2/22/96
Patty Misener
Jiffy Lube
M

1/2

UNDERGROUND STORAGE TANK LIMITED SITE ASSESSMENT & UST CLOSURE IN PLACE REPORT

SW JS
6355
U 8588

Jiffy Lube
6317 E. Fourth Plain
Vancouver, Washington 98661

1/17/96

Prepared for:

Richard A. Misener
Jiffy Lube
6317 E. Fourth Plain
Vancouver, Washington 98661

Prepared by:

Pacific Northern Environmental
1081 Columbia Blvd
Longview, Washington 98632

January 17, 1996

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1.0 INTRODUCTION

Pacific Northern Environmental (PNE) has been retained by Richard A. Misener to complete Underground Storage Tank (UST) Site Assessment soil sampling with intent to complete UST Closure in Place. The site is located at 6317 E. Fourth Plain Vancouver, Washington 98661. The Washington Department of Ecology (WDOE) facility identification number is 006355. Please refer to Figure 1 Site Vicinity Map for the site location.

2.0 SITE CONDITIONS

The facility operates as a Jiffy Lube, automotive oil service station. The facility consist of two lube bays and two offices. Three UST are located at the facility, two 550 gallon lube oil and one 550 waste oil. The three UST were pumped emptied in July of 1995 and replaced with three above ground storage tanks.

3.0 SITE CRITERIA FOR UST DISPOSAL IN PLACE

The three UST can not be decommissioned by removal because they are located under the building. The UST inventory records and tightness testing results where also researched and suggest that no releases have occurred. It is Jiffy Lubes intent to decommission the three UST in place upon completion of a satisfactory Site Check / Site Assessment.

4.0 SITE ASSESSMENT PROCEDURES

PNE provided a Registered Site Assessor to complete an assessment of the soil conditions surrounding the UST's. PNE completed a total of four soil borings around the UST's. A total of four soil samples were collected from the soil borings. The soil samples were collected with a stainless steel decontaminated hand auger tool.

4.1 Decontamination Procedures

During the process of hand auger boring, decontamination procedures were implemented. The decontamination procedures included, but were not limited to, the following:

* Any tools or other equipment that was introduced, at anytime, to the bore hole were either (sealed by a manufacture), or decontaminated before each introduction. Decontamination consists of using a clean plastic scrub brush, ample amounts of tri-sodium phosphate (TSP) and water, followed by spraying methanol on each item;

* New surgical latex gloves were used for the collection of each soil sample;

* Laboratory cleaned sampling containers were used for the collection of each soil sample;

The decontamination procedures were completed to ensure that cross contamination did not occur.

4.2 Hand Auger Boring & Soil Screening

Hand auger boring was completed by a Registered Site Assessor from PNE. One to two foot interval screening samples were brought to the surface for field screening. Field screening consisted of visual observation for petroleum contamination, olfactory checks for petroleum odors, and head space readings by the use of a photo-ionization meter. Headspace readings were collected by placing ample amounts of soil into a zip lock baggy labeled with the boring number and sample depth. The zip lock baggies were shut with an air tight seal and the soil inside was shaken and allowed time to volatilize. The tip of the calibrated HNU photo-ionization meter was then placed through the zip lock baggy and the headspace result (HNU reading) was noted in a field notebook.

4.3 Soil Sample Collection and Chemical Analyses

One soil sample per auger boring was collected into a prepared laboratory soil sampling jar for chemical analyses. The soil samples were collected by the Registered Site Assessor wearing a new pair of vinyl gloves. Immediately upon soil sample collection the soil sample jar was sealed and labeled with its individual sample identification number, which was documented in the field notebook. The soil sample identification number was also documented on a chain of custody form, and the soil sample jar was placed into a zip lock baggy and an iced cooler. Bore Hole locations are presented in Figure 2.

Soil sampling depths were chosen based on the total depth of the three UST's. The borings were advanced to a depth of 2 feet below the bottom of the deepest UST. The field screening results obtained from the four boreholes has been provided in Table 1 below.

Table 1
Borehole Screening Results
mg/kg (ppm)

BORE-HOLE #	DATE	DEPTH	SOIL DESCRIPTION	HNU RESULT(ppm)
B2	12-26-95	.0 - 2' 2' - 4' 4' - 6' ** 6' - 8'	3" ASPHALT, BROWN SILTY LOAM BROWN SILTY LOAM BROWN SILTY LOAM BROWN SILTY LOAM	0 0 0 0
B3	12-26-95	.0 - 2' 2' - 4' 4' - 6' ** 6' - 8'	5" CONCRETE, BROWN SILTY LOAM BROWN SILTY LOAM BROWN SILTY LOAM BROWN SILTY LOAM	0 0 0 0
B4	12-26-95	.0 - 2' 2' - 4' 4' - 6' ** 6' - 8'	5" CONCRETE, BROWN SILTY LOAM BROWN SILTY LOAM BROWN SILTY LOAM BROWN SILTY LOAM	0 0 0 0
B5	12-26-95	.0 - 2' 2' - 4' 4' - 6' ** 6' - 8'	5" CONCRETE, BROWN SILTY LOAM BROWN SILTY LOAM BROWN SILTY LOAM BROWN SILTY LOAM	0 0 0 0

** DEPTH OF SAMPLE SUBMITTED TO LABORATORY FOR ANALYSES

The four soil samples collected from borings 1 through 4 were submitted to Columbia Analytical Services, Inc. for chemical analyses by WDOE Method TPH-HCID (Hydrocarbon Identification Scan). The TPH-HCID chemical analytical results are provided in Table 2.

Table 2 ODEQ METHOD TPH-HCID mg/kg (ppm)			
SAMPLE NAME	GAS - RESULT MRL = 20	DIESEL - RESULT MRL = 50	OIL - RESULT MRL = 100
B2-12/26	ND	ND	ND
B3-12/26	ND	ND	ND
B4-12/26	ND	ND	ND
B5-12/26	ND	ND	ND
Method Blank	ND	ND	ND

MRL Method Reporting Limit
ND None Detected at or above the Method Reporting Limit
D Detected at or above the Method Reporting Limit

As presented in Table 2, no petroleum contamination was detected in the sample collected for chemical analyses. A copy of the laboratory analytical reports including QA/QC results and visual display of the gas chromatograph's are included in Appendix A.

5.0 UST DISPOSAL IN PLACE

Based on the site assessment results and the fact that removal of the UST's is not feasible the three UST's will be closed in place. UST Disposal In Place operations will be performed by PNE in accordance with the following.

* The UST's will be triple rinsed, removing all free product and residue from the UST's.

* The UST's rinsate water developed during the triple rinsing process will be removed from the UST's with a vacuum truck.

* The rinsate water will be transported from the site in the vacuum truck to a disposal facility in Portland, Oregon.

* A two inch adaptable funnel will be connected to the fill pipes on the UST's and a controlled density fill material will be placed into the UST's.

* The controlled density fill material will be placed into the UST's until the mix is observed as overfilling.

* After the UST's have been completely filled the vent lines will be cut off at the ground surface and filled with concrete.

6.0 CONCLUSIONS

Based on the information obtained and observations made by PNE during this assessment, PNE feels that the petroleum contamination doesn't exist in the area that the soil borings were advanced.

PNE has completed this assessment on the behalf of Richard A. Misener owner of the site. Upon completion of the UST closure a UST Permanent Decommissioning Checklist will completed and submitted.

7.0 LIMITATIONS

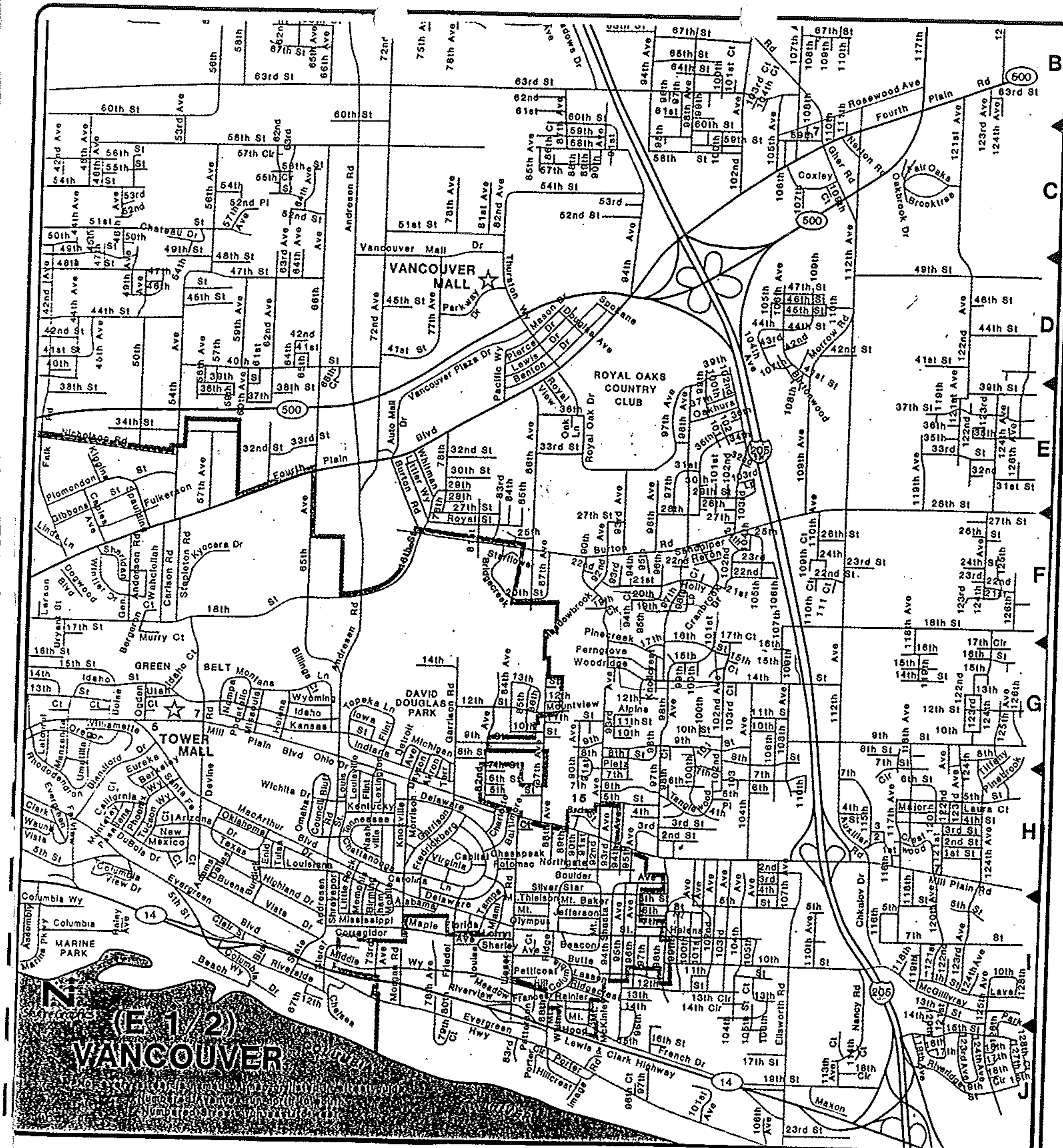
Work was performed by PNE in accordance with generally accepted professional practices related to the nature of the work accomplished in the same of similar localities, at the time that the services are performed, and in accordance with agreements and understandings with the client, which may not be disclosed in this document. This report and its contents are for the specific application to the referenced project and for the exclusive use of the client. No other warranty, expressed of implied, is made. Any reliance on this report, in whole or in part, by a third party is at the party's sole risk.

If you have any questions or require any additional information please feel free to contact me.

Sincerely,

PACIFIC NORTHERN ENVIRONMENTAL

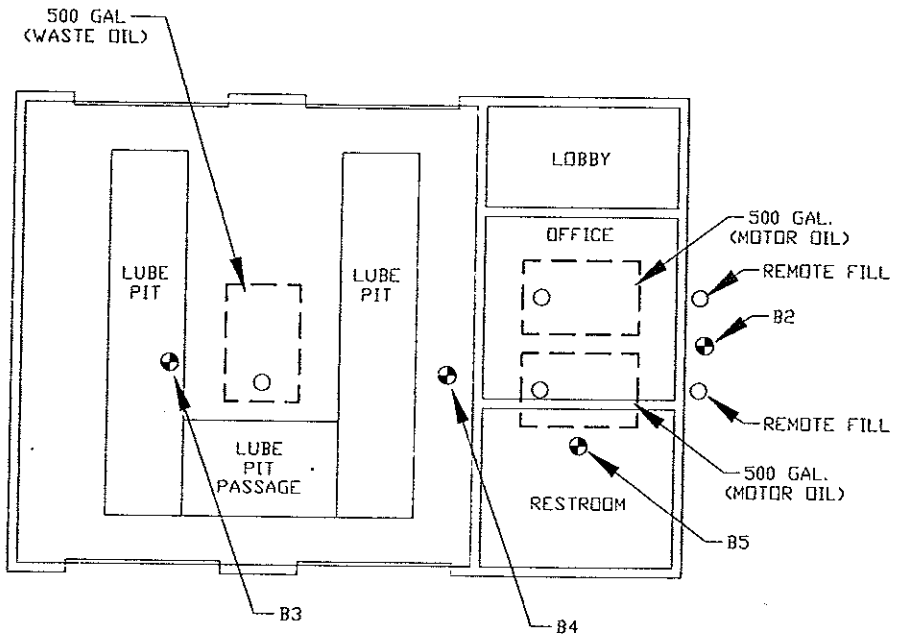
Kelly W. Kellogg
Project Manager



SITE VICINITY MAP

P N E PACIFIC NORTHERN ENVIRONMENTAL	JIFFY LUBE INC. 6317 E. 4TH PLAIN VANCOUVER, WASHINGTON	Project No. 8671.12 Date: 1-2-96 Drawn: W.D.J. Approved: K.K. Figure No. F1

4TH PLAIN



SITE/SAMPLE MAP

PACIFIC NORTHERN ENVIRONMENTAL

JIFFY LUBE INC.
6317 E. 4TH PLAIN
VANCOUVER, WASHINGTON

Project No. 8671.12
Date: 1-2-96
Drawn: W.D.J.
Approved: K.K.
Figure No. F2

WASHINGTON STATE DEPARTMENT OF ECOLOGY

UNDERG OUND STORAGE TANK
30 DAY NOTICE

See back of form for instructions
Please ☑ the appropriate box

☐ Intent to Install ☒ Intent to Close ☐ Both

For Office Use Only
SW JS
Owner # U000 8588
Site # 006355

SITE INFORMATION:

Site ID Number (on invoice or available from Ecology if the tank is registered): 006355

Site/Business Name: Jiffy Lube

Site Address: 6317 E. Fourth Plain (Street) Owner/Operator Telephone: (___) ___

Vancouver (City) Wa (State) 98661 (ZIP-Code)

TANK INFORMATION:

TANKS TO BE CLOSED

This section to be filled out ONLY if tanks are being removed

Tank ID	Projected Closure Date	Tank Capacity	Substance Stored	Date tank last used	Is there product in the tank? (yes/no)	If no; date tank was pumped
1	1-96	550	Oil	11/95	No	
2	1-96	550	Oil	11/95	No	
3	1-96	550	W/Oil	11/95	No	

RECEIVED
JAN - 8 1996
ECOLOGY

TANKS TO BE INSTALLED

This section to be filled out ONLY if tanks are being installed

Tank ID	Approx. Install Date

TANK INSTALLATION TO BE PERFORMED BY (if known):

This section to be filled out ONLY if tanks are being installed

Service Provider: ___ Contact Name: ___

Telephone: (___) ___

Address: ___ (Street) (P.O. Box)

___ (City) (State) (ZIP-Code)

TANK PERMANENT CLOSURE TO BE PERFORMED BY (if known):

This section to be filled out ONLY if tanks are being removed

Service Provider: Pacific Northern Environmental

Contact Name: Kelly Kellogg

Telephone: (360) 423 2245

Address: 1081 Columbia Blvd (Street) (P.O. Box)

Longview, Wa 98632 (State) (ZIP-Code)

This form will be returned to this address

~~UST OWNER~~/ OPERATOR Rep Pacific Northern Environmental

MAILING ADDRESS ___ (Street)

___ (City) (State) (ZIP-Code)

Once validated by Ecology, this form serves as your temporary permit for the tanks listed above.

Please type or print information

ECY 020-33

Columbia Analytical Services, Inc.

December 28, 1995

Service Request No.: K9507991

Kelly Kellogg
Pacific Northern Environmental, Inc.
1081 Columbia Boulevard
Longview, WA 98632

Re: **Jiffy Lube Project**

Dear Kelly:

Enclosed are the results of the sample(s) submitted to our laboratory on December 26, 1995. Preliminary results were transmitted via facsimile on December 27, 1995. For your reference, these analyses have been assigned our service request number K9507991.

All analyses were performed consistent with our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions. My extension is 260.

Respectfully submitted,

Columbia Analytical Services, Inc.

Joe Wiegel
Project Chemist

JW/sam

17 South 13th Avenue • P.O. Box 479 • Kelso, Washington 98626 • Telephone 206/577-7222 • Fax 206/636-1068

COLUMBIA ANALYTICAL SERVICES, Inc.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
J	Estimated concentration. The value is less than the method reporting limit, but greater than the method detection limit.
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected at or above the MRL
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Pacific Northern Environmental	**Service Request:**	K9507991
Project:	Jiffy Lube	**Date Collected:**	12/26/95
Sample Matrix:	Soil	**Date Received:**	12/26/95
		Date Extracted:	12/26/95
		Date Analyzed:	12/26/95

Total Petroleum Hydrocarbon - Hydrocarbon Identification
Washington DOE Method WTPH-HCID
Units: mg/Kg (ppm)
Dry Weight Basis

Analyte:		Gasoline	Diesel	Oil*
Method Reporting Limit:		20	50	100
Sample Name	**Lab Code**			
B2-12/26	K9507991-001	ND	ND	ND
B3-12/26	K9507991-002	ND	ND	ND
B4-12/26	K9507991-003	ND	ND	ND
B5-12/26	K9507991-004	ND	ND	ND
Method Blank	K951226-SB	ND	ND	ND

* Quantified using 30-weight motor oil as a standard.

Approved By: _____ Date: 12/27/95

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Pacific Northern Environmental
Project: Jiffy Lube
Sample Matrix: Soil

Service Request: K9507991
Date Collected: 12/26/95
Date Received: 12/26/95
Date Extracted: 12/26/95
Date Analyzed: 12/26/95

Surrogate Recovery Summary
Total Petroleum Hydrocarbon - Hydrocarbon Identification
Washington DOE Method WTPH-HCID

Sample Name	Lab Code	Percent Recovery o-Terphenyl
B2-12/26	K9507991-001	93
B3-12/26	K9507991-002	91
B4-12/26	K9507991-003	94
B5-12/26	K9507991-004	90
Method Blank	K951226-SB	89

CAS Acceptance Limits: 50-150

Approved By: _____ Date: 12/27/95

SUR1/111594
07991PHC.MS1 - HCIDsSUR 12/27/95