KEWAUNEE CO LMN

Robert E. Lee & Associates
Engineering, Surveying, Laboratory Services

4/18/91

December 3, 1991

rec'd 12/10/91 -SM13

2825 S. Webster Ave.
P.O. Box 2100
Green Bay, WI 54306-2100
414/336-6338
FAX 414/336-9141

Mr. Robert L. Snodgrass
Kewaunee Nuclear Plant
WISCONSIN PUBLIC SERVICE
N490 Hwy 42
Kewaunee, WI 54216

NFA 1/29/95 - D.P.

RE: Tank Removal Certification for Property located at the Kewaunee Nuclear Plant, N490 Hwy 42, Kewaunee, WI

Dear Mr. Snodgrass:

We have completed the laboratory analysis of the soil samples gathered on November 11, 1991 from the property located at the above noted address. These soil samples were taken to certify the removal of two 300-gallon underground storage tanks.

Based upon the Total Petroleum Hydrocarbon (TPH) laboratory analysis on the samples we collected, there is no indication of contamination of the soil due to petroleum products. The TPH analysis results are below the WDNR established standards of 10 ppm.

For exact laboratory data per parameter, please see attachment. Also enclosed is a Field Observation Data Sheet for additional removal information, a site map, chain of custody records, photographs taken during the tank removal, and the Underground Petroleum Product Tank Inventory form which was sent to DILHR to update their files.

This information has been sent to DILHR and the WDNR, thus notifying them of the tank removal and closure.

If you have any questions or comments, please call.

Sincerely,

ROBERT E. LEE & ASSOCIATES

Jeffrey G. LaViolette
Project Engineer

JGL/sdb

ENC.

cc: DILHR, Safety & Building Division
Bruce Urben, Unit Leader, WDNR-Lake Michigan District

ROBERT E. LEE AND ASSOCIATES, INC.

FIELD OBSERVATION OF UNDERGROUND TANK REMOVAL

DATE OF REPORT: November 20, 1991

TANK LOCATION: Wisconsin Public Service - Kewaunee Nuclear Plant
N. 490 Hwy 42
Kewaunee, WI 54216

OWNER REPRESENTATIVE : Robert L. Snodgrass

A. TANK INFORMATION

1. **TANK ID NO.:** not available

2. **TANK INSTALLATION DATE:** Tanks installed in 1977.

3. **NOTIFICATION OF STATE AGENCY:** DNR & DILHR notified on 11/91.

4. **NOTIFICATION OF FIRE MARSHAL:** Kewaunee Fire Chief Gregory Hlinak was notified, but was not present.

5. **TANK LOCATION:** The tanks were located on the north side of the existing building. (See site map.)

6. **TANK DIMENSIONS:** #1, 3'x 6'; #2, 3'x 6'.

7. **TANK CAPACITY:** #1, 300; #2, 300 gallons.

8. **TANK MANUFACTURER AND MODEL NO.:** N/A

9. **TANK AND TANK LINER MATERIAL:** Steel tank without an interior lining.

10. **TYPE OF CORROSION PROTECTION:** Tar-like coating.

11. **MATERIAL STORED IN TANK:** #1, Diesel fuel; #2, Unleaded Gasoline.

12. **DATE TANK REMOVED FROM SERVICE:** November 11, 1991

13. **DATE TANK REMOVED FROM GROUND:** November 18, 1991

14. **WEATHER CONDITIONS AT THE TIME OF REMOVAL:**
Overcast, windy; Approx. 45oF

B. REMOVAL INFORMATION

1. **PARTY RESPONSIBLE FOR REMOVAL:** Red's Excavating Inc.
   Green Bay, WI

2. **PARTY RESPONSIBLE FOR BACKFILL:** Red's Excavating Inc.
   Green Bay, WI

3. **RESPONSIBLE ON-SITE REPRESENTATIVE:** Mark Peters

4. **DESCRIBE METHODS USED FOR DRAINING AND PURGING TANK:**

   JAVCO INC, Green Bay, WI was responsible for the tank cleaning. Cleaning was accomplished shortly after the tanks were removed from the excavation. The tanks were purged of vapors, a manway was cut in the end of each tank and excess product was pumped to barrels. The tanks were wiped down and additional holes were cut in each side for ventilation.

5. **DESCRIBE METHOD USED FOR REMOVING TANK:**

   The tanks were removed with the use of a backhoe by excavating the soil adjacent to the tanks and lifting them out with the backhoe.

6. **DESCRIBE TIME AND PROCEDURES USED FOR BACKFILLING:**

   Backfilling took place shortly after soil samples were gathered. The backfill consisted of clean sand and gravel soils.

C. INSPECTION INFORMATION

1. DESCRIBE CONDITION OF TANK AND PIPING:

Visual inspection of the tanks and piping indicated that the tanks were in good condition with minimal corrosion. The piping led to the dispenser located directly above the tanks that were to be removed.

2. DESCRIBE NATIVE SOILS AND BACKFILL MATERIAL:

The native soils consisted of clay.

3. DESCRIBE FIELD ANALYTICAL SAMPLING EQUIPMENT:

The field sampling equipment (where applicable) consists of either a Microtip photoanalyzer detector (PID) with a 10.6 eV lamp or a Sensidyne Flame Ionization detector (FID), along with visual and odor observations. Sample jars consisted of glass jars with teflon lined caps.

4. DESCRIBE HOW, WHERE, AND NUMBER OF SAMPLES COLLECTED:

Samples were taken from the sidewalls of the excavation in the native soils at the depth of groundwater, which was approximately 4.5 feet.

5. IDENTIFY LAB USED FOR SAMPLE ANALYSIS:

The soils were analyzed at the Robert E. Lee and Associates laboratory, State Certification # 405043870. Samples were analyzed on a Hewlett Packard Gas Chromotagraph in accordance to procedures under the June, 1991 Lust Analytical Guidance.

(See attached Lab Results.)

D. DISPOSAL INFORMATION

1. INDICATE AMOUNT OF PRODUCT REMOVED AND IDENTIFY CONTRACTOR:

Remaining product was removed from the tanks by JAVCO, Inc. Disposal of this waste will be conducted by Javco, Inc.

2. IDENTIFY CONTRACTOR RESPONSIBLE FOR TANK DISPOSAL:

After the tanks were cleaned and purged, JAVCO Inc, was responsible for tank disposal. The tanks will be cut for scrap.

3. DESCRIBE METHODS USED TO EVALUATE, STORE, AND DISPOSE OF CONTAMINATED SOILS:

Contaminated soils not encountered.

SIGNATURE OF FIELD REPRESENTATIVE

Glenn J. Willems

DATE: DECEMBER 3, 1991

Wisconsin Department of Industry, Labor and Human Relations

UNDERGROUND PETROLEUM PRODUCT TANK INVENTORY

Send Completed Form To:
Safety & Buildings Division
P.O. Box 7969
Madison, WI 53707
Telephone (608) 267-5280

For Office Use Only:
Tank ID #

This form is to be completed pursuant to Section 101.142, Wis. Stats., to register all underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances. Please see the reverse side for additional information on this program. An underground storage tank is defined as any tank with at least 10 percent of its total volume (included piping) located below ground level. A separate form is needed for each tank. Send each completed form to the agency designated in the top right corner.

This registration applies to a tank that is (check one):
1. ☐ In Use or New
2. ☐ Abandoned With Product
3. ☐ Abandoned No Product (empty) or With Water
4. ☒ Closed - Tank Removed
6. ☐ Closed - Filled With Inert Material
7. ☐ Out of Service
8. ☐ Changed Ownership (Indicate new owner below)

Fire Department Providing Fire Coverage Where Tank Located: CITY OF KEWAUNEE

A. IDENTIFICATION: (Please Print)

1. Tank Site Name	Site Address	Site Telephone No.
WISCONSIN PUBLIC SERVICE	N 490 HWY 42	(414) 388-2560

☒ City ☐ Village ☐ Town of:	State	Zip Code	County
KEWAUNEE	WISC.	54216	KEWAUNEE

2. Owner Name (mail sent here unless indicated otherwise in #3 below)	Owner Mailing Address (mail sent here unless indicated otherwise in #3)
ROBERT L. SNODGRASS	SAME

☐ City ☐ Village ☐ Town of:	State	Zip Code	County

3. Alternate Mailing Name If Different Than #2	Alternate Mailing Street Address If Different From #2

☐ City ☐ Village ☐ Town of:	State	Zip Code	County

4. Tank Age (date installed, if known: or years old)	5. Tank Capacity (gallons)	6. Tank Manufacturer's Name (if known)
14 YEARS	300	

B. TYPE OF USER (check one):
1. ☐ Gas Station
2. ☐ Bulk Storage
3. ☐ Utility
4. ☐ Mercantile
5. ☒ Industrial
6. ☐ Government
7. ☐ School
8. ☐ Residential
9. ☐ Agricultural
10. ☐ Other (specify): _____

C. TANK CONSTRUCTION:
1. ☐ Bare Steel
2. ☐ Cathodically Protected and Coated Steel (A. ☐ Sacrificial Anodes or B. ☐ Impressed Current)
3. ☒ Coated Steel
4. ☐ Fiberglass
5. ☐ Other (specify): _____
6. ☐ Relined
7. ☐ Steel - Fiberglass Reinforced Plastic Composite
9. ☐ Unknown

Approval: 1. ☐ Nat'l Std. 2. ☐ UL 3. ☐ Other: | Is Tank Double Walled? ☐ Yes ☒ No

Overfill Protection Provided? ☐ Yes ☐ No If yes, identify type: | Spill Containment? ☐ Yes ☒ No

Tank leak detection method: 1. ☐ Automatic tank gauging 2. ☐ Vapor monitoring 3. ☐ Groundwater monitoring 4. ☐ Inventory control and tightness testing 5. ☐ Interstitial monitoring 6. ☒ Not required at present 7. ☐ Manual Tank Gauging (only for tanks of 1,000 gallons or less)

D. PIPING CONSTRUCTION
1. ☒ Bare Steel 2. ☐ Cathodically Protected and Coated or Wrapped Steel (A. ☐ Sacrificial Anodes or B. ☐ Impressed Current) 3. ☐ Coated Steel
4. ☐ Fiberglass 5. ☐ Other (specify): _____ 9. ☐ Unknown

Piping System Type: 1. ☐ Pressurized piping with: A. ☐ auto shutoff; B. ☐ alarm; or C. ☐ flow restrictor 2. ☒ Suction piping ~~with check valve at tank~~
3. ☐ Suction piping with check valve at pump and inspectable

Piping leak detection method: used if pressurized or check valve at tank: 1. ☐ Vapor monitoring 2. ☐ Interstitial monitoring
3. ☐ Groundwater monitoring 4. ☐ Tightness testing 5. ☐ Line Leak Detector 6. ☒ Not Required

Approval: 1. ☐ Nat'l Std 2. ☐ UL 3. ☐ Other: | Double Walled: ☐ Yes ☒ No

E. TANK CONTENTS
1. ☐ Diesel
2. ☐ Leaded
3. ☒ Unleaded
4. ☐ Fuel Oil
5. ☐ Gasohol
6. ☐ Other
7. ☐ Empty
8. ☐ Sand/Gravel/Slurry
9. ☐ Unknown
10. ☐ Premix
11. ☐ Waste Oil
12. ☐ Propane
13. ☐ Chemical * _____ _____ _____
14. ☐ Kerosene
15. ☐ Aviation

* If # 13 is checked, indicate the chemical name(s) or number(s) of the chemical or waste.

If Tank Closed, Give Date (mo/day/yr):	Has a site assessment been completed? (see reverse side for details)
NOVEMBER 18, 1991	☒ Yes ☐ No

If installation of a new tank is being reported, indicate who performed the installation inspection:
1. ☐ Fire Department 2. ☐ DILHR 3. ☐ Other (identify) _____

Name of Owner or Operator (please print):	Indicate Whether:
ROBERT L. SNODGRASS	☐ Owner or ☒ Operator

Signature of Owner or Operator:	Date Signed:
Glenn J. Williams (ROBERT E. LEE & ASSOC.)	NOVEMBER 19, 1991

SBD-7437 (R-03-91)

IMPORTANT: Complete as many items on this form as possible. Failure to provide sufficient information may cause you to fall under additional regulations.

Wisconsin Department of Industry, Labor and Human Relations

UNDERGROUND PETROLEUM PRODUCT TANK INVENTORY

Send Completed Form To:
Safety & Buildings Division
P.O. Box 7969
Madison, WI 53707
Telephone (608) 267-5280

For Office Use Only:
Tank ID #

This form is to be completed pursuant to Section 101.142, Wis. Stats., to register all underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances. Please see the reverse side for additional information on this program. An underground storage tank is defined as any tank with at least 10 percent of its total volume (included piping) located below ground level. A separate form is needed for each tank. Send each completed form to the agency designated in the top right corner.

This registration applies to a tank that is (check one):
1. ☐ In Use or New
2. ☐ Abandoned With Product
3. ☐ Abandoned No Product (empty) or With Water
4. ☒ Closed - Tank Removed
6. ☐ Closed - Filled With Inert Material
7. ☐ Out of Service
8. ☐ Changed Ownership (Indicate new owner below)

Fire Department Providing Fire Coverage Where Tank Located: CITY OF KEWAUNEE

A. IDENTIFICATION: (Please Print)

1. Tank Site Name	Site Address	Site Telephone No.
WISCONSIN PUBLIC SERVICE	N490 HWY 42	(414) 388-2560

☒ City ☐ Village ☐ Town of:	State	Zip Code	County
KEWAUNEE	WISC.	54216	KEWAUNEE

2. Owner Name (mail sent here unless indicated otherwise in #3 below)	Owner Mailing Address (mail sent here unless indicated otherwise in #3)
ROBERT L. SNODGRASS	SAME

☐ City ☐ Village ☐ Town of:	State	Zip Code	County

3. Alternate Mailing Name If Different Than #2	Alternate Mailing Street Address If Different From #2

☐ City ☐ Village ☐ Town of:	State	Zip Code	County

4. Tank Age (date installed, if known: or years old)	5. Tank Capacity (gallons)	6. Tank Manufacturer's Name (if known)
14 YEARS	300	

B. TYPE OF USER (check one):
1. ☐ Gas Station
2. ☐ Bulk Storage
3. ☐ Utility
4. ☐ Mercantile
5. ☒ Industrial
6. ☐ Government
7. ☐ School
8. ☐ Residential
9. ☐ Agricultural
10. ☐ Other (specify): _____

C. TANK CONSTRUCTION:
1. ☐ Bare Steel
2. ☐ Cathodically Protected and Coated Steel (A. ☐ Sacrificial Anodes or B. ☐ Impressed Current)
3. ☒ Coated Steel
4. ☐ Fiberglass
5. ☐ Other (specify): _____
6. ☐ Relined
7. ☐ Steel - Fiberglass Reinforced Plastic Composite
9. ☐ Unknown

Approval: 1. ☐ Nat'l Std. 2. ☐ UL 3. ☐ Other: | Is Tank Double Walled? ☐ Yes ☒ No

Overfill Protection Provided? ☐ Yes ☒ No If yes, identify type: | Spill Containment? ☐ Yes ☒ No

Tank leak detection method: 1. ☐ Automatic tank gauging 2. ☐ Vapor monitoring 3. ☐ Groundwater monitoring 4. ☐ Inventory control and tightness testing 5. ☐ Interstitial monitoring 6. ☒ Not required at present 7. ☐ Manual Tank Gauging (only for tanks of 1,000 gallons or less)

D. PIPING CONSTRUCTION
1. ☒ Bare Steel
2. ☐ Cathodically Protected and Coated or Wrapped Steel (A. ☐ Sacrificial Anodes or B. ☐ Impressed Current)
3. ☐ Coated Steel
4. ☐ Fiberglass
5. ☐ Other (specify): _____
9. ☐ Unknown

Piping System Type: 1. ☐ Pressurized piping with: A. ☐ auto shutoff; B. ☐ alarm; or C. ☐ flow restrictor 2. ☒ Suction piping ~~with check valve at tank~~
3. ☐ Suction piping with check valve at pump and inspectable

Piping leak detection method: used if pressurized or check valve at tank: 1. ☐ Vapor monitoring 2. ☐ Interstitial monitoring
3. ☐ Groundwater monitoring 4. ☐ Tightness testing 5. ☐ Line Leak Detector 6. ☒ Not Required

Approval: 1. ☐ Nat'l Std 2. ☐ UL 3. ☐ Other: | Double Walled: ☐ Yes ☒ No

E. TANK CONTENTS
1. ☒ Diesel
2. ☐ Leaded
3. ☐ Unleaded
4. ☐ Fuel Oil
5. ☐ Gasohol
6. ☐ Other
7. ☐ Empty
8. ☐ Sand/Gravel/Slurry
9. ☐ Unknown
10. ☐ Premix
11. ☐ Waste Oil
12. ☐ Propane
13. ☐ Chemical * _____ _____ _____
14. ☐ Kerosene
15. ☐ Aviation

* If # 13 is checked, indicate the chemical name(s) or number(s) of the chemical or waste.

If Tank Closed, Give Date (mo/day/yr):	Has a site assessment been completed? (see reverse side for details)
NOVEMBER 18, 1991	☒ Yes ☐ No

If installation of a new tank is being reported, indicate who performed the installation inspection:
1. ☐ Fire Department
2. ☐ DILHR
3. ☐ Other (identify) _____

Name of Owner or Operator (please print):	Indicate Whether:
ROBERT L. SNODGRASS	☐ Owner or ☒ Operator

Signature of Owner or Operator:	Date Signed:
Glenn J. Willems (ROBERT E. LEE & ASSOC.)	NOVEMBER 19, 1991

SBD-7437 (R. 03 91)

IMPORTANT: Complete as many items on this form as possible. Failure to provide sufficient information may cause you to fall under additional regulations.

Robert E. Lee & Associates
Engineering, Surveying, Laboratory Services

Wisconsin Certification No: 405043870

2825 S. Webster Ave.
P.O. Box 2100
Green Bay, WI 54306-2100
414/336-6338
FAX 414/336-9141

REPORT DATE===> 12/02/91

JOB NUMBER====> 1006095

CUSTOMER======> 100150

Internal Work-Jeff LaViolette

CONTACT=======> Jeff LaViolette

PROJECT=======> Kewaunee Nuclear

RECEIVED======> 11/18/91

SAMPLED=======> 11/18/91

COMMENTS:

ATTEST: _____

ROBERT E. LEE & ASSOCIATES
Wisconsin Certification No: 405043870

CUSTOMER======> 100150 - Internal Work-Jeff LaViolette
REPORT DATE===> 12/02/91 PROJECT====> Kewaunee Nuclear
JOB NUMBER====> 1006095 LOCATION===> Kewaunee Nuclear Power
BATCH=========> 2 SAMPLED====> 11/18/91

Sample #	Sample Id	Result		Analyzed	By
GASOLINE RANGE ORGANICS					
1	S3	<0.5	mg/kg	11/21/91	TR
2	S4	<0.5	mg/kg	11/21/91	TR
TOTAL SOLIDS					
1	S3	87.8	%	11/21/91	DT
2	S4	87.4	%	11/21/91	DT

[END OF BATCH: 2]

ROBERT E. LEE & ASSOCIATES
Wisconsin Certification No: 405043870

CUSTOMER======> 100150 - Internal Work-Jeff LaViolette
REPORT DATE===> 12/02/91 PROJECT====> Kewaunee Nuclear
JOB NUMBER====> 1006095 LOCATION===> Kewaunee Nuclear Power
BATCH=========> 1 SAMPLED====> 11/18/91

Sample #	Sample Id	Result		Analyzed	By
DIESEL RANGE ORGANICS					
1	S1	<0.5 (6)	mg/kg	11/25/91	JF
2	S2	<0.5 (6)	mg/kg	11/25/91	JF
EXTRACTION DATE - DIESEL					
1	S1	Extracted	On	11/20/91	SH
2	S2	Extracted	On	11/20/91	SH
TOTAL SOLIDS					
1	S1	85.0	%	11/21/91	DT
2	S2	84.8	%	11/21/91	DT

[END OF BATCH: 1]

Figures in parentheses after the analytical results indicate that a violation of quality control has occurred in our laboratory. Please see the key below to determine what violation has occurred.

1. The result reported was included in an analytical batch in which the duplicate analysis failed the acceptable quality control limits.

2. The result reported was included in an analytical batch in which the spike analysis failed the acceptable quality control limits.

3. The result reported was included in an analytical batch in which the check standard failed the acceptable quality control limits.

4. The reported duplicate value for this sample failed the acceptable quality control limits for duplicate analysis.

5. The reported spike recovery for this sample failed the acceptable quality control limits for spike analysis.

6. The result reported was influenced by a sample interference in the analytical method.

7. Sample analyzed after holding time had expired.

8. The 5-day BOD result is reported as an "estimate" since the dilution was inadequate.

9. Sample received after holding time had expired.

10. This is a preliminary result since a quality control limit has been exceeded for this batch or sample.

Robert E. Lee & Associates
Engineering, Surveying, Laboratory Services
2825 S. Webster Ave. • Box 2100 • Green Bay, WI 54306-2100
Office 414.336.6338 • FAX 414.336.9141

MAIL RESULTS TO:	
NAME	J.G.L.
ADDRESS	
CITY	

Special Handling Request: JRSH
X Rush Analysis Date Required: 11/25/91
Normal Turn Around

Chain of Custody Record

Client Number: 1006095-JG
Client Name: KEWAUNEE NUCLEAR POWER PLANT
Project Number:
Sampled By: GLENN J. WILLEMS
Project Name:

Sample I.D.	Date	Time	Bottle Total	Sample Type	Preservation Type (H = Hydrochloric Acid, N = Nitric Acid, S = Sulfuric Acid, O = Sodium Hydroxide, NA = None)	Analysis Required	Comments
S1 (W. END TANK #1)	11/18/91	11:00	1	SOIL	N/A	DRO	CLAY SOIL
S2 (E. END TANK #1)	11/18/91	11:15	1	SOIL	N/A	DRO	CLAY SOIL
S3 (E. END TANK #2)	11/18/91	11:30	1	SOIL	N/A	GRO	CLAY SOIL
S4 (W. END TANK #2)	11/18/91	11:45	1	SOIL	N/A	GRO	CLAY SOIL

Relinquished By	Date	Time	Received By	Date	Time
1) Glenn J. Willems	11/18/91	2:35			
2)					
3)					
4)					

Temperature of Contents: 9 °C
Condition of Seals:
Condition of Contents:

Received in Laboratory By: JGrow 11-18-91 2:40

CC: TN SH CT SS

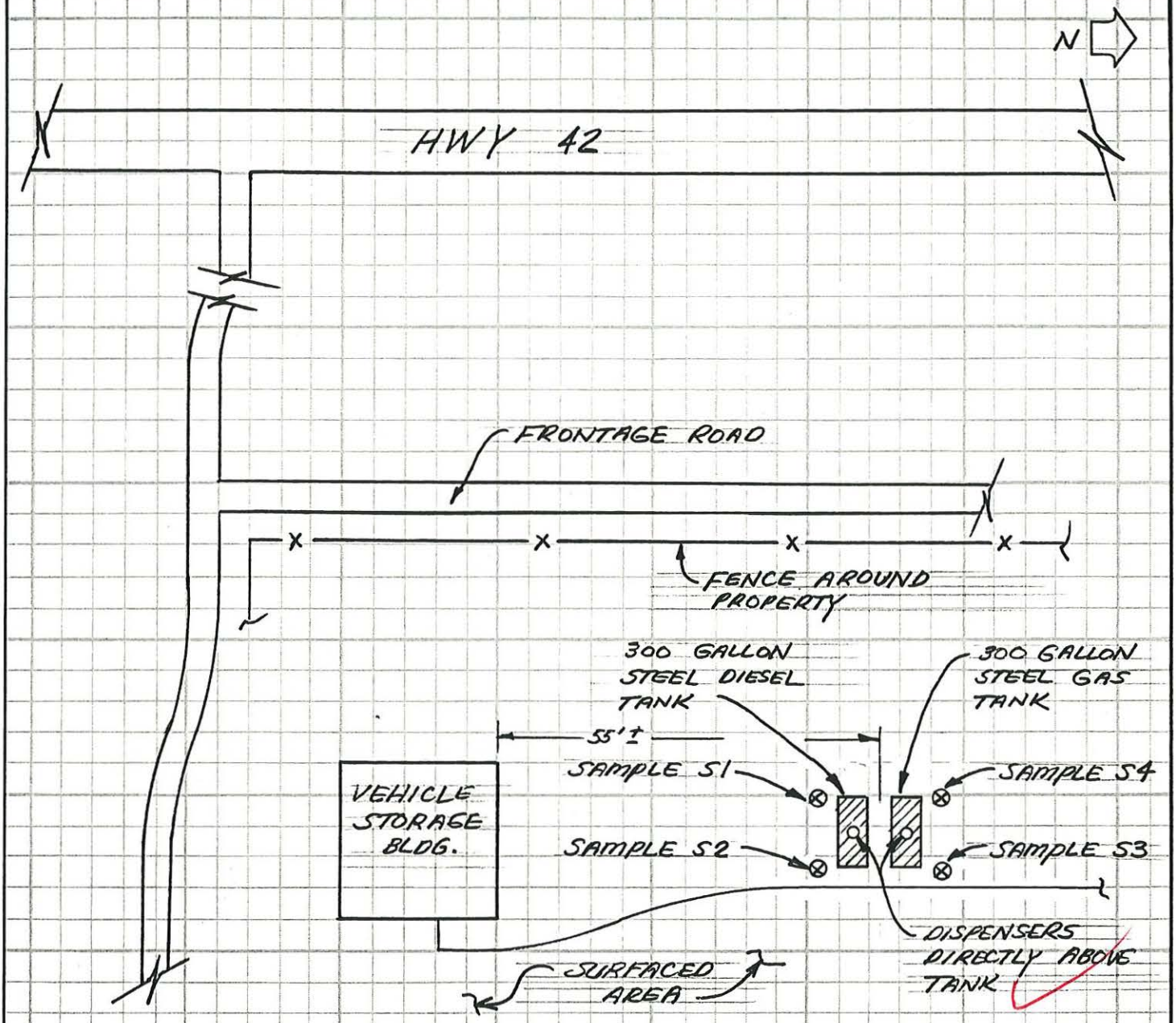
Please complete shaded areas and return top two copies with samples.

I/P 90' - 001

ROBERT E. LEE & ASSOCIATES, INC.
ENGINEERING • SURVEYING • LABORATORY SERVICES (414) 336-6338
Box 2100 2825 S. Webster Avenue Green Bay, WI 54306-2100

SUBJECT: WISCONSIN PUBLIC SERVICE

JOB NO.	DATE	BY	SHEET
	11/19/91	G.J.W.	



WISCONSIN PUBLIC SERVICE
SITE PLAN MAP
NOT TO SCALE

1-800-76, -0777
STOCK# PPV840-000

WISCONSIN PUBLIC SERVICE
KEWAUNEE NUCLEAR PLANT
N. 490 HWY 42
KEWAUNEE, WI 54216
PHOTOGRAPHS TAKEN 11/18/91.