BREAKOUT TANK INSPECTION FORM

A completed **Standard Inspection Report** is to be submitted to the Director within 60 days from completion of the inspection. A **Post Inspection Memorandum (PIM)** is to be completed and submitted to the Director within 30 days from the completion of the inspection, or series of inspections, and is to be filed as part of the **Standard Inspection Report.**

Inspection Report	**Post Inspection Memorandum**	
Inspector/Submit Date: Kuang Chu June 10, 2010	**Chief Eng/Review Date:**	David Lykken 6/11/2010
	Peer Review/Date:	N/A
	Director Approval/Date:	David Lykken 6/11/2010

POST INSPECTION MEMORANDUM (PIM)

Name of Operator: Olympic Pipe Line Company	**OPID #:** 30781
Name of Unit(s): Intrastate Laterals	**Unit #(s): N/A**
Records Location: Renton, WA	**Activity # N/A**
Unit Type & Commodity: Intrastate Hazardous Liquid transporting refined petroleum products	
Inspection Type: Standard	**Inspection Date(s):** May 17 – 21, 2010
PHMSA Representative(s): Kuang Chu & Dave Cullom/UTC	**AFO Days:** 5

Summary:

There are 3 breakout tanks for the laterals, one each at the Seattle DF (T-102), Tacoma DF (T-103), and Vancouver DF (T-107). The Olympia lateral was taken out of service early last year and the DF, including the breakout tank, was completely removed. All 3 breakout tanks were inspected during the field inspection.

Findings:

There were no probable violations. The breakout tank T-102 at the Seattle DF was inspected in accordance with API 653 in-service external inspection in April of 2010. The inspection report was not ready for review at the time of this inspection. The spill containment and impoundment area inside the dike is to be paved with concrete in July 2010, similar to the breakout tanks at the Tacoma DF and the Vancouver DF.

Company System Maps (copies for Region Files):

Validate SMART Data (components, miles, etc): ☐ **Acquisition(s), Sale or New Construction** (submit SMART update): ☐

Validate Additional Requirements Resulting From Waiver(s) or Special Permit(s):

Name of Operator:	BP Olympic Pipe Line Company		
OP ID No. [1] 30781		**Unit ID No.** [1]	
HQ Address:		**System/Unit Name & Address:** [1]	
BP Pipeline (North America), Inc. 28100 Torch Parkway Warrenville, IL 60555		BP Olympic Pipe Line Company 2201 Lind Avenue SW Suite 270 Renton, WA 98055	
Co. Official:	Steve Pankhurst, President	**Activity Record ID #:**	
Phone No.:	(630) 836-7608	**Phone No.:**	(360) 371-1744
Fax No.:	(630) 836-3588	**Fax No.:**	(360) 371-1697
Emergency Phone No.:	(800) 362-6742	**Emergency Phone No.:**	(800) 362-6742

Persons Interviewed	Title	Phone No.
David Knoelke	Compliance Coordinator	(630) 452-9133
Ken Carlton	Central Area Team Leader	(206) 510-0589
Jeff Berry	South Area Team Leader	(206) 510-0562

PHMSA Representative(s) [1] Kuang Chu & Dave Cullom/UTC	**Inspection Date(s)** [1] May 17 – 21, 2010

Company System Maps (Copies for Region Files):

Comments:

There were no probable violations. The spill containment and impoundment area for breakout tanks at the Tacoma DF and the Vancouver DF has been paved with concrete and properly sloped with drainage away from the tanks. The spill containment and impoundment area for the breakout tank at the Seattle DF will be paved with concrete in July 2010. All three tanks appear to be in good condition.

[1] Information not required if included on page 1.

For hazardous liquid operators, the attached evaluation form may be supplemented with PHMSA Form 3 and 49 CFR 195 during PHMSA inspections.

		Design and New Construction of Aboveground Breakout Tanks	S	U	N/A	N/C
.132	(a)	Each aboveground breakout tank must be designed and constructed to withstand the internal pressure produced by the hazardous liquid to be stored therein and any anticipated external loads.	X			
	(b)	After Oct. 2, 2000 compliance with paragraph (a) above requires:				
		(1) Shop-fabricated, vertical, cylindrical, closed top, welded steel tanks with nominal capacities of 90 to 750 barrels and with internal vapor space pressures that are approximately atmospheric must be designed and constructed in accordance with API Specification 12F.	X			
		(2) Welded, low-pressure (i.e., internal vapor space pressure not greater than 15 psig) carbon steel tanks that have wall shapes that can be generated by a single vertical axis of revolution must be designed and constructed in accordance with API Standard 620.	X			
		(3) Vertical, cylindrical, welded steel tanks with internal pressures at the tank top approximating atmospheric pressures (i.e., internal vapor space pressures not greater than 2.5 psig, or not greater than the pressure developed by the weight of the tank roof) must be designed and constructed in accordance with API Standard 650.	X			
		(4) High pressure steel tanks (i.e., internal gas or vapor space pressures greater than 15 psig) with a nominal capacity of 2000 gallons or more of LPG must be designed and constructed in accordance with API Standard 2510.	X			

Comments:
The team O&M inspection was conducted in September 2007 and the breakout tank procedures were included in the inspection. This is the case throughout this form.

		Tank Repairs, Alterations, and Reconstruction Procedures	S	U	N/A	N/C
.205	(a)	Aboveground breakout tanks repaired, altered, or reconstructed and returned to service must be capable of withstanding the internal pressure produced by the hazardous liquid to be stored therein and any anticipated external loads. *The repair/alteration history includes all data accumulated on a tank from the time of its construction with regard to repairs, alterations, replacements, and service changes (recorded with service conditions such as stored product temperature and pressure). These records should include the results of any experiences with coatings and linings.*	X			
	(b)	After Oct. 2, 2000 compliance with paragraph (a) above requires:				
		(1) Tanks designed for approximately atmospheric pressure, constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated built to **API Standard 650 (Welded Steel Tanks for Oil Storage)** must be repaired, altered, or reconstructed according to API Standard 653. *The basis for repairs and alterations shall be an API Standard 650 equivalence*	X			
		(2) Tanks built to API Specification 12F (Specification for Shop Welded Tanks for Storage of Production Liquids) or API Standard 620 (Design, Construction, Large, Welded, Low-Pressure Storage Tanks), the repair, alteration, and reconstruction must be in accordance with the design, welding, examination, and material requirements of those respective standards. Tanks built to API 620 may be modified by the design, welding examination and testing provisions of API 653 in proper conformance with the stresses, joint efficiencies, material and other provisions in API standard 620.	X			
		(3) For high pressure tanks built to API Standards 2510 (Design and Construction of LPG Installations), repaired, altered, or reconstructed will be in accordance with API 510 (Pressure Vessel Inspection Code).	X			

Comments:

Impoundment, Protection Against Entry, Relief, and Venting Procedures			S	U	N/A	N/C
.264	(a)	A means must be provided for containing hazardous liquids in the event of spillage or failure of an aboveground breakout tank. Containment and impoundment are effective means of controlling environmental releases and fires.	X			
	(b)	(1) For tanks built to **API Specification 12F (Specification for Shop Welded Tanks for Storage of Production Liquids) , API Standard 620 (Design, Construction, Large, Welded, Low-Pressure Storage Tanks)**, and others (such as **API Standard 650** or its predecessor Standard **12C**), the installation of impoundment must be in accordance with the following sections of **NFPA 30 (Flammable and Combustible Liquids Code):**				
		(i) Impoundment around a breakout tank must be installed in accordance with Section 3.2.3.2; and	X			
		(ii) Impoundment by drainage to a remote impounding area must be installed in accordance with Section 4.3.2.3.1.	X			
		(2) For tanks built to **API Standard 2510**, the installation of impoundment must be in accordance with Section 5 or 11 of **API Standard 2510. (Design and Construction of LPG Installations):** *Refer to Section 5 API Standard 2510 - Siting Requirements and Spill Containment*	X			
	(c)	Aboveground breakout tank areas must be adequately protected against unauthorized entry.	X			
	(d)	Normal/emergency relief venting must be provided for each atmospheric pressure breakout tank. Each low-pressure and high-pressure breakout tank must have pressure/vacuum-relieving devices.	X			
	(e)	For normal/emergency relief venting and pressure/vacuum-relieving devices installed on aboveground breakout tanks after October 2, 2000, compliance with paragraph (d) of this section requires the following for the tanks specified:				
		(1) Normal/emergency relief venting installed on atmospheric pressure tanks built to **API Specification 12F (Specification for Shop Welded Tanks for Storage of Production Liquids)** must be in accordance with Section 4, and Appendices B and C, of **API Specification 12F (Specification for Shop Welded Tanks for Storage of Production Liquids) .**	X			
		(2) Normal/emergency relief venting installed on atmospheric pressure tanks (such as those **built to API Standard 650** or its predecessor **Standard 12C**) must be in accordance with **API Standard 2000. (Venting Atmospheric and Low-Pressure Storage Tanks Nonrefrigerated and Refrigerated)**	X			
		(3) Pressure-relieving and emergency vacuum-relieving devices installed on low pressure tanks built to **API Standard 620 (Design, Construction, Large, Welded, Low-Pressure Storage Tanks)** must be in accordance with Section 9 of API Standard 620 and its references to the normal and emergency venting requirements in API Standard 2000.	X			
		(4) Pressure and vacuum-relieving devices installed on high pressure tanks built to **API Standard 2510 (Design and Construction of LPG Installations):** must be in accordance with Sections 7 or 11 of API Standard 2510.	X			

Comments:

Pressure Test Procedures/Pressure Testing Aboveground Breakout Tanks			S	U	N/A	N/C
.307	(a)	Aboveground breakout tanks built to **API Specification 12F (Specification for Shop Welded Tanks for Storage of Production Liquids)** and first placed in service after October 2, 2000, pneumatic testing must be in accordance with section 5.3 of API Specification 12F.	X			
	(b)	Aboveground breakout tanks built to **API Standard 620 (Design, Construction, Large Welded Low Pressure Storage Tanks)** and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 7.18 of API Standard 620.	X			
	(c)	Aboveground breakout tanks built to **API Standard 650 (Welded Steel Tanks For Oil Storage)** and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 5.3 of API Standard 650.	X			

		Pressure Test Procedures/Pressure Testing Aboveground Breakout Tanks	S	U	N/A	N/C
	(d)	Aboveground atmospheric pressure breakout tanks constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated and tanks built to **API Standard 650 Welded Steel Tanks For Oil Storage)** or its predecessor **Standard 12C** that are returned to service after October 2, 2000, the necessity for the hydrostatic testing of repair, alteration, and reconstruction is covered in section 12.3 of API Standard 653.	X			
	(e)	Aboveground breakout tanks **built to API Standard 2510 (Design and Construction of LPG Installations)** and first placed in service after October 2, 2000, pressure testing must be in accordance with ASME Boiler and Pressure Vessel Code, Section VIII, Div.1 or 2.	X			
.310	(a)	A record must be made of each pressure test required by this subpart, and the record of the latest test must be retained as long as the facility tested is in use.	X			
	(b)	The record required by paragraph (a) of this section must include: (1) The pressure recording charts; (2) Test instrument calibration data; (3) The name of the operator, the name of the person responsible for making the test, and the name of the test company used, if any; (4) The date and time of the test; (5) The minimum test pressure; (6) The test medium; (7) A description of the facility tested and the test apparatus; (8) An explanation of any pressure discontinuities, including test failures, that appear on the pressure recording charts; (9) Where elevation differences in the section under test exceed 100 feet (30 meters), a profile of the pipeline that shows the elevation and test sites over the entire length of the test section; and (10) Temperature of the test medium or pipe during the test period.	X			

Comments:

		BREAKOUT TANK PROCEDURES	S	U	N/A	N/C
.402(c)(3)	.404(a)	Operator shall maintain current maps and records of its pipeline systems that include at least the following information; (1) Location and identification of (i) breakout tanks.	X			
	.405(a)	Provide protection against ignitions arising out of static electricity, lightning, and stray currents IAW **API Recommended Practice 2003 (Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents**). ***(Refer to Subsection 4.5, Subsection 4.6, Subsection 5.4 , Subsection 5.5, and Subsection 6.3 of API RP 2003)***	X			
	.405(b)	Review, consider, and incorporate into operator's procedure manual, the potentially hazardous conditions, safety practices and procedures associated with access/egress onto floating roofs IAW **API 2026 (Safe Access/Egress Involving Floating Roofs of Storage Tanks In Petroleum Service)**.	X			
	.422	Repairs shall be made in a safe manner and made so as to prevent damage to persons or property.	X			
	.428(a)	Inspect and test each pressure limiting device, relief valve, pressure regulator, or other pressure control equipment (annually/NTE 15 mo), except as provided in paragraph (b) of this section.	X			
	.428(b)	In the case of relief valves on pressure breakout tanks containing **HVLs**, operator shall test each valve at intervals not exceeding 5 years.	X			

		BREAKOUT TANK PROCEDURES	S	U	N/A	N/C
	.428(c)	Aboveground breakout tanks • constructed or significantly altered according to section 5.1.2 of **API Standard 2510 (Design and Construction of LPG Installations)** after October 2, 2000 must have an overfill protection system according to 5.1.2 of API Standard 2510. • **if (600 gallons or more)** constructed or significantly altered after October 2, 2000, must have overfill protection according to **API Recommended Practice 2350 (Overfill Protection for Storage Tanks in a Petroleum Facility).** **For Unattended Facilities (defined in API RP 2350, paragraph 1.3.1) Section 2, for Attended Facilities (defined in API RP 2350, paragraph 1.3.1) Section 3, and for all facilities, Transfer Procedures need to be per Section 4.**	X			
	.428(d)	After October 2, 2000, paragraphs (a) and (b) of §195.428 also applies for the inspection and testing of pressure control equipment and to the testing of overfill protection systems.	X			
	.430	Each operator shall maintain adequate firefighting equipment at each pump station and breakout tank area. The equipment must be– (a) In proper operating condition at all times; (b) Plainly marked so that its identity as firefighting equipment is clear; and (c) Located so that it is easily accessible during a fire.	X			
	.432(b)	Each operator shall inspect the physical integrity of in-service atmospheric and low-pressure steel aboveground breakout tanks according to **section 6 of API Standard 653.** However, if structural conditions prevent access to the tank bottom, the bottom integrity may be assessed according to a plan included in the operations and maintenance manual under **§195.402(c)(3).**	X			
		-Owner/operator visual, external condition inspection interval not to exceed **one month** (more frequent inspections may be needed based on conditions at particular sites)	X			
		-External inspection, visual, by an Authorized Inspector at least every **five years** or at the quarter corrosion rate life of the shell, whichever is less. -External ultrasonic thickness measurement of the shell based on the corrosion rate. If the corrosion rate is not known, the maximum interval shall be **five years**.	X			
		Are corrosion rate-based internal inspection intervals established in accordance with API 653, and in no case exceed **20 years**?	X			
		If tank bottom upper or lower side corrosion rate is unknown, the Out of Service inspection interval shall not exceed **10 years**.	X			
	.432(c)	Each operator shall inspect the physical integrity of in-service steel aboveground breakout tanks built to **API Standard 2510** according to **section 6 of API 510.** Amt. 195-86 Pub. 06/09/06 eff 07/10/06.	X			
	.432(d)	The intervals of inspection specified by documents referenced in paragraphs (b) and (c) of this section begin on **May 3, 1999**, or on the operator's last recorded date of the inspection, whichever is earlier.	X			
	.434	Maintain signs visible to the public around each breakout tank area. Each sign must contain the name of the operator and a telephone number (including area code) where the operator can be reached at all times.	X			
	.436	Operator shall provide protection for each breakout tank area and other exposed facility (such as scraper traps) from vandalism and unauthorized entry.	X			
	.438	Operator shall prohibit smoking and open flames in each breakout tank area where there is a possibility of the leakage of a flammable hazardous liquid or of the presence of flammable vapors.	X			

Comments:

		Corrosion Control Procedures	S	U	N/A	N/C
.402(c)(3)	.563(d)	Breakout tank areas, bare pipelines, and buried pumping station piping must have cathodic protection in places where previous editions of this part required cathodic protection as a result of electrical inspections.	X			

	Corrosion Control Procedures	S	U	N/A	N/C
.565	**Breakout Tank CP installation** Does operator install (after 10/2/00) required cathodic protection systems to protect above ground breakout tanks over 500 bbl capacity, in accordance with API RP 651?	X			
.571	**Cathodic Protection (CP) Acceptance Criteria** CP levels must comply with NACE Standard RP0169-96 (paragraphs 6.2 and 6.3)	X			
.573(d)	**Breakout Tank CP inspections** Cathodic protection systems used to protect breakout tanks must be inspected in accordance with API 651.	X			
11.3.2	**Cathodic Protection Surveys** – Annual CP surveys are required. Surveys may include one or more of the following:				
	1. Structure to soil potential.	X			
	2. Anode current.	X			
	3. Native structure to soil potentials	X			
	4. Structure-to-structure potential	X			
	5. Piping-to-tank isolation if protected separately.	X			
	6. Structure-to-soil potential on adjacent structures.	X			
	7. Continuity of structures if protected as a single structure.	X			
	8. Rectifier DC volts, DC amps, efficiency, and tap settings.	X			
	Rectifier Inspections:				
	- Every 2 months. – (Inspections should include a check for electrical shorts, ground connections, meter accuracy, and circuit resistance).	X			
11.3.3.4	**Tank Bottoms** – Tank bottom should be examined for evidence of corrosion whenever access to the bottom is possible. (During repairs, modifications, during API653 inspections) Examinations may be done by coupon cutouts or nondestructive methods.	X			
.577(a)	**Interference Currents** For breakout tanks exposed to stray currents, is there a program to minimize the detrimental effects?	X			
.579(d)	**Breakout tank – internal corrosion mitigation** After October 2, 2000, tank bottom linings installed in tanks built to **API 12F (Specification for Shop Welded Tanks for Storage of Production Liquids), API 620 (Design, Construction, Large, Welded, Low-Pressure Storage Tanks), API 650 (Welded Steel Tanks for Oil Storage), or its predecessor 12C** must be installed in accordance with API RP 652.	X			
.581(c)	**Atmospheric Corrosion Protection** Except for soil-to-air interfaces, atmospheric corrosion protection is not required where it is demonstrated by test, investigation, or similar environmental experience; that corrosion will – (1) Only be a light surface oxide; or (2) Not affect the safe operation of the pipeline before the next scheduled inspection.	X			
.583(a)	**Atmospheric Corrosion Monitoring** Inspect each pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion at least once every 3 calendar years, but with intervals not exceeding 39 months.	X			
.583(c)	If you find atmospheric corrosion during an inspection, you must provide protection against the corrosion as required by §195.581.	X			

Comments:

	FIELD REVIEW	S	U	N/A	N/C
.258(a)	Is each valve installed in a location that is accessible to authorized employees and protected from damage or tampering?	X			
.260(b)	A valve must be installed on each line entering or leaving a breakout storage tank area in a manner that permits isolation of the tank area from other facilities.	X			

	FIELD REVIEW	S	U	N/A	N/C
.264	Impoundment areas adequate, dikes not eroded, and dike drains operational.	X			
.428	Pressure Limiting Devices, relief valve, pressure regulator, overfill protection systems.	X			
.430	Each operator shall maintain adequate firefighting equipment at each breakout tank area that is: • In proper operating condition, • Plainly marked, and • Located to be readily accessible	X			
.434	Signs visible to the public around each breakout tank area that contains the name of the operator and a telephone number (including area code) where the operator can be reached at all times.	X			
.436	Protection for each breakout tank area from vandalism and unauthorized entry.	X			
.438	Prohibition of smoking and open flames in breakout tank areas	X			
.565	Cathodic Protection System Facilities	X			
.581	Atmospheric Corrosion (piping, tanks, soil/air interfaces, splash zones)	X			
.501-.509	**Operator Qualification** - Use PHMSA Form 15 Operator Qualification Field Inspection Protocol	X			

Comments:

Breakout Tank Field Review (Complete one page for each tank or tank impound area inspected)						
.432	**Tank Number(s)**		S	U	N/A	N/C
	General Site Conditions	a. Runoff rainwater from the shell drains away from tank, and site drainage away from tank.	X			
		b. No vegetation against tanks, no flammable materials, trash.	X			
		c. No voids under tank/tank foundations, or settlement around perimeter of tank.	X			
	Tank Foundation, Bottom Shell	a. Concrete (no broken concrete, spalling, or cracks).	X			
		b. Plate and weld in bottom angle area (No thinning or corrosion).	X			
		c. Integrity of the bottom-to-foundation seal, if present.	X			
		d. No signs of bottom leakage.	X			
	External Shell	a. Exterior coating (No paint failure, pitting, or corrosion).	X			
		b. Rivet or seam leakage. ***(Notes: All tanks are welded construction.)***			X	
		c. No cracks or signs of leakage on weld joints at nozzles, manways, and reinforcing plates.	X			
		d. No shell deformation.	X			
		e. No shell plate dimpling around nozzles, caused by excessive pipe deflection.	X			
	Tank Piping and	a. No manifold piping, flange, or valve leakage.	X			

Breakout Tank Field Review (Complete one page for each tank or tank impound area inspected)						
	Manifolds	b. Anchored piping (check that it would not cause tank shell bottom connection damage during earth movement).	X			
		c. Adequate thermal pressure relief of piping to the tank.	X			
		d. Temperature indicators are accurate and undamaged.	X			
	Shell-Mounted Sample Station	a. Sample line and return-to-tank line valves, seals, and drains function properly. ***(Notes: There are no shell-mounted sample stations.)***			X	
		b. Circulation pump has no signs of leaks or operating problems. ***(Notes: There are no circulation pumps.)***			X	
	Mixer	a. Mounting flange is properly supported. ***(Notes: There are no mixers.)***			X	
		b. No signs of leaks or operating problems. ***(Notes: There are no mixers.)***			X	
	Gauging System(s)	a. Verify proper operating condition	X			
		b. Evidence of operating problems	X			
	Inspection Recommendation(s) Follow-up	a. Have recommended actions from inspection reports been taken?	X			
		b. Have repairs identified by required inspections been made?	X			

Comments:

	RECORDS REVIEW	S	U	N/A	N/C
.132	Design and Construction of aboveground breakout tanks	X			
.205(b)	Tank alteration and reconstruction records. For tanks repaired after 10/2/2000, records reflecting compliance with the referenced API standards.	X			
.264	Impoundment determination records. For tanks constructed after October 2, 2000, records reflecting compliance with the referenced API/NFPA standards. ***(Notes: All tanks were constructed before October 2, 2000.)***			X	
.264(d)	Record of calculations for normal/relief vents and pressure/vacuum vents.	X			
.310	Hydrostatic/pneumatic testing records for above ground breakout tanks for tanks first placed in service after 10/2/2000. ***(Notes: All tanks were constructed before October 2, 2000.)***			X	
.404(a)	Maps and records of location and identification of breakout tanks	X			
.405(a)	API RP 2003 (if not followed by operator, must have a documented basis)	X			
.405(b)	Review applicable hazards in API RP 2026 for inclusion in the procedure manual	X			
.428	Testing of overpressure safety devices and overfill protection systems	X			
.432	Inspection of in-service breakout tanks (in accordance with applicable API Standard)				
	Monthly inspection reports	X			
	Annual inspection report(s) ***(Notes: The operator performs monthly inspection without the annual inspection.)***			X	
	In-service inspection report(s), including next inspection interval calculation	X			
	Out-of-service inspection report(s), including next inspection interval calculation ***(Notes: There were no out-of-service inspections conducted during this inspection period.)***			X	
	Follow-up actions from inspection findings (repairs, fill level height adjustments, other recommendations from inspection report).	X			
.573	External corrosion control monitoring records in accordance with API RP 651	X			
	Rectifiers (6 times per calendar year, not to exceed 2 ½ month intervals)	X			
	Electrical isolation and or bonds	X			
	Structure to Soil potentials, annual surveys	X			

RECORDS REVIEW		S	U	N/A	N/C
.579	Tank bottom linings in accordance with API RP 652, if installed after October 2, 2000	X			
.581	Atmospheric corrosion monitoring (every 3 years not to exceed 39 months)	X			
.589	Maintain current records or maps to show the location of cathodic protection and monitoring facilities, including galvanic anodes, installed after January 29, 2002, and neighboring structures bonded to cathodic protection systems.	X			

Comments:

TANK DATA

(See Note Below for * Items)		1	2	3	4	5	6
	FACILITY NAME(S):	Seattle DF	Tacoma DF	Vancouver DF			
*(A)	PRODUCT	R	R	R			
(B)	TANK #	T-102	T-103	T-107			
(C)	CONSTRUCTION YEAR and API STANDARD	1965 API 12C	1965 API 12C	1967 API 12C			
*(D)	CONSTRUCTION TYPE	W	W	W			
(E)	CAPACITY (BBL)	843	268	988			
(F)	LINING? (Y/N)	Y	Y	Y			
(G)	LINING TYPE?	Epoxy	Epoxy	Epoxy			
(H)	TANK HT.(FT)	16	16	16			
(I)	MAX. FILL HT. (FT)	12	11	11			
(J)	DIA (FT)	21.3	11	21			
*(K)	ROOF TYPE	IF	F	F			
*(L)	VOLUMETRIC ALARM(S)	H-HH	H-HH	H-HH			
(M)	DIKE VOLUME (BBL)	999	504	1,093			
*(N)	DATE LAST INTERNAL INSPECTION	9/25/2005	7/18/2006	9/20/2006			
*(O)	OUT OF SERVICE REPAIR OR OTHER MAJOR REPAIR	N/A	N/A	N/A			
(P)	DATE API 653 APPLIED	1995	1996	1996			
*(Q)	CP TYPE & ANODE TYPE	R	R	R			
*(R)	C P MONITORING	S	S	S			
(S)	DUE DATE FOR NEXT INTERNAL INSPECTION?	2015	2016	2016			
(T)	INTERNAL INSPECTION INTERVAL? (YEARS)	10	10	10			
*(U)	INTERNAL INSPECTION INTERVAL BASIS?	Max API	Max API	Max API			
(V)	DUE DATE FOR NEXT EXTERNAL INSPECTION?	2010 (completed in April)	2011	2011			
*(W)	EXTERNAL INSPECTION INTERVAL BASIS?	Max API	Max API	Max API			
(X)	DUE DATE FOR NEXT U. T. INSPECTION?	2010 (completed in April)	2011	2011			
(Y)	SHELL U.T. INSPECTION INTERVAL	5	5	5			
*(Z)	SHELL U.T. INSPECTION INTERVAL BASIS?	Max API	Max API	Max API			

NOTE: Enter the applicable codes below in the table above:

(A): (R) Refined; (C) Crude; (HVL) Highly Volatile Liquid; (O) Other
(D): (W) Welded; (R) Riveted; (B) Bolted; Note if Tank is Insulated
(K): (EF) External Floater; (IF) Internal Floater; (F) Fixed
(L): (H) High; (HH) High-High; (OF) Overfill; (O) Other
(N): Most Recent Date
(O): Most Recent Date
(Q): (A) Anodic; (R) Rectified (N) None - Document why not needed.
(R): (F) Fixed Reference Cells Under Floor; (S) CP Monitored at Edge of Shell
(U): (C) Calculation (based upon known corrosion rate); (M) API Maximum Allowed Interval; (O) Other; (SS) Similar Service
(W): (C) Calculation (based upon known corrosion rate); (M) API Maximum Allowed Interval; (O) Other; (SS) Similar Service
(Z): (C) Calculation (based upon known corrosion rate); (M) API Maximum Allowed Interval; (O) Other; (SS) Similar Service

Comments: