EXPLORATORY INVESTIGATION FOR PETROLEUM CONTAMINANTS AT THE PIT STOP NACHES, WA

For:
John R. Bissell
Bissell Distributing
10121 Highway 12
Naches, WA 98937

By:
David L. Green
Engineering Geologist

WHITE SHIELD, INC.
P.O. Box 477
Grandview, WA 98930

July, 1991

WHITE SHIELD, INC.

P.O. BOX 477 • GRANDVIEW, WA 98930 • (509) 882-1144
FAX (509) 882-4566

July 3, 1991
Bissell Distributing
10121 Highway 12
Naches, WA 98937

Attention: John R. Bissell

SUBJECT: RESULTS OF OUR EXPLORATORY INVESTIGATION ON THE PIT STOP PROPERTY, NACHES, WA.

Dear Mr. Bissell,

Please find two copies of our exploratory investigation report. Based on the data and findings reported herein, we find that concentrations of petroleum hydrocarbons in the soil and groundwater exceed Action Levels for Petroleum Releases within the eastern portion of your property.

We have enclosed the Tightness Testing Report, prepared by Appleland Pump and Equipment, with this report. The DOE requires that you retain these reports for a minimum of ten years. We recommend you retain it indefinitely. The DOE also requires us to submit a copy of the Underground Storage Tank Site Check/Site Assessment Checklist to the Olympia office and it is attached to this report as Appendix D. We have also included the Tightness Testing Report conducted by Appleland Pump and Equipment and it is included as Appendix E.

We appreciate the opportunity to provide you technical assistance for your tank closure. Please call me at (509) 882-1144 should you have any questions or comments.

Respectfully Yours,
WHITE SHIELD, INC.

David L. Green, R.S.A.
Engineering Geologist

Project Number: BIS-0191

cc: lb
Department of Ecology, Main Office, Olympia
Mike Cochran, Department of Ecology, Central Regional Office

The Pit Stop - Naches, Washington

Executive Summary

White Shield, Inc. (WSI) provided exploratory site assessment services at the Pit Stop in Naches, Washington. The scope of work included sampling of soil and groundwater in test pits established with a backhoe to determine if the property had been contaminated by petroleum products. We tested the soil for gasoline and diesel contamination as required by the Guidance for Site Checks and Site Assessments for Underground Storage Tanks (Guidance for Site Assessments). We conducted our investigation on May 10, 1991.

Based on our visual observations, analytical laboratory analyses, olfactory responses (smell), we found gasoline, ethylbenzene and xylene contamination in the soil which requires remedial action. We also found gasoline, diesel, benzene, toluene, ethylbenzene and xylene contamination in the groundwater which again requires remedial action. We compared laboratory analysis results with "Action Levels for Petroleum Releases" established in the Guidance for Site Assessments to determine that remedial action is required. Although our investigation was limited due to budget constraints, we discovered one source of petroleum contamination and one potential source of petroleum contamination. The vertical and horizontal extent of petroleum contaminants in the soil suggests that the petroleum contamination originated from the abandoned dispenser island and possibly from the area of the underground storage tanks. The relative concentrations of volatile petroleum constituents near the abandoned dispenser island indicates that the petroleum is moderately degraded and appears to be an aged release. The relative concentrations of volatile petroleum constituents near the underground storage tanks suggests that the petroleum is relatively fresh and may be a recent or reoccurring release.

The plume of petroleum contaminated groundwater extends to the eastern property boundary. Soil contamination appears to be confined to the area adjacent to the unused dispenser island and a 1 to 2 foot zone above the groundwater surface. It also extends to the eastern property boundary. Although we did not investigate outside the property boundary, it is likely that petroleum hydrocarbons have migrated off-site. Remedial action will be necessary to halt migration and reduce contaminant levels to acceptable levels.

We recommend conducting additional exploration on adjacent properties to determine the extent of the petroleum plume in the soil and groundwater and to assess the potential hazards the plume may present. Once the extents of petroleum plume are known, at least three groundwater monitoring wells should be established to ensure that petroleum contaminants do not migrate. These wells will also allow determination of the precise direction of groundwater flow. Measures should then be taken to contain the plume and halt migration. Once the plume is characterized and contained, an appropriate remedial action plan may be chosen to lower petroleum concentrations to acceptable levels.

TABLE OF CONTENTS

1.0 Introduction

1.1 Purpose

This report describes findings and actions taken for work associated with the exploratory investigation to determine if petroleum contaminated soil and/or groundwater exists at the Pit Stop in Naches, Washington. The work and investigation responds to regulatory requirements set forth by the United States Environmental Protection Agency (EPA) and the State of Washington, Department of Ecology (DOE).

1.2 Scope of Work

This report completes site assessment services, provided by White Shield, Inc. (WSI), for one 8,000 gallon regular gasoline tank and two 2,500 gallon unleaded gasoline tanks on the Pit Stop property. The most easterly unleaded gasoline tank has also stored diesel. The tanks currently remain in place. The purpose of the investigation consisted of determining if the soil and/or groundwater had been contaminated with petroleum products. Desmarais Service and Supply provided backhoe services to establish four test pits.

2.0 Background Information

2.1 Site Location and Topography

The site is located at 10123 Highway 12 in Naches, Washington. It is situated on the Southeast corner of the intersection of Highway 12 and Naches Street. According to the Public Land Survey System, the site is located within the SW 1/4 of the SW 1/4 of the NW 1/4 of the SW 1/4 of Section 3, Township 14 North, Range 17 East, Willamette Meridian. The location of the site is displayed by Figure 1.

The topography at the site slopes gently to the southeast, following the Naches River drainage. This drainage is nestled between Naches Heights and the southeastern flanks of Cleman Mountain.

2.2 Site Description and History

The Pit Stop consists of a convenience store/restaurant which also supports retail sale of petroleum products. This business property occupies less than an acre of land. The general layout of the property is shown on the Field Form for Site Assessment of Underground Storage Tanks (Field Form) and is included in this report as Appendix A.

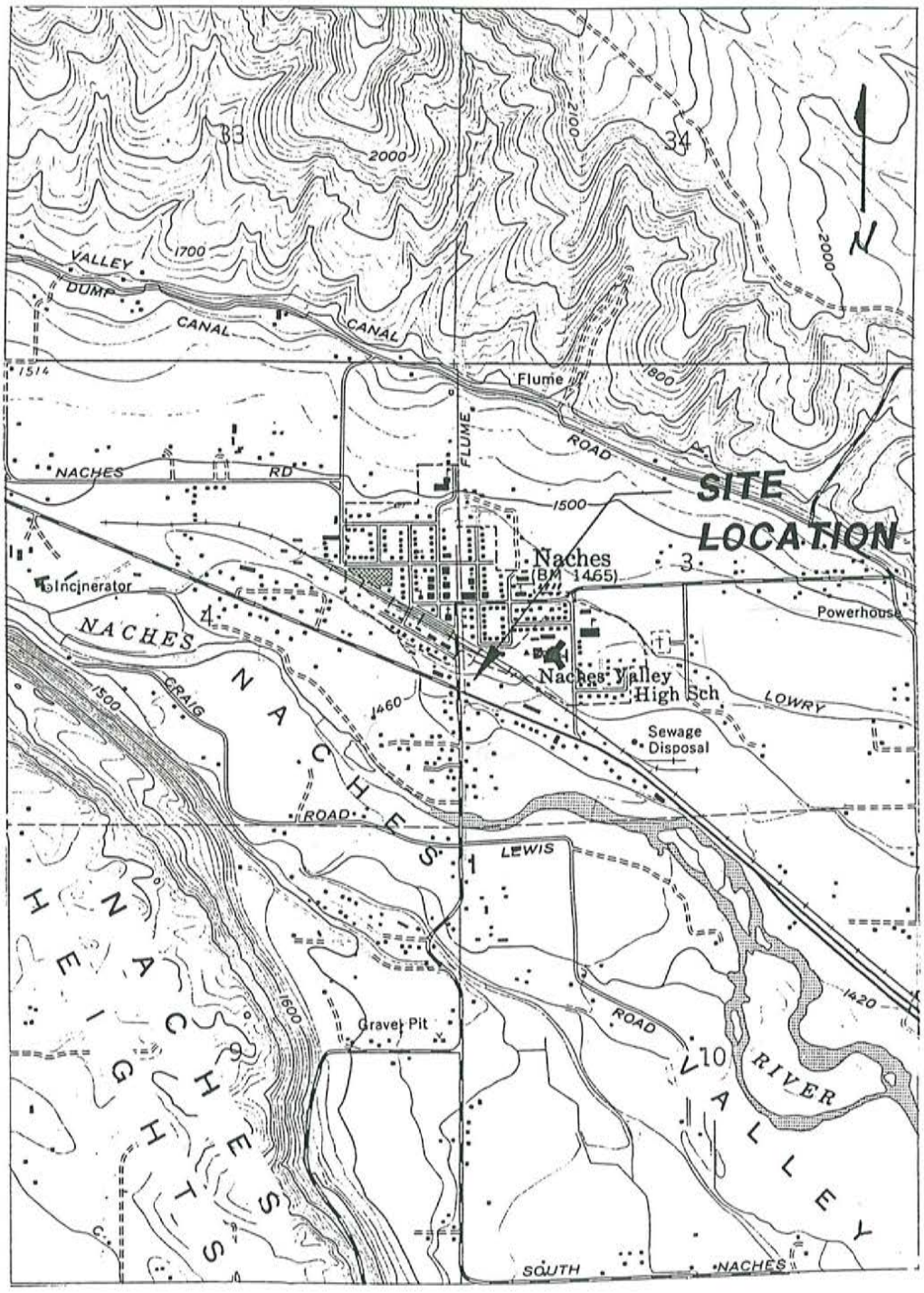


Figure 1. Site Location and Topography

1961 - unl
1961 - unl
1968 - reg

The convenience store building is located on the northern margin of the property. There are three Underground Storage Tanks (UST's) located immediately east of the building. The dispensers currently in use are located south of the building, while an abandoned dispenser island is located southeast of the UST's. We understand that these tanks support retail sale of petroleum products to the general public. The tanks were installed in and currently remain in place.

The site has been owned and operated, since the late 1950's, by about four different parties prior to Bissell Distributing. Bissell Distributing purchased the property in 1979 and subsequently leased it to other operators.

2.3 Site Geology

The geology of the immediate area consists of three primary geologic features. The site itself rests upon alluvial material deposited by the Naches River. The alluvium lies within the Naches River Valley which is bounded by the southeastern flanks of Cleman Mountain to the north and Naches Heights to the south. The river rock composing the alluvium consists of cobbles and boulders derived from adjacent highlands and the eastern Cascade Range. Sediments of the Ellensburg Formation flank the southeastern portion of Cleman Mountain and form the foothills located approximately 3/4 mile north of the site. These sediments are associated with Columbia River Basalts which underlie the region. Naches Heights, composed of Tieton Andesite, lies approximately 1/2 mile to the southwest. These heights are composed of the Tieton Andesite which flowed down a prehistoric Naches River Valley.

Our inspection of the soil at the site found very poorly sorted river gravels up to 2 feet in diameter. The cobbles average 5 inches in diameter. Approximately 10 to 15% of the material consists of small boulders greater than 1 foot in diameter.

2.4 Surface and Groundwater Hydrology

The major drainage features in the area consist of the Naches Heights, the southeastern flanks of Cleman Mountain and the Naches River Valley. Surface runoff generally flows toward the Naches River. The nearest surface water to the site consist of a flume, located immediately west of the Pit Stop Property. This flume flows directly south to the Naches River.

Groundwater is contained by an alluvial aquifer and deep basalt aquifers. The groundwater surface in the Alluvial Aquifer lies at a depth of about 13 feet at the site. We conducted a review of driller well logs retained by the Washington State Department of Ecology. Although the data is limited, it suggests that groundwater at the site flows generally in a southeast direction following the Naches River Valley.

3.0 Field Activities

3.1 General Investigative Methods

The investigation consisted primarily of establishing test pits in areas most likely to exhibit petroleum contamination. We used sampling, field screening, analytical laboratory analyses, olfactory responses (smell), and interviews for data. We compared laboratory analysis results with Action Levels for Petroleum Releases (Appendix C), established in the Guidance for Site Checks and Site Assessments for Underground Storage Tanks, to determine if petroleum concentrations warrant corrective action. The methods and general conclusions are discussed below.

3.2 Exploratory Investigation

Dave Green, engineering geologist, and Rodney Heit, environmental technician, performed the exploratory investigation on May 10, 1991. Both are registered with the Washington State Department of Ecology Underground Storage Tank Program.

We initiated our investigation by establishing three test pits (Pit 1, 2 & 3, Appendix A) in areas adjacent to the underground storage tank system. We established the pits in locations adjacent to the tank system in an attempt to intercept petroleum products which may have migrated from the system. Upon determination that petroleum existed in the soil and groundwater, an additional pit (Pits 4) was established to assess the potential for off-site migration of groundwater contamination.

The attached Field Forms for Site Assessment of Underground Storage Tanks (Field Form) provides a site map, sample locations and other key data. Results of laboratory analyses are discussed in Section 4.3 Soil Chemistry and Section 4.5 Groundwater Chemistry. Information regarding each pit is discussed below.

Pit 1

During excavation of Pit 1 (see Field Form), we discovered petroleum contaminated soil and groundwater underneath the abandoned dispenser island. The visible contamination extends from the base of the island down to groundwater. The soil and groundwater smelled heavily of gasoline and diesel. We observed a sheen floating atop the groundwater which indicated that groundwater contamination existed. We collected a soil sample at a depth of 11 feet and a groundwater sample at a depth of 13 feet for field and laboratory analysis. Field analysis of the samples indicated that the soil and groundwater were heavily contaminated with gasoline and diesel.

Pit 2

We established Pit 2 immediately east of the underground storage tanks. We found low levels (below cleanup guidelines) of petroleum contamination to a depth of approximately 11 feet. Between 11 and 13 feet, the soil was obviously contaminated by petroleum product. The groundwater smelled of gasoline and diesel and a sheen covered the surface of the groundwater. We collected a soil sample at a depth of 8 feet and a groundwater sample at a depth of 13 feet for field and laboratory analysis. Our field analysis indicated that the soil above a depth of about 11 feet contained moderate levels of petroleum. The soil lying between depths of 11 and 13 feet and the groundwater was heavily contaminated with petroleum products.

Pit 3

We established Pit 3 at the north end of the regular gasoline tank. The soil and groundwater in the pit appeared to be relatively clean. We collected a soil sample at a depth of 11 feet and a groundwater sample at a depth of about 13 feet for field and laboratory analysis. Our field analysis detected very low levels of petroleum in the soil but groundwater contamination was not detected. However, laboratory analysis (discussed below) has determined that petroleum concentrations slightly exceed Action Levels within the groundwater.

Pit 4

In an effort to determine the potential for off-site migration of petroleum products in the groundwater, we established a test pit at the extreme southeast corner of the property. The soil appeared to be relatively clean to a depth of approximately 11 feet. The groundwater smelled of gasoline. We collected soil samples at depths of 7 feet and 12 feet and a groundwater sample at a depth of 13 feet. Our field analysis indicated that the soil is relatively clean to a depth of 11 feet. Below 11 feet, our analysis indicated that the soil and groundwater contain petroleum concentration exceeding cleanup guidelines.

As required by the DOE, we have completed the Underground Storage Tank Site Check/Site Assessment Checklist and submitted it to the Olympia office. A copy of this checklist is presented in this report as Appendix D.

4.0 Investigative Methods and Results

4.1 Field Screening

For field analysis, we use a Foxboro Organic Vapor Analyzer in conjunction with the interim headspace method as recommended by the manufacturer. This method is used to confirm the presence or absence of volatile components in the soil and provides only a rough indication of the contaminant concentrations. The analysis procedure involves:

1. Selecting a clean, wide mouth jar (1 qt.) and filling the bottom 1/3 with a discrete soil sample.

2. Place aluminum foil over the top of the jar and place a ring over the jar to create a seal.

3. Boil the sample for 10 minutes. This causes the volatile compounds to become vapors and collect in the space above the soil.

4. Remove the sample from the boiling water and insert the instrument probe through the aluminum foil for vapor analysis.

5. Record the instrument response on the FF.

4.2 Soil Sampling

The FF presents the location, quantity and types of samples taken. In general, sample collection and control followed the following protocol:

1. Select a laboratory certified clean sample jar for sample collection.

2. Using clean latex gloves and clean sampling utensils (tri-sodium phosphate, chlorine solution, tap water rinse and distilled water rinse cycle) tightly pack the soil sample in the sample jar (4 oz.) to the top of the jar to prevent any airspace.

3. Label the jar with the soil sample number, the type of laboratory test required, the date, name of site and sampler. The sample is then entered on the chain of custody form.

4. Cool the sample in wet ice to approximately 4 degrees Centigrade.

5. Repack the samples for shipment to the laboratory in blue ice and a cooler.

6. Relinquish sample to courier for shipment to the laboratory.

4.3 Soil Chemistry

We collected 5 soil samples and submitted them to Materials Testing and Consulting in Mt. Vernon, Washington for laboratory analysis. Laboratory analysis of soil samples indicated that petroleum concentrations exceed action levels in Pits 1 & 4. In addition, we observed visible petroleum contamination in Pit 2 between depths of 11 and 13 feet. However, we did not submit a sample for laboratory analysis due to budget constraints. The analyses support the hypothesis that the petroleum release occurred at the abandoned dispenser island.

Pit 1

The soil sample collected from Pit 1 exhibited the highest degree of petroleum contamination. The analysis found:

- gasoline at a concentration of 12,467 parts per million (ppm),
- toluene at a concentration of 1.04 ppm,
- ethylbenzene at a concentration of 147.0 ppm and
- xylenes at a concentration of 1,316.8 ppm.

All of the constituents analyzed in this sample, with the exception of benzene, exceed action levels. The relative concentrations of benzene toluene, ethylbenzene and xylene suggest that the gasoline has been degraded and the volatile components may have migrated from the area of the test pit.

Pit 4

Laboratory analysis of the soil sample collected from Pit 4 at a depth of 7 feet found no detectable petroleum compounds. However the sample collected at a depth of 12 feet exhibited:

- gasoline at a concentration of 542.0 ppm,
- toluene at a concentration of 0.045 ppm,
- ethylbenzene at a concentration of 6.391 ppm and
- xylenes at concentrations of 57.248 ppm.

Compounds exceeding Action Levels in this sample consist of gasoline and xylenes. As in Pit 1, the relative concentrations of benzene toluene, ethylbenzene and xylene suggest that the gasoline has been degraded and the volatile components may have migrated from the area of the test pit.

Results of the analyses are shown in Appendix B. Comparison of the analyses results with Action Levels for Petroleum Releases indicates that corrective action for soil cleanup is required in the area of Pit 1 and Pit 4. Although no sample was collected immediately above the groundwater in Pit 2, corrective action for soil contamination is warranted.

4.4 Groundwater Sampling

Water sampling followed the same general protocol as the soil samples. The difference lies in filling the sample bottle. We filled the water bottle, placed the cap on the sample and inverted the bottle to ensure the absence of air space.

4.5 Groundwater Chemistry

We collected four groundwater samples and submitted them to Materials Testing and Consulting in Mt. Vernon, Washington for laboratory analysis. Results of the analyses find that the groundwater is contaminated by gasoline, diesel, benzene, toluene, ethylbenzene and xylenes. All of these contaminants exceed Action Levels. The sample collected from pit 1, adjacent to the abandoned dispenser island, exhibits the highest concentrations of petroleum hydrocarbons. The results for individual test pits are discussed below.

Pit 1

Analysis of the groundwater sample collected from Pit 1 found the following:

- gasoline at a concentration of 1,373 ppm,
- diesel at a concentration of 5,621 ppm,
- benzene at a concentration of 180 parts per billion (ppb),
- toluene at a concentration of 380 ppb,
- ethylbenzene at a concentration of 5,550 ppb and
- xylenes at a concentration of 38,400 ppb.

As discussed above, the relative concentrations of the BTEX compounds suggest that the petroleum is moderately weathered and is probably the result of an old release.

Pit 2

Analysis of the groundwater sample collected from Pit 2 found the following:

- gasoline at a concentration of 59 ppm,
- diesel at a concentration of 122 ppm,
- benzene at a concentration of 872 ppb,
- toluene at a concentration of 2,535 ppb,
- ethylbenzene at a concentration of 980 ppb,
- xylenes at a concentration of 6,360 ppb.

The relative concentrations of BTEX compounds suggests that the petroleum products found in this sample are relatively fresh. This may indicate a release in the vicinity of the underground storage tanks.

Pit 3

Analysis of the groundwater sample collected from Pit 3 found relatively low levels of diesel. However, the concentration of diesel slightly exceeds Action Levels. The analysis found:

- diesel at a concentration of 3.5 ppm.

No other petroleum constituents were detected.

Pit 4

Analysis of the groundwater sample collected from Pit 4, located at the southeast corner of the property, found:

- gasoline at a concentration of 23 ppm,
- benzene at a concentration of 11.8 ppb,
- toluene at a concentration of 117 ppb,
- ethylbenzene at a concentration of 96 ppb, and
- xylenes at concentrations of 3,209 ppb.

Although petroleum concentrations are substantially lower in this pit, the concentrations of petroleum constituents indicates that the contaminants have likely migrated off-site.

Results of the analyses are shown in Appendix B. Comparison of the analyses results with the Guidance for Site Checks and Site Assessments for Underground Storage Tanks indicates that corrective action is required to prevent migration of petroleum products and lower contaminant concentrations to acceptable levels.

5.0 Conclusion

5.1 Summary

Based on our visual observations, analytical laboratory analyses, olfactory responses (smell), we found gasoline, ethylbenzene and xylene contamination in the soil which requires remedial action. We also found gasoline, diesel, benzene, toluene, ethylbenzene and xylene contamination in the groundwater which again requires remedial action. The vertical and horizontal extent of petroleum contaminants in the soil suggests that the petroleum contamination originated from the area of the abandoned dispenser island and possibly the area of the underground storage tanks. The relative concentrations of volatile petroleum constituents near the abandoned dispenser island indicates that the petroleum is moderately degraded and appears to be an aged release. The relative concentrations of volatile petroleum constituents near the underground storage tanks suggests that the petroleum is relatively fresh.

A plume of petroleum contaminated groundwater, which requires remedial action, extends to the eastern property boundary. Soil contamination, which also requires remedial action, appears to be confined to the area adjacent to the unused dispenser island and a 1 to 2 foot zone above the groundwater surface. It also extends to the eastern property boundary. Although we did not investigate outside the property boundary, it is likely that petroleum hydrocarbons have migrated off-site.

5.2 Recommendations

We recommend conducting additional exploration on adjacent properties to determine the extent of the petroleum plume in the soil and groundwater and to assess the potential hazards the plume may present. Once the extents of petroleum plume are known, at least three groundwater monitoring wells should be established to ensure that petroleum contaminants do not migrate and to also allow determination of the precise direction of groundwater flow. Measures should then be taken to contain the plume and halt migration. Once the plume is characterized and contained, an appropriate remediation may be selected to lower petroleum concentrations to acceptable levels. It is likely that excavation of petroleum contamination near the source is appropriate. In this case, removal of the existing tanks is recommended to facilitate soil removal. The tank system should then be replaced with tanks meeting current regulatory standards.

6.0 Limitations

In performing our professional services, we used a degree of care ordinarily exercised under similar circumstances by members of our profession. No warranty, expressed or implied, is made or intended. Our conclusions and recommendations, developed from our field and laboratory investigation reported herein, are based upon this firm's understanding of the tank removal project and are in concurrence with generally accepted practice.

APPENDIX A

FIELD FORM FOR SITE ASSESSMENT OF UNDERGROUND STORAGE TANKS

WHITE SHIELD, INC.
ENVIRONMENTAL ENGINEERING CONSULTING
P.O. BOX 477
GRANDVIEW, WA
98930
(509) 882-1144

Project name: Pit Stop Project number: Bis-0191

NE NE? yes per DG 11-14-91

Location: S,E corner Naches & Hwy 12 ; NW 1/4 SW 1/4, Sec. 3, T. 14 N., R. 17 E., W.M.

Field Personnel: DAVEGREEN, RodHeit Weather: Mostly Cloudy, WARM Date: 5/10/91

Tank Contents: Regular gas Size: 8,000 gal Condition: NOT KNOWN

Tank Contents: Unleaded gas Size: 2,500 gal Condition: Not Known

Tank Contents: Unleaded gas Size: 2,500 gal Condition: Not Known, Previously Diesel

Tank Contents: _____ Size: _____ Condition: _____

Tank Contents: _____ Size: _____ Condition: _____

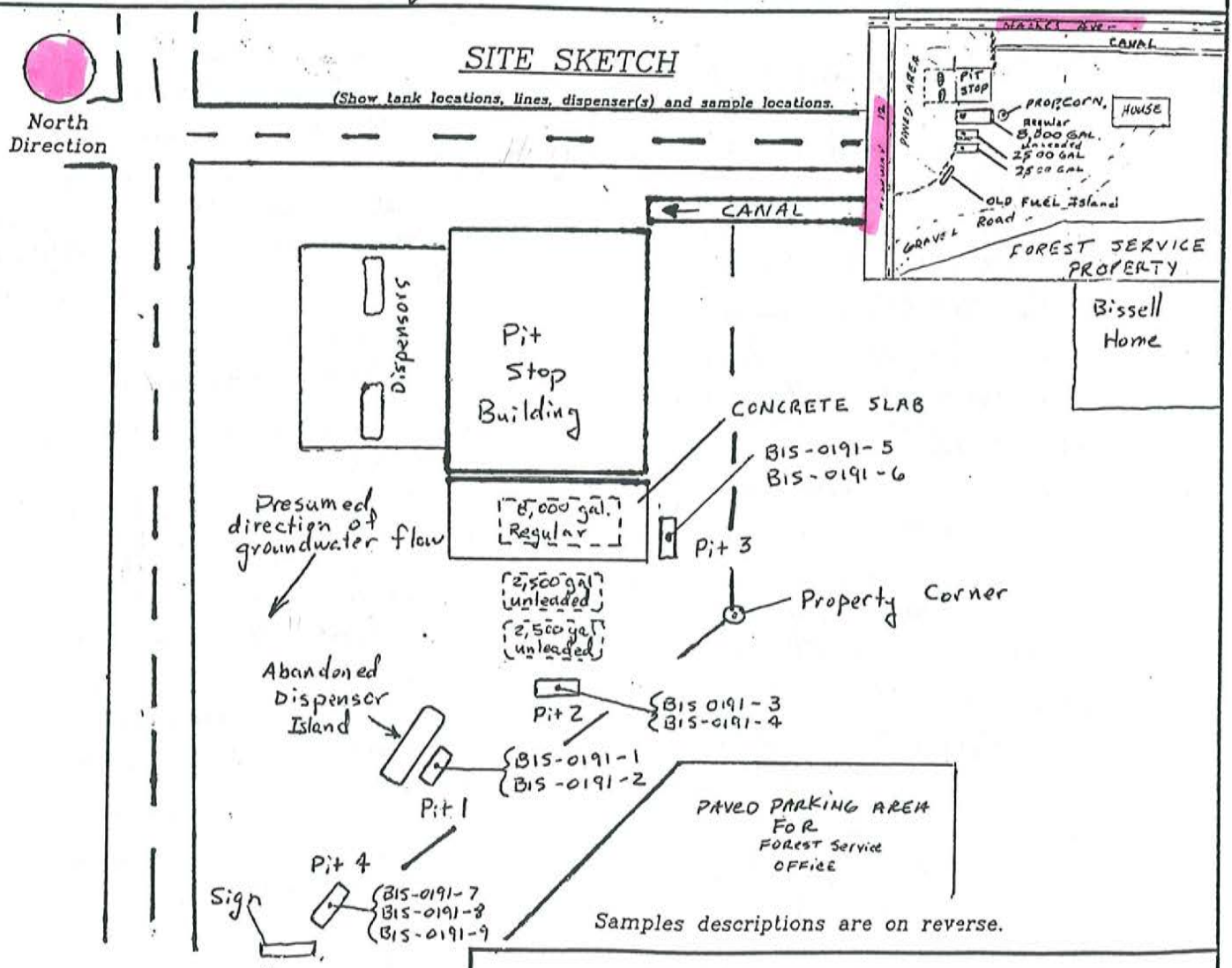
Ambient vapors: 4.2 T.O.V. Vapors in excavation: yes Odors: Diesel & Gasoline

Soil texture and structures: Very Poorly Sorted River Gravels up to 2' in Diameter Average 5" Approx. 10% – 15% over 1' Diameter

Visual contamination: Stained Grey ~ 1½' Above Ground Water Screening method: F.I.D.

SITE SKETCH

(Show tank locations, lines, dispenser(s) and sample locations.)



Samples descriptions are on reverse.

Depth to groundwater ~13'

Approximate scale: Not to Scale

I certify that the work performed and sampling methods used meet regulatory requirements as set forth by the U.S. Environmental Protection Agency and the Washington State Department of Ecology.

Site Assessor: _____ Date: 5-10-91

REQUIRED SAMPLES

Display locations on site sketch

○ Dispenser 1 (two feet below pipe).
Analysis:______ Depth:______.
Headspace reading ______ ppm.

If there is more than one dispenser, include corresponding samples under Additional Sampling

○ Fuel lines (first 50 feet of length).
Analysis:______ Depth:______.
Headspace reading ______ ppm.

If there is more than 50 ' of lines, include corresponding samples under Additional Sampling

ADDITIONAL SAMPLING

(1) Im. East of old Fuel Island
Analysis: 8015/8020 Depth: 11'.
Headspace reading >1000 ppm.

(2) East old Fuel Island.
Analysis: 8015/602 Depth: 13'.
Headspace reading >1000 ppm.

(3) #2 Test Pit.
Analysis: 8015/8020 Depth: 8'.
Headspace reading 11 ppm.

(4) #2 Test Pit.
Analysis: 8015/602 Depth: 13'.
Headspace reading >1000 ppm.

(5) #3 Test Pit.
Analysis: 8015/8020 Depth: 11'.
Headspace reading .4 ppm.

(6) #3 Test Pit.
Analysis: 8015/602 Depth: 13'.
Headspace reading ND Detect ppm.

(7) #4 Test Pit.
Analysis: 8015/8020 Depth: 7'.
Headspace reading 13 ppm.

(8) #4 Test Pit.
Analysis: 8015/8020 Depth: 12'.
Headspace reading >1000 ppm.

(9) #4 Test Pit.
Analysis: 8015/602 Depth: 13'.
Headspace reading 670 ppm.

○ ______.
Analysis:______ Depth:______.
Headspace reading ______ ppm.

○ ______.
Analysis:______ Depth:______.
Headspace reading ______ ppm.

○ ______.
Analysis:______ Depth:______.
Headspace reading ______ ppm.

○ ______.
Analysis:______ Depth:______.
Headspace reading ______ ppm.

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Analysis:______ Depth:______.
Headspace reading ______ ppm.

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Headspace reading ______ ppm.

○ ______.
Analysis:______ Depth:______.
Headspace reading ______ ppm.

○ ______.
Analysis:______ Depth:______.
Headspace reading ______ ppm.

○ ______.
Analysis:______ Depth:______.
Headspace reading ______ ppm.

APPENDIX B

MTC *Analytical/Environmental Services*

Materials Testing & Consulting, Inc
P.O. Box 309
Mount Vernon, WA 98273
WSDOH Laboratory #46092090
(206)424-7560 · FAX (206)424-7550

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Client: White Shield Inc.
P.O. Box 477
Grandview, WA 98930

Date: 5/17/91
Reference: 91-0144

Attn: Mr. Dave Green

Project: Bissel-Naches

Data Report

Lab Number	Sample Description	ug/gm TPH	ng/gm Benzene	Toluene	Ethylbenzene	Xylenes
31-91-00543.0S	BIS-0191-1	12467-G	<100	1040	147000	1316800
31-91-00544.0W	BIS-0191-2	1373-G 5621-D	180	380	5560	38400
31-91-00545.0S	BIS-0191-3	1.1-G 6.6-D	<5	<5	<5	12
31-91-00546.0W	BIS-0191-4	59-G 122-D	872	2535	980	6360
31-91-00547.0S	BIS-0191-5	1.4-D	<5	<5	<5	<5
31-91-00548.0W	BIS-0191-6	3.5-D	<5	<5	<5	<5
31-91-00549.0S	BIS-0191-7	<1	<5	<5	<5	<5
31-91-00550.0S	BIS-0191-8	542-G	<25	45	6391	57248
31-91-00551.0W	BIS-0191-9	23-G	11.8	117	96	3209
	Methods:					
	BTEX/TPH SW846 8020/8015mod.					
	G- Gasoline D-Diesel	Soil/Water	Soil/Water	Soil/Water	Soil/Water	Soil/Water
	Method Reporting Limit (MRL)	0.05/0.01	5/1	5/1	5/1	5/1
	Maximum Contamination Levels	100/1	500/5	20000/20	40000/40	20000/20

Kurt W. Larsen
Sr. Enviromental Chemist

APPENDIX B

WHITE SHIELD INC.
P. O. BOX 477
GRANDVIEW, WA. 98930
(509) 882-1144
(509) 882-4566 FAX

CHAIN OF CUSTODY

PROJECT NAME BISSEL - NACHES
PROJECT # BIS-0191
DESTINATION MTC
SAMPLER D Green
DATE 5-10-91 TIME

SAMPLE NUMBER	8015	8020	TOTAL LEAD
BIS-0191-1	X	X	
BIS-0191-2	X		
BIS-0191-2		X	
BIS-0191-3	X	X	
BIS-0191-4	X		
BIS-0191-4		X	
BIS-0191-5	X	X	
BIS-0191-6	X		
BIS-0191-6		X	
BIS-0191-7	X	X	
BIS-0191-8	X	X	
BIS-0191-8			X
BIS-0191-9			X
BIS-0191-9	X		
BIS-0191-9		X	

RELINQUISHED BY (SIGN) 1. D Green PC DATE 5/13/91 TIME 8:00

RELINQUISHED BY (SIGN) 2. D Chulos DATE 5/13/91 TIME 4:30

RELINQUISHED BY (SIGN) 3. [illegible] DATE [illegible] TIME 6:45

RELINQUISHED BY (SIGN) 4. [illegible] DATE 5/13 TIME 8:32p

RECEIVED BY (SIGN) 1. [illegible] DATE 5/13/91 TIME 8:00am

RECEIVED BY (SIGN) 2. [illegible] DATE 5/13 TIME 4:30

RECEIVED BY (SIGN) 3. [illegible] DATE 5/13 TIME 6:45p

RECEIVED BY (SIGN) 4. [illegible] 6403 DATE 5/13 TIME 2050

METHOD OF SHIPMENT HAND CARRIED

SHIPPED BY (SIGN) HAND CARRIED

RECEIVED FOR LABORATORY (SIGN) Kurt Kaman

DATE 5/14 TIME 12:01

APPENDIX C

Action Levels for Petroleum Releases

Indicator Constituent	CAS Number[1]	Groundwater Action Level	Soil Action Level
Benzene	71-43-2	1 µg/L[2,4]	0.5 mg/kg[3]
Ethylbenzene	100-41-4	30 µg/L	20 mg/kg
Toluene	108-88-3	40 µg/L	40 mg/kg
Xylene	1330-20-7	20 µg/L	20 mg/kg
TPH (gasoline)	---	1,000 µg/L	100 mg/kg
TPH (other than gasoline)	---	1,000 µg/L	200 mg/kg
Lead	7439-92-1	5.0 µg/L	250 mg/kg

1 CAS number is the Chemical Abstracting Service number; "---" means no CAS number has been defined for these constituents.
2 µg/L can also be expressed as ppb.
3 mg/kg can also be expressed as ppm.
4 Groundwater quality based criteria (Chapter 173-200 WAC).

UNDERGROUND STORAGE TANK
Site Check/Site Assessment Checklist

APPENDIX D

The purpose of this form is to certify the proper investigation of an UST site for the presence of a release. These activities shall be conducted in accordance with Chapter 173.360 WAC. A description of the various situations requiring a site check or site assessment is provided in the guidance document for UST site checks and site assessments.

This Site Check/Site Assessment Checklist shall be completed and signed by a person registered with the Department of Ecology to perform site assessments.

Two copies of the results of the site check or site assessment should be included with this checklist according to the reporting requirements in the guidance document for UST site checks and site assessments.

For further information about completing this form, please contact the Department of Ecology UST Program.

The completed checklist should be mailed to the following address:

Underground Storage Tank Section
Department of Ecology
Mail Stop PV-11
Olympia, WA 98504-8711

1. UST SYSTEM OWNER AND LOCATION

UST Owner/Operator: John R. & Camille M. Bissell

Owners Address: 10123 Hwy 12 (Street) P.O. Box

Naches WA 98937 (City) (State) (ZIP-Code)

Telephone: (509) 653-2118

Site ID Number (on invoice or available from Ecology if tank is registered): 002282

Site/Business Name: The Pit Stop

Site Address: 10121 Hwy 12 (Street) County

Naches WA 98937 (City) (State) (ZIP-Code)

2. SITE CHECK/SITE ASSESSMENT CONDUCTED BY:

Registered Person: DAVID L. GREEN

Address: 246 DIVISION (Street) P.O. BOX 477 (P.O. Box)

GRANDVIEW (City) WA (State) 98930 (ZIP-Code)

Telephone: (509) 882-1144

3. TANK INFORMATION

1. Tank ID Number (as registered with Ecology): Unknown
2. Year installed: Unknown (1960's?)
3. Tank capacity in gallons: 8000, 2500, 2500
4. Last substance stored: gas

4. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

_____ Investigate suspected release due to on-site environmental contamination
_____ Investigate suspected release due to off-site environmental contamination
_____ Extend temporary closure of UST system for more than 12 months
_____ UST system undergoing change-in-service
_____ UST system permanently closed-in-place
_____ UST system permanently closed with tank removed
_____ Required by Ecology or delegated agency for UST system closed before December 22, 1988
X Other (describe): Determine if PCS or PCG exists at the site

5. CHECKLIST

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.

	Yes	No
1. Has the site check/site assessment been conducted according to applicable procedures specified in the UST site check/site assessment guidance issued by the Department of Ecology?		D.G.
2. Has a release from the UST system been confirmed? *NOTE: Owners/operators must report all confirmed releases to the Department of Ecology or delegated agency within 24 hours.*	D.G.	
3. Are the results of the site check/site assessment enclosed with this checklist? *NOTE: Two copies of the site check/site assessment results must be submitted to the Department of Ecology according to the reporting requirements specified in the UST site check/site assessment guidance.*	D.G.	

I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173.360 WAC.

6/27/91
Date

David J. Free
Signature of Person Registered with Ecology

6. OWNER'S SIGNATURE

7-1-91
Date

Camille M. Russell
Signature of Tank Owner or Authorized Representative

Appendix E

Appleland Pump and Equipment

(509) 662-0832 P.O. Box 3011 Wenatchee, WA 98807-3011
In State Watts Line 1-800-832-6010

June 11, 1991

White Shield, Inc.
P. O. Box 477
Grandview, WA 98930

The following are the testing results taken at Pit Stop, Naches, WA on 5/31/91.

EAST UNLEADED 2500 GALLON TANK: Tank was topped and probes installed at 1800. Test ran from 2120 to 2250.
Results of that data indicate a leak rate of +.013 gallons per hour.

WEST UNLEADED 2500 GALLON TANK: Tank was topped and probes installed at 1750. Test ran from 2000 to 2130.
Results of that data indicate a leak rate of +.027 gallons per hour.

REGULAR 8,000 GALLON TANK: Tank was topped and probes installed at 2200. Test ran from 2340 to 0150.
Results of that data indicate a leak rate of +.047 gallons per hour.

The two tanks listed above do not exceed the standard of .050 gallons per hour as described in NFPA bulletin 329.

Testing results are enclosed.

If you have any questions, or need additional information, please call.

Cordially,

APPLELAND PUMP & EQUIPMENT

Jim Gamel

Jim Gamel
Owner/Opertor

SOILTEST®

AINLAY TANK 'TEGRITY TESTER™ FIELD TEST DATA

1 TANK OPERATOR

NAME Wat Stop ADDRESS PHONE

marked (n/k)

2 TANKS TO BE TESTED

IDENTIFICATION	CAPACITY—GALS.	MANUFACTURER	STEEL/FIBRGLS.	AGE—YRS.
Regular	8000	(unknown)	steel	(unknown)

3 WATER TABLE

DISTANCE FROM GRADE TO WATER Over 120 INS.

4 TANK FILL-UP

TANK WILL BE FILLED 0900 (TIME) ON 5/31/91

EXTRA 5 GALS PRODUCT AVAILABLE FROM Ainlay

FILL UP TO BE ARRANGED BY MR. _____ PHONE ( )

CONTACT AT STORAGE TERMINAL IS MR. _____ PHONE ( )

5 OUTSIDE CONTRACTORS

NAME ADDRESS PHONE

6 OFFICIALS TO BE CONTACTED

NAME AUTHORITY PHONE

7 SPECIAL NOTES OR PRECAUTIONS

8 TEST RESULTS

ALL TESTS WERE PERFORMED IN ACCORDANCE WITH PROCEDURES DESCRIBED IN SOILTEST'S INSTRUCTION BOOK. CRITERIA FOR TIGHTNESS IS ESTABLISHED BY NATIONAL FIRE PROTECTION ASSOCIATION BULLETIN. N.F.P.A. 329.

TANK IDENT	TANK IS TIGHT	TANK IS NOT TIGHT	LEAK RATE G. P. H.	TEST DATE
8000 gal Regular	X		+047	5-31-91

9 CERTIFICATION

THIS CERTIFIES THAT THE TANKS DESCRIBED WERE TESTED BY THE UNDERSIGNED AND THAT THE STATED RESULTS REPRESENT THE TRUE STATE OF THE TANKS ON THIS DATE TO THE BEST OF MY KNOWLEDGE.

SIGNED Tim Samuel CERTIFICATE NO. 2015 A

ISSUE DATE 12-90

FOR (TEST COMPANY) Ackland Pump & Co

ADDRESS 3802 Kennedy Rd

Wenatchee WA-98801

B (459-916) REV 1/90

AINLAY TANK TIGHTNESS TEST No.

JOB Pat Sleight DATE 5-31
ADDRESS Marcus WA
TESTER TEST COMPANY

10 TANK I.D.
INCLUDE ENOUGH INFO. TO ACCURATELY IDENTIFY TANK. (NUMBER/CONTENTS/POSITION. ETC.)
TANK DIAMETER 95 INS FILL PIPE LENGTH 28. INS

11 WATER IN TANK
(a) START WATER IN TANK ____ INS (c) END WATER IN TANK ____ INS
(b) START WATER IN TANK ____ GALS (d) END WATER IN TANK ____ GALS

12 PRODUCT VOLUME
(a) NOMINAL CAPACITY 8000 GALS (c) DEDUCT WATER IN TANK 0 GALS
(b) ACTUAL CAPACITY 8139 GALS (d) TOTAL PRODUCT VOL. 8139 GALS
(FROM TANK CHART) (e) PIPING 5 GALS
(f) TOTAL 8144 GALS

13 FILL PIPE EXTENSION
(a) HEIGHT OF WATER TABLE ABOVE TANK BOTTOM = ____ (h) INS
(b) DENSITY OF TANK PRODUCT = ____ (w) LB/CU. IN. (FROM TABLES)
DENSITY OF EXTERNAL WATER = 0.036 LB/CU. IN.
(c) ADDITIONAL HEAD REQUIRED = $\frac{(h) \times 0.036}{(w)}$ = ____ x 0.036 = ____ INS

NOTE:
TO AVOID POSSIBLE TANK DAMAGE THE ADDED PRESSURE FROM A FILL PIPE EXTENSION MUST NEVER EXCEED 5 P.S.I.

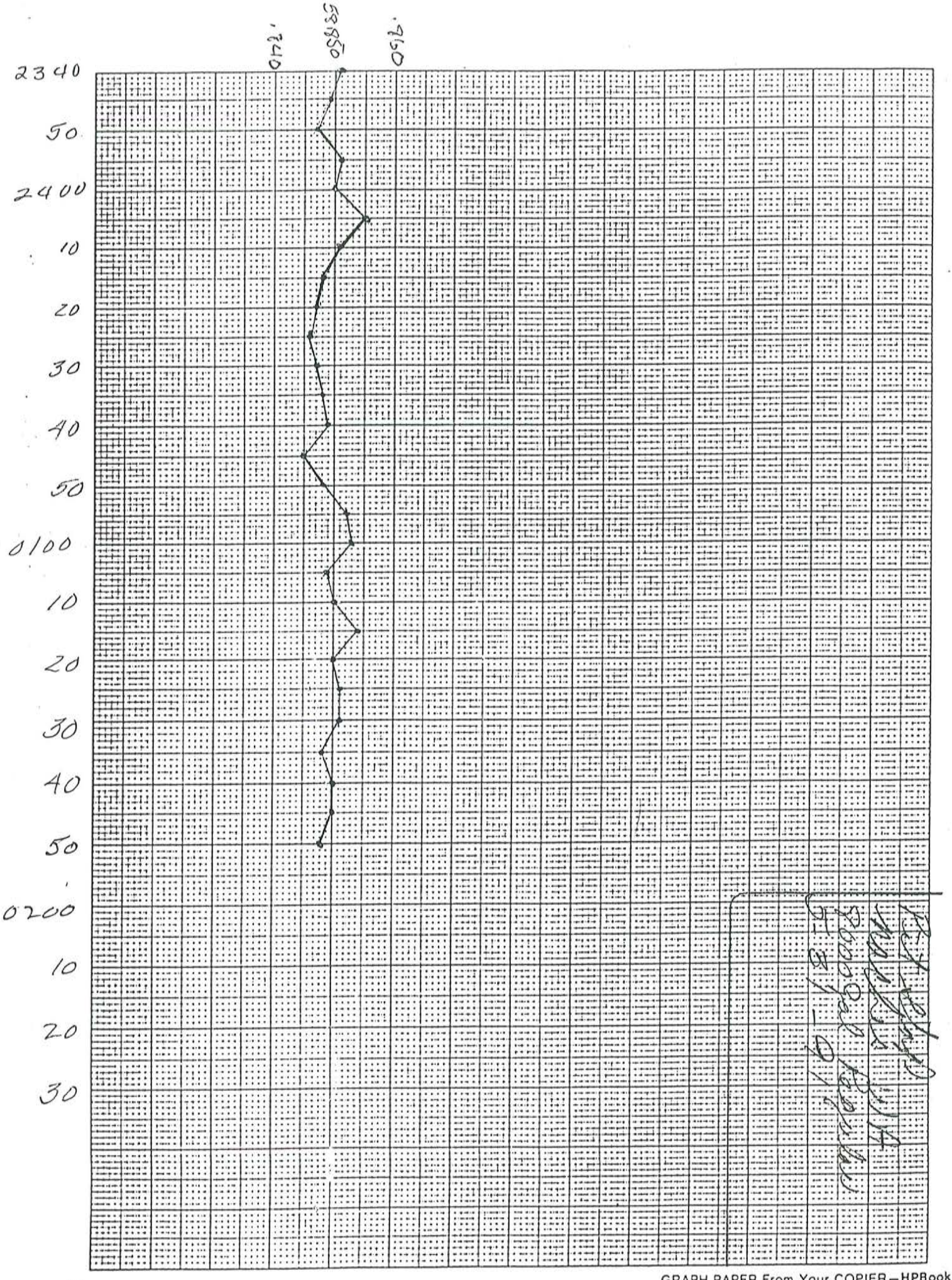
14 PRELIM TEST DATA
(a) A.P.I. GRAVITY 56.8 AT 58 °F
(b) A.P.I. GRAVITY 57.0 AT 60° F
(c) COEFF. OF EXPANSION .0006673.0

15 TEST DATA
(a) START TEST 2340 AM/PM: END TEST 0150 AM/PM: TEST TIME 130 MINS.
(b) TEMPERATURE CHANGE DURING TEST = (SLOPE OF "BEST FIT" LINE) × (TEST TIME)
= .000005 × 130 = ⊖ .0006 °F.
(c) VOL. CHANGE DUE TO TEMP = PRODUCT VOL × TEMP. CHANGE × COEFF. EXP.
= 8144 (12f) × +.0006 (15b) × .0006673 (14c) = ⊖ .003 GALS.
(d) TOTAL LIQUID VOL. ADDED/SUBTRACTED AT END OF TEST..... ⊖ .090 GALS.
(e) VOL. CHANGE NOT DUE TO TEMP [(c) + (d)]..... = +.003 + .090 = ⊖ .093 GALS.
(f) LEAK RATE = $\frac{(e) \times 60}{\text{TIME OF TEST (MINS)}}$ = $\frac{.093 \times 60}{(15a)}$ = +.047 G.P.H.

THIS LEAK RATE DOES/DOES NOT EXCEED THE STANDARD OF 0.050 G.P.H. DESCRIBED IN NATIONAL FIRE PROTECTION ASSOC., BULLETIN N.F.P.A. 329.

THE TANK IS TIGHT ☒ / THE TANK IS NOT TIGHT ☐

16 NOTES
Tanks was topped & probes installed at 2200. Test ran from 2340 to 0150 Results of that data indicate a loss of .047 gallons per hour.



TEST SITE LAYOUT

18

TESTER

TEST COMPANY

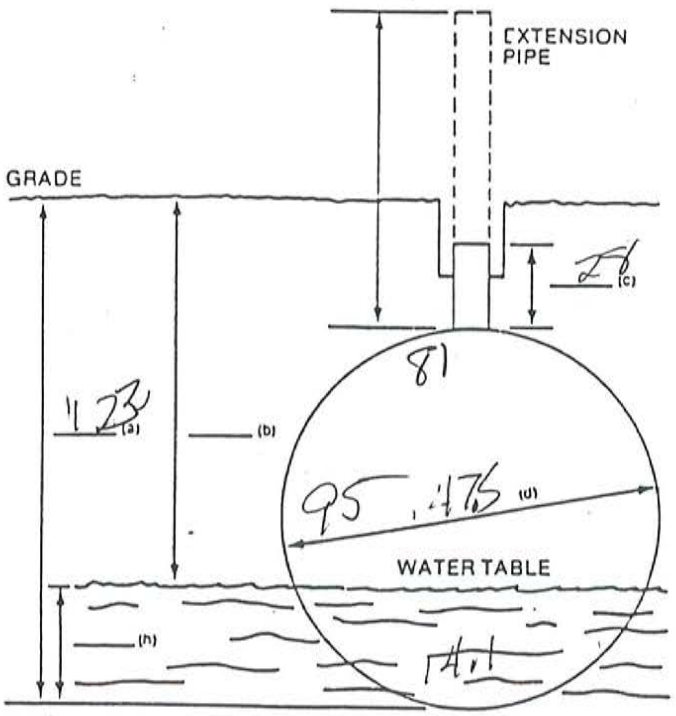
DATE 5, 31, 91

JOB Exit Ramp

ADDRESS Marina

19

TEST 1: TANK DIMENSIONS



TANK IDENT. Regular

SOILTEST®

AINLAY TANK 'TEGRITY TESTER™ FIELD TEST DATA

Section	
1 TANK OPERATOR	NAME Pat Staff ADDRESS [illegible] PHONE
2 TANKS TO BE TESTED	IDENTIFICATION: Westenbed; CAPACITY—GALS.: 2500; MANUFACTURER: unknown; STEEL/FIBRGLS.: Steel; AGE—YRS.: unknown
3 WATER TABLE	DISTANCE FROM GRADE TO WATER unknown 120 INS.
4 TANK FILL-UP	TANK WILL BE FILLED 900 (TIME) ON 5/13/91 EXTRA 5 GALS PRODUCT AVAILABLE FROM on site FILL UP TO BE ARRANGED BY MR. ______ PHONE ( ) CONTACT AT STORAGE TERMINAL IS MR. ______ PHONE ( )
5 OUTSIDE CONTRACTORS	NAME ADDRESS PHONE
6 OFFICIALS TO BE CONTACTED	NAME AUTHORITY PHONE
7 SPECIAL NOTES OR PRECAUTIONS	

8 TEST RESULTS

ALL TESTS WERE PERFORMED IN ACCORDANCE WITH PROCEDURES DESCRIBED IN SOILTEST'S INSTRUCTION BOOK. CRITERIA FOR TIGHTNESS IS ESTABLISHED BY NATIONAL FIRE PROTECTION ASSOCIATION BULLETIN. N.F.P.A. 329.

TANK IDENT	TANK IS TIGHT	TANK IS NOT TIGHT	LEAK RATE G. P. H.	TEST DATE
2500 gal Westenbed	X		+.027	5-31-91

9 CERTIFICATION

THIS CERTIFIES THAT THE TANKS DESCRIBED WERE TESTED BY THE UNDERSIGNED AND THAT THE STATED RESULTS REPRESENT THE TRUE STATE OF THE TANKS ON THIS DATE TO THE BEST OF MY KNOWLEDGE.

SIGNED Jim Gamel

CERTIFICATE NO. 2010 A

ISSUE DATE Dec 1990

FOR (TEST COMPANY) Appleland Pump & Co

ADDRESS [illegible] Rd
Wenatchee WA 98801

-8 (459-916) REV 1/90

AINLAY TANK TIGHTNESS TEST No.

10 TANK I.D.	INCLUDE ENOUGH INFO. TO ACCURATELY IDENTIFY TANK. (NUMBER/CONTENTS/POSITION, ETC.) TANK DIAMETER 76.5. INS FILL PIPE LENGTH 16.5 INS
11 WATER IN TANK	(a) START WATER IN TANK ____ INS (c) END WATER IN TANK ____ INS (b) START WATER IN TANK ____ GALS (d) END WATER IN TANK ____ GALS
12 PRODUCT VOLUME	(a) NOMINAL CAPACITY 2500 GALS (c) DEDUCT WATER IN TANK 0 GALS (b) ACTUAL CAPACITY 2552 GALS (d) TOTAL PRODUCT VOL. 2552 GALS (FROM TANK CHART) (e) PIPING 5 GALS (f) TOTAL 2557 GALS
13 FILL PIPE EXTENSION	(a) HEIGHT OF WATER TABLE ABOVE TANK BOTTOM = ____ (h) INS (b) DENSITY OF TANK PRODUCT = ____ (w) LB/CU. IN. (FROM TABLES) DENSITY OF EXTERNAL WATER = 0.036 LB/CU. IN. (c) ADDITIONAL HEAD REQUIRED = (h) x 0.036 / (w) = ____ x 0.036 / ____ = ____ INS NOTE: TO AVOID POSSIBLE TANK DAMAGE THE ADDED PRESSURE FROM A FILL PIPE EXTENSION MUST NEVER EXCEED 5 P.S.I.
14 PRELIM TEST DATA	(a) A.P.I. GRAVITY 56.6 AT 59 °F (b) A.P.I. GRAVITY 56.7 AT 60°F (c) COEFF. OF EXPANSION .0006569
15 TEST DATA	(a) START TEST 2000 AM/PM: END TEST 2130 AM/PM: TEST TIME 90 MINS. (b) TEMPERATURE CHANGE DURING TEST = (SLOPE OF "BEST FIT" LINE) × (TEST TIME) = .00027 × 90 = ⊕- .024 °F. (c) VOL. CHANGE DUE TO TEMP = PRODUCT VOL × TEMP. CHANGE × COEFF. EXP. = 2557 (12f) × .024 (15b) × .0006569 (14c) = ⊕/- .041 GALS. (d) TOTAL LIQUID VOL. ADDED/SUBTRACTED AT END OF TEST.................. = +/- 0 - GALS. (e) VOL. CHANGE NOT DUE TO TEMP [(c) + (d)]......... ±.040 + 0 ⊕/-.041 GALS. (f) LEAK RATE = (e) × 60 / TIME OF TEST (MINS) = .040 × 60 / (15a) = +.027 G.P.H. THIS LEAK RATE DOES/DOES NOT EXCEED THE STANDARD OF 0.050 G.P.H. DESCRIBED IN NATIONAL FIRE PROTECTION ASSOC., BULLETIN N.F.P.A. 329. THE TANK IS TIGHT ☒ / THE TANK IS NOT TIGHT ☐
16 NOTES	Tank was topped and probes installed @ 1750. Test ran from 2000 to 2130. Results of that data indicate a loss of .027 gallons per hour

TESTER ____ TEST COMPANY ____

DATE ____ ADDRESS ____

TEST SITE LAYOUT

18

TESTER

TEST COMPANY

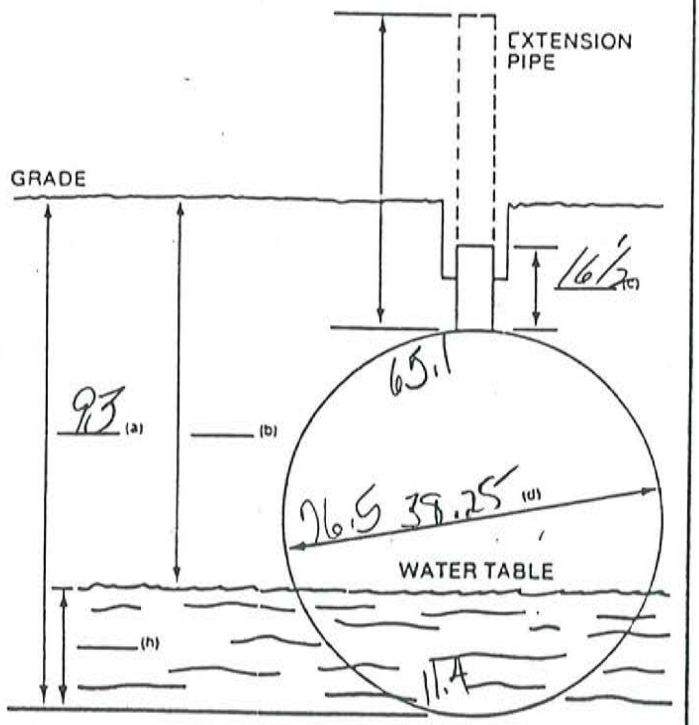
DATE / /

JOB

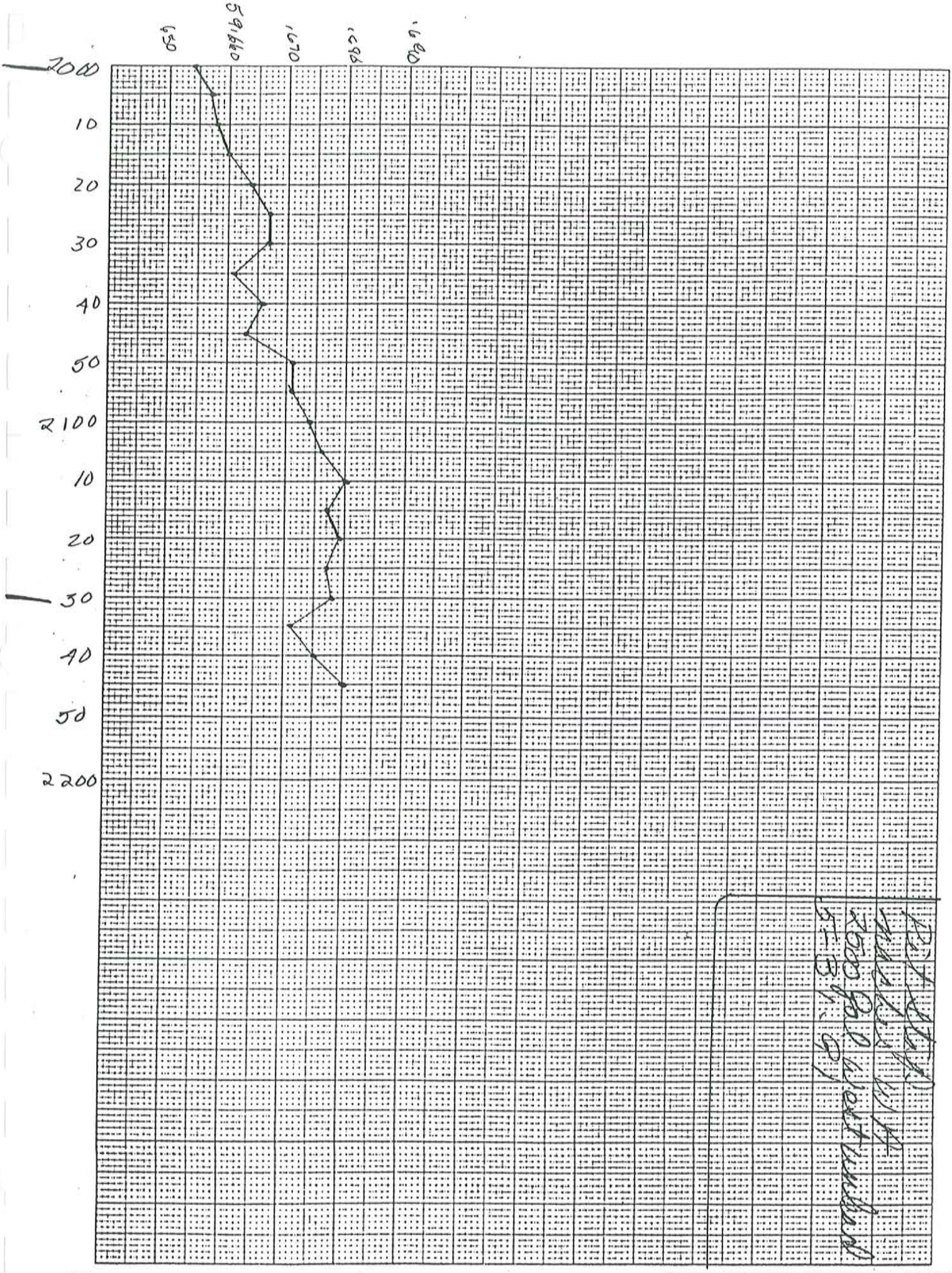
ADDRESS

19

TEST 1: TANK DIMENSIONS



TANK IDENT. Westfund 2500



SOILTEST®

AINLAY TANK 'TEGRITY TESTER™ FIELD TEST DATA

1 TANK OPERATOR

NAME Pit Stop ADDRESS PHONE

Marsh WA

2 TANKS TO BE TESTED

IDENTIFICATION	CAPACITY—GALS.	MANUFACTURER	STEEL/FIBRGLS.	AGE—YRS.
East unleaded	2500	unknown	steel	unknown

3 WATER TABLE

DISTANCE FROM GRADE TO WATER over 120 INS.

4 TANK FILL-UP

TANK WILL BE FILLED 0900 (TIME) ON 5 13 1991

EXTRA 5 GALS PRODUCT AVAILABLE FROM

FILL UP TO BE ARRANGED BY MR. PHONE ( )

CONTACT AT STORAGE TERMINAL IS MR. PHONE ( )

5 OUTSIDE CONTRACTORS

NAME ADDRESS PHONE

6 OFFICIALS TO BE CONTACTED

NAME AUTHORITY PHONE

7 SPECIAL NOTES OR PRECAUTIONS

8 TEST RESULTS

ALL TESTS WERE PERFORMED IN ACCORDANCE WITH PROCEDURES DESCRIBED IN SOILTEST'S INSTRUCTION BOOK. CRITERIA FOR TIGHTNESS IS ESTABLISHED BY NATIONAL FIRE PROTECTION ASSOCIATION BULLETIN. N.F.P.A. 329.

TANK IDENT	TANK IS TIGHT	TANK IS NOT TIGHT	LEAK RATE G. P. H.	TEST DATE
2500gal East unleaded	X		+.013	5-31-91

9 CERTIFICATION

THIS CERTIFIES THAT THE TANKS DESCRIBED WERE TESTED BY THE UNDERSIGNED AND THAT THE STATED RESULTS REPRESENT THE TRUE STATE OF THE TANKS ON THIS DATE TO THE BEST OF MY KNOWLEDGE.

SIGNED Jim Parnell CERTIFICATE NO. 2014

ISSUE DATE 6-5-91

FOR (TEST COMPANY) Applegate Pumping Co

ADDRESS 780 E Bowers Rd

Woodinville WA 98072

AINLAY TANK TIGHTNESS TEST No.

JOB Big Whip ADDRESS _____ DATE 5-31-91 TESTER _____ TEST COMPANY _____

10 TANK I.D.

INCLUDE ENOUGH INFO. TO ACCURATELY IDENTIFY TANK. (NUMBER/CONTENTS/POSITION, ETC.)

TANK DIAMETER 79 INS FILL PIPE LENGTH 30 INS

11 WATER IN TANK

(a) START WATER IN TANK 0 INS (c) END WATER IN TANK _____ INS

(b) START WATER IN TANK _____ GALS (d) END WATER IN TANK _____ GALS

12 PRODUCT VOLUME

(a) NOMINAL CAPACITY 2500 GALS (c) DEDUCT WATER IN TANK 0 GALS

(b) ACTUAL CAPACITY 2552 GALS (FROM TANK CHART) (d) TOTAL PRODUCT VOL. 2552 GALS

(e) PIPING 5 GALS

(f) TOTAL 2557 GALS

13 FILL PIPE EXTENSION

(a) HEIGHT OF WATER TABLE ABOVE TANK BOTTOM = _____ (h) INS

(b) DENSITY OF TANK PRODUCT = _____ (w) LB/CU. IN. (FROM TABLES)

DENSITY OF EXTERNAL WATER = 0.036 LB/CU. IN.

(c) ADDITIONAL HEAD REQUIRED = $\frac{(h) \times 0.036}{(w)}$ = $\frac{\quad \times 0.036}{\quad}$ = _____ INS

NOTE:
TO AVOID POSSIBLE TANK DAMAGE THE ADDED PRESSURE FROM A FILL PIPE EXTENSION MUST NEVER EXCEED 5 P.S.I.

14 PRELIM TEST DATA

(a) A.P.I. GRAVITY 56.5 AT 59 °F

(b) A.P.I. GRAVITY 56.16 AT 60°F

(c) COEFF. OF EXPANSION .00066516

15 TEST DATA

(a) START TEST 2120 AM/PM: END TEST 2250 AM/PM: TEST TIME 90 MINS.

(b) TEMPERATURE CHANGE DURING TEST = (SLOPE OF "BEST FIT" LINE) × (TEST TIME)

= .0000014 × 90 = ⊕/⊖ .0001 °F.

(c) VOL. CHANGE DUE TO TEMP = PRODUCT VOL × TEMP. CHANGE × COEFF. EXP.

= 2557 (12f) × .0001 (15b) × .00066516 (14c) = ⊕/⊖ .002 GALS.

(d) TOTAL LIQUID VOL. ADDED/SUBTRACTED AT END OF TEST..... = ⊕/⊖ .018 GALS.

(e) VOL. CHANGE NOT DUE TO TEMP [(c) + (d)]..... = ±.002 + .018 = ⊕/⊖ .020 GALS.

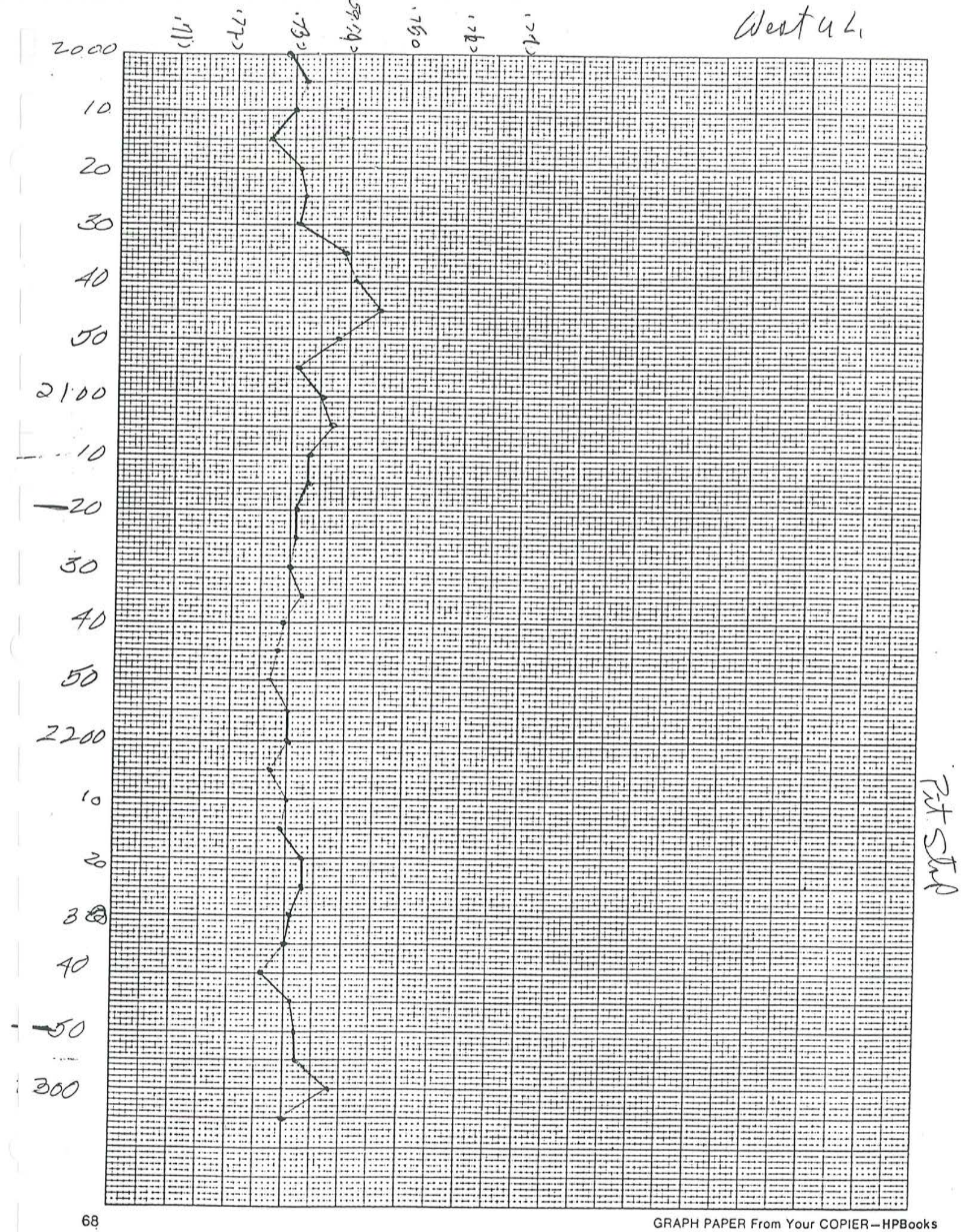
(f) LEAK RATE = $\frac{(e) \times 60}{\text{TIME OF TEST (MINS)}}$ = $\frac{.020 \times 60}{90}$ (15a) = ±.013 G.P.H.

THIS LEAK RATE DOES/DOES NOT EXCEED THE STANDARD OF 0.050 G.P.H. DESCRIBED IN NATIONAL FIRE PROTECTION ASSOC., BULLETIN N.F.P.A. 329.

THE TANK IS TIGHT ☑ / THE TANK IS NOT TIGHT ☐

16 NOTES

Tank was stripped & probes installed @ 1800. Test ran from 2120 to 2250. Results of that data indicate a loss of .013 gallons per hour.



TEST SITE LAYOUT

18

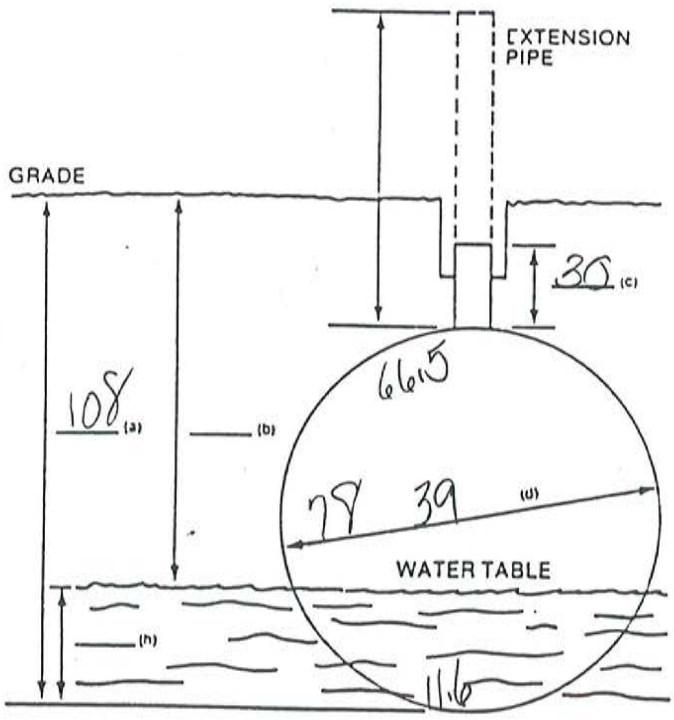
TESTER
TEST COMPANY

19

DATE / /

JOB
ADDRESS

TEST 1: TANK DIMENSIONS



TANK IDENT. Test unl. 2500