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INSTALLATION RESTORATION PROGRAM OIL WATER SEPARATOR ASSESSMENT
WORK PLAN ADDENDUM NAS FORT WORTH TX
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11-3517-0121

**INSTALLATION RESTORATION PROGRAM (IRP)
OIL/WATER SEPARATOR ASSESSMENT**

WORK PLAN ADDENDUM

Carswell Air Force Base, Fort Worth, Texas

December 1993

Draft



PREPARED FOR

**AIR FORCE BASE DISPOSAL AGENCY (AFBDA/SWH)
CARSWELL AIR FORCE BASE, TEXAS 76127**

**UNITED STATES AIR FORCE
AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE
BASE CLOSURE RESTORATION DIVISION (AFCEE/ESB)
BROOKS AIR FORCE BASE, TEXAS 78235-5328**



December 29, 1993

Air Force Center for Environmental Excellence
AFCEE/ESB
Building 624 West
Brooks Air Force Base, TX 78235-5328

Attention: Chris Hobbins (Team Chief)

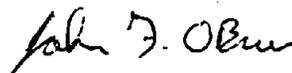
Subject: Carswell Air Force Base
Oil/Water Separator Assessment
Draft Work Plan Addendum
Contract No. F33615-90-D-4008
Delivery Order No. 0021
Law Project No. 11-3517-0121

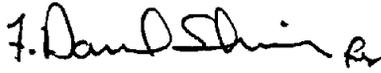
Dear Mr. Hobbins:

Law Environmental, Inc., Government Services Division is pleased to submit the enclosed six (6) copies of the Oil/Water Separator Assessment Draft Work Plan Addendum to the Air Force Center for Environmental Excellence (AFCEE) for review and comment.

If you have questions or comments, please contact us at (404) 499-6800.

Sincerely,


John F. O'Brien
Project Manager


E. Fred Sharpe, Jr., P.E.
Principal

3517-0121.04

LAW ENVIRONMENTAL, INC.
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REPORT DOCUMENTATION PAGE

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FORM 298

**INSTALLATION RESTORATION PROGRAM (IRP)
OIL/WATER SEPARATOR ASSESSMENT
DRAFT WORK PLAN ADDENDUM**

FOR

**CARSWELL AFB
FORT WORTH, TEXAS 76127-5000**

DECEMBER 1993

Prepared by:

**Law Environmental, Inc.
114 TownPark Drive
Kennesaw, Georgia 30144**

CONTRACTOR CONTRACT NO. F33615-90-D-4008 DELIVERY ORDER NO. 0021

**United States Air Force
Air Force Center for Environmental Excellence
Base Closure Restoration Division (AFCEE/ESB)
Brooks Air Force Base, Texas 78235-5328
Mr. Chris Hobbins (AFCEE/ESB)**

PURPOSE OF DOCUMENT

This work plan addendum has been developed for the Oil/Water Separator Assessment Project activities at Carswell Air Force Base (Carswell AFB). Procedures outlined in this plan are designed to describe the work to be performed, explain the project objectives, and present the rationale for conducting specific project activities. The plan will be effective upon final approval by the Air Force Center For Environmental Excellence (AFCEE).

Every effort will be made to fully comply with this plan. The success of Carswell AFB's Installation Restoration Program depends on team effort and total dedication from the various parties involved. Therefore, efforts will be focused on achieving and maintaining compliance with this work plan and pertinent regulations.

The point of contact for this investigation is as follows:

Mr. Chris Hobbins
Team Chief (TC)
AFCEE/ESB
Building 624 W.
Brooks AFB, Texas 78235-5000
Phone: (210) 536-5261

**WORK PLAN
DISCLAIMER NOTICE**

This work plan addendum has been prepared for the United States Air Force by Law Environmental, Inc. for the purpose of aiding in the implementation of a final remedial action plan under the Air Force Installation Restoration Program (IRP). As the report relates to actual or possible releases of potentially hazardous substances, its release prior to an Air Force final decision on remedial action may be in the public's interest. The limited objectives of this work plan and the ongoing nature of the IRP, along with the evolving knowledge of site conditions and chemical effects on the environment and health, must be considered when evaluating this work plan addendum, since subsequent facts may become known which may make this work plan addendum premature or inaccurate. Acceptance of this work plan addendum in performance of the contract under which it is prepared does not mean that the United States Air Force adopts the conclusions, recommendations or other views expressed herein, which are those of the contractor only and do not necessarily reflect the official position of the United States Air Force. Copies of this work plan addendum may be purchased from:

Government agencies and their contractors registered with Defense Technical Information Center (DTIC) should direct their requests for copies of this report to:

Defense Technical Information Center
Cameron Station
Alexandria, VA 22304-6145

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5285 Port Royal Road
Springfield, VA 22161

3517-0121.04

PREFACE

Law Environmental, Inc. (Law) was contracted by the U.S. Air Force Center For Environmental Excellence (AFCEE) to perform an Oil/Water Separator Assessment at 11 sites at Carswell AFB, Texas. The 11 Oil/Water Separators to be investigated are located in association with the following buildings:

1. Unnamed Stream (Building 38A)
2. Truck Re-Fuel Station (Building 1064)
3. Machine Shop (Building 1060)
4. Aircraft Wash Rack (Building 1027)
5. Engine Test Cell (Building 1015)
6. Bomb Assembly (Building 4210)
7. Generator Maintenance (Building 1414)
8. Auto Hobby Shop (Building 1145)
9. Hazardous Waste Storage Area (Building 1190)
10. Vehicle Maintenance Shop (Building 1191)
11. Fuel Truck Repair (Building 1194)

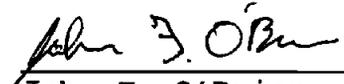
The primary objectives of this field investigation are to:

1. Assess the presence or absence of contamination and assess the types and quantities of detected contamination;
2. Evaluate the operational status of each oil/water separator under study and recommend any repair and/or replacement needs; and
3. Provide a written report discussing the evaluation of each oil/water separator under study by this delivery order.

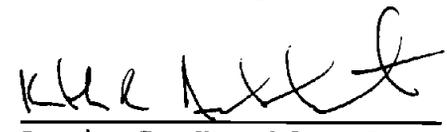
Project objectives will be achieved through the use of soil borings and hand auger borings; in combination with soil samples for field screening and laboratory analyses.

Mr. John O'Brien is the Project Manager for the oil/water separator assessment. Members of the field team will be selected prior to commencement of field activities.

This work plan addendum was prepared by Mr. Tom McComb and reviewed by Mr. John O'Brien and Mr. E. Fred Sharpe, Jr. The efforts of Mr. Chris Hobbins (AFCEE Team Chief) and personnel at Carswell AFB are greatly appreciated.


John F. O'Brien
Project Manager


E. Fred Sharpe, Jr., P.E.
Principal

 
Louis S. Karably, P.E.
Program Manager

National Account Manager

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0121

1.0 INTRODUCTION

This addendum to the Installation Restoration Program (IRP) RCRA Facility Investigation Final Work Plan for the Carswell Air Force Base, prepared by Law Environmental, Inc., dated December 1993, has been developed for additional work at the Carswell Air Force Base (Carswell AFB), in Fort Worth, Texas. This addendum was prepared by Law Environmental, Inc., Government Services Division (Law), in response to Delivery Order 0021 dated August 3, 1993, under Contract No. F33615-90-D-4008 issued by the Air Force Center for Environmental Excellence (AFCEE).

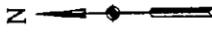
This addendum to the work plan summarizes waste characterization activities to be performed at Carswell AFB to assess the presence and absence of contamination and if contamination is present, to assess the types and quantities of contamination from 11 oil/water separators located on the facility (Figure 1-1).

1.1 HISTORY OF PAST IRP WORK AT CARSWELL AFB

Refer to Section 1.1 of the Installation Restoration Program (IRP) RCRA Facility Investigation Final Work Plan for the Carswell Air Force Base, prepared by Law Environmental, Inc., dated December 1993.

1.2 DESCRIPTION OF CURRENT STUDY

This section describes project objectives, scoping documents, and the role of subcontractors.



11 OIL/WATER SEPARATORS

LEGEND

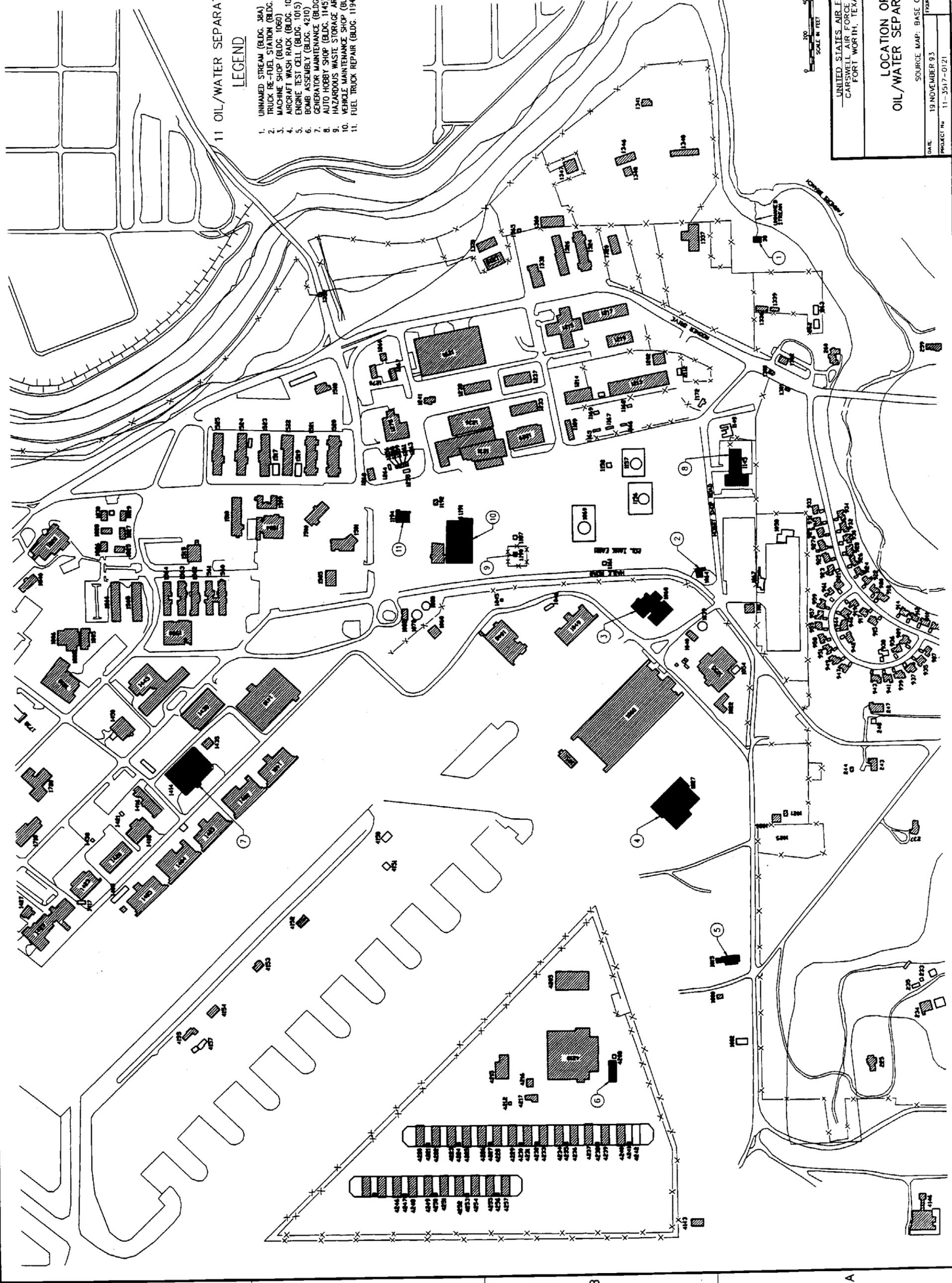
- 1. UNNAMED STREAM (BLDG. 38A)
- 2. TRUCK RE-FUEL STATION (BLDG. 1064)
- 3. MACHINE SHOP (BLDG. 1060)
- 4. AIRCRAFT WASH RACK (BLDG. 1027)
- 5. ENGINE TEST CELL (BLDG. 1015)
- 6. BOMB ASSEMBLY (BLDG. 4210)
- 7. GENERATOR MAINTENANCE (BLDG. 1414)
- 8. AUTO HOBBY SHOP (BLDG. 1145)
- 9. HAZARDOUS WASTE STORAGE AREA (BLDG. 1190)
- 10. VEHICLE MAINTENANCE SHOP (BLDG. 1191)
- 11. FUEL TRUCK REPAIR (BLDG. 1194)

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UNITED STATES AIR FORCE
CARSWELL AIR FORCE BASE
FORT WORTH, TEXAS

LOCATION OF
OIL/WATER SEPARATORS

SOURCE MAP: BASE COMPREHENSIVE PLAN
DATE: 19 NOVEMBER 93
PROJECT No: 11-3517-0121
FIGURE NUMBER: FIGURE 1-1



Oversized
MAP

1.2.1 Project Objectives

The objective of this oil/water separator assessment is to:

- Assess the presence or absence of contamination in the area of the 11 oil/water separators.
- If contamination is present, assess the types and quantities of contamination from 11 oil/water separators.
- Provide a written report discussing the evaluation of each oil/water separator under study by this delivery order.

1.2.2 Scoping Documents

Addenda to the following documents have been prepared to reflect the scope of services requested by AFCEE, Delivery Order 0021, in the Modification of Contract, dated August 3, 1993.

- Installation Restoration Program (IRP) RCRA Facility Investigation Final Work Plan for the Carswell Air Force Base, prepared by Law Environmental, Inc., dated December 1993.
- Installation Restoration Program (IRP) RCRA Facility Investigation Final Sampling and Analysis Plan for Carswell Air Force Base, prepared by Law Environmental, Inc., dated December 1993.
- Installation Restoration Program (IRP) RCRA Facility Investigation Final Health and Safety Plan for Carswell Air Force Base, prepared by Law Environmental Inc., dated December 1993.

Book # 609

1.2.3 Identify Subcontractors and Their Roles

Law will manage the project and provide services related to field sampling, data analysis, site characterization, and reporting.

ATEC Environmental Services of Dallas, Texas, will be the subcontractor to perform the drilling services. Law Environmental National Laboratories of Pensacola, Florida (LENL-P) has been subcontracted to perform the chemical analyses of the soil samples. A surveying company, certified in the state of Texas, will survey the soil boring locations and prepare a site map. Details of the project organization, personnel, and subcontractor responsibility are provided in the Sampling and Analysis Plan (SAP) Addendum for this project.

2.0 SUMMARY OF EXISTING INFORMATION

The description of the environmental setting for Carswell AFB and site-specific environmental setting is included in the Installation Restoration Program (IRP) RCRA Facility Investigation Final Work Plan for the Carswell Air Force Base, prepared by Law Environmental Inc., dated December 1993.

3.0 INVESTIGATION TASKS

3.1 SITE OBJECTIVES

The objective of the scope of services for the oil/water separator assessment is to collect assessment data on the soils in the vicinity of 11 oil/water separators located at Carswell AFB. The findings will be used to assess the presence or absence of contamination in the soils in the vicinity of the oil/water separators.

3.2 FIELD INVESTIGATION

The following section summarizes the specific field operations included in this addendum. Details of the execution of the field tasks are presented in the addendum to the Sampling and Analysis Plan (SAP).

3.2.1 Field Tasks

Depending on the access available to the oil/water separators and the location of aboveground and underground utilities, up to four soil borings will be drilled at each of the 11 oil/water separators located Figure 1-1. The soil borings will be drilled using hollow-stem auger techniques to the depth where ground water is first encountered (at estimated depths ranging from 10 feet to 20 feet below the ground surface) or to auger refusal. Subsurface soil samples will be continuously collected from the ground surface to the boring termination depth using procedures outlined in the addendum to the Field Sampling Plan of the SAP. Two soil samples per borings will be retained for laboratory analyses.

3.2.2 Sampling and Analysis Activities

The samples and analyses to be performed for the scope of services in this addendum are summarized in Table 3-1.

3.3 LITERATURE SEARCH

Refer to Section 3.3 of the Installation Restoration Program (IRP) RCRA Facility Investigation Final Work Plan for the Carswell Air Force Base, prepared by Law Environmental Inc., dated December 1993.

3.4 RECORD KEEPING

Refer to Section 3.4 of the Installation Restoration Program (IRP) RCRA Facility Investigation Final Work Plan for the Carswell Air Force Base, prepared by Law Environmental Inc., dated December 1993.

3.5 DATA ASSESSMENT

Refer to Section 3.5 of the Installation Restoration Program (IRP) RCRA Facility Investigation Final Work Plan for the Carswell Air Force Base, prepared by Law Environmental Inc., dated December 1993.

TABLE 3-1

SAMPLING AND ANALYSIS PLAN SUMMARY: SUB-SURFACE SOIL FROM BORINGS NEAR OIL/WATER SEPARATORS
RCRA FACILITY INVESTIGATION - CARSWELL AIR FORCE BASE, TEXAS

PARAMETER	TOTAL NO. FIELD LOCATION	SAMPLES PER LOCATION	FIELD DUPLICATE	EQUIPMENT BLANK	AMB COND BLANK	TRIP BLANK(a)	TOTAL NO. FIELD SAMPLES				LAB DUPLICATE	SPIKED BLANK(b)	2ND (c) COLUMN CONFIRM. ANALYSES		TOTAL NO. LAB SAMPLES
							MSD	MS	MSD	MS			ANALYSES	SAMPLES	
<u>Oil/Water Separators</u>															
ICP Screen for Metals	44	2	9	10	0	0	0	107	6	6	0	0	0	125	
SW 3050/SW 6010															
<u>Oil/Water Separators</u>															
Volatile Organic Compounds	44	2	9	10	10	10	127	7	7	0	7	0	148		
SW 8240															
<u>Containerized Waste Material</u>															
TCLP	11	1	1	0	0	0	12	1	1	0	1	0	15		
SW1311															

(a) Volatile organics only; number to be initiated will depend upon number of shipments

(b) Estimated; number to be determined by batch preparation

(c) Method SW8240 will have 2nd column confirmation performed on all samples exhibiting positive results

4.0 REPORTING REQUIREMENTS

Refer to Section 4.0 of the Installation Restoration Program (IRP) RCRA Facility Investigation Final Work Plan for the Carswell Air Force Base, prepared by Law Environmental Inc., dated December 1993.

5.0 PROJECT SCHEDULE

The summary schedule for the Carswell AFB Oil/Water Separator Assessment will be updated on a quarterly basis and submitted with the respective R&D Status Report to show any changes for each of the projected tasks for the work plan, field activities and reports.

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE

