AP - 002

STAGE 1 & 2 WORKPLANS

DATE:

Dec. 15, 1997

ASSESSMENT WORK PLAN
1329 TASKER ROAD
HOBBS, NEW MEXICO

for

SHELL E&P TECHNOLOGY COMPANY

HOUSTON, TEXAS

December 15, 1997

RECEIVED
DEC 19 1997
Environmental Bureau
Oil Conservation Division

1.0 INTRODUCTION

The subject property is located at 1329 Tasker Road, Hobbs, New Mexico. Portions of site are currently under construction of residential structures (**Figure 1**). Several weeks ago, Shell's environmental engineering group learned of an asphalt-like layer present at the construction site. The layer occurs at a depth of approximately one foot below the ground surface, and is approximately one inch thick.

2.0 PROJECT BACKGROUND

Based on observation of the site following recent construction activities and an aerial photograph dated 1954 (**Figure 2**), the subject impacted area appears to measure approximately 80 feet by 160 feet.

Shell representatives have sampled the material and analyzed the samples for total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene, and xylenes (BTEX); chlorides, and TCLP metals. Sample locations of the five-point composite sample are shown in **Figure 3**. Analysis of TCLP metals indicate that all analytes analyzed for are below detection limits. Total chlorides were detected at a concentration of 128 milligrams per kilogram (mg/kg), indicating that elevated chloride concentrations are not present in the soil sample. Benzene, toluene, and ethylbenzene concentrations were below detection limits, and minor amounts of total xylenes were detected at a concentration of 0.017 mg/kg. TPH compounds were analyzed using GC/ MS scan. Analytical results indicate the presence of n-Alkanes C13-C40. The chromatograph exhibited characteristics described by the laboratory as those of weathered oil. The value for numerous branched alkanes and cyclic hydrocarbons (unresolved mixture, 4122 mg/kg) are representative of USEPA method 8015 TPH analysis. Sample results are included in **Appendix I**.

Groundwater occurs at the location at a depth of approximately 65 feet below ground surface based on the recent installation of two monitor wells approximately 400 feet west of the site.

3.0 ASSESSMENT WORKPLAN

3.1 Delineation Sampling Methodology

The subject site located at 1329 Tasker Road, and the adjacent property to the north located at 1311 Tasker Road will be assessed for the presence of the asphaltic material using a relatively non-invasive technique such as a shovel or hand auger. Soil samples will be collected from each sample location and will be screened in the field for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID). The soil samples will also be examined for visual evidence of staining and the presence of the asphaltic material. Each sample location will be investigated to a depth where no evidence of the asphaltic material is observed and no PID readings are detected.

3.2 Delineation Sampling Locations

The subject site and the adjacent property will be sampled on twenty-foot grids (**Figure 4**). The center of each twenty foot grid will be sampled as described above. If presence of the asphaltic material is observed in the sample collected from the center of the grid, additional sample locations will be placed at ten-foot intervals north, south, east, and west of the grid sample until no visible evidence of the material is observed and no PID readings are detected. If housing foundations or other immovable features exist at the grid sample location, the sample will be collected at the edge of the feature.

3.3 Laboratory Analysis of Samples

One sample of the asphaltic material (the sample exhibiting the highest PID value or if not applicable, a sample observed to be representative of the asphaltic material at the site) will be submitted for laboratory analysis of the following constituents:

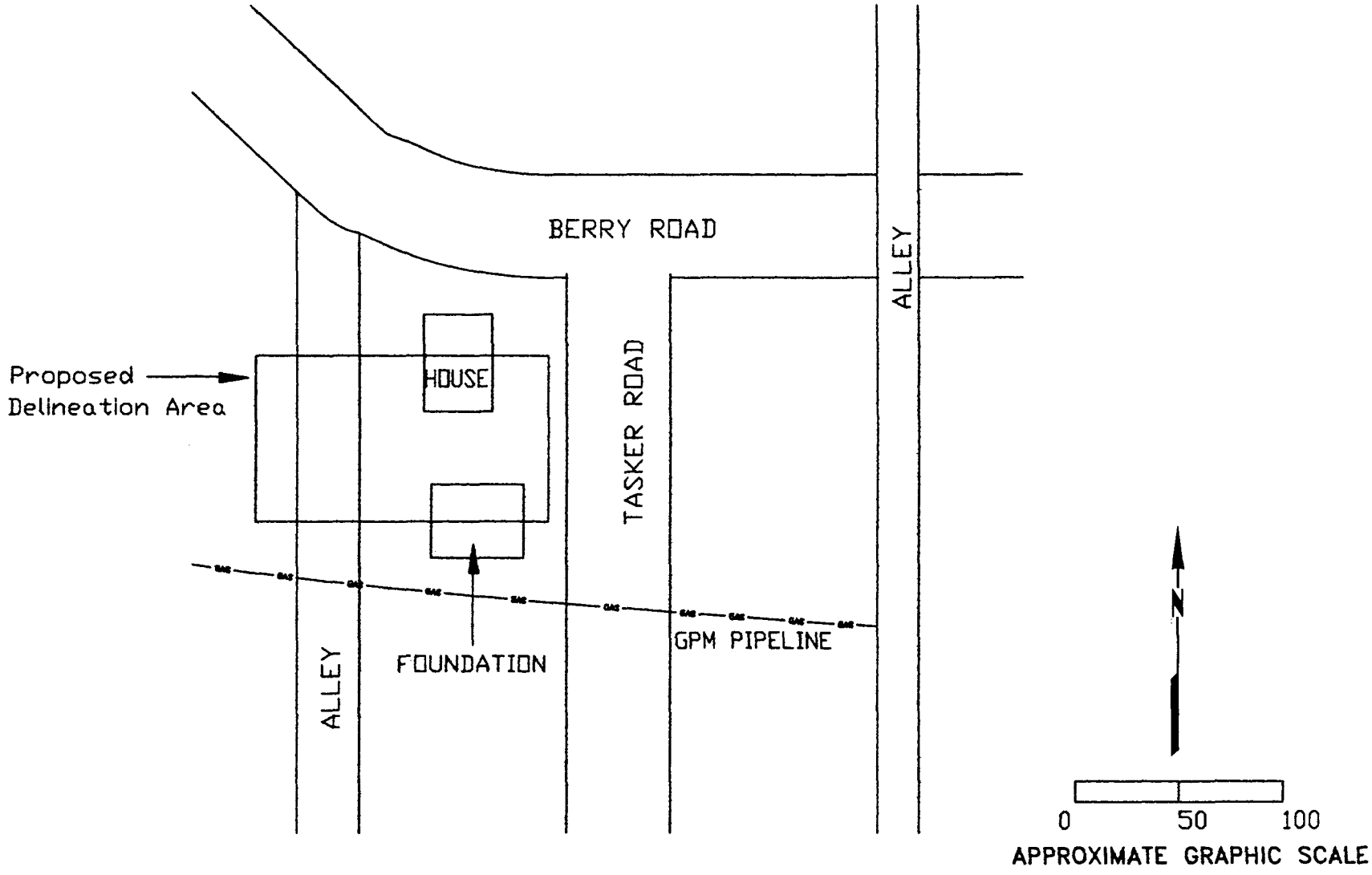
- Polynuclear Aromatic Hydrocarbons, USEPA Method 8270
- Volatiles, USEPA Method 8260
- Semi-Volatiles, USEPA Method 8270
- Chlorinated Pesticides, USEPA Method 8080
- Polychlorinated biphenyl's, USEPA Method 8080
- Naturally Occurring Radioactive Materials (Uranium 238, Radium 226, Lead 210)

The sample will not be analyzed for previously analyzed constituents (TPH, BTEX, TCLP Metals, and Chlorides).

If the presence of the above listed constituents are detected in the sample at levels in excess of Regulatory or Human Health standards, Shell E&P Technology Company will submit a workplan for additional analysis of soils at the subject site for the constituents of concern. The plan may be to either conduct additional sampling or to conduct an interim removal of visibly impacted soil (weathered crude oil layers) before resampling.

3.4 Assessment Report

Upon completion of the project, Shell E&P Technology Company will submit a report and Remediation Workplan for NMOCD approval. The report will include a description and photographs of field activities, a plot-plan showing soil sampling locations and depths, a description of field findings, a map showing the distribution of the asphaltic material, a map showing PID values, results of laboratory analysis (tables and laboratory reports), and recommendations for further assessment or remediation of the site.

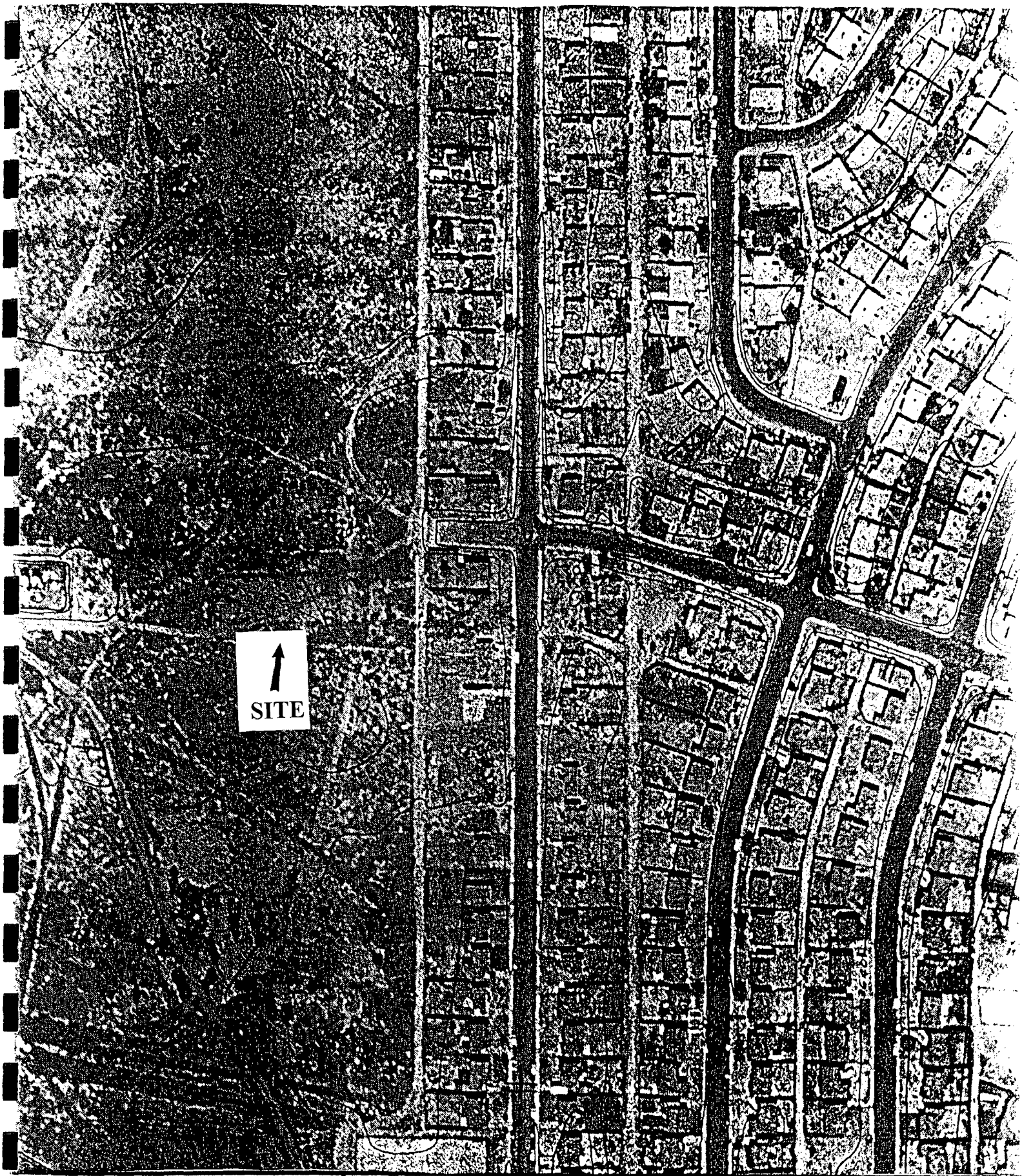


PHILIP SERVICES CORP.

TITLE:
SITE MAP
1329 Tasker Road
Hobbs, New Mexico

DWN:	DES.:	PROJECT NO.: 18906
kmo	seh	SEPTCO TASKER ROAD HOBBS, NM
CHKD: seh	APPD: seh	
DATE: 12/97	REV.: 1	1

kmo projects\18906\18906-1.dwg



PSC PHILIP SERVICES CORP

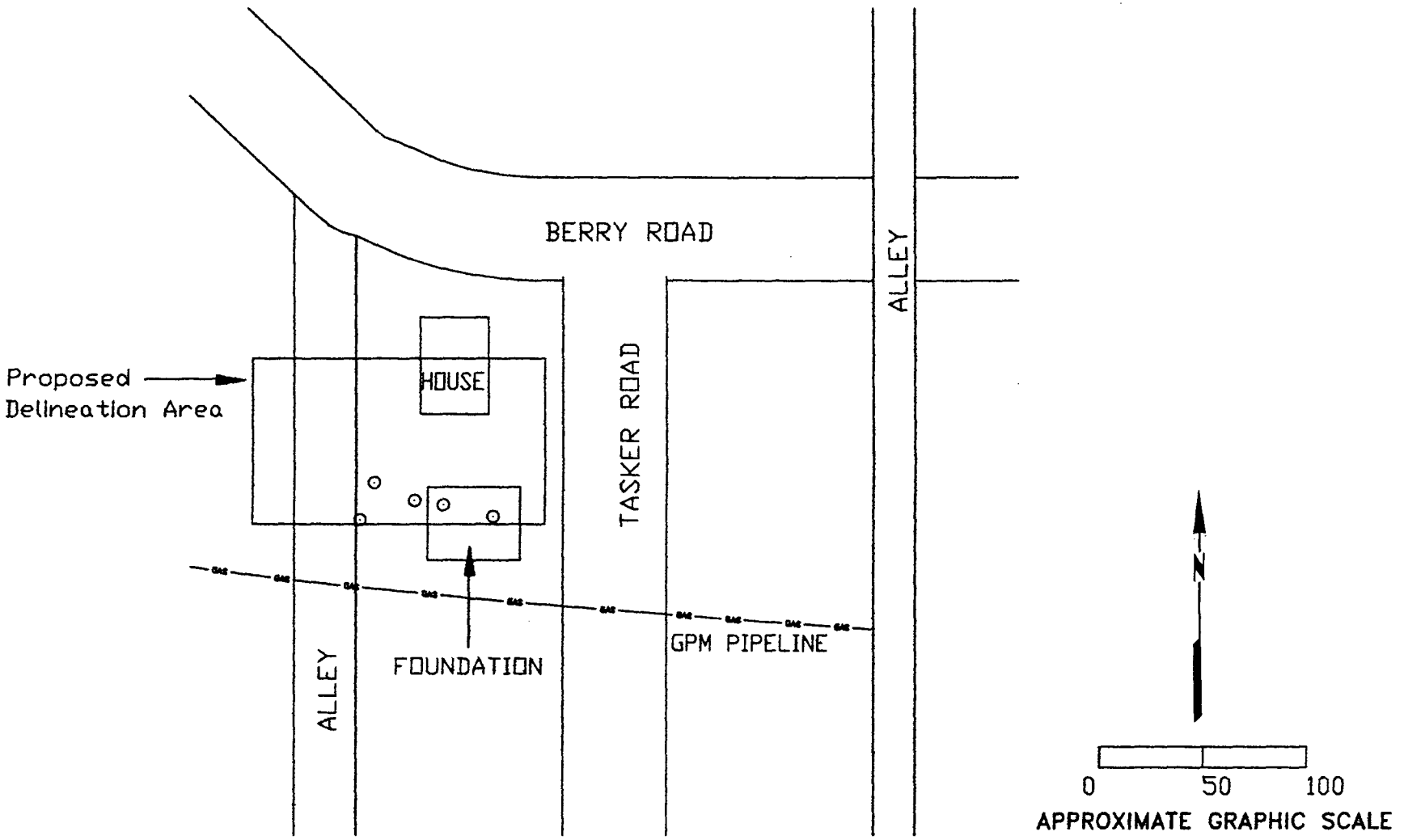
TITLE:
AERIAL PHOTOGRAPH
1329 Tasker Road
Hobbs, New Mexico

N

DWN:	DES.:
CHKD: seh	APPD: seh
DATE: 12/97	REV.: 1

PROJECT NO.: 189C
SEPTCO TASKER ROAI
Hobbs, NM

2

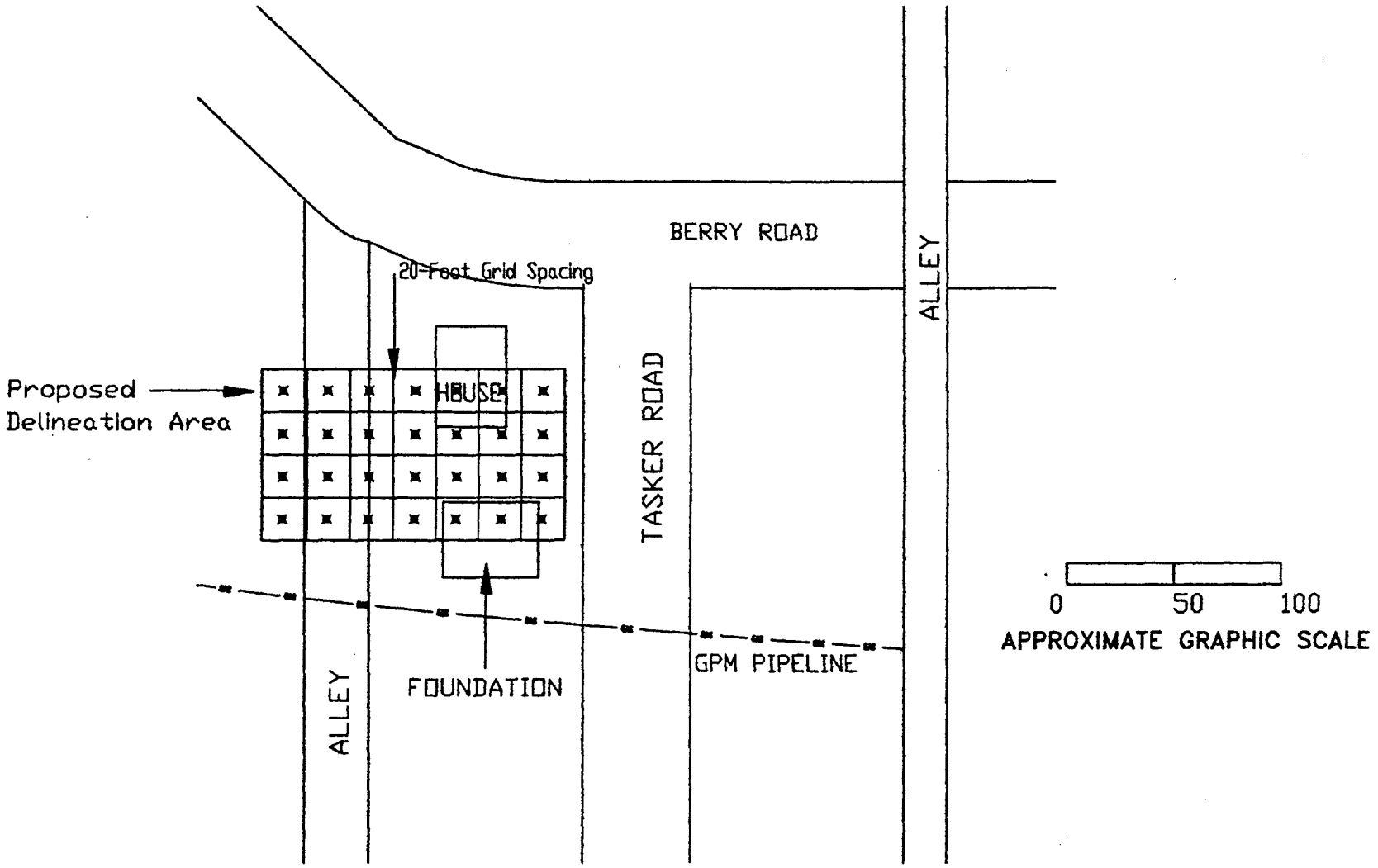


PHILIP SERVICES CORP

TITLE:
FIVE-POINT COMPOSITE SAMPLE LOCATIONS
1329 Tasker Road
Hobbs, New Mexico

DWN:	DES.:	PROJECT NO.: 18906
kmo	seh	SEPTCO TASKER ROAD Hobbs, NM
CHKD:	APPD:	
seh	seh	
DATE:	REV.:	3
12/97	1	

kmo projects\18906\18906-3.dwg



PHILIP SERVICES CORP

TITLE:
PROPOSED SAMPLE LOCATIONS
1329 Tasker Road
Hobbs, New Mexico

DWN:	DES.:
kma	seh
CHKD:	APPD:
seh	seh
DATE:	REV.:
12/97	1

PROJECT NO.: 18906
SEPTCO TASKER ROAD
Hobbs, NM

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APPENDIX I

LABORATORY ANALYSIS

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SHELL OIL CO.
ATTN: DONNIE ANDERSON
1017 W. STANOLIND
HOBBS, NM 88240
FAX TO: 505-397-8204

Receiving Date: 11/17/97
Modified Reporting Date: 11/25/97
Reporting Date: 11/19/97
Project Number: NOT GIVEN
Project Name: TASKER SITE
Project Location: EAST OF GRIMES BATTERY
Laboratory No.: H3320-1
Sample ID: COMPOSITE OF #1, 2, 3, 4, 5

Analysis Date: 11/19/97
Sampling Date: 11/17/97
Sample Type: SOIL & WASTE
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC

MODIFIED REPORT

Compounds Detected (GC/MS Scan)

n-Alkanes, C13 through C40, maximum @ n-Pentacosane (C25) **(Total n-Alkanes=92.2mg/Kg)**; 2,6,10,14-Tetramethylpentadecane **(7.4mg/Kg)** and 2,6,10,14-Tetramethylheptadecane **(10.9mg/Kg)**; Numerous branched alkanes and cyclic hydrocarbons (unresolved mixture) **(4122mg/Kg)**; Naphthalene **(0.7mg/Kg)**, 1- and 2-Methylnaphthalene **(2.1mg/Kg)**.

Methods: SW-846 8270 and 8015 modified

NOTE: Sample has chromatographic characteristics of weathered oil.

Chemist

11/25/97
Date

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ATTN: DONNIE ANDERSON
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HOBBS, NM. 88240
FAX TO: 505-397-8204

Receiving Date: 11/17/97
Reporting Date: 11/18/97
Project Number: NOT GIVEN
Project Name: TASKER SITE
Project Location: EAST OF GRIMES BATTERY

Sampling Date: 11/17/97
Sample Type: SOIL
Sample Condition: INTACT & COOL
Sample Received By: GP
Analyzed By: GP

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		11/17/97	11/17/97	11/17/97	11/17/97
H3320-1	COMPOSITE OF 5	<0.002	<0.002	<0.002	0.017
	SAMPLES				
Quality Control		101	99	91	306
True Value QC		100	100	100	300
% Recovery		101	99	91	102
Relative Percent Difference		0.8	2.6	9.4	5.4

METHOD: EPA SW 846-8021B, 5030, 5021 Gas Chromatography

Chemist

11/18/97
Date

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HOBBS, NM. 88240
FAX TO: 505-397-8204

Receiving Date: 11/17/97
Reporting Date: 11/18/97
Project Number: NOT GIVEN
Project Name: TASKER SITE
Project Location: EAST OF GRIMES BATTERY

Analysis Date: 11/17/97
Sampling Date: 11/17/97
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl^- (mg/Kg)
H3320-1	COMPOSITE OF 5 SAMPLES	128
Quality Control		480
True Value QC		500
% Accuracy		96
Relative Percent Difference		4
METHOD: STANDARD METHODS 4500 Cl B		325.3

Gayle A. Potter, Chemist

11/18/97
Date

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FAX TO: 505-397-8204

Receiving Date: 11/17/97
Reporting Date: 11/21/97
Project Number: NOT GIVEN
Project Name: TASKER SITE
Project Location: EAST OF GRIMES BATTERY

Sampling Date: 11/17/97
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: GP

TCLP METALS

LAB NO.	SAMPLE ID	As ppm	Ag ppm	Ba ppm	Cd ppm	Cr ppm	Pb ppm	Hg ppm	Se ppm
ANALYSIS DATE:		11/20/97	11/20/97	11/20/97	11/20/97	11/20/97	11/20/97	11/21/97	11/20/97
EPA LIMITS:		5	5	100	1	5	5	0.2	1
H3320-1	COMPOSITE OF 5 SAMPLES	<1.0	<1.0	<5.0	<0.1	<1.0	<1.0	<0.02	<0.1
Quality Control		0.095	5.02	9.9	1.010	1.00	5.03	0.0101	0.108
True Value QC		0.100	5.00	10.0	1.000	1.00	5.00	0.0100	0.100
% Recovery		95	101	99	101	100	101	101	108
Relative Standard Deviation		3.9	0.4	1.8	0.5	1.1	0.7	3.7	6.4
METHODS: EPA 1311, 600/4-9		206.2	272.1	208.1	213.1	218.1	239.1	245.1	270.2

Gayle A. Potter, Chemist

11/21/97
Date

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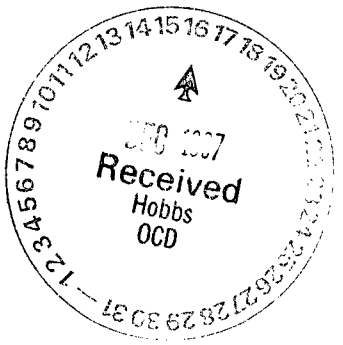
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