UST Inspection Checklist

PART I. OWNER/OPERATOR INFORMATION

1. Facility Name: Morning Star Market
2. Owner: Eggen's Direct Service
3. Operator: Lori Niesen
5. Contact Person: Rich Mycue - 320-983-3760
6. UST Site Phone #: 320-495-3394

6. Date of Visit: 10/30/13 7. Marketer: X Non-Marketer: ___
8. Site Arrival/Departure (Time): 11:50 / 12:40
9. Facility Address: 104 N. Main St. Wahkon, MN 56386
10: Team Members: Scott Hansen

PART II. UST SITE INFORMATION

	1	2	3	4	5	6	7
1. Tank #:	1	2	3				
2. Tank Type:	STIP3						
3. Piping Type:	Steel				6K and 4K unleaded is manifolded		
4. Size of Tank:	6K	4K	4K				
5. Tank Contents:	Gas-Reg	Gas-Prem	Gas Reg		Suction - 4K Prem / 6K unleaded		
6. Install Date:	5/98	5/98	10/03				
7. TTT Date:	- ATG -	Auto Stick Jr					
8. LTT Date:	In Con TS-LS 300						
9: LD (Tank):							
10: LD (Pipe):							
11. Closure Date:							
	Perm___Temp___	Perm___Temp___	Perm___Temp___	Perm___Temp___	Perm___Temp___	Perm___Temp___	Perm___Temp___
12. Spill:	Yes X No ___	Yes X No ___	Yes X No ___	Yes___ No ___	Yes___ No ___	Yes___ No ___	Yes___ No ___
13. Overfill:	Yes X No ___	Yes X No ___	Yes X No ___	Yes___ No ___	Yes___ No ___	Yes___ No ___	Yes___ No ___
Type:	Alarm						
14. CP (Tank):	Yes X No ___	Yes X No ___	Yes X No ___	Yes___ No ___	Yes___ No ___	Yes___ No ___	Yes___ No ___
Date:	9-14-2012 PASS						
Type:	CP						
15. CP (Piping):	Yes___ No ___	Yes___ No ___	Yes___ No ___	Yes___ No ___	Yes___ No ___	Yes___ No ___	Yes___ No ___
Date:	9-14-2012 Pass						
Type:							

16. CP Monitoring: [For all cathodic protection systems (Galvanic Anodes and Impressed Current Systems)]

	1	2	3	4	5	6	7
6 Mo./3 Yrs:	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___
Note: Monitoring conducted within six month of installation and three years after initial monitoring. [280.31(b)(1)]							
Six Months:	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___
Note: Monitoring conducted within six month of any repairs to UST system. [280.33(e)]							
Records:	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___
Note: Records on file of last two monitoring results. [280.31(d)(2)]							

17. CP Monitoring: [For Impressed Current Systems Only]

	1	2	3	4	5	6	7
60 Day Insp.:	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___
Note: System is inspected ever 60 days, involvers reading and recording systems voltage and amperage. [280.31(c)]							
Records:	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___
Note: Records on file of last three voltage and amperage readings. [280.33(d)(1)]							

(3/31/2008)

UST Inspection Checklist

PART III. RECOMMENDATION(S) & NARRATIVE COMMENTS

1. Further action is recommend/necessary: Yes ___ No X

Notes: _____

2. Facility to provide info. on compliance: Yes ___ No X

Notes: _____

3. Follow-up inspection recommended: Yes ___ No X

Notes: _____
[If Yes, state reason(s) why.]

4. Information Request Letter (IRL): Yes ___ No ___ Date: _____

Notes: _____
[If Yes, A Full Narrative Report **is** required along with this checklist]

5. Notice of Violation (NOV): Yes ___ No ___ Date: _____

Notes: _____
[If Yes, A Full Narrative Report **is** required along with this checklist]

6. Field Citation (FC): Yes ___ No ___ Date: _____

Notes: _____
[If Yes, A Full Narrative Report **is** required along with this checklist]

7. Administrative Order (AO): Yes ___ No ___ Date: _____

Notes: _____
[If Yes, A Full Narrative Report **is** required along with this checklist]

8. Refer to State: Yes ___ No ___ Date: _____

Notes: _____
[If Yes, A Full Narrative Report **may** be required along with this checklist]

9. Financial Responsibility (FR): Yes X No ___ Expiration Date: _____

10. Inspector's Remarks: Aug. Tank test was not in book was going to ask Lori usually is with inventory report

11. Additional Remarks/Comments:

Oct. 9, 2013	Tank Test Pass	Tank 1&3		10-22-13	Line Test Pass (Incon)
Sept. 25, 2013	Pass		Pass	9-22-13	Visual No Leak
Aug	No Tape	Will Ask: requested papers - Called Nov. 13, 2013		8-19-13	" No Leak
July	09-13	Pass		7-22-13	" "
June	05-13	Pass		6/13/13	" "
May	08-13	Pass		5/20/13	" "
April	22-13	Pass		4/20/13	" "
March	25-13	Pass		3/20/13	" "
Feb.	21-13	Pass		2/18/13	" "
Jan	13-13	Pass		1/17/13	" No Leak

CP Test 9-14-2012 Pass - Attached
Func. Test 3/26/13 Pass - Attached
Monthly Insp. log - (MACA) Tank Sump, Dispenser, Spill Bucket

Scott Hansen 10/30/13
Inspector Signature Date

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

UST Cathodic Protection System Evaluation Galvanic (Sacrificial Anode) Type

Underground Storage Tanks (UST) Program

Doc Type: Compliance Certification

Instructions: Within 30 days, send completed form to Joann Henry, Minnesota Pollution Control Agency (MCPA) at the address above, fax to 651-297-2343, or e-mail joann.henry@state.mn.us.

- **All reports must be submitted regardless of results (pass, fail, or inconclusive)**
- **Incomplete, unsigned, or illegible forms will not be accepted and will be returned.**

1. UST facility MPCA Site ID #: 20556

Name: Morning Star Market
Address: 104 Main
City: Cyrus Zip code: 56386
County: Pitte Lacs Phone: 320-495-3384

2. UST owner/operator

Name: Eggen's Service
Address: 220 2nd Ave N.E.
City: Milaca State: MN
Zip code: 56353 Phone: 320-983-3760
Contact name (if different than above): Rich Myrve Contact phone: 320-983-3760

3. Cathodic Protection (CP) tester information and qualifications

Tester name (print): Scott S. Olson Company name: Northland Petroleum Service
Address: 22743 171st Street City: Big Lake
State: MN Zip code: 55390 Phone: 763-263-2033 E-mail: Northlandps@aol.com
National Association of Corrosion Engineers (NACE) International certification #: Steel Tank Institute (STI) certification #: CP-SP17-04

4. Reason survey was conducted (check only one)

☒ Routine - 3 years ☐ Routine - within 6 months of install ☐ 30-day re-survey after fail ☐ Re-survey within 6 months of repair/modification

Date next CP survey must be conducted by (mm/dd/yyyy): 9-14-2015 (Required within 6 months of install or repair, and every 3 years thereafter.)

5. CP tester's evaluation (check only one)

☒ Pass All protected structures at this facility pass the CP survey and the continuity survey indicates all protected structures are isolated. It is judged that adequate CP has been provided to the UST system (Complete sections 7 and 8).

☐ Fail One or more protected structures at this facility fail the CP survey, and it is judged that adequate CP has not been provided to the UST system. (Complete sections 7 and 8).

☐ Inconclusive The remote and the local do not both indicate the same test result on all protected structures (both pass or both fail), or the continuity survey indicates continuous or inconclusive results when compared to non-protected structures, the survey must be evaluated by a corrosion expert (Corrosion Expert to complete section 6).

CP Tester Signature: [signature] Date CP survey performed (mm/dd/yyyy): 9-14-2012

6. Corrosion expert's evaluation (if applicable)

The attached survey must be conducted and/or evaluated by a corrosion expert when: a) conducting repairs to metallic structures which are non-factory coated with dielectric material; b) adding supplemental anodes to the tanks and/or piping without following accepted industry standards; c) the local and remote structure-to-soil potential did not result in the same outcome (both pass or both fail); d) the continuity survey indicates one or more of the protected structures are not isolated; e) when required by MPCA (Corrosion Expert to complete sections 7 and 8).

N/A

☐ Pass All protected structures at this facility have been judged that the adequate CP is provided to the UST system.

☐ Fail One or more protected structures at this facility fail the CP survey and it is judged that adequate CP has not been provided to the UST system.

Corrosion expert's name (print): Phone:
Company name:
NACE Int./PE certification: NACE Int./PE certification #:
CP Expert Signature: Date (mm/dd/yyyy):

7. Criteria applicable to evaluation (check all that apply)

☒ -850 On Structure-to-soil potential more negative than -850 millivolts (mV) with the protective current applied.

☐ -850 Off Structure-to-soil potential more negative than -850 mV with the protective current momentarily interrupted. ("Instant Off")

☐ 100 mV Structure tested exhibits at least 100 mV of cathodic polarization. ("Instant Off" readings minus native/depol readings)

EPA-R5-2018-000306_0000313

Facility name: Morning Star Market Date of test (mm/dd/yyyy): 9-14-2012
(Note: The facility name and date of test will automatically populate from page one, if filled out electronically.)

8. Action required as a result of this evaluation (check only one)

- ☒ None — CP is adequate. No further action is necessary at this time. Test again by no later than (see Section 4).
- ☐ Retest — CP may not be adequate. Retest within 30 days to determine if passing results can be achieved. (Retests may occur only if all protected structures are isolated from non-protected structures)
- ☐ Repair & Retest — CP is not adequate. Repair/modification is necessary within the next 60 days, or permanently close the tank system.

9. CP system repairs and/or modification information

Date of "failing" test: _____ *(mm/dd/yyyy)* Date of repair: _____ *(mm/dd/yyyy)* Repair company: _____

N/A

Name of lead repair technician: _____ Phone # _____

Certification of repair technician (check all that apply): ☐ Steel Tank Institute ☐ NACE ☐ MPCA certified supervisor

Note: submit failing test results with this report if not already submitted.

Description of Repairs (check all that apply)

- ☐ 1. Supplemental anodes for a sti-P$_3$® tank.
- ☐ 2. Supplemental anodes for metallic pipe which is factory coated with dielectric material (fusion bonded epoxy or equivilent).

Repairs /modifications for 1 & 2 must be designed by a "corrosion expert" or installed per industry standards. Attach corrosion experts design, or documentation industry standard was followed. (Section 6 must be signed if designed by a corrosion expert.)

- ☐ 3. Supplemental anodes for a non-sti-P$_3$® tank. (e.g., bare steel).
- ☐ 4. Supplimental anodes for metallic pipe which is non-factory coated with dielectric material (e.g., galvanized, copper, bare steel, etc.).

Repairs/modifications for 3 & 4 and must be designed and evaluated by a corrosion expert only. Attach a corrosion experts design. (Section 6 must be signed.)

- ☐ 5. Isolation of Galvanically protected tanks/piping. (explain in "remarks/other" below).
- ☐ 6. Isolation of non-protected metal pipe segments (e.g., flex connectors) at STP or dispenser sumps (explain in "remarks/other" below).

Remarks/Other: _____

10. Galvanic (sacrificial anode) structure to soil potential and continuity survey

Half Cell Placement (testing) on frozen soil, concrete, asphalt, or other paving materials is not acceptable.

Structure to Soil Potentials:

- The half cell must be placed in a minimum of three locations per tank, and three locations per piping run. At least one of the reference cell locations must be in the soil directly over the tested structure (local); and at least one must be placed in soil approximately 25 to100 feet away from the structure (remote). The third location is at the discretion of the tester (either local or remote).
- When testing flex connectors only, two tests points are required for each flex connector, one local and one remote.
- Both the local and the remote voltage must meet one of the three criteria listed in section 7 in order for the structure to pass. Inconclusive must be indicated when both the local and the remote structure-to-soil potentials do not result in the same outcome (both pass or both fail).
- If the "-850 mV Off" or the "100 mV Polarization" criteria is used for galvanic systems, record structure-to-soil potential readings on the MPCA Impressed Current data sheet or similar form.

Continuity Testing: (Point-to-Point and/or Fixed Cell-Moving Ground)

- Point-to-Point: When conducting this method, the leads of the volt meter are required to contact the two structures being examined to demonstrate isolation or continuity. A half cell is not used for this test method.
- Fixed Cell-Moving Ground: When conducting this method, the half cell must be placed in the soil at a remote location approximately 25 to100 feet away and left undisturbed. The other lead of the meter is moved to structures being evaluated.
- To interpret continuity data for either method compare the difference in voltage of the structures evaluated and use the following guidelines: 1 mV or less = continuous, 1-10 mV= inconclusive, greater than 10 mV = isolated.
- For galvanic systems, the structure that is to be protected must be isolated from all other non-protected metallic structure in order to "pass" the continuity survey.
- If other approved continuity testing methods are used, alter this form or submit the data on a separate sheet.

EPA-R5-2018-000306_0000313

Facility name: Mirrors Star Mart Date of test (mm/dd/yyyy): 9-14-2012

(Note: The facility name and date of test will automatically populate from page one, if filled out electronically.)

Describe soil type and location(s) of remote reference cell placement(s) (e.g., Black Dirt, 30 feet NW of Tank #1 spill bucket):

Remote location #1: NPL sub pit Sandy

Remote location #2: Grassy area east of tanks - black dirt

Describe soil type(s) of local reference cell placements:

	Structure to soil potentials (mV)			Continuity testing (mV)			
	Half cell site map code	Half cell placement description	"ON" Voltage	Structure tested	Point-to-point voltage	Fixed cell remote voltage	Isolated/ Continuous/ Inconclusive
Structure: (Example) Tank 1	(Ex)1	Local, soil at ATG manway	-1011 mV	(Ex) ATG Conduit	475 mV		isolated
	(Ex)2	Local, Soil at STP manway	-995 mV	(Ex) STP conduit		-528 mV	isolated
	(Ex)R-1	Remote #1	-1042 mV	(Ex) Vent	421 mV		isolated
	Structure contact point(s): (Ex) Tank Bottom			(Ex) Fill Riser	375 mV	-522 mV	isolated
	Overall Structure Results (Structure to soil potentials and continuity): ☒ Pass ☐ Fail ☐ Inconclusive						
Combo Tank Fill Pipe Structure:	1	Local at test cell	-.88vdc	Combo tank to small NPL	.18vdc		isolated
	1	Local at fill pipe	-.88vdc	Combo tank to conduit	.36vdc		isolated
	3	Remote at fill pipe	-.93vdc	Combo tank to product line	.57vdc		isolated
	3	Remote at test cell	-.93vdc				
	Structure contact point(s): Tank test cell + bottom of tank through fill						
	Overall Structure Results (Structure to soil potentials and continuity): ☒ Pass ☐ Fail ☐ Inconclusive						
Small NPL Tank Structure:	2	Local at test cell	-1.06vdc	Small NPL to Combo Tank	.18vdc		isolated
	2	Local at fill pipe	-1.06vdc	Small NPL to conduit	.55vdc		isolated
	3	Remote at test cell	-1.11vdc	Small NPL to product line	.38vdc		isolated
	3	Remote at fill pipe	-1.11vdc				
	Structure contact point(s): Tank test cell + bottom of tank through fill						
	Overall Structure Results (Structure to soil potentials and continuity): ☒ Pass ☐ Fail ☐ Inconclusive						
NPL Product Pipe Structure: Suction	4	Local at disp #1+2	-1.45vdc	Line to Disp Conduit	.95vdc		isolated
	4	Local at disp #1+2	-1.45vdc	NPL Line - suction	.00vdc		bonded
	3	Remote at disp #1+2	-1.50vdc	Small NPL Line	.00vdc		bonded
	3	Remote at disp #1+2	-1.50vdc	Combo Tank	.57vdc		isolated
				NPL Line - pressure	.00vdc		bonded
	Structure contact point(s): piping at dispenser						
	Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive						
NPL Product Pipe Structure:	4	Local at disp #1+2	-1.45vdc	Line to Disp Conduit	.95vdc		isolated
	4	Local at disp #1+2	-1.45vdc	NPL Line - suction	.00vdc		bonded
	3	Remote at disp #1+2	-1.50vdc	Small NPL Line	.00vdc		bonded
	3	Remote at disp #1+2	-1.50vdc	Combo Tank	.57vdc		isolated
				NPL Line - pressure	.00vdc		bonded
	Structure contact point(s): piping at dispenser						
	Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive						
Small NPL Product Pipe Structure:	5	Local at disp #3+4	-1.45vdc	Line to disp conduit	.95vdc		isolated
	2	Local at sub piping	-1.45vdc	NPL Line - suction	.00vdc		bonded
	3	Remote at disp #3+4	-1.50vdc	NPL Line - suction	.00vdc		bonded
	3	Remote at sub piping	-1.50	Small NPL Tank	.38vdc		isolated
				NPL line - pressure	.00vdc		bonded
	Structure contact point(s): piping at dispenser + sub						
	Overall Structure Results (Structure to soil potentials and continuity): ☒ Pass ☐ Fail ☐ Inconclusive						

Facility name: _____ Date of test (mm/dd/yyyy): _____

(Note: The facility name and date of test will automatically populate from page one, if filled out electronically.)

	Structure to soil potentials (mV)			Continuity testing (mV)			
	Half cell site map code	Half cell placement description	"ON" Voltage	Structure tested	Point-to-point voltage	Fixed cell remote voltage	Isolated/ Continuous/ Inconclusive
Structure: PML Product Pressurized	5	local lot disp # 3-4	-1.45vdc	Line to disp conduit	.95vdc		isolated
	1	local at sub piping	-1.45vdc	PML line - suction	.00vdc		bonded
	3	Remote at disp # 3-4	-1.50vdc	PML line - suction	.00vdc		bonded
	3	Remote at sub piping	-1.50vdc	Combo tank	.50vdc		isolated
	Structure contact point(s):	piping at dispenser sub		small PML line	.00vdc		bonded
	Overall Structure Results (Structure to soil potentials and continuity):			☒ Pass ☐ Fail ☐ Inconclusive			
Structure: ____							
	Structure contact point(s):						
	Overall Structure Results (Structure to soil potentials and continuity):			☐ Pass ☐ Fail ☐ Inconclusive			
Structure: ____							
	Structure contact point(s):						
	Overall Structure Results (Structure to soil potentials and continuity):			☐ Pass ☐ Fail ☐ Inconclusive			
Structure: ____							
	Structure contact point(s):						
	Overall Structure Results (Structure to soil potentials and continuity):			☐ Pass ☐ Fail ☐ Inconclusive			
Structure: ____							
	Structure contact point(s):						
	Overall Structure Results (Structure to soil potentials and continuity):			☐ Pass ☐ Fail ☐ Inconclusive			

Comments/Remarks: Tanks are isolated from all other structures at site. Lines are bonded to each other but isolated from all other structures at site

If separate corrosion protection is required on flex connectors, treat each flex as if it were an individual metal pipe.

Attach additional sheets as needed.

EPA-R5-2018-000306_0000313

Facility name: Morning Star Market Date of test (mm/dd/yyyy): 9-14-2012

(Note: The facility name and date of test will automatically populate from page one, if filled out electronically.)

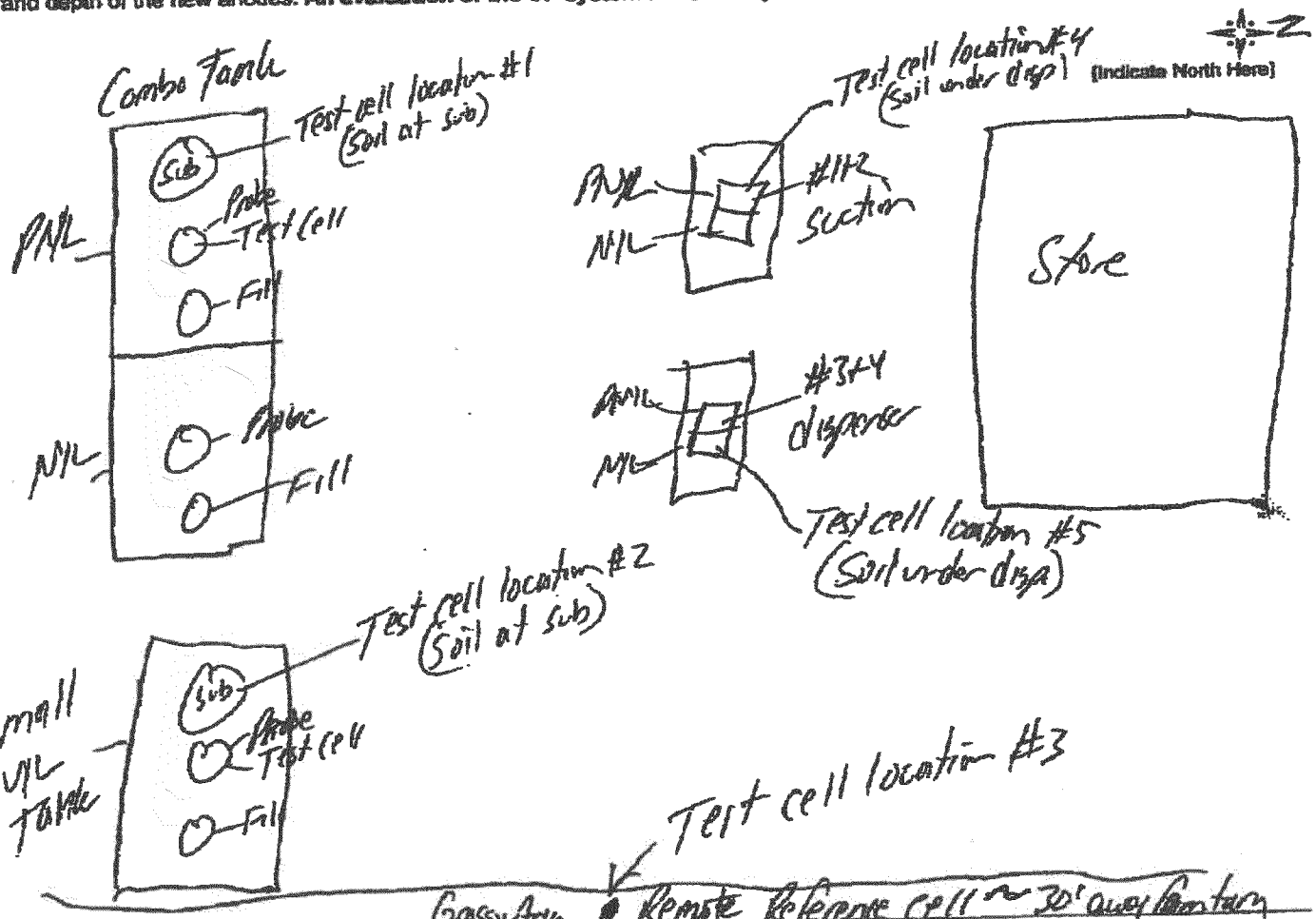
11. Description of UST system

Tank/ Pipe #	Product	Capacity (Gallons)	Tank type[1]	Piping type[2]	Metal Segments at Tank sump[3]	Metal Segments at Dispenser[3]
1	NL / Prem NL	10000	Steel sti-P3	Galv Steel	CP with Anodes	CP with Anodes
2	Small NL	4000	Steel sti-P3	Galv. Steel	CP with Anodes	CP with Anodes
3						
4						
5						
6						
Ex:	*Premium*	*10,000*	*SW sti-P3®*	*DW Fiberglass*	*CP w/ anodes*	*In Containment*

1. Indicate if tank is Double Wall (DW) or Single Wall (SW). Also indicated type (e.g., steel, fiberglass, sti-P3®, composite etc.). Also indicate if tank is compartmental if applicable
2. Indicate if piping is Double Wall (DW) or Single Wall (SW). Also indicate type (e.g., coated steel, fiberglass, galvanized, flex, etc.).
3. Indicate how metal segments such as flex connectors or metal pipe segments are protected from corrosion (e.g., isolated, booted, bonded, CP w/anodes, in containment, etc.)

12. UST facility site drawing

Attach detailed drawing or use the space provided to draw a sketch of the UST and CP systems. At a minimum you should indicate the following: All tanks, piping and dispensers; Location of anodes if known; All buildings and streets; Location of CP test stations; Each reference cell placement (local and remote) must be indicated by a code (e.g., 1,2, T-1,) corresponding with the appropriate test in Section 10 of this form. If supplemental anodes are added to the tank system, indicate number, size, location and depth of the new anodes. **An evaluation of the CP system is not complete without an acceptable site drawing.**



Northland Petroleum Service

22743 171st Street, Big Lake, MN 55309

763-263-2033 763-263-0086 Fax

Electronic or Mechanical Pressurized Line Leak Detector Test Results

Site Name: Morning Star Market

Site Address: 104 N. Main Street, Wahkon MN ZIP 56386

Test Date: 3/26/13 Testers Name: Matt Dave

Product	Electronic Monitor Model	Leak Detection Model	Piping Material	Pass/Fail
N/L	TS-LS300	PLLD	Steel	Pass
PNL	TS-LS300	PLLD	Steel	Pass

Testing was conducted using a VMI LDT 890 Leak Detector Tester.

EPA-R5-2018-000306_0000313