AST spills due external corrosion. OPS: no equiv.

	1	1	Comparison of PPTS and OP			T
	Item Description	PPTS Part	PPTS Language	OPS Section	OPS Language	Comparison Notes
79.	Internal Corrosion Mitigation	CR	Were Internal corrosion mitigation systems/procedures used, e.g. inhibitors, dewatering pigs run ☐ Yes ☐ No ☐ Don't know If yes, continuous since: yyyy			PPTS: large non-AST spills due internal corrosion. OPS: no equiv.
80.	Type of Pipe Failure	PI		Part H5	☐ Body of Pipe: Dent; Gouge; Bend; Arc Burn; Other ☐ Component: Valve; Fitting; Vessel; Extruded Outlet; Other ☐ Joint: Gasket; O-Ring; Threads; Other	PPTS: No direct equiv.; but some detail asked in Part FA. PPTS asks about evidence of damage if accident due to Prior TP Damage OPS: Large spills due to material or weld failure (sub set of primary cause options)
81.	Type of Weld Failure	PI	Type of pipe (check one): Seamless; Flash welded; Spiral welded SAW; ERW; Butt-welded; Spiral welded ERW; Single SAW; Lap-welded; Plastic/non-metallic; DSAW; Continuous welded; Other; Unknown	Part H5	☐ Butt: Pipe; Fabrication; Other ☐ Fillet: Branch; Hot Tap; Fitting; Repair Sleeve; Other ☐ Pipe Seam: LF ERW; DSAW; Seamless; Flash Weld; HF ERW; SAW; Spiral; Other	PPTS: Pipe seam question in Part PI; No PPTS detail for "butt" or "fillet" categories. OPS: Large spills (sub set of primary cause options) Differences in seam choices.
82.	Cause of Pipe or Weld Failure	<u>PW</u>	Failure due to (check one): Defective pipe body Defective pipe seam Defective girth weld Defective fabn/repair weld Orig constn/fabn damage/defect Pipe transport damage Prior third party damage Other defective weld or material	Part H5	Type of failure/defect: O Construction: Poor Work; Procedure not followed; Poor Constn Procedure. O Material Was failure due to pipe damage during transport to constn/fabn site? O Yes O No	PPTS: large non-AST spills due pipe/weld failure OPS: Large spills with primary cause pipe/weld failure [Significant differences in structure of questions here]
83.	Other factors; Overpressuriza tion	PW	What other factors do you suspect played a role in the incident? (check all that apply) □Fatigue crack growth; □Over-pressurization; □Ground settling/loss support; □Other factors; □None	Part C	Did an overpressurization occur relating to the accident? OYes O No	PPTS: large spills caused by pipe material or weld failure. PPTS also asks about overpressurization for incidents due to Operator Error OPS: all large spills; no detail on fatigue crack growth, etc. [Differences again]

	Item Description	PPTS Part	PPTS Language	OPS Section	OPS Language	Comparison Notes
	-	•				
84.	Equipment Failure Equip. Failure (cont'd)	EQ	Failure due to (check one): Malfunction control/relief equip Stripped threads, defective/loose fitting/tubing, failed coupling Seal/packing failure Gasket/O-ring failure Other equip/non-pipe failure	Part H6	☐ Malfunction Control/Relief Equip: Control valve; SCADA; Instrumentation; Communication; Block valve; Relief valve; Power failure; Other ☐ Threads Stripped, Broken Pipe Coupling: Nipples; Valve Threads; Dresser Couplings; Other ☐ Seal Failure: Gasket; O-Ring; Seal/Pump Packing; Other	PPTS: large non-AST spills caused by equipment failure OPS: Large spills with primary cause equip. failure OPS asks for sub-category detail PPTS defective/loose fitting/tubing has no specific OPS equiv
85.	Operator Error - Excavation	<u>OP</u>	Nature of failure (check one): □ Excvn or damage to facility/ pipeline by operator/subcontractor There are 5 others [see below]	Part H3	☐ Operator Excavation Damage (including their contractors/Not Third Party)	PPTS: large non-AST spills caused by Operator Error OPS: Large spills with primary cause Excavation Damage
86.	Operator Error - Other	<u>OP</u>	Nature of failure (check one): Excvn or damage to facility/ pipeline by operator/subcontractor Valve left/placed in wrong posn. Pipeline/equip overpressured Motor Vehicle Tank overfilled Other human error	Part H7	☐ Incorrect Operation Type: ○ Inadequate Procedures ○ Inadequate Safety Practices ○ Failure to Follow Procedures ○ Other	PPTS: large non-AST spills caused by Operator Error OPS: Large spills with primary cause Incorrect Operation Differences in choices
87.	Direct Employee	<u>OP</u>	Was the individual involved: □ Direct employee of operator □ Contract employee engaged by the operator			PPTS: large non-AST spills caused by Operator Error OPS: no equiv.
88.	3			Part H7	Number of employees involved who failed a post-accident test: drugs: alcohol:	PPTS: no equiv. OPS: Large spills caused by incorrect operation
89.	Natural Force Damage	<u>NF</u>	Which Natural Forces were involved in this failure (check all that apply): Landslide or mudslide Earthquake Subsidence/other earth movement Wind, hurricane, or tornado Cold weather Frostheave Lightning Heavy rains/floods incl. washout	Part H2	Natural Forces □ Earth Movement: Earthquake; Subsidence; Landslide; Other □ Lightning □ Heavy Rains/Floods: Wash-outs; Flotation; Mudslide; Scouring; Other; □ Temperature: Thermal stress; Frost heave; Frozen components; Other □ High Winds	PPTS: large non-AST spills caused by Natural Forces OPS: large spills with primary cause Natural Force Options are similar but not identical, e.g. PPTS combines landslide & mudslide; subsidence & other earth movement.

	Item Description	PPTS Part	PPTS Language	OPS Section	OPS Language	Comparison Notes
					,	
			☐ Riverbed or seabed scouring			
			☐ Other			
90.	Other Causes	<u>OT</u>	Which of following best describes this failure cause (check one): Unknown at this time Could not be determined Does not fit in any of the other classifications	Part H8	OTHER ☐ Miscellaneous; describe ☐ Unknown ○ Investigation Complete ○ Still Under Investigation (submit supplemental report when complete)	PPTS: large non-AST spills caused by OPS: large spills with primary cause Other OPS provides indication of where revisions likely. Also allows for more detail on the unusual
91.	Feedback	Feedback	Allows user to suggest improvements to Record Release form			PPTS: continuously available as menu item OPS: no equiv
92.	Narrative			Part I	Narrative description of factors contributing to the event	PPTS: no equiv OPS: all large spills

The term "larger spills" or "large spills" for both PPTS and OPS refers to those that must report detailed information on a "Long Form." For PPTS, these incidents involve a release of 5 barrels or more, or a death, an injury, a fire or an explosion. For OPS, these incidents include the same thresholds as PPTS, plus any spill to water.

"AST": Aboveground Storage Tank; "Non-AST": any system part other than an Aboveground Storage Tank

01/01/02 New changes are shown in Bold, Italic, and Red

RELEASE RECORD – HAZARDOUS LIQUID PIPELINE FACILITY

API-assigned User Name	(<u>back)</u>
PART DS. DESCRIPTIO	N OF RELEASE
Date of release://_	_ (back)
Is pipeline or facility:	□ interstate □ intrastate (back)
Is pipeline or facility:	□ a gathering line (based on function, not Part 195 definition) If so, is it □ regulated under Part 195 or its state equivalent □ unregulated under Part 195 (back)
Was or will a DOT 7000-1	report be submitted? Yes No Don't know (back)
Was or will a telephonic o	r written release report be made to any State agency? □ Yes □ No □ Don't know (back)
Was a telephonic report m	nade to the National Response Center for this incident? □ Yes □ No □ Don't know (back)
☐ CO2, N2 or other non-	eleased (check one): lble or toxic fluid which is a gas at ambient conditions flammable, non-toxic fluid which is a gas at ambient conditions oil, or other petroleum product which is a liquid at ambient conditions
Did this release reach a	ny "high consequence areas" (49 CFR Part 195.452)? [note: to be added in new PPTS system] □ Yes □ No □ Don't know
Management Pr leave blank. Commo High po Other p Unusua	pelow the types of HCA's affected and whether they were identified or not identified in your Integrity rogram as HCA's that the pipeline segment "could affect." If a particular type of HCA was not affected ercially navigable waterway identified not identified not identified not identified not identified not identified ally Sensitive Area – Water identified not
Approximate size range o	f release: □ <1 gal sheen on water □ 1 gal − 4.99 bbls □ ≥5 bbls (back) PART SM PART SM
Estimated size of release:	:bbls
Amount of commodity rec	overed: bbls (back)
Is recovery of additional c	commodity anticipated? □ Yes □ No □ Don't know (back)
Did release occur:	□ Onshore □ Offshore (back)

State (back)	☐ Federal OCS waters ☐ State waters		
Did release occur in "non-rural" area (Part 195	Offshore area (without block number e.g. Ship Shoal)		
definition)? ☐ Yes ☐ No ☐ Don't know (back)	Approximate water depth: feet (back)		

PART CQ. CONSEQUENCE OF RELEASE

Was there a fire?	□No	□ Yes <u>(</u>	back)		
Was there an explosion?	□No	□ Yes <u>(</u>	back)		
Any deaths or injuries?	□No	□ Yes	If Yes		Complete also PART PB (back)
Public evacuation necessary?	□No	□ Yes	If Yes		Complete also PART PB (back)
Was the area affected by the relea ☐ Yes ☐ No ☐ Don't k			the compar	y-controlled	I facility (excluding right-of-way)?
Type of water impacted (check all some Surface water If checked Drinking water for human Adrinking water sour	ed, Was ed, Was an consu	an intake a well sh imption	e shutdown utdown?	□ Yes □	Yes □ No □ Don't know No □ Don't know nsitive to environmental damage (USA)
Type of ecology impacted (check a None None Vegetation/pla Fish/aquatic lif Birds (excludir Other wildlife (Livestock such	nt life e (exclu ig livesto excludin	ding lives ock) ig livestoo	ck)	, animals, b	irds and other livestock <u>(back)</u>
Remediation activities undertaken None needed Vegetation/pla Soil Surface water Groundwater Drinking water Fish/aquatic lift Birds Other wildlife (Livestock such	nt life for hum e excludin	an consu	umption		oply): irds and other livestock (<u>back)</u>
Were other environmental projects ☐ No ☐ Yes If Yes	Unkno		s time	ed above? Anticipated	□ Planned <u>(back)</u>
Were threatened or endangered sp □ No □Yes		r plants ir know <u>(ba</u>		nal, plant, fis	sh, or bird)?

Has a Natural Resources Damage Assessment been performed? □ No □ Yes □ Don't know If Yes ───────────────────────────────────
Public or commercial property disrupted or damaged?
PART FA. FACILITY INVOLVED
Part of system involved (check one main category and one subcategory):
□ Aboveground storage tank □ Atmospheric or Low Pressure □ Pressurized Go to PART TK, for Cause of Release
☐ Cavern or other belowground storage facility ☐ Sub-surface facility ☐ Wellhead equipment
 □ Pump/meter station; terminal/tank farm piping & equipment, including sumps □ Does facility operate above 20% SMYS? □ Yes □ No (SMYS back only) □ Aboveground equipment or pipe □ Belowground equipment or pipe □ At aboveground/belowground transition
 □ Onshore pipeline, including valve sites Does facility operate above 20% SMYS? □ Yes □ No (SMYS back only) □ Belowground equipment or pipe □ At unintentional exposure of buried pipe □ At designed aboveground/belowground transition □ Aboveground equipment or pipe
□ Offshore pipeline, including platforms Does facility operate above 20% SMYS? □ Yes □ No (SMYS back only) □ Shoreline crossing or shore approach □ Below water □ Splash zone □ Above water (back)

If Station/Terminal Item involved (ch		shore Pipeline, or Offshore Pipeline, complete "Item involved". □ Pipe or Pipe Seam □ Weld, including heat-affected zone □ Weld, including heat-affected zone	
□ Valve	□ Pump	□ Meter/Prover □ Scraper Trap □ Sump/Separator	
☐ Weld Fitting		□ Threaded or Other Fitting □ Other (back)	
Year item was in	stalled (actual or e	estimated if necessary) (back)	
PART CA. CAU	SE OF RELEASE		
□ Third □ Corro □ Pipe r □ Equip □ Opera	material, pipe sear ment malfunction ator error or other al forces	,	
Part CD NOT to Facility, or Sump		n the facility involved is an Aboveground Storage Tank, a Cavern or Other Belowground Storag	де
PART CD. CON	DITIONS RELAT	ED TO RELEASE	
		led component (psig): ation of failure (psig): Don't know Don't know (back)	
System Tests an	d Inspections		
Had there been a If Yes	Duratio Maximu	the system? Yes No Don't know n of most recent test (hrs.) Don't know m pressure of most recent test (psig) Don't know most recent test Don't know (back)	
Had there been a □ Yes □ No	an in-line internal i	nspection device run at the point of failure?	
	— Type of	device run (check all that apply including combination tools):	
	esolution magneti		
	esolution magnetion	·	
□ UT to		Year of latest in-line inspection:	
	etry tool	Year of latest in-line inspection:	
□ Calipe □ Crack		Year of latest in-line inspection: Year of latest in-line inspection:	
	spot tool	Year of latest in-line inspection:	
□ Other	-	Year of latest in-line inspection: (back)	
Leak Detection			
	□ CPM/SCADA-I □ Remote operar □ Static shut-in to □ Local operating □ Air patrol or gro □ A third party □ Other (back) e of the release co	etected by? (check one): passed system with automated leak detection (alert/alarm) ring personnel, including controllers est or other pressure or leak test g personnel, procedures, or equipment round surveillance onfirmed by? (check one):	
•		pased system with automated leak detection (alert/alarm)	

 □ Remote operating personnel, including controllers □ Static shut-in test or other pressure or leak test □ Local operating personnel, procedures, or equipment □ Air patrol or ground surveillance □ A third party □ Other (back)
Did the applied leak detection tools perform as expected? ☐ Yes ☐ No ☐ Don't know
If No → Reason for non-performance (check one): □ Field instrumentation failure □ Communications failure □ Software failure □ Human error □ Other (back)
Emergency Response
Did the Federal Government take control of the response? ☐ Yes ☐ No ☐ Don't know (back)
lf: 1) the volume released is greater than or equal to 50 bbls; and 2) the release involved an Onshore or Offshore Pipeline, complet "Isolation Response" section below:
Isolation Response
Was there an isolation? Yes No (if No, skip remainder of section) What is the approximate distance between valves which were closed for the initial isolation? miles Don't know How long did it take from release detection/confirmation to perform this initial isolation?
minutes Don't know
What is the approximate distance between valves which were closed for the final isolation, if needed? miles Don't know
How long did it take from release detection/confirmation to perform this final isolation, if needed? minutes □ Don't know (back)

These instructions should appear as one of the first screens the User sees upon entering the Release Record program

Feedback or Suggested Improvements

This section describes a feature which is built into the database program which allows you to provide valuable feedback and suggested improvements to this Release Record Form "online". As you enter the data, a "Feedback" menu item is continuously available to you. This menu item can be activated while you are entering data for any data field. It will then allow you to make either: 1) a comment relating to that particular data field; or, 2) a more general comment relating to the overall database program. Selecting the "Feedback" menu item will activate the following pop-up screen where you will be able to register your feedback or suggested improvements:

☐ General comment on overall database program
□ A definition is needed for this term
☐ The definition which exists is not clear enough
☐ This data element or question is not appropriate
☐ This data element or question needs to be stated more clearly
☐ A new data element or question needs to be added
□ Other feedback or suggested improvement
Explain your selection above:

<u>Definitions</u> – Terms contained in the Release Record program should be bolded to indicate that a definition and/or explanation is available via a pop-up screen. (back)

POP-UP SCREEN FOR SMALL RELEASES

PART SM. SHORT FORM FOR SMALL RELEASES

□ Natural forces□ Other (back)

		- > 45 > 45 > 45 > 45 > 45 > 45 > 45 > 4			
Any deaths or injuries?	□ No	☐ Yes If Yes	٦	return të	• Long Form (back)
Fire or explosion?	□ No	☐ Yes If Yes	-	return t e	b Long Form (back)
Did release occur:	□ Onshore	e 🗆 Offsho	ore (back)		
If onshore:					
Was the area affected by the relea	ase containe	d on the compar	-		ty (excluding right-of-way)? □ Don't know <u>(back)</u>
Did release occur in "non-rural" ar	ea (Part 195	definition)?	□ Yes	□ No	□ Don't know (back)
Type of water impacted (check all that apply): None Surface water If checked, Was an intake shutdown? Surface water If checked, Was a well shutdown? Surface water If checked, Was an intake shutdown? Surface water If checked, Was a well shutdown? Surface water					
Part of system involved (check one): Aboveground storage tank Cavern or other belowground storage facility Pump/meter station; terminal/tank farm piping & equipment, including sumps Onshore pipeline, including valve sites Offshore pipeline, including platforms (back) Cause of release (check one): Third party damage (current or past) Corrosion Pipe material, pipe seam, pipe weld or repair weld failure Equipment malfunction or failure of non-pipe component Operator error or other incorrect operation					

POP-UP SCREEN FOR DETAILS OF PUBLIC SAFETY CONSEQUENCES

PART PB. DETAILS OF PUBLIC SAFETY CONSEQUENCES

Fatalities and/or injuries:		
Number of operator employees	killed	injured
Number of contractor employees working for the operator	killed	injured
Number of others	killed	injured
Total	killed	injured (back)
Public evacuation undertaken (check all that apply):		
 □ Precautionary evacuation undertaken by company □ Evacuation required by or initiated by a public official (back) 		

POP-UP SCREENS WHEN PIPE OR WELDS ARE INVOLVED

Nominal pipe size inches □ Don't know Wall thickness _____ inches □ Don't know _____ Don't know (SMYS back only) SMYS (psi) Type of pipe (check one): □ Seamless □ Flash welded □ Spiral welded SAW □ ERW □ Butt-welded □ Spiral welded ERW □ Single SAW □ Lap-welded □ Plastic/non-metallic □ DSAW □ Continuous welded □ Other ☐ Seamless □ Unknown Manufacturer (if known) _____ Don't know Year of manufacture (if known) _____ □ Don't know (back) Was this a seam-related failure? ☐ Yes ☐ No ☐ Don't know (back) Nature of failure (check one): ☐ Pinhole leak or crack □ Rupture □ Puncture □ Other (back) PART WL. DETAILS WHEN A GIRTH WELD OR FABRICATION OR REPAIR WELD IS INVOLVED Nature of failure (check one): (back) ☐ Pinhole leak or crack ☐ Total separation of weldment ☐ Partial separation of weldment

□ Yes □ No □ Don't know (back)

PART PI. DETAILS WHEN PIPE IS INVOLVED (back)

Was this an acetylene weld?

POP-UP SCREENS FOR ABOVEGROUND STORAGE TANKS

PART TK. CAUSE OF RELEASE – ABOVEGROUND STORAGE TANKS (back)

Description of failure (check one):					
□ Single Bottom System failure					
□ Double Bottom System failure	е				
□ Shell or Head failure					
□ Overfill/overpressure (check of □ Operator error □ Equipment malfunct □ Other □ Appurtenance failure (check of □ Roof drain failure □ Other	ion				
□ Damage by Third Party			Go to PART TP		
□ Damage by Operator			Go to PART OP		
□ Damage by Natural Force			Go to PART NF		
□ Other failure					
Was this a catastrophic failure?	□ Yes	□ No	□ Don't know (back)		
Was the tank hydrotested or otherwise pressure t	ested upon	construc No	tion or major repair? □ Don't know		
Is the tank bottom cathodically protected?	□ Yes	□ No	□ Don't know		
Is the tank bottom internally lined or coated?	□ Yes	□ No	□ Don't know		
Year of most recent API 653 internal tank inspection or equivalent □ Don't know					
Year of most recent API 653 shell thickness exter	rnal tank insp	pection o	or equivalent □ Don't know (back)		

POP-UP SCREENS FOR THIRD PARTY DAMAGE

PART TP. THIRD PARTY DAMAGE

Failure occurred due to (check one):					
☐ Third party excavation, construction, or occurring at the time of the failure.					
☐ Third party excavation, construction, or occuring at some time prior to the					
 Other, including vandalism, third party with facility, and other intentional 					
#1 POP-UP SCREEN – OCCURRING AT TIME C	F FAILURE				
Damaging party or activity (check one):					
☐ Pipeline operator or their contractor and	→ Will be recorded as "Operator Error", NOT "Third Party Damage"				
☐ Other liquid or gas transmission pipelin	e operator or their contractor				
 □ Other underground facility operator or t □ Power or electric company □ Cable television □ Water utility □ Other industry or party 	heir contractor (check one): Gas distribution Telecommunications Sewer utility				
☐ Farming or agricultural business	□ Farming or agricultural business				
☐ Homeowner or other activity related to homeowner's residence					
☐ Residential or commercial developmen	☐ Residential or commercial development				
☐ Road construction or maintenance, inc	☐ Road construction or maintenance, including ditch grading, traffic light construction, etc.				
☐ Railroad construction, maintenance, or	☐ Railroad construction, maintenance, or repair				
☐ Waterway or reservoir construction or r	□ Waterway or reservoir construction or maintenance, including dredging				
☐ Some type of offshore oil production, maritime, shipping, or fishing activity or equipment					
☐ Some type of inland waterway oil produ or equipment	uction, maritime, shipping, or fishing activity				
☐ Other damaging party or activity (back)					
If on land, depth of cover at site of damage:	inches □ Don't know (back)				
□ Bla	Illing, boring, augering asting, tunnelling, mining enching, grading, backfilling her (back)				
Was OneCall system utilized? □ No	ne Available □ Yes □ No				
Pipeline operator's response to One-Call notification Marked or staked celements Provided on-site representations.					

 □ Excavated own line for the third party □ Pipeline operator was unaware of excavation activity □ Patrol frequency: □ Weekly □ Bi-weekly □ Other 		
Was pipeline right-of-way permanently marked and visible to third party at the site? □ Yes □ No □ Don't know		
Was there a job-specific excavation plan in effect? ☐ Yes ☐ No ☐ Don't know (back)		
Apparent primary cause of damage (check one): Failure of third party to utilize One-Call System Failure of third party to wait the proper time Failure of third party to respect pipeline company directions or procedures Failure of third party to take reasonable care to protect facilities Failure of pipeline operator to respond or to properly mark the pipeline Other (back)		
#2 POP-UP SCREEN – PRIOR DAMAGE		
Possible or probable cause of damage (check one): Some type of onshore construction, boring, or excavation equipment Some type of offshore or inland waterway oil production, maritime, shipping, or fishing activity or equipment Approx. water depth: Don't know Other source There are no clues as to the possible cause (back)		
Evidence of damage (check one): Coating damage only Dent or buckle without metal loss Gouge or other metal loss (with or without dent or buckle) Other (back) Position of damage on pipe (check one): Top (10-2 o'clock position) Side (8-10 & 2-4 o'clock position) Bottom (4-8 o'clock position)		
If onshore, depth of cover at site of damage: inches Don't know (back)		
#3 POP-UP SCREEN – OTHER		
Cause of third party damage (check one): □ Vandalism/theft/mischief □ Sabotage □ Vehicle impact If checked, Was vehicle driven by: □ A direct employee of the operator or a contract employee engaged by the operator If checked → retrace your steps, this is an operator error, not a third party damage □ Other party □ Fire (back) □ Other (back)		

POP-UP SCREENS FOR CORROSION

PART CR. CORROSION

Location of corrosion:	Internal (back)			
If External Corrosion, complete the following:				
Type of corrosion (check one): Galvanic Atmospheric Stray current corrosion Other (back)		ss corrosic	n crack	ced corrosion ing
Facility externally coated or painted? If Yes Type of coating (check one):	☐ Yes ☐ No ☐ Coal Tar ☐ Tape ☐ Extruded plas ☐ Fusion-bonde ☐ Paint ☐ Other ☐ Unknown		know	
Was shielding, tenting, or disbonded coating a factor	or in this failure?	□ Yes	□No	□ Don't know
Was damaged coating a factor in this failure? ☐ Yes ☐ No ☐ Don't know (b			□ Don't know (back)	
Was the pipeline or equipment at the site of the failure Facility under cathodic protection? Year that CP was installed:	ure operating above	e 100 deg □ Yes □ Yes	rees F? No No	□ Don't know <u>(back)</u> □ Don't know
Has a Close Interval CP Survey been performed? Year of most recent CIS: (back)		□ Yes	□No	□ Don't know
Did failure occur within or just outside of a road cros	ssing casing?	□ Yes	□No	□ Don't know (back)
If Internal Corrosion, complete the following:				_
Were inhibitors being injected, dewatering pigs run,	or other internal co	orrosion m	itigation □ No	systems or procedures employed
Year since mitigation system or procedures have been continuously employed:				

POP-UP SCREENS FOR PIPE & MATERIAL FAILURES AND EQUIPMENT & OPERATIONS FAILURES

PART PW. DETAILS OF PIPE, PIPE MATERIAL, & WELD FAILURE

Failure occurred due to (check one): Defective pipe body Defective pipe seam Defective girth weld Defective fabrication weld or repair weld Original construction or fabrication damage or defect Pipe transport damage Prior third party damage
□ Other defective weld or material (back) What other factors do you suspect played a role in the incident? (check all that apply) □ Fatigue crack growth □ Overpressurization □ Ground settling or other loss of support □ Other factors □ None (back)
PART EQ. DETAILS OF EQUIPMENT & NON-PIPE COMPONENT FAILURE
Failure occurred due to (check one):
☐ Malfunction of control or relief equipment
$\hfill\Box$ Stripped threads, defective or loose fitting or tubing, failed coupling
□ Seal or packing failure
□ Gasket or O-ring failure
☐ Other equipment or non-pipe component failure (back)

POP-UP SCREENS FOR NATURAL FORCE DAMAGE AND OTHER CAUSES

PART OP. OPERATOR ERROR OR INCORRECT OPERATION

Nature of the failure (check one):					
☐ Excavation or physical damage to facility or pipeline by operator or operator's contractor (back)					
☐ Valve left or placed in wrong position					
☐ Pipeline or equipment overpressured					
□ Motor Vehicle					
☐ Tank overfilled					
☐ Other human error (back)					
Was the individual involved: ☐ A direct employee of the operator					
☐ A contract employee engaged by the operator (back)					
PART NF. NATURAL FORCE DAMAGE					
Which of the following Natural Forces were involved in this failure (check all that apply):					
□ Landslide or mudslide					
□ Earthquake					
☐ Subsidence or other earth movement					
□ Wind, hurricane, or tornado					
□ Cold weather					
□ Frostheave					
☐ Lightning					
☐ Heavy rains or floods including washout					
☐ Riverbed or seabed scouring					
□ Other (back)					
□ Other (back)					
PART OT. OTHER CAUSE					
Which of the following best describes this failure cause (check one):					
☐ The cause of failure is unknown at this time					
☐ The cause of failure could not be determined					
☐ The cause of failure does not fit in any of the other classifications (back)					
- The cade of failure accorded in the arry of the care of accimications accom-					

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed \$25,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed \$500,000 as provided in 49 USC 60122 OMB No. 2137-0047

U.S. Department of Transportation Research and Special Programs

ACCIDENT REPORT – HAZARDOUS LIQUID PIPELINE SYSTEMS

Report Date _______No. _____

Administration	ims FIFELINE	SISIEWIS	(DOT Use Only)		
INSTRUCTIONS					
Important: Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the Office Of Pipeline Safety Web Page at http://ops.dot.gov .					
PART A – GENERAL	REPORT INFORMATION Check: Origin	al Report 🗆 Supplemental Re	eport ☐ Final Report (back)		
b. If Operator does c. Name of Operator d. Operator street e. Operator addres IMPORTANT: IF THE COMPLETE THIS PA		it Identification Number (if knov	(back) T IS LESS THAN 5 BARRELS,		
2. Time and date of the	ne accident (back)	5. Losses (Estimated)			
/ / / / / hr. 3. Location of accider (If offshore, do not of accider (If offshore, do not of accider (If not available, see location) b	/ / / / / / / / / / / / / / / / / / /	, , , , , , , , , , , , , , , , , , ,	ponse phase \$ remediation \$ s erty damage \$ \$		
 b. Classification of o O HVLs /other flatholder of the color of the color	commodity spilled: (back) commodity spilled: (back) commable or toxic fluid which is a gas at ambien con-flammable, non-toxic fluid which is a gas at cel, fuel oil or other petroleum product which is a	ambient conditions I liquid at ambient conditions	O Gallons (check only if spill is less than one barrel) Amounts: Spilled: Recovered: (back)		
CAUSES FOR SMALL SPILLS ONLY (5 gallons to under 5 barrels): (For large spills [5 barrels or greater] see Part H) ○ Corrosion ○ Natural Forces ○ Excavation Damage ○ Other Outside Force Damage					
O Material and/or W		O Incorrect Operati	•		
PART B - PREPARE	R AND AUTHORIZED SIGNATURE				
(type or print) Prepare	r's Name and Title		Area Code and Telephone Number		
Preparer's E-mail Add	lress	_	Area Code and Facsimile Number		
Authorized Signature	(type or print) Nan	ne and Title Date	Area Code and Telephone Number		

Additional location information Chack Complete dif offshore d. Area Block # C. Le pipeline interstate? O Yes No (back)
b. Accident on Federal land other than Outer Continental Shelf O Yes O No (back) c. Is pipeline interstate? O Yes O No (back) 2. Location of system involved (check all that apply)
Sheff O Yes O No (back) 2. Location of system involved (check all that apply)
c. Is pipeline interstate?
Operator's Property Pipeline Right of Way High Consequence Area (HCA)? Describe HCA System involved in accident O Above Ground Storage Tank O Above Ground Storage Tank O Cavem or other below ground storage facility O Pump/meter station; terminal/tank farm piping and equipment, including sumps O Other Specify: Manual Automatic Remote Control O Congludinal - Teal/Crack, length (inches) Propagation Length, total, both sides (feet) O NIA OOther Specify: Manual Automatic Remote Control Other Valve used for isolation of immediate section: Offshore pipeline, including valve sites Offshore pipeline, including platforms (back) If failure occurred on Pipeline, complete items a - g: A. Failure occurred on Pipeline, complete items a - g: A. Failure occurred on Pipeline, complete items a - g: A. Failure occurred on Pipeline, complete items a - g: A. Failure occurred on Valve Metering Facility O Component Valve Metering Facility Repair Sleeve Welded Fitting Bolted Fitting Bolted Fitting Girth Weld Other (specify) (back) (back
Operator's Property Pipeline Right of Way High Consequence Area (HCA)? Describe HCA System involved in accident O Above Ground Storage Tank O Cavern or other below ground storage facility O Pump/meter station; terminal/tank farm piping and equipment, including sumps O Other Specify: O Onshore pipeline, including valve sites O Offshore pipeline, including platforms (back) If failure occurred on Pipeline, complete items a - g: O Figure 1
High Consequence Area (HCA)? Describe HCA (back)
Describe HCA
3. Part of system involved in accident Above Ground Storage Tank Cavem or other below ground storage facility Pump/meter station; terminal/tank farm piping and equipment, including sumps Other Specify: Onshore pipeline, including valve sites Offshore pipeline, including platforms (back) If failure occurred on Pipeline, complete items a - g: 4. Failure occurred on Pipeline, complete items a - g: 4. Failure occurred on Pipeline, complete items a - g: 4. Failure occurred on Osump
O Above Ground Storage Tank C Cavern or other below ground storage facility Pump/meter station; terminal/tank farm piping and equipment, including sumps O Other Specify: O Onshore pipeline, including valve sites O Offshore pipeline, including platforms (back) If failure occurred on Pipeline, complete items a - g: 4. Failure occurred on Pipeline, O Sump O Sump O Sump O Sump O Sump O Sump O Hetring Seleve O Welded Fitting O Girth Weld Other (specify) (back) 5. Maximum operating pressure (MOP) a. Estimated pressure at point and time of accident: - PSIG b. MOP at time of accident: - PSIG D. MOP at time of accident: - O Yes O No (back) PART D - MATERIAL SPECIFICATION Propagation Length, total, both sides (feet) - ON/A OOther - ON/A ON/A OOther - ON/A OOther - ON/A OOther - ON/A ON OO DOR' - Not Possible due to physical constraints in the system gill file (beck) - It gereated to the outher of internal inspection device run at the point of
O Cavern or other below ground storage facility O Pump/meter station; terminal/tank farm piping and equipment, including sumps O Other Specify: O Onshore pipeline, including valve sites O Offshore pipeline, including platforms (back) If failure occurred on Pipeline, complete items a - g: 4. Failure occurred on Pipeline, O Sump O Sump O Sump O Joint O Component O Valve O Metering Facility Repair Sleeve O Welded Fitting O Girth Weld Other (specify) (back) Year the component that failed was installed: / / / / / (back) Year the component that failed was installed: / / / / / (back) S. Maximum operating pressure (MOP) a. Estimated pressure at point and time of accident: PSIG D. MOP at time of accident: OYes ○ No (back) PART D - MATERIAL SPECIFICATION 1. Nominal pipe size (NPS) Wall thickness SMYS / / / / / (back) 4. Seam type O Other Specify: OOther Manual Automatic Remote Control Dother Manual Automatic Remote Control Dother Valve Ocheck Valve Downstream: Manual Automatic Remote Control Check Valve C. Length of segment isolated d. Distance between valves ft (back) That there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes ○ No Fald there been an in-line inspection tools? OYes
equipment, including sumps O Other Specify: O Onshore pipeline, including valve sites O Offshore pipeline, including platforms (back) If failure occurred on Pipeline, complete items a - g: 4. Failure occurred on O Body of Pipe O Pump O Sump O Sump O Joint O Component O Component O Cirth Weld Other (specify) Year the component that failed was installed: / / / / / (back) S. Maximum operating pressure at point and time of accident: - PSIG back) D. Type of block valve used for isolation of immediate section: Upstream: Manual Automatic Remote Control Check Valve Downstream: Manual Automatic Remote Control Check Valve Downstream: Manual Automatic Remote Control Check Valve c. Length of segment isolated ft (b. Distance between valves ft (back) The segment configured for internal inspection tools? OYes O No The dathere been an in-line inspection device run at the point of failure? O Yes O No Don't Know Not Possible due to physical constraints in the system S. Maximum operating pressure (MOP) a. Estimated pressure at point and time of accident:
O Other Specify: O Onshore pipeline, including valve sites O Offshore pipeline, including platforms (back) If failure occurred on Pipeline, complete items a - g: 4. Failure occurred on Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 4. Failure occurred on O Pipeline, complete items a - g: 6. Length of segment isolated of the Distance between valves of segment isolated of the Distance between valves of the control Onder on the segment of control Onder occurred on on the point of the power occurred on on the point of the power occurred on occurred occurr
Onshore pipeline, including valve sites Offshore pipeline, including platforms (back) If failure occurred on Pipeline, complete items a - g: 4. Failure occurred on One Body of Pipe One Seam Oscraper Trap One Pump Osump
Offshore pipeline, including platforms (back) If failure occurred on Pipeline, complete items a - g: 4. Failure occurred on O Body of Pipe O Pipe Seam O Scraper Trap O Pump O Sump O Joint O Component O Valve O Metering Facility O Repair Sleeve O Welded Fitting O Bolted Fitting O Girth Weld Other (specify) (back) Year the component that failed was installed: / / / / / (back) 5. Maximum operating pressure (MOP) a. Estimated pressure at point and time of accident: PSIG (back) c. Did an overpressurization occur relating to the accident? OYes O No (back) PART D - MATERIAL SPECIFICATION Did (A Distance between valves fit (back) d. Distance between valves fit fit (back) d. Distance valves fit fit (back) d. Distance valves fit fit (back) d. Distance valves fit fit for the distance valves fit fit fit (back) d. Distance valves fit fit fit (back) d. Distance valves fit fit fit fit fit fit fit fit f
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4. Failure occurred on O Body of Pipe O Pipe Seam O Scraper Trap O Pump O Sump O Sump O Joint O Repair Sleeve O Girth Weld Other (specify) Year the component that failed was installed: / / / / / / / / / / / / / / / / / / /
4. Failure occurred on O Body of Pipe O Pump O Sump O Joint O Component O Valve O Metering Facility O Repair Sleeve O Girth Weld Other (specify) (back) Year the component that failed was installed: / / / / / (back) 5. Maximum operating pressure (MOP) a. Estimated pressure at point and time of accident: PSIG b. MOP at time of accident: OYes O No (back) PART D - MATERIAL SPECIFICATION 1. Nominal pipe size (NPS) Wall thickness Segment configured for internal inspection tools? OYes O No f. Had there been an in-line inspection device run at the point of failure? O Yes O No O Don't Know O Not Possible due to physical constraints in the system O Low Resolution Magnetic Flux tool Year run: UT tool Crack tool Year run: UT tool Part Fellow Resolution Magnetic Flux tool Year run: UT tool Vear run: O Canber tool Year run: O Chack O Under pavement O Above ground O Under water O In open ditch O Under year run: O Under pavement O In open ditch O Unde
O Body of Pipe O Pipe Seam O Scraper Trap O Pump O Sump O Joint O Component O Valve O Metering Facility O Repair Sleeve O Welded Fitting O Bolted Fitting O Girth Weld Other (specify) (back) Year the component that failed was installed: / / / / / / (back) 5. Maximum operating pressure (MOP) a. Estimated pressure at point and time of accident:
O Component O Valve O Metering Facility O Repair Sleeve O Welded Fitting O Bolted Fitting O Girth Weld Other (specify) (back)
O Repair Sleeve O Welded Fitting O Bolted Fitting O Girth Weld Other (specify)
O Girth Weld Other (specify)
Year the component that failed was installed: / / / /
Year the component that failed was installed: / / / /
5. Maximum operating pressure (MOP) a. Estimated pressure at point and time of accident:
a. Estimated pressure at point and time of accident:
b. MOP at time of accident: PSIG (back) c. Did an overpressurization occur relating to the accident? OYes O No (back) PART D - MATERIAL SPECIFICATION 1. Nominal pipe size (NPS) 2. Wall thickness
c. Did an overpressurization occur relating to the accident? OYes O No (back) PART D - MATERIAL SPECIFICATION 1. Nominal pipe size (NPS)
PART D – MATERIAL SPECIFICATION 1. Nominal pipe size (NPS) 2. Wall thickness 3. Specification SMYS / / / / / / (back) 4. Seam type
1. Nominal pipe size (NPS)
2. Wall thickness / / / / / in. 3. Specification SMYS / / / / / (back) 4. Seam type O Under pavement O Above ground O Under water 2. Under pavement O Above ground O Under water O Inside/under building O Other (back) 2. Depth of cover: inches (back)
2. Wall thickness / / / / / in. 3. Specification SMYS / / / / / (back) 4. Seam type O Under pavement O Above ground O Under water 2. Under pavement O Above ground O Under water O Inside/under building O Other (back) 2. Depth of cover: inches (back)
3. Specification SMYS / / / / / (back) O Inside/under building O Other (back) 4. Seam type 2. Depth of cover: inches (back)
4. Seam type inches (back)
z. Deptit of cover findles (back)
5. Valve type
6. Manufactured by in year / / / / (back)
PART F - CONSEQUENCES [continuation of Page 2 of 4]
 Consequences (check and complete all that apply) a. Fatalities Injuries c.Product ignited OYes O No (back) d. Explosion OYes O No (back)
Number of operator employees: e. Evacuation (general public only) / / / / people (back)
Contractor employees working for operator: Reason for Evacuation:
General public: O Precautionary by company
Totals: (back) O Evacuation required or initiated by public official (back)
b. Was pipeline/segment shutdown due to leak? OYes O No f. Elapsed time until area was made safe: If Yes, how long? days hours minutes / / hr / / min.
2. Environmental Impact
a. Wildlife Impact: Fish/aquatic O Yes O No e. Water Contamination: O Yes O No (If Yes, provide the following)
Birds O Yes O No Amount in water barrels Terrestrial O Yes O No (back) Ocean/Seawater O No O Yes
b. Soil Contamination O Yes O No Surface O No O Yes
If Yes, estimated number of cubic yards:(back) Groundwater O No O Yes
c. Long term impact assessment performed: O Yes O No (back) d. Anticipated remediation O Yes O No Drinking water O No O Yes (If Yes, check below.) (back) O Private well O Public water intake
If Yes, check all that apply: ☐ Surface water ☐ Groundwater ☐ Soil ☐ Vegetation ☐ Wildlife (back)

PART G - LEAK DETECTION	INFORMATION				
Computer based leak detection capability in place? O Yes O No (back)					
2. Was the release initially detected by? (check one): O CPM/SCADA-based system with leak detection O Static shut-in test or other pressure or leak test O Local operating personnel, procedures or equipment O Remote operating personnel, including controllers O Air patrol or ground surveillance					
		O A third party O Other (specify)(back)			
Estimated leak duration data	<u> </u>				
PART H – APPARENT CAUS	E primary cause o	here are 25 numbered causes in this Part H. Check the box corresponding to the of the accident. Check one circle in each of the supplemental categories corresponding ou indicate. See the instructions for guidance.(back)			
H1 - CORROSION		b. Visual Examination c. Cause of Corrosion			
1. ☐ External Corrosion		O Localized Pitting O Galvanic O Atmospheric			
	O Coated (back)	O General Corrosion O Stray Current O Microbiological O Other (back) Cathodic Protection Disrupted			
2. ☐ Internal Corrosion	(Dack)	O Stress Corrosion Cracking			
(back)		O Selective Seam Corrosion			
(Complete items a – e where		O Other(<u>back</u>)			
applicable.)	d. Was corroded part of p	pipeline considered to be under cathodic protection prior to discovering accident?			
	O No O Yes, Year P	Protection Started: / / / / (back)			
	a Was nine previously de	damaged in the area of corrosion?			
		mated time prior to accident: / / / years / / / months Unknown 🗖 (back)			
H2 - NATURAL FORCES					
□ Earth Movement	⇒ O Earthquake	O Subsidence O Landslide O Other			
4. ☐ Lightning					
5. ☐ Heavy Rains/Floods		O Float house O France contracts O Other			
6. ☐ Temperature ⇒ O Thermal stress O Frost heave O Frozen components O Other					
	_				
H3 – EXCAVATION DAMAG	E				
 9. ☐ Third Party (complet a. Excavator group) 	e a-f) (below)	contractors/Not Third Party) (back) Int O Excavator other than Operator/subcontractor			
b. Type: O Road	Work O Pipeline O V	Water O Electric O Sewer O Phone/Cable			
O Lando	wner-not farming related	O Farming O Railroad			
	O Other liquid or gas transmission pipeline operator or their contractor				
O Nautical Operations O Other(back)					
c. Excavation was: OOpen Trench O Sub-strata (boring, directional drilling, etc) (back)					
d. Excavation was an ongoing activity (Month or longer) OYes O No If Yes, Date of last contact //_/					
e. Did operator get prior notification of excavation activity? O Yes; Date received: /_ / / mo. /_ / / day /_ / / / / yr. Notification received from: O One Call System O Excavator O Contractor O Landowner					
f. Was pipeline marked as result of location request for excavation? O No O Yes (If Yes, check applicable items i - iv)					
i. Temporary markings: O Flags O Stakes O Paint					
ii. Permanent markings: O					
iii. Marks were (check one): O Accurate O Not Accurate iv. Were marks made within required time? O Yes O No (<u>back)</u>					
H4 – OTHER OUTSIDE FORCE DAMAGE					
10. ☐ Fire/Explosion as primary cause of failure ⇒ Fire/Explosion cause: O Man made O Natural (back)					
11. ☐ Car, truck or other vehicle not relating to excavation activity damaging pipe					
12. Rupture of Previously Damaged Pipe (back)					
13. □ Vandalism (back)					

H5 – MATERIAL AND/OR WELD FAILURES						
Material 14.□ Body of Pipe	\Rightarrow	O Dent	O Gouge	O Bend	O Arc Burn	O Other
15.☐ Component	\Rightarrow		O Fitting	O Vessel	O Extruded Outlet	
16.□ Joint	\Rightarrow	O Gasket	O O-Ring	O Threads	O Other	
Weld						
17.□ Butt	\Rightarrow	O Pipe	O Fabrication			O Other
18.□ Fillet	\Rightarrow	•	O Hot Tap	O Fitting	O Repair Sleeve	O Other
19.□ Pipe Seam	\Rightarrow		O DSAW	O Seamless	O Flash Weld	
			O SAW	O Spiral	Other	
Complete a-g if you indicate any cause in part H5. a. Type of failure: O Construction Defect \(\infty \infty \) Procedure not followed \(\infty \) Poor Construction Procedures \(\infty \) Material Defect \(\infty \) Operation in transportation to the construction or fabrication site? O Yes \(\infty \) No \(\text{(back)} \) c. Was part which leaked pressure tested before accident occurred? O Yes, complete d-g O No \(\text{day} \) No \(\text{day} \) d. Date of test: \(\begin{array}{c}						