POOR LEGIBILITY

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4931

Site Prioritization

EPA REGION IX SITE SCREENING CHECKLIST

This review checklist is to be used by individual site screening staff when reviewing sites which have been brought to the attention of EPA or the State. Each site is reviewed on the merits of the discovery documentation and additional information gathered during the screening process. The guiding principal in evaluating a given site is to use common sense in assessing the information and subsequently presenting the site and its known hazardous potential to the SST.

1.0 GENERAL INSTRUCTIONS

Complete Section 1 for the site using readily available information and contacting appropriate individuals. A contact log (Attachment A) should be used to document information gained through correspondence, interviews, and telephone calls. Handwriting is acceptable if it is legible. Attach extra pages if necessary.

1.1 Site Information

Site Name: One Camelback

Alias Name: Former Exxon Service Station 7-7846

Site Street Address: 1 E. Camelback Road

City, County, State: Phoenix, Maricopa, Arizona Zip: 85012

EPA ID Number: AZ0001039148

Site Screener: Mary Hessler Date: May 15, 1998

Date of Discovery: February 27, 1995

Discovery Vehicle:

[ ]	County Referral	[X]	State Referral	[ ]	Lawsuit
[ ]	Citizen Petition	[ ]	State PA/SI Grant	[ ]	Removal
[ ]	RCRA Referral	[ ]	Nonemergency Release Report	[ ]	Newspaper
				[ ]	Other

Is this site part of an NPL site? [ ] Yes [X] No

CERCLIS Status:		[X]	Discovery PA	[ ]	NFRAP
[ ]	Other (specify): _____	[ ]	SI	[ ]	Not in CERCLIS

State oversight role:
PA/SI Cooperative Agreement [X] Yes [ ] No [ ] Not applicable
Cooperative Agreement Number: V999705-01-0

EPA Project Officer: Jere Johnson

RCRA Status:		[ ]	Generator	[ ]	Transporter
		[ ]	TSDF	[X]	Not listed in RCRIS

In a State Database(s)? [X] Yes [ ] No If yes, specify. ACIDS ID # 1342

1.2 CERCLA Eligibility

If the answer to question 1 is "No", or if the answer to any question of 2 through 8 is "Yes", the site is ineligible for CERCLA evaluation and the decision at the bottom of this page is "No Further Action Under CERCLA". The answers to questions 9 through 16 should be used to identify sites that may not be appropriate for CERCLA evaluation without further justification. If a question cannot be answered, explain why in the Comments section below.

1.	Has a release of hazardous substances, pollutants, or contaminants occurred?	[X] Yes	[ ] No
2.	Does the release or threat of release consist only of crude oil or unaltered petroleum product?	[ ] Yes	[X] No
3.	Is the site subject to corrective action under RCRA Subtitle C (hazardous waste treatment, storage, or disposal facility)?	[ ] Yes	[X] No
4.	Does the release or threatened release fall under the jurisdiction of the Uranium Mill Tailings Radiation Control Act (UMTRCA)?	[ ] Yes	[X] No
5.	Does the release or threatened release fall under the jurisdiction of the Atomic Energy Act (AEA)?	[ ] Yes	[X] No
6.	Is the release or threatened release a result of a legal application of pesticides under Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)?	[ ] Yes	[X] No
7.	Is the release or threatened release regulated under the Oil Pollution Act (OPA)?	[ ] Yes	[X] No
8.	Is the release or threatened release permitted under the Nuclear Regulatory Commission (NRC)?	[ ] Yes	[X] No
9.	Is the site a federal facility?	[ ] Yes	[X] No
10.	Is the site outside of U.S. boundaries?	[ ] Yes	[X] No
11.	Is the site outside of EPA, Region IX borders?	[ ] Yes	[X] No
12.	Is the site within Native American Tribal lands?	[ ] Yes	[X] No
13.	Is the site currently under the control and management of a state/local agency? If yes, which agencies?	[ ] Yes	[X] No
14.	Is the site currently operating?	[ ] Yes	[X] No
15.	Is the site address valid?	[X] Yes	[ ] No
16.	Has the site been investigated under an alias?	[X] Yes	[ ] No

Comments: 2 - Both tetrachloroethylene (PCE) and petroleum constituents such as benzene, toluene, ethylbenzene, and xylenes have been detected in groundwater samples taken beneath the site. A former dry cleaner is a possible source of the PCE.

DECISION: [ ] **No Further Action Under CERCLA**
Go to Section 7

[X] **Go to Section 2**

2.0 TECHNICAL INFORMATION

This section contains information about site's operational history and environmental sampling. Complete the following section by filling in the blanks or checking the appropriate boxes. If a question cannot be answered, explain why. If a drive-by is performed, complete Attachment B.

2.1 Operational History

1a. List present site owner(s) and operator(s). [Include dates of ownership]:
One Camelback, Inc., 1986 to present (Owner and Operator)

1b. Are hazardous substances presently on site? [ ] Yes [X] No
If yes, how and where are substances stored and used?

2a. List historic site owner(s) and operator(s). [Include dates of ownership]:
Park West Associates Ltd., 1982(?) - 1986
Prior to 1982, the site was a strip mall occupied by 17 separate addresses. Below is a list of the businesses with potential for generating hazardous substances.

Service Station, 4995 N. Central Avenue, 1939-72
V M Curry, Photographer, 23 E. Camelback Road, 1947-48
Esquire Cleaners, 27 E. Camelback Road, 1948-51
Don Keller's Photo Lab, 23 E. Camelback Road, 1948-50
Camelback Photo Center, 23 E. Camelback Road, 1951-61
Central Camera, 4967 N. Central Avenue, 1963
The Photo Shop, 4967 N. Central Avenue, 1965-67
Fotomat, 4995 N. Central Avenue, 1975-82

2b. Were hazardous substances present on site in the past? [X] Yes [ ] No
If yes, how and where were substances stored and used?
Historic waste management practices are unknown.

Additional comments: The strip mall was torn down in the early 1980s. Park West built the One Camelback building, an 11-story building with five levels of underground parking. The first certificates of occupancy for the building are dated 1985.

2.2 Contaminant(s):

List any hazardous substances, pollutants, or contaminants that have been identified at the site and indicate whether they have been quantified (e.g., by sampling).

		Suspected	Identified	Quantified	Comments
[ ]	Ammonia	[ ]	[ ]	[ ]	
[ ]	Arsenic	[ ]	[ ]	[ ]	
[ ]	Asbestos	[ ]	[ ]	[ ]	
[ ]	Beryllium	[ ]	[ ]	[ ]	
[ ]	Cadmium	[ ]	[ ]	[ ]	
[ ]	Carbon tetrachloride	[ ]	[ ]	[ ]	
[ ]	Chloroform	[ ]	[ ]	[ ]	
[ ]	Chromium (+3 or +6)	[ ]	[ ]	[ ]	
[ ]	Copper	[ ]	[ ]	[ ]	
[ ]	Cyanide	[ ]	[ ]	[ ]	
[ ]	Dichloroethene,1,1-	[ ]	[ ]	[ ]	
[ ]	Dioxin	[ ]	[ ]	[ ]	
[ ]	Ethyl benzene	[ ]	[ ]	[ ]	
[ ]	Lead	[ ]	[ ]	[ ]	
[ ]	Mercury	[ ]	[ ]	[ ]	
[ ]	Methylene chloride	[ ]	[ ]	[ ]	
[ ]	Nickel	[ ]	[ ]	[ ]	
[ ]	P-Dichlorobenzene	[ ]	[ ]	[ ]	
[ ]	Pentachlorophenol	[ ]	[ ]	[ ]	
[ ]	Phenol	[ ]	[ ]	[ ]	
[ ]	Polychlorinated biphenyls (PCBs)	[ ]	[ ]	[ ]	
[ ]	Polycyclic aromatic hydrocarbons (PAHs)	[ ]	[ ]	[ ]	
[ ]	Toluene	[ ]	[ ]	[ ]	
[ ]	Trichloroethylene	[ ]	[ ]	[ ]	
[ ]	Vinyl chloride	[ ]	[ ]	[ ]	
[ ]	Xylene	[ ]	[ ]	[ ]	
[ ]	Zinc	[ ]	[ ]	[ ]	
[ ]	Other chemicals (List):	[ ]	[ ]	[ ]	
	Tetrachloroethylene (PCE)	[X]	[X]	[X]	
	Silver	[X]	[ ]	[ ]	

Additional Comments: Tetrachloroethylene (PCE) is used by dry cleaners and has been detected in groundwater monitoring wells at the site. However, the source of PCE has not been identified. Silver is commonly used in photofinishing. It is suspected that silver may be present in onsite soils.

2.3 Has a release as defined in CERCLA Section 101(22) occurred?

[ ] Yes [X] Suspected [ ] No

Identify the source(s) of the release or suspected release (e.g., drums, landfill, surface impoundment, waste pile, etc.): Dry cleaning and photofinishing businesses that historically operated at the site. No detailed information is available.

2.4 Pathway(s) of contaminant migration:

[ ] Air [X] Groundwater [ ] Surface Water [ ] Soil

Briefly describe any identified pathway: PCE was detected in the groundwater at the site in 1993. However, PCE has not been detected in the groundwater monitoring wells since 1993. The pump-and-treat system began operation in 1993, and appears to have removed the PCE from the groundwater. The groundwater monitoring wells have been sampled on a quarterly basis since 1993, and PCE has not reappeared.

Silver is commonly used by photofinishing businesses. It is suspected, therefore, that silver-contaminated soil may be present onsite. However, the site is paved, landscaped, or covered by a building. It is suspected, therefore, that the potential for contact with the soil is low.

2.5 Sampling History

1. Has sampling been conducted? [X] Yes [ ] No

2. If environmental sampling has been conducted, use the Sampling Event Summary Table, Attach-ment C, to record the information.

2.6 Additional Information

Use this space to present additional information that may be used to support site screening decisions.

3.0 REMOVAL ASSESSMENT CRITERIA — NCP EVALUATION

Use the following criteria to determine if the site should be referred to EPA's Removal Section. If the answer to any question is yes, get EPA concurrence for the decision. If all answers are no, go to Section 4. If a question cannot be answered, explain why in the Comments section below.

1.	Is there actual or potential exposure to nearby populations, animals, or the food chain from hazardous substances, pollutants, or contaminants?	[ ] Yes	[X] No
2.	Is there actual or potential contamination of drinking supplies or sensitive ecosystems?	[ ] Yes	[X] No
3.	Are hazardous substances, pollutants, or contaminants in drums, barrels, tanks, or other bulk storage containers which may pose a threat of release?	[ ] Yes	[X] No
4.	Are there high levels of hazardous substances, pollutants, or contaminants is soils largely at or near the surface, which may migrate and affect populations or the environment?	[ ] Yes	[X] No
5.	Could weather conditions cause hazardous substances, pollutants, or contaminants to migrate or be released?	[ ] Yes	[X] No
6.	Is there a threat of fire or explosion?	[ ] Yes	[X] No
7.	Are there appropriate Federal or State response mechanisms to respond to the release or potential release?	[X] Yes	[ ] No
8.	Are there other situations or factors which may pose threats to public health, welfare, or the environment?	[X] Yes	[ ] No
9.	< Reserved >	[ ] Yes	[ ] No
10.	For the situation where there appears to be primarily a groundwater contamination problem, is there a near-surface source which can be removed?	[ ] Yes	[X] No

Comments: 1 - There is presently actual exposure to petroleum odors in the fifth level of the underground parking structure. 8 - The fifth level of underground parking is below the water level. Thus, the pump-and-treat system is necessary to prevent flooding. Visitors to the building have experienced headaches while on the fifth level of underground parking. In addition, workers operate the pump-and-treat system, which is located on the fifth level.

DECISION:

[ ] **Removal Assessment**
Go to Section 7

[ ] **Expanded Removal Assessment**
Go to Section 7

[X] **Not Appropriate For Removal Action**
Go to Section 4

4.0 OTHER INFLUENCING FACTORS

Assign a high, medium, or low priority category to each of the following factors and then use these factors to help make preliminary recommendations in Section 5. A high priority influence may indicate that a Preliminary Assessment should be conducted as a high priority without regard to other screening factors.

Other Influences	High	Medium	Low
1. Site remedial/ removal history	[ ] None	[X] Some	[ ] All wastes removed
2. Regulatory involvement	[X] Other agency currently active	[ ] Somewhat involved	[ ] No involvement
3. Environmental justice	[ ] Site is in low income/minority neighborhood		[X] Site is not in low income or minority neighborhood
4. Brownfields/Redevelop-ment	[ ] Possible candidate		[X] Not a likely candidate
5. Political attention	[X] Very visible/vocal	[ ] Some involve-ment	[ ] None
6. Public attention	[ ] Very visible/vocal	[ ] Some involve-ment	[X] None
7. Remedial Costs	[X] Likely very expensive or diffi-cult		[ ] Easy and relatively cheap

Comments:
2 - The ADEQ Underground Storage Tanks Section is presently handling the site. 5 - The site owner, One Camelback, Inc., has filed a lawsuit against the surrounding former service stations. The owners have approached both ADEQ and the EPA requesting assistance in addressing the infiltration of groundwater.

OTHER INFLUENCING FACTORS CATEGORY:

HIGH **MEDIUM** LOW

5.0 PRELIMINARY RECOMMENDATIONS

Use the information in sections 1 through 4 and professional judgement to make a preliminary determination of the need for further investigation of the actual or potential threat posed by hazardous substance contamination at this site. Select one of the following options for site disposition.

5.1. Prioritize for Site Assessment

Further site assessment appears warranted.

5.1.a. Prioritize for Site Assessment under State Lead [ ]

Complete Section 6 to determine if site should be high, medium, or low priority for further assessment.

5.1.b. Prioritize for Site Assessment under EPA Cooperative Agreement [ ]

Complete Section 6 to determine if site should be high, medium, or low priority for further assessment.

5.2. High Priority Site Assessment [ ]

The influencing factors in Section 4 suggest that further site assessment be conducted as a high priority. Go to Section 7.

5.3. Referral To Hazardous Waste Management Program [ ]

Recommend for sites that can be remediated as a Corrective Action under H&S Code 25187. Go to Section 7.

5.4. Referral To Water Quality Program [ ]

Recommend referral to Water Quality Control Program for sites that fall under its authority and for which it is providing oversight of investigation/remediation. Go to Section 7.

5.5 Referral to another agency [ ]

Recommend to another agency for sites where it is providing or has provided oversight. Go to Section 7.

5.6 No Futher Action Under CERCLA [X]

Recommend No Further Action for sites where documented contamination is not significant by EPA standards and the presence of greater contamination is unlikely. Go to Section 7.

Comments: _____

6.0 SITE PRIORITIZATION WORKSHEET

Site Name: One Camelback **Site Screener:** Mary Hessler
EPA ID Number: AZ0001039148 **Date:** May 15, 1998
Site Assessment Phase: Preliminary Assessment

The following risk-based criteria should be used as a guideline to assist in the prioritization of pre-CERCLIS and CERCLIS sites. These guidelines can be used in various stages of assessment. When interpreting the information provided below, one should understand that conservative assumptions were made where information is lacking and the risk value is subjective.

Site screeners should complete this form by using the categories as guidelines. The "Notes" sections should be used to document assumptions made, data sources, or other information pertinent to determining risk prioritization.

6.1 HAZARDS IDENTIFICATION

Complete the sections below for the suspected contaminants of greatest concern. Use SCDMs as a reference for assigning hazardous substance risk category. Assign a Hazard Factor for each hazardous substance evaluated and then assign an Overall Hazard Factor Value combining the separate Hazard Factors. If only one hazardous substance is evaluated, the Overall Hazard Factor Value will be the same as the Hazard Factor for A.

HAZARDOUS SUBSTANCE A: Tetrachloroethylene (PCE)

Estimate the risk associated with the hazard properties for this hazardous substance.

Hazard Property	HIGH	MEDIUM	LOW
Quantity	[ ] ≥10,000 lbs; or or 5 mil. gals; or or 25,000 yds^3	[ ] <10,000 lbs and ≥100 lbs; or <5 mil. gals and ≥50,000 gals; or <25,000 yds^3 and ≥250 yds^3	[X] <100 lbs. or 50,000 gals. or 250 yds^3
Toxicity	[ ] ≥10,000	[X] <10,000 and ≥100	[ ] <100
Mobility	[X] 1	[ ] <1 and ≥0.001	[ ] <0.001
Bioavailability	[ ] ≥1,000	[X] <1,000 and ≥10	[ ] <10
Concentration (if known)	[ ] ≥benchmark =	[ ] near benchmark =	[X] low relative to benchmark =
Level of Containment	[ ] None	[ ] Partial	[X] Full
Hazard Factor for A	HIGH	MEDIUM	LOW

Comments: PCE has not been detected in the groundwater since 1993. The pump-and-treat system appears to have removed the PCE. Therefore, a low priority is assigned.

HAZARDOUS SUBSTANCE B: Silver

Estimate the risk associated with the hazard properties for this hazardous substance.

Hazard Property	HIGH	MEDIUM	LOW
Quantity	[ ] ≥10,000 lbs; or or 5 mil. gals; or or 25,000 yds^3	[ ] <10,000 lbs and ≥100 lbs; or <5 mil. gals and ≥50,000 gals; or <25,000 yds^3 and ≥250 yds^3	[X] <100 lbs. or 50,000 gals. or 250 yds^3
Toxicity	[ ] ≥10,000	[X] <10,000 and ≥100	[ ] <100
Mobility	[ ] 1	[X] <1 and ≥0.001	[ ] <0.001
Bioavailability	[ ] ≥1,000	[X] <1,000 and ≥10	[ ] <10
Concentration (if known)	[ ] ≥benchmark = _____	[ ] near benchmark = _____	[ ] low relative to benchmark = _____
Level of Containment	[ ] None	[ ] Partial	[X] Full
Hazard Factor for B	HIGH	MEDIUM	**LOW**

Comments: Soils have not been sampled; therefore, the concentration of silver is unknown. It is suspected that, because the majority of the site has been excavated, and that the site was landscaped in conjunction with the construction of the building, that the level of containment is high. Because of the high level of containment, a low priority is assigned.

OVERALL HAZARD FACTOR VALUE: HIGH MEDIUM **LOW**

6.2 VULNERABILITY ANALYSIS

Assign a risk category to each of the following vulnerability factors. Assign an Overall Vulnerability Factor Value for the site based on the dominant vulnerability risk categories.

Vulnerability Factor	High	Medium	Low
1. Environmental Setting - Land use within 0.5 miles of the site	[X] Residential	[ ] Agricultural/ Commercial	[ ] Industrial
2. Sensitive Populations - Children, the elderly, or groups with poor health live:	[X] Within 0.25 miles of site		[ ] More than 0.25 miles from site
3. Population Density - Evaluate within 0.5 miles.	[X] Dense	[ ] Moderate	[ ] Sparse
4. Groundwater Use - Wells used for drinking water are located:	[ ] Within 0.5 miles of the site	[ ] 0.5 to 2 miles from site	[X] More than 2 miles from site
5. Groundwater Contamination - Evaluate groundwater contamination within 2 miles of the site.	[ ] Known	[ ] Possible	[X] Not likely
6. Surface Water Location - Distance to nearest surface water body. If used for drinking water or known to be contaminated, bump to next higher risk category.	[X] Within 0.5 miles of the site	[ ] 0.5 to 2 miles from site	[ ] More than 2 miles from site
7. Sensitive Habitats - Distance to nearest sensitive habitat. If known or projected contamination within habitat, bump to next higher risk category.	[ ] Within 0.5 miles of the site	[ ] 0.5 to 2 miles from site	[X] More than 2 miles from site
8. Soil/Air Contamination - Evaluate the potential for exposure to individuals from contaminated soil or air releases.	[ ] Documented or probable exposure	[ ] Potential for exposure	[X] Exposure not likely
9. Sampling Data Confidence - Evaluate the quality of any data available for the site.	[ ] No oversight; no QA/QC; no data	[X] Regulatory oversight; EPA methods; partial or unknown QA/QC	[ ] Regulatory oversight; EPA methods; QA/QC validation

Notes: 5 - The groundwater is contaminated with petroleum constituents. 8 - Petroleum constituents such as benzene, toluene, ethylbenzene, and xylene have been detected in air samples taken in the underground parking structure. In addition, visitors to the site have experienced headaches while in the fifth level of the underground parking structure.

OVERALL VULNERABILITY FACTOR VALUE: HIGH **MEDIUM** **LOW**

6.3 PRIORITIZATION SCREENING RISK ANALYSIS

Assign a Site Priority Level based on the dominant risk categories given for the hazard and vulnerability factor values.

HAZARD FACTOR VALUE	HIGH	MEDIUM	LOW
VULNERABILITY FACTOR VALUE	HIGH	MEDIUM	LOW
SITE PRIORITY LEVEL	**HIGH**	**MEDIUM**	**LOW**

Additional Comments: _____

7.0 SITE RECOMMENDATION

Site Name: One Camelback **Site Screener:** Mary Hessler
EPA ID Number: AZ0001093148 **Date:** May 15, 1998

7.1. Futher Site Assessment Warranted

7.1.a Under State Lead
High Priority [ ] **Medium Priority** [ ] **Low Priority** [ ]

Recommend further site investigation under State lead.

7.1.b Under EPA Cooperative Agreement
High Priority [ ] **Medium Priority** [ ] **Low Priority** [ ]

Recommend further site investigation under the EPA cooperative agreement.

7.2. Recommended for Removal Assessment [ ]
or Expanded Removal Assessment [ ]

Recommend referral to EPA's Removal Section.

7.3. Referral To Hazardous Waste Management Program [ ]

Recommend hazardous waste management program for sites that can be remediated as a Corrective Action under H&S Code 25187.

7.4 Referral to Water Quality Control Program [ ]

Recommend Water Quality Program referral for sites that fall under its authority and for which it is providing oversight of investigation/remediation.

7.5 Referral to another agency [ ]

Recommend referral to another agency for sites where it is providing or has provided oversight.

7.6 No Futher Action Under CERCLA [X]

Recommend No Further Action for sites where documented contamination is not significant by EPA standards and the presence of greater contamination is unlikely.

Comments: The pump-and-treat system appears to have removed the PCE from the groundwater. Petroleum constituents are still present in the groundwater, but are being addressed by ADEQ under the Underground Storage Tanks (UST) program. Silver may be present in onsite soils, but is covered by the onsite building, paved areas, and landscaped areas.

EPA CONCURRENCE: [signature] 5.28.98
signature date

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ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull Russell F. Rhoades, Director

May 20, 1998
SAU98, 210

Ms. Jerelean M. Johnson
Arizona Project Officer
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street, SFD-5 8th Floor
San Francisco, CA 94105-3901

RE: Site Screening Form
One Camelback
1. E. Camelback Road
Phoenix, Arizona 85012
AZ0001039148

Dear Jere,

Enclosed please find the Screening Form for the One Camelback Site. The Arizona Department of Environmental Quality (ADEQ) looks forward to receiving your comments and decision regarding the site.

If you have any questions please contact me at (602) 207-4223. You may contact the report assessment team of Project Manager, Mary Hessler and Hydrologist, Wael Hassinan at (602) 207-4195 and (602) 207-4451. Within Arizona, you may contact us at 1-800-234-5677 extensions 4223, 4195, and 4451 respectively.

Sincerely,

Lowell M. Carty Jr.
Site Assessment Unit Manager

Attachment:

cc: Site File
Reading File

(M:\...\8Scr0018.520)

Just do screening. No TA. NFA.
5-28-98

MEMORANDUM

DATE: February 24, 1995

SUBJECT: CERCLIS Discoveries

FROM: Jim Quint (H-8-1)

TO: ISSI

Attached is a two page list of new site that should be entered to CERCLIS as Discoveries with an effective date o 2/27/95.
I am attached both the fax copy and the original as you will need them both to make you entries.

Any questions let's discuss.

3/9/95 12 SITES FOR DISCOVERY !

JMJ

N.H
3/3/95

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CERCLIS ARCHIVE SITE MEMO TO FILE

DATE: June 29, 2000

RE: SITE NAME: One Camelback

EPA ID#: AZ0001039148

FROM: 6.29.00
(Signature/Date) Region 9 States, Tribes and Assessment Office

7/5/00
Emergency Response Office

This site is being archived in CERCLIS because it does not warrant Federal Superfund action, or an appropriate Federal Superfund response action has been completed. This means that EPA believes no further Federal Superfund response is appropriate. Archived sites may be returned to the CERCLIS site inventory if new information necessitating further Federal Superfund consideration is discovered.

REFERENCES:

* Memo from EPA Headquarters: "Archiving CERCLIS Sites" from Stephen D. Luftig, Director, Office of Emergency and Remedial Response, to Region 9: Director, Hazardous Waste Management Division, dated November 13, 1996.

* Memo from EPA Headquarters: "Transmittal of Potential Archive Reports" from Dave Evans, Director, State, Tribal & Site Identification Center, to Regional Site Assessment Contacts, undated. The attached list of potential archive sites (POTAR19) was dated 12/3/96.

* Memo from EPA Headquarters: "Policy on Issuance if Comfort/Status Letter" from Steven A. Herman, Assistant Administrator, Office of Enforcement and Compliance Assurance, to Region 9: Regional Counsel and Director, Hazardous Waste Management Division, dated November 8, 1996.

* Latest CERCLA Evaluation (e.g., Screen, Preliminary Assessment, Site Inspection, Expanded Site Inspection, Federal Register Notice removing the site from CERCLIS, Consent Decree, Removal Assessment, etc.).

4931

MEMORANDUM

DATE: June 27, 2000

SITE NAME: One Camelback

EPA ID NUMBER: AZ0001039148

CITY,COUNTY,STATE: Phoenix, Maricopa County, Arizona

DOCUMENT: PA X SI ___ PA/SI ___ ESI ___
OTHER ___

Latitude 33° 30' 33" N Longitude 112° 04' 23" W

CERCLIS Changes —

EPA Further Action Determination NFA-PA1

Archive? Yes X No ___

Lead Agency ADEQ

Concurrence by Site Assessment Manager [illegible]

Sign-off Date 6.27.00

Document Screening Coordinator [illegible]

Chief, Office of States, Planning, and Assessment ___

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REGION 9 SUPERFUND SITE ASSESSMENT PROGRAM ROUTING SLIP FOR STATE AND CONTRACTOR REPORTS		
NAME/MAIL CODE	INITIALS	DATE
SITE ASSESSMENT MANAGER (SFD-5) Please mark the contents in the package: ____ Site Screening Form ✓ Site Assessment Report ✓ HRS Scoresheets and Rationale ✓ EPA Potential Hazardous Waste Site PA Form ✓ Archive Memo to File ~~To Roberta Temple 6/30~~ ✓ Sample Plan and Analytical Results	JJ	6/29/00
Document Screening Coord.: Ann Ficher (SFD-5)	[illegible]	6/29/00
Section Chief: (SFD-5)	MM	9/30/00
Document Screening Coord.: ~~Ann Ficher~~ (SFD-5) Log out		
ISSI: (SFD-2) QA/QC		
Document Screening Coord.: Ann Ficher (SFD-5)		
Superfund Records Center: Barbara Chertowsky	BC	1/30/01

PA REPORT CHECKLIST

Site Name: One Camelback EPA ID#: AZ0001039148

- [x] 1. Cover Memorandum to EPA
- [ ] 2. Transmittal List
- [x] 3. HRS Scoresheet Packet, including Rationale
- [x] 4. PA Report, which includes a Site Location Map and Site Layout Map
- [x] 5. EPA Region 9 Remedial Site Assessment Decision Form
- [x] 6. Appendix A, Reference List
- [x] 7. Appendix B, Photographic Documentation
- [x] 8. Appendix C, Contact Log
- [x] 9. Appendix D, Contact Reports
- [x] 10. Appendix E, Site Reconnaissance Interview and Observation Report
- [x] 11. ~~EPA Potential Hazardous Waste Site Preliminary Assessment Form~~
- [x] 12. Latitude and Longitude Calculations Worksheet
- [ ] 13. References (refer to *Guidelines for References,* Copying Referenced Materials, in Section 30 of the *Reference Handbook for the Site Assessment Project*) Not provided
- [x] 14. EPA CERCLA Eligibility Questionnaire (not submitted to EPA - stays in State/contractor files)

Review conducted by: [signature]

FINAL EPA File Copy

4931

ABBREVIATED PRELIMINARY ASSESSMENT REPORT

ONE CAMELBACK

1 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85012
MARICOPA COUNTY

EPA ID#: AZ0001039148

STATE ID#: 1342

PREPARED BY:
MARY E. HESSLER AND WAEL T. HASSINAN

APRIL 27, 2000

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE PROGRAMS DIVISION
SUPERFUND PROGRAMS SECTION
SITE ASSESSMENT UNIT

THIS REPORT IS PRINTED ON RECYCLED PAPER

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION IX

EPA ID: AZ0001039148 **Site Name:** ONE CAMELBACK **State ID:**

Alias Site Names:

City: PHOENIX **County or Parish:** MARICOPA **State:** AZ

Refer to Report Dated: 04/27/2000 **Report Type:** PRELIMINARY ASSESSMENT 001

Report Developed by: STATE

DECISION:

- [X] **1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:**
  - [X] **1a. Site does not qualify for further remedial site assessment under CERCLA (No Further Remedial Action Planned - NFRAP)**
  - [ ] **1b. Site may qualify for action, but is deferred to:**
- [ ] **2. Further Assessment Needed Under CERCLA:**
  - **2a. Priority:** [ ] **Higher** [ ] **Lower**
  - **2b. Other: (recommended action)** NFRAP (No Futher Remedial Action Planned

DISCUSSION/RATIONALE:

Site Decision Made by: J. JOHNSON

Signature: _____ **Date:** 06/27/2000

EPA Form # 9100-3

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull Jacqueline E. Schafer, Director

April 27, 2000
SAU00.237

Ms. Jerelean M. Johnson
Arizona Project Officer
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street, SFD-5 8th Floor
San Francisco, CA 94105-3901

RE: Abbreviated Preliminary Assessment Report
One Camelback
1 E. Camelback Road
Phoenix, Arizona 85012
Maricopa County
(AZ0001039148)

Dear Jere,

Enclosed please find the Abbreviated Preliminary Assessment Report for the One Camelback site. The Arizona Department of Environmental Quality looks forward to receiving your comments and decision regarding the site.

Once the Remedial Site Assessment Form is returned, we will forward copies of the report to the individuals indicated on the distribution list.

If you have any questions, please contact me at (602) 207-4195. You may contact the Site Assessment Unit Manager, Cathy Chaberski and Site Assessment Hydrologist, Wael Hassinan at (602) 207-4221 and (602) 207-4451, respectively.

Sincerely,

Mary Hessler
Site Assessment Manager

Enclosure:
cc: Site File Reading File Transmittal File WPD Reading File
(A:\1CAMEL\PA2JERE.)

ABBREVIATED PRELIMINARY ASSESSMENT REPORT

ONE CAMELBACK

1 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85012
MARICOPA COUNTY

EPA ID#: AZ0001039148

STATE ID#: 1342

PREPARED BY:
MARY E. HESSLER AND WAEL T. HASSINAN

APRIL 27, 2000

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE PROGRAMS DIVISION
SUPERFUND PROGRAMS SECTION
SITE ASSESSMENT UNIT

THIS REPORT IS PRINTED ON RECYCLED PAPER

PRELIMINARY ASSESSMENT

ONE CAMELBACK

INTRODUCTION

The U.S. Environmental Protection Agency (EPA), Region IX, under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA) has tasked the Arizona Department of Environmental Quality (ADEQ) to conduct a Preliminary Assessment (PA) at the One Camelback (OCI) site, located at 1 E. Camelback Road, Phoenix, Maricopa County, Arizona. The OCI site was entered into the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) on February 27, 1995, and assigned an EPA ID number of AZ0001039148. The site was identified for CERCLIS because tetrachloroethylene (PCE) was detected in nearby groundwater monitoring wells and groundwater was seeping into the basement of the underground parking garage. The geographic coordinates of the site are 33°30'33"N latitude, 112°04'23"W longitude. The U.S. Geological Survey location is Township 2N, Range 3E Section 20, NW¼, NW¼, NE¼ of the Gila and Salt River Baseline and Meridian [(A-02-03)20ABB]. Figure 1, Site Location Map, shows the location of the site.

SITE DESCRIPTION

The site occupies approximately 1.5 acres, and is surrounded by commercial and residential areas. The site is owned by OCI. There is presently one 11-story office building onsite. There is an underground parking garage beneath the office building. There are five levels of underground parking, and the lowest level is 60 feet below land surface (bls). The underground parking garage underlies most of the site. There is a sump in the fifth level of underground parking. There is one underground "fire storage tank." See Figure 2, the Site Diagram, and Figure 3, Dames & Moore Boring Location Map.

There is a landscaped area surrounding the office building. There are also one paved parking area and one concrete ramp to the underground parking garage. There are five wells onsite. Figure 4, the Well Location Map, shows the onsite wells and other wells in the vicinity of the site.

The site is bordered by Camelback Road to the north, Mariposa Street to the south, First Street to the east, and Central Avenue to the west. North of Camelback Road is Uptown Plaza. East of First Street is Bank of America and a residential area. South of Mariposa Street is a vacant lot and the Thunderbird Bank drive-in Teller. West of Central Avenue are Raliberto's Restaurant, Maroney's Cleaners, and two vacant lots.

The site is not fenced. However, the parking garage has a card-operated system and an onsite parking attendant to prevent unauthorized access during business hours. After business hours, gates to the underground parking garage are locked.

OPERATIONAL HISTORY

From the 1940s until 1982 or 1983, the site was occupied by two one-story commercial buildings and a service station that included 17 separate addresses. Figure 5, the Historic Site Diagram, shows the layout of the buildings and the addresses. Most of these 17 separate addresses were occupied by commercial businesses such as retail stores, beauty shops, restaurants, Realtors, doctors, and marketing businesses. These types of businesses do not generate hazardous substances as a general rule. However, some of the former occupants warrant closer examination. Businesses such as auto repair, photo finishing, photocopying, printing, and dry cleaning may use hazardous substances. These businesses are listed in Table 1, Former Occupants Selected for Further Consideration.

Thunderbird Leasing and American Trailer Rental advertised trailer rentals in the yellow pages. The ad included the heading "where to rent them," and a list of offsite gas stations. Therefore, it is assumed that the rental trucks were not kept onsite and that auto repairs were not performed onsite.

The photographic businesses were checked in the yellow pages. Don Keller's Photo Lab, Camelback Photo Center, Central Camera, the Photo Shop, and Fotomat all advertised photo finishing. Thus, it is probable that some types of photo finishing were performed onsite from the late 1940s until 1982. Photo finishing typically generates wastewater containing silver. Waste disposal practices are unknown.

Adams Office Supply was listed at 4975 N. Central from 1965 to 1982. Its advertisement in the yellow pages indicated retail sales of office supplies. There is no indication of copying or printing services.

A service station was listed at 4995 N. Central from 1939 until 1972. This property was leased to Sahuaro Petroleum Products Company from 1947 until 1959. In 1959, the lease was assigned to Exxon Oil & Refining Company. Auto repair facilities typically generate used oil and spent solvents. Two 5,000-gallon gasoline underground storage tanks (USTs) and one 350-gallon used oil UST were reportedly located onsite. In 1974, the City of Phoenix (COP) Fire Department issued a permit for removal of the USTs.

Phoenix Uniform Center and Stan Gilson Uniforms were advertised in the yellow pages. Although retail sales of uniforms were advertised, there was no mention of laundering service for uniforms. Therefore, it is assumed that these two businesses were retail stores.

Esquire Laundry and Dry Cleaning was listed at 27 E. Camelback Road from 1948 until 1951. Dry-cleaning plants typically generate wastewater containing PCE when PCE is used as a dry-cleaning solvent. Waste disposal practices are unknown.

In 1982, the site owners, Park West Associates Limited, began submitting building plans to the City of Phoenix (COP). These plans called for the construction of a 11-story office building with four levels of underground parking. Later documents indicate that five levels of underground parking were actually constructed. The first four levels of underground parking include the majority of the site, extending within 25 feet of the site boundaries. The fifth level occupies approximately one third of the site (See Figure 4.) In 1986, Park West sold the building to OCI.

Therefore, the construction of the underground parking structure resulted in the removal of the majority of the onsite soils. According to Exxon, based on the general design of service stations, the used oil UST was probably located at the rear (southeast) or end (southwest) side of the building. Both of these areas were excavated when the underground parking structure was built. If contaminated soil was associated with the photography businesses or Esquire Cleaners, then the contaminated soil may have been removed.

Apparently, the water table has been rising since the construction of the building. In October 1989, "water spraying from a crack" was observed halfway up the west wall in the fourth level of the parking garage. In June 1991, Dames & Moore (D&M), contractor to OCI, reported that the water level had risen to 4.38 to 4.94 feet above the floor of the fifth level of the parking garage. In 1996, the water level was 8.24 feet above the floor of the fifth level of the parking garage. In addition, the water began to seep into the fifth level of the parking garage. A black, slimy substance was associated with this water.

In July 1993, OCI informed the City of Phoenix that the rising water table threatened the structural integrity of the building. Ellisor & Tanner, Inc., (E&T) the structural engineers for the original building construction, indicated that overstressing of the wall could begin if the groundwater elevation was greater than 5 feet above the floor of the parking garage. OCI contracted with Caruso Turley Scott to assess the structural integrity of the building. Caruso Turley Scott concluded that the building integrity had not been compromised by the rising water levels.

During an inspection in October 1995, ADEQ noted that standing groundwater was observed on Level 5 of the parking garage. The water level was 96 inches above the floor of the parking garage. In May and June 1997, ADEQ noted that the walls and floor of the fifth level of the parking garage had areas of wetting, including small weep points, stains, or peeling paint. These areas generally extended about six feet above floor level.

Several soil, groundwater, and air investigations have been conducted at the site. In October 1991, D&M, contractor for OCI, sampled soil from six locations near the northwest corner of the site, the location of the former service station. Four samples were taken at 4 feet below level 4 of

the parking garage. The remaining two borings, taken outside the building, were advanced to 48 feet bls. Sampling results are presented in Table 6, Results of Dames & Moore Sampling, 1991. Sample locations are in Figure 3. Total petroleum hydrocarbons (TPH) were detected at levels ranging from 270 to 9,900 milligrams per kilogram (mg/kg). In addition, D&M was told that petroleum hydrocarbon odors were present during excavation of subsurface soils during construction of the underground parking structure. Exxon's contractor, Asset Environmental Services, Inc., raised questions regarding the usability of the data. First, the samples were taken beneath the parking garage, and may represent the backfill rather than the native soil. Second, samples from the soil borings may have been taken at or below the existing water table, and, therefore, may be affected by a "smear zone" in the groundwater.

In July 1997, Asset Environmental, contractor for Exxon, sampled the site. Agra Earth and Environmental (Agra), contractor for OCI, collected split samples. Fifteen soil borings were advanced in level 4 of the parking garage. Samples were collected at 1, 2, and 6 feet bls. Results are presented in Table 7, Asset's Laboratory Analytical Results - Soil, and Table 8, Agra's Laboratory Analytical Results - Soil. Benzene, toluene, ethylbenzene, and xylenes (BTEX), and TPH were detected in the soil borings, with the highest concentrations near the northwest corner of the former service station. The only halogenated volatile organic compounds (VOCs) detected in the Asset samples were methylene chloride, acetone, and trichlorotrifluoroethane. The only halogenated VOC detected in the Agra samples was 1,2-dichloroethane (1,2-DCA).

In 1990, Speedie and Associates (S&A), contractor to OCI, conducted an investigation and installed four groundwater monitoring wells (MW-E, MW-N, MW-S, and MW-W). S&A estimated that the water levels were 2.1 to 3.4 feet above the floor of the fifth level of the parking garage. In 1992, D&M and Water Resources Associates (WRA), contractors to OCI, conducted additional investigations including groundwater sampling, aquifer testing, and the installation of a fifth monitoring well (MW-SW).

In July 1997, Asset Environmental, contractor for Exxon, installed four additional groundwater monitoring wells (MW-A1, MW-A2, MW-A4, and MW-A8) in conjunction with its investigation of the OCI Site. Two wells (MW-A2 and MW-A8) are located onsite; the third well (MW-A1) is upgradient (southwest) of the site; the fourth well (MW-A4) is downgradient (north) of the site.(8A, 28) In January 1998, Asset installed two additional wells (MW-A5 and MW-A6) downgradient (north) of the site. In August 1999, Asset installed an upgradient well (MW-A7) south of the site. The monitoring wells are shown on Figure 4. Sampling results from these wells are shown in Table 2, One Camelback Groundwater Sampling Results, 1991 to Present, and water levels are shown in Table 3, Cumulative Static Water Levels.

From the initial sampling event until March 1998, TPH and BTEX have been detected in MW-N, MW-W, MW-SW, MW-A2, MW-A4, and MW-A8. BTEX were detected in MW-S and MW-E in April, July, and November 1993 only. BTEX have occasionally been detected in MW-A5 and MW-A6. No contaminants have been detected in MW-A7.

In addition, several halogenated VOCs have been detected in the wells. PCE, 1,2-DCA, trichloroethylene (TCE), and 1,2-dibromoethane (EDB) are the only VOCs that have been detected **above** the EPA Maximum Contaminant Levels (MCLs) of 5.0, 5.0, 5.0, and 0.05 micrograms per liter (µg/L), respectively. The detections were as follows:

- PCE: PCE was not detected during the first sampling event that included VOCs in July 1992. PCE was detected in MW-E at 7.6 µg/L and in MW-S at 4.4 µg/L in July 1993 and in MW-W, MW-SW, MW-S, and MW-E at concentrations ranging from 50 to 89 µg/L in July 1993. No PCE has been detected above the MCL in any onsite monitoring wells since 1993. PCE was detected in offsite monitoring well MW-A1 at concentrations ranging from 11 to 74 µg/L from July 1997 through June 1998.

- 1,2-DCA: 1,2-DCA was detected in MW-N at concentrations ranging from 24 to 29 µg/L in March and June 1997 and in MW-A6 at 15 µg/L in January 1998.

- TCE: TCE was detected in MW-W at concentrations ranging from 5.2 to 15 µg/L in March, June, and December 1997.

- EDB: EDB was detected in MW-SW at a concentration of 0.4 µg/L in December 1994. No EDB has been detected since 1994.

Other halogenated VOCs have been detected below the MCL. Chloroform is detected in MW-E, approximately 70 percent of the time, at concentrations below 5.0 µg/L. There is no MCL for chloroform. Since the initial sampling event, halogenated VOCs (TCE, 1,1-dichloroethane, chloroform, 1,2-DCA, 1,2-dichloropropane, and 1,1,1-trichloroethane) at concentrations near the detection limit have occasionally been detected in some of the monitoring wells.

Due to the rising water levels, OCI began to pump water from the basement, and in 1993 installed a groundwater treatment system. OCI collects groundwater in fourteen collection points in the basement of the parking garage. Four of the wells (wells 8, 12, 13, and 14) are pumped to a main sump and into the COP storm sewer with no pretreatment. OCI indicated that the water in the main sump is tested weekly by EPA method 8260, and that contaminant concentrations are in compliance with the NPDES permit requirements.

Water from the remaining wells is piped to a 500-gallon surge tank. The water passes through a Carbtrol filtration system (a.k.a. biofilter), a prefilter, and a granular activated carbon (GAC) treatment system. The water is discharged to the main sump, and then pumped to the COP storm sewer. The groundwater treatment system is located in two rooms (the treatment rooms) at the north end of the fifth level of the parking garage. The spent GAC is sent to Carbtrol for reactivation. Empty drums, when taken out of service, are sent to the Butterfield Landfill for disposal. Several million gallons of water have been treated since 1993.

The radius of influence of the groundwater treatment system was estimated at 800 feet for a pumping rate of 30 gallons per minute (gpm) and at 1,100 feet for a pumping rate of 60 gpm.

OCI's groundwater consultant concluded that groundwater, together with its contaminants, within the radius of influence, will move toward the basement of the OCI building.

Several air investigations have been conducted by OCI contractors and by ADEQ. On June 21, 1991, D&M took an air sample in the breathing zone of the fifth level of the parking garage, and 1,1,1-TCA was detected at low concentrations. On August 3, 1993, GPI Engineers, Inc., collected air samples from the 5th level of the parking garage and PCE, TCE, and 1,1,1-TCA were detected at concentrations of 0.07, 0.07, and 0.52 µg/L, respectively. Additional investigations were conducted for petroleum hydrocarbons, BTEX, carbon monoxide, and carbon dioxide.

During ADEQ's June 1997 inspection, ADEQ staff noted that odors similar to diesel fuel were present. At times, the fifth level of the parking garage has been closed due to the fumes. ADEQ noted that the treatment rooms and the floor wells appear to be significant sources of organic vapors. ADEQ also noted that air flow in the basement appears to move through the treatment rooms, to an adjacent stairwell, and across the fifth level to a large ventilation fan located at the southwest corner of the fifth level of the parking garage. ADEQ collected air samples, and benzene and xylenes were detected in some of them. These samples were not analyzed for PCE. However, if PCE is present in the groundwater seeping into the garage, then potential exists for PCE to evaporate into the air in the parking garage.

In July 1999, Exxon conducted soil vapor extraction (SVE) pilot testing at the site. Exxon proposed in its Corrective Action Plan (CAP) that SVE and air sparging be conducted to address the petroleum hydrocarbon contamination in the onsite soil and groundwater.

REGULATORY INVOLVEMENT

U. S. Environmental Protection Agency

OCI has requested that the EPA conduct a "fund lead removal/corrective action" to halt the infiltration of groundwater into the basement parking garage.

OCI obtained a National Pollutant Discharge and Elimination System (NPDES) permit #AZ0023868, effective December 26, 1994, and expiring December 25, 1999. The permit allows OCI to discharge the treated water to the storm sewer, and monthly monitoring is required. The permit requires testing for BTEX, chloroform, naphthalene, PCE, TCE, pH and suspended solids. The NPDES application indicates that the untreated groundwater contains these contaminants, with the benzene, ethylbenzene, TCE, and PCE concentrations exceeding MCLs. ADEQ inspected the site on October 3, 1996, and on May 28, 1998, and concluded that the site was in

compliance with permit requirements. The permit was modified in August 1997, so that monitoring is required once every six months. In June 1999, OCI submitted an application to renew the NPDES permit. EPA plans to re-issue the permit during the 1999/2000 fiscal year.

Arizona Department of Environmental Quality

The ADEQ Emergency Response Unit (ERU) inspected the site during May and June 1997. Air quality readings were taken using a combustible gas indicator. The vapors in three of the sump pumps were 8 to 12 percent of the lower explosive limit (LEL), but the ambient air concentrations were zero. In addition, air samples were also taken and analyzed by a gas chromatograph for BTEX. Benzene and xylenes were detected in some samples. The samples were not analyzed for PCE.

The ADEQ Underground Storage Tanks Section has determined that Exxon Company USA is a former owner and/or operator of the site. Exxon has appealed this decision. The UST Section also concluded that regulated substances have been released from former USTs at the site. Exxon initially submitted a CAP dated July 31, 1998. ADEQ provided comments to Exxon, and Exxon addressed comments in additional submittals.

In January 1999, the Central and Camelback Southwest Corner Source Area was listed on the Arizona Water Quality Assurance Revolving Fund (WQARF) Site Registry. This WQARF site is directly south of the Unocal site. The WQARF site includes the extent of PCE contamination exceeding 2,000 µg/L.

Arizona Department of Water Resources

The Arizona Department of Water Resources (ADWR) granted Emergency Dewatering Permit # 59-540940 to OCI, effective October 7, 1993, through January 7, 1994, later extended until March 9, 1995. ADWR granted Temporary Dewatering Permit # 59-540940 to OCI, effective March 10, 1995, through November 4, 2000. The permit allows OCI to withdraw 323 acre feet per year. The specific purpose of the permit is to keep the lower level of the parking garage dry.

Maricopa County Health Department, Air Pollution Control Division

The Maricopa County Bureau of Air Pollution Control granted OCI a de minimis permit for a power generator. The permit expired on February 28, 1994, and the file has been closed.

City of Phoenix

The COP Fire Department has inspected the office building several times since its construction. Several routine fire code violations have been noted. In 1974, the COP Fire Department issued a permit for removal of three 5,000-gallon and one 300 gallon USTs. Exxon was listed as the owner/occupant.

In July 1993, OCI requested an Industrial Waste Permit for discharge of 22,000 gallons of water per day from the sump pump in the underground parking garage. The permit (# 9401-5296) was granted, effective January 20, 1994, and periodic groundwater monitoring for BTEX and metals was required.(156) There was one violation of benzene concentration on February 22, 1994. Southwest Groundwater Consultants (SGC), contractor for OCI, investigated the problem and connected additional GAC canisters to the groundwater treatment system. The COP inspected the site on July 25, 1994, and the site was in compliance. The COP approved connection to the storm sewer on August 11, 1994. The discharge from the sump was disconnected from the sanitary sewer and connected to the storm sewer on August 11, 1994. Therefore, the COP canceled the Industrial Wastewater Discharge Permit, effective August 24, 1994. In addition, the piping to the sanitary sewer was removed, so there is no possibility of reconnection.

SOURCES OF CONTAMINATION

A dry cleaner and several photo businesses operated onsite. There are no records or other information available to determine the chemicals used or the waste disposal practices of these businesses. However, dry cleaners typically use chemicals such as PCE and photo businesses may generate wastes containing silver. Potential sources of contamination associated with other dry cleaners include septic tanks, lint traps, sewer lines, and dry-cleaning equipment. The available soil sampling data indicated that TPH are present onsite, but did not indicate the presence of PCE. The soil samples were not analyzed for silver.

Additionally, PCE, TCE, and 1,1,1-TCA were detected in air samples collected in the basement on August 3, 1993. No additional air samples have been analyzed for halogenated VOCs. The source of the airborne halogenated VOCs is unknown.

GROUNDWATER PATHWAY

The main sources of groundwater in the vicinity of the site are the alluvial deposits which underlie the valley floor. According to Brown and Pool, basin fill units in descending order are the upper unit, the middle unit, and the lower unit. These units comprise one aquifer, and these units are interconnected to some degree. Underlying the alluvial deposits is the red unit which is on top a crystalline basement complex. The crystalline rocks form a highly impenetrable barrier to the movement of groundwater. The unsaturated zone overlying the regional aquifer consists of clayey sand, sandy silt, clayey silt, silty sand, and gravelly sand. From 1990 to present, the depth to water in onsite monitoring wells has ranged from 40 to 49 feet bls. Groundwater flow direction in the vicinity of the site is to the north.

Groundwater is used for irrigation within 4 miles of the site, and the nearest drinking water wells are more than 2 miles from the site.

SGC has sampled the five original onsite monitoring wells on a quarterly basis since April 1993. PCE was detected in two of the wells in April 1993, and in four wells in July 1993. No PCE was detected in the wells from September 1993, through March 1997. However, 1,1,1-trichloroethane was detected in MW-SW in September 1995. In 1997, TCE was detected in MW-W.

The source of the contaminated groundwater at the site is uncertain. Esquire Cleaners was located on the north side of the site, along Camelback Road. However, MW-N, the only well located along Camelback Road, was non-detect for PCE in 1993. This suggests that Esquire Cleaners is not the source of PCE in the groundwater. Potential offsite sources of contamination include former service stations and dry-cleaning operations adjacent to the site.

SURFACE WATER PATHWAY

Treated groundwater is discharged to the COP storm sewer under a NPDES permit. The storm sewer runs along Central Avenue and empties into the Salt River, approximately 6 miles south of the site.

The nearest surface water is the Grand Canal, located approximately ¼ mile south of the site. The canal is not bermed. The site is located in the 500-year floodplain. However, surface water runoff in the area is collected by the COP storm drain system, which discharges to the Salt River, more than 2 miles from the site. There are no drinking water intakes associated with the Grand Canal. It is unknown if people fish in the canal. The Roundtail Chub, a Wildlife of Special Concern in Arizona, is documented as occurring in the vicinity of the site.

SOIL AND AIR PATHWAYS

The site is located in a commercial area, and is adjacent to a residential area. The site is paved, landscaped, or covered by a building. The basement structure was built in the mid-1980s. The site is not fenced, so onsite landscaped areas are readily accessible. There are two bus stops, one north and one west of the building, adjacent to the landscaped areas. The underground parking garage has a card-operated system and an onsite parking attendant to prevent unauthorized access during business hours. After business hours, gates to the underground parking garage are locked.

There are no residents living directly onsite. However, the site is an office building, and 550 people work in the building. One parking attendant works in the parking garage beneath the building. Two employees work six hours a day to operate and maintain the groundwater treatment system on level 5 of the parking garage.

The nearest school is Brophy High School, located ¼ mile south of the site. The population within 4 miles of the site is as follows.

Distance	Population
0-¼ mile	912
¼-½ mile	2,289
½-1 mile	11,313
1-2 miles	50,112
2-3 miles	70,976
3-4 miles	93,254

No terrestrial sensitive environments are documented as occurring in the vicinity of the site.

PCE, TCE, and 1,1,1-TCA have been detected in air samples collected from the 5th level of the parking garage on August 3, 1993. The concentrations were 0.07, 0.07, and 0.52 μg/L, respectively. No soil data are available for the upper 3 feet of soil.

EMERGENCY RESPONSE CONSIDERATIONS

A referral to the EPA's Emergency Response Section does not appear to be necessary because the ADEQ ERU conducted air sampling at the site, and concluded that response was not necessary.

HRS FACTORS

The following are HRS factors for the site:

- A dry cleaner and several photo businesses operated onsite historically. Dry cleaners are known to use PCE, and photo businesses may generate wastes containing silver.
- PCE was detected in onsite monitoring wells during two sampling events in 1993, but has not been detected since that time.
- TCE at concentrations of 5.2 to 15 µg/L has been detected in one onsite monitoring well during several recent sampling events.
- TCE, PCE, and 1,1,1-TCA were detected in air samples collected from the 5th level of the underground parking garage in 1993. No recent air sampling data are available.
- Onsite workers include approximately one parking garage attendant and 550 office workers. Also, two workers maintain the groundwater treatment system.

SUMMARY

The One Camelback (OCI) site is located at 1 E. Camelback Road, Phoenix, Maricopa County, Arizona. The geographic coordinates of the site are 33°30'33"N latitude, 112°04'23"W longitude. The U.S. Geological Survey location is Township 2N, Range 3E Section 20, NW¼, NW¼, NE¼ of the Gila and Salt River Baseline and Meridian [(A-02-03)20ABB].

The OCI site occupies approximately 1.5 acres, and is surrounded by commercial and residential areas. There is presently one 11-story office building onsite. The building is surrounded by paved areas and landscaped areas. There is are five levels of underground parking beneath the office building. The fifth level is 60 feet below land surface. From the late 1940s until the early 1980s, the site was occupied by two commercial buildings and a service station. Several retail businesses, offices, and restaurants occupied the commercial buildings. A dry cleaner operated onsite from 1948 until 1951. Several photographic businesses also operated onsite from the late 1940s until the early 1980s.

Water levels have been rising for the past several years. In 1990, Speedie & Associates, contractor to OCI determined that the water level was 2.3 to 3.4 feet above the floor of the fifth level of the parking garage. Another OCI contractor, Caruso Turley Scott (CTS), indicated that overstressing of the wall may occur if the water level reached 5 feet above the floor of the fifth level of the parking garage. But, CTS concluded that the structural integrity of the building had not been compromised.

Several soil and groundwater investigations have been conducted at the site. Soil and groundwater in the vicinity of the former service station are contaminated with benzene, toluene, ethylbenzene, xylenes, and petroleum hydrocarbons. Tetrachloroethylene (PCE) and ethylene dibromide (EDB) were present above the EPA Maximum Contaminant Levels (MCLs) in a few groundwater samples collected in 1993 and 1994, but have not been detected since that time. During the most recent sampling events, trichloroethylene (TCE) and 1,2-dichloroethane (1,2-DCA) were detected in groundwater above MCLs.

A groundwater pump-and-treat system has operated at the site since 1993. In 1999, Exxon, the former operator of the service station, installed a soil vapor extraction (SVE) system to address the onsite petroleum-contaminated soils.

The pump-and-treat system was initially discharged to the sanitary sewer under a wastewater discharge permit issued by the City of Phoenix. In 1994, OCI obtained a NPDES permit and began to discharge to the storm sewer, which discharges to the Salt River. Groundwater withdrawal is regulated by a permit issued by the Arizona Department of Water Resources. The Arizona Department of Environmental Quality (ADEQ) Emergency Response Unit inspected the site in 1997. The ADEQ Underground Storage Tanks (UST) Section has determined that regulated substances have been released from USTs at the site. Exxon is conducting SVE under

the ADEQ UST program. The site is adjacent to the Central and Camelback Water Quality Assurance Revolving Fund Site, Southwest Corner Source Area Portion.

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION IX

Site Name: One Camelback **EPA ID#:** AZ0001039148

Alias Site Names:

City: Phoenix **County or Parish:** Maricopa **State:** AZ

Refer to Report Dated: 4/27/00 **Report type:** Preliminary Assessment

Report developed by: Mary E. Hessler and Wael Hassinan

DECISION:

[X] **1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:**

[X] 1a. Site does not qualify for further remedial site assessment under CERCLA (Site Evaluation Accomplished - SEA)

| | 1b. Site may qualify for further action, but is deferred to: | | RCRA | | NRC

| | **2. Further Assessment Needed Under CERCLA:** 2a. (optional) Priority: | | Higher | | Lower

2b. Activity Type: | | PA | | ESI | | SI | | HRS evaluation

| | Other:

DISCUSSION/RATIONALE:

Report Reviewed and Approved by: Signature: Date:

Site Decision Made by: J M Johnson Signature: Date: 6-27-00

EPA Form # 9100-3

ADEQ MANAGEMENT REVIEW/CONCURRENCE

Site Name: One Camelback

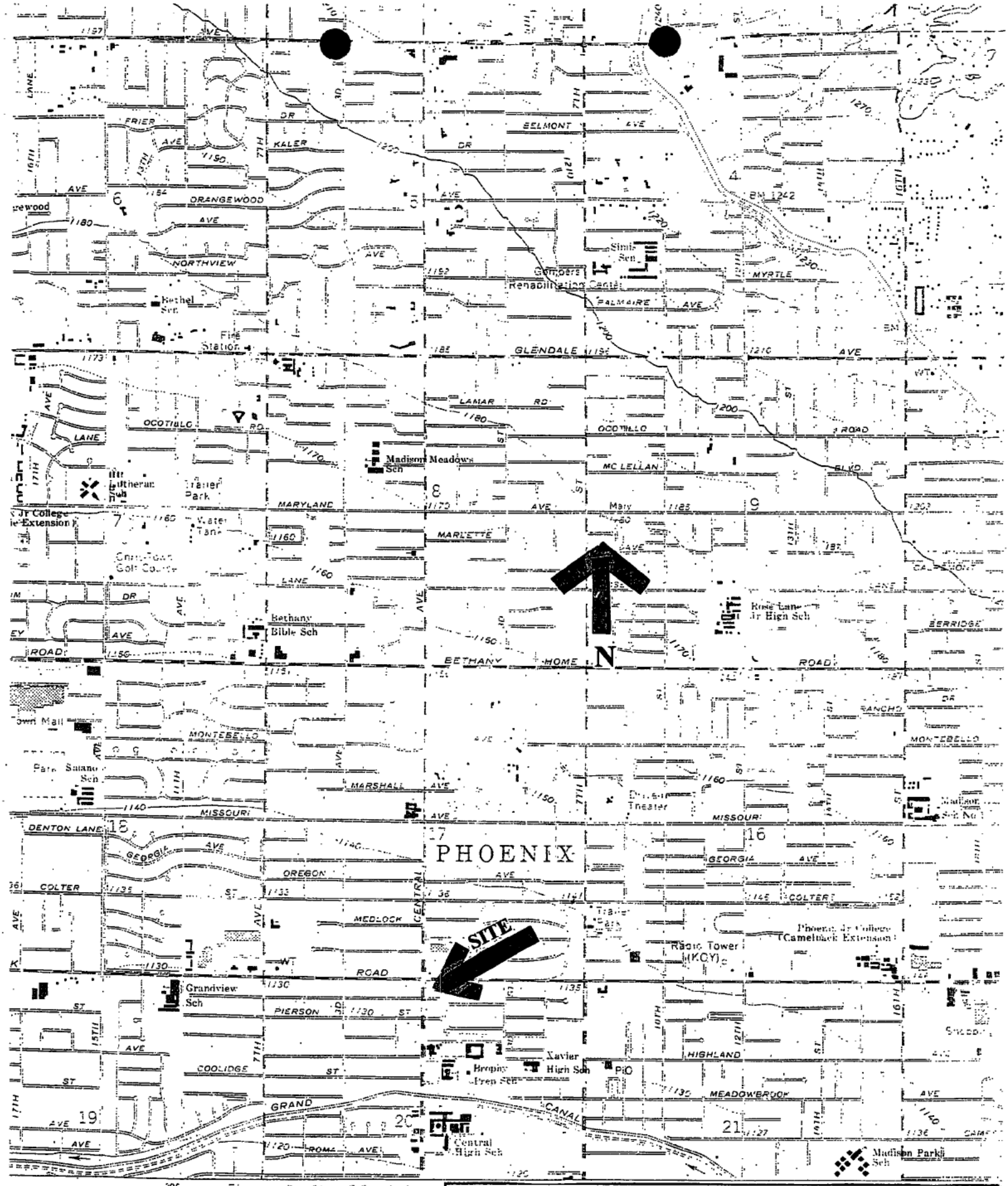
EPA ID No: AZ0001039148

Catherine M. Chaberski

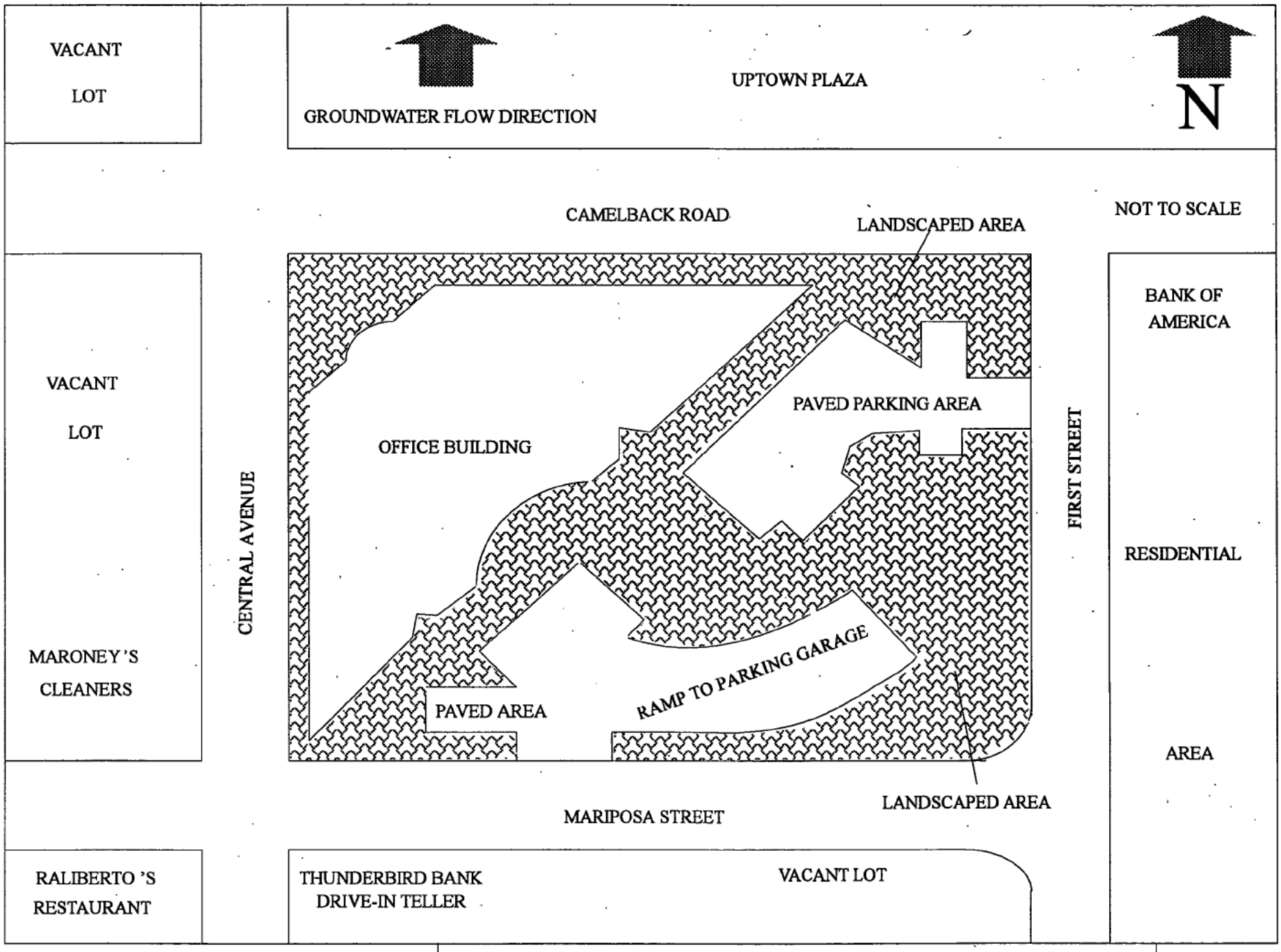
Catherine M. Chaberski, Manager
Site Assessment Unit

4/28/00
Date

FIGURES

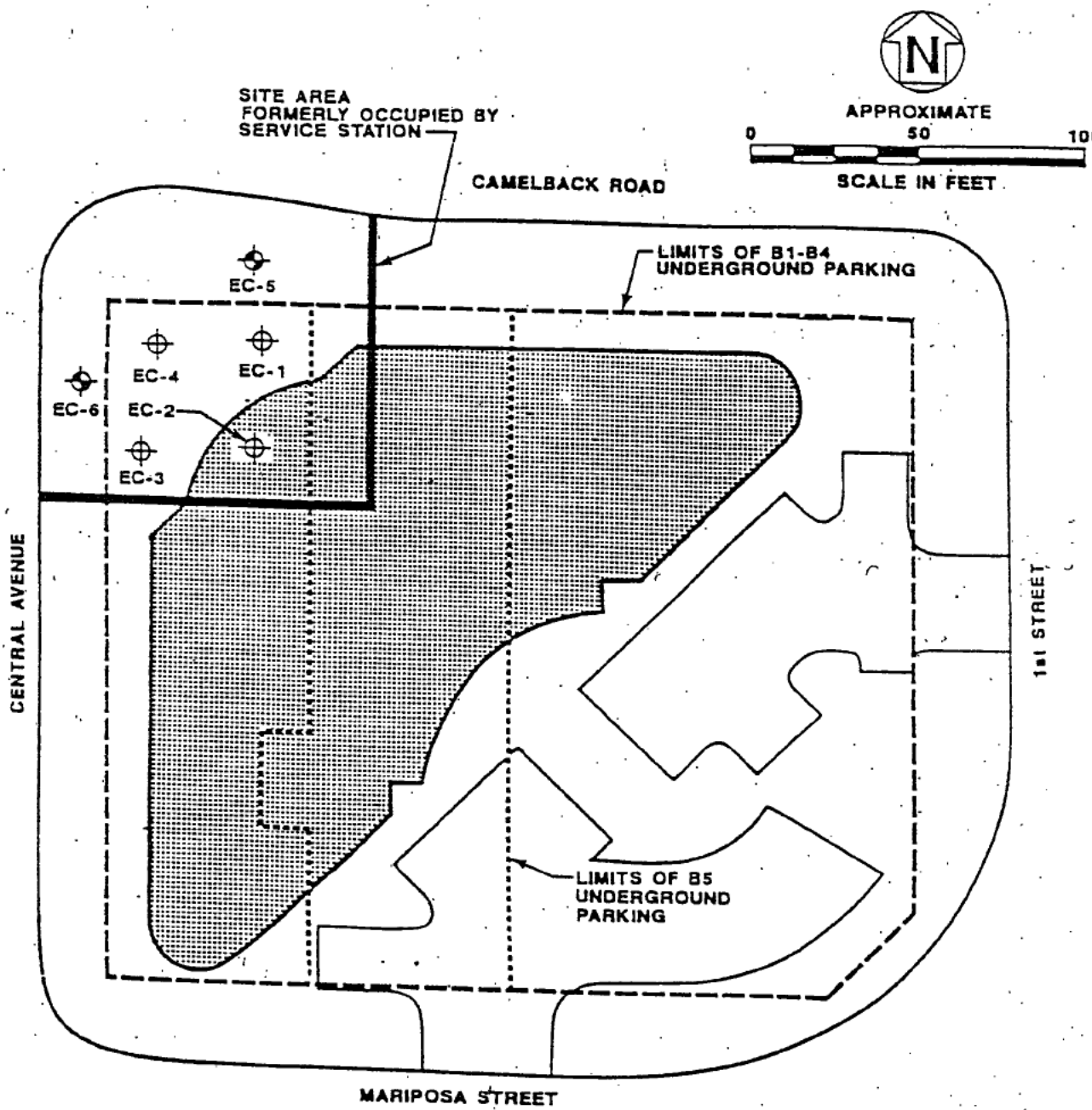


ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY	
FIGURE 1	SITE LOCATION MAP
PREPARED BY MARY HESSLER	ONE CAMELBACK



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

FIGURE 2:	SITE DIAGRM :	ONE CAMELBACK	PREPARED BY MARY HESSLER



LEGEND:

- SHALLOW B-4 LEVEL BORINGS
- DEEP OUTSIDE BORINGS

OCI 02145

NB 4

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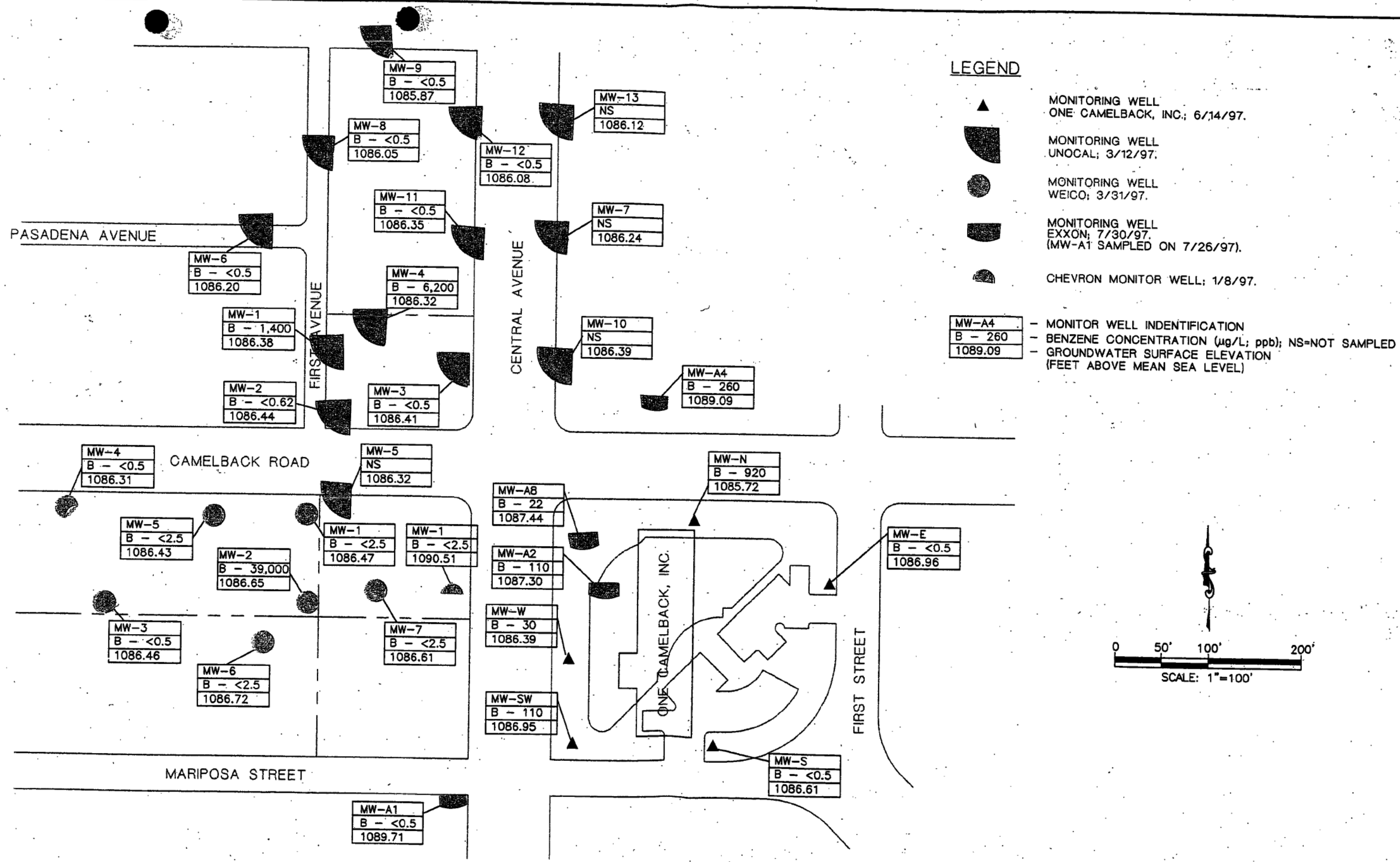
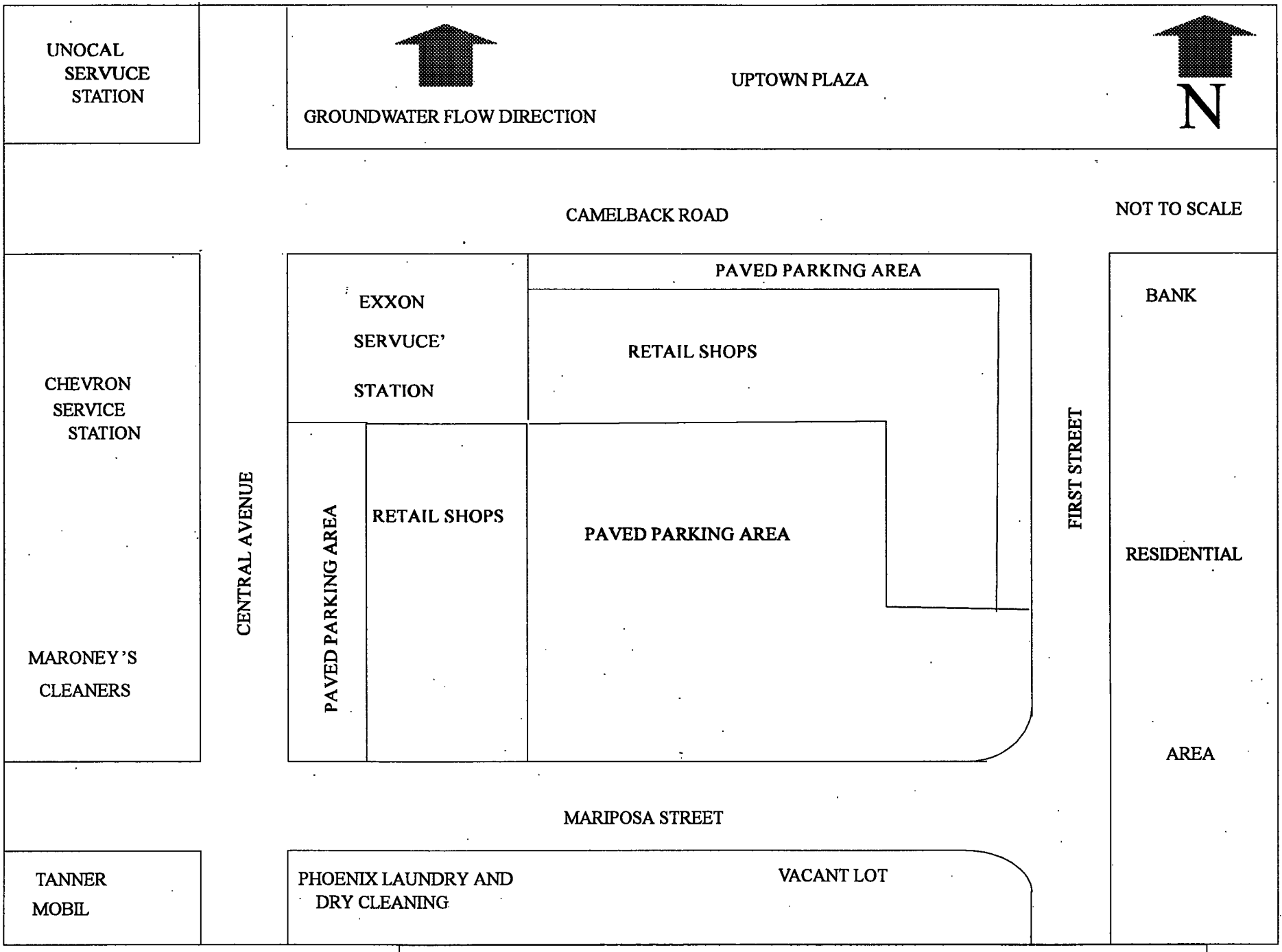
ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY	
FIGURE 3	DAMES & MOORE BORING LOCATION MAP
PREPARED BY MARY HESSLER	ONE CAMELBACK SITE
SOURCE: DAMES & MOORE	



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY		FIGURE 4	WELL LOCATION MAP
PREPARED BY MARY HESSLER	ONE CAMELBACK SITE	SOURCE:AGRA EARTH AND ENVIRONMENTAL	



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

FIGURE 5: HISTORIC SITE DIAGRM : ONE CAMELBACK PREPARED BY MARY HESSLER

TABLES

Table 1: Former Occupants Selected for Further Consideration		
Address	Years	Owner
4961 N. Central	1961	Thunderbird Leasing
4961 N. Central	1963	American Trailer Rental
4967 N. Central	1963	Central Camera
4967 N. Central	1965-67	The Photo Shop
4975 N. Central	1965-82	Adams Office Supply
4995 N. Central	1946-72	Service Station
4995 N. Central	1975-82	Fotomat
21 E. Camelback	1958	Olson's Shoe Repair
23 E. Camelback	1947-48	V M Curry (Photographer)
23 E. Camelback	1948-50	Don Keller's Photo Lab
23 E. Camelback	1951-61	Camelback Photo Center
23 E. Camelback	1965-75	Phoenix Uniform Center
23 E. Camelback	1978-80	Stan Gilson Uniforms
27 E. Camelback	1948-51	Esquire Cleaners

TABLE 2

RESULTS OF DAMES & MOORE SAMPLING, 1991

Results in mg/kg

Boring No.	Sample Depth (ft)		Total Petroleum Hydrocarbons[1] (TPH)	Aromatic Hydrocarbons[2] (BTEX)			
	Boring	Below Grade		Benzene	Toluene	Ethylbenzene	Total Xylenes
[1]EC-1	4	48	7,100	7.5	140	74	440
[1]EC-2	4	48	ND <5	ND <0.025	ND <0.025	ND <0.025	ND <0.025
[1]EC-3	4	48	ND <5	ND <0.025	ND <0.025	ND <0.025	ND <0.025
[1]EC-4	4	48	4,900	7.6	160	53	320
[1]EC-5	20	20	2,900	ND <0.25	9.2	21	96
	30	30	1,200	–	–	–	–
	45	45	9,900	–	–	–	–
EC-6	20	20	270	ND <0.025	0.026	0.13	4.4
	25	25	1,500	–	–	–	–
	35	35	2,200				
	45	45	ND<5	ND <0.025	ND <0.025	ND <0.025	0.03
Regulatory Guidance Level			100	0.13	200	68	44

ND < Not detected in concentrations above detection limit.
(1) EPA Method 8015 Modified.
(2) EPA Method 8020.
(3) Arizona Department of Environmental Quality (ADEQ) recommended action level.

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TABLE 3. Asset's Laboratory Analytical Results - Soil

Sample ID	Date	Depth (ft bgs)	MTBE (mg/kg)	TRPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)
MWA8-40(10)[1]			<1		**<1.0**	<1.0	<1.0	1.42
MWA8-45		45		<20	0.068	0.10	0.28	1.4
MWA8-50		50		240	**4.4**	2.0	1.5	3.2
MWA8-50(16)[1]			<1		**<1.0**	<1.0	<1.0	<1.0
A6-10	7/19/97	10		<20	<0.050	<0.10	<0.10	<0.15
A6-20		20		700	**<1.0**	31	63	420
A6-30		30		2,000	<0.50	6.9	14	83
A6-35		35		39	**55**	260	91	460
A6-35(44)[1]			<25		**<25**	420	**150**	770
A6-40		40		1,200	**54**	210	75	390
A6-45		45		4,500	**100**	**470**	**130**	690
A6-45(46)[1]			<25		**17**	390	**130**	640
A1-1.5	7/19/97	41.5		1,800	**110**	**430**	**190**	930
A1-1(27)[1]			<25		**86**	**600**	**260**	1,290
A1-6		46		790	**140**	**480**	**160**	820
A1-6(18)[1]			<25		**66**	**540**	**220**	1,050
A2-1.5	7/19/97	41.5		2,300	**140**	**510**	**240**	1,300
A2-6		46		4,100	**250**	**860**	**310**	1,500
A2-6(20)[1]			<25		**200**	**1,300**	**560**	**2,470**
A3-1.5	7/19/97	41.5		1,500	**49**	240	91	490
A3-6		46		1,700	**37**	260	80	420
B1-1.0	7/19/97	41		52	0.48	0.21	0.47	1.6
B1-1.5		41.5		<20	0.25	0.13	0.25	0.90
B1-6		46		160	**13**	6.6	40	250
B2-1.0	7/19/97	41		<20	**0.75**	0.26	1.1	4.8
B2-1.5		41.5		190	**3.6**	17	11	54
B2-6		46		190	**11**	110	58	270
B3-1.0	7/19/97	41		89	**4.2**	1.6	9.6	29
B3-1.5		41.5		<20	**1.4**	4.2	2.1	10
B3-6		46		190	**11**	110	58	270
C1-1.0	7/19/97	41		<20	<0.050	<0.10	<0.10	<0.15
C1-1.5		41.5		<20	<0.050	<0.10	<0.10	<0.15
C1-6		46		45	**0.74**	0.33	0.32	1.5
C2-1.0	7/19/97	41		<20	<0.050	<0.10	<0.10	<0.15
C2-1.0(49)[1]			<1		**2.1**	14.0	5.5	25.6
C2-1.5		41.5		23	0.091	0.12	<0.10	0.40
C2-1.5(48)[1]			<1		0.63	3.6	1.4	5.7
C2-6		46		60	0.31	<0.10	1.6	4.2
C2-6(50)[1]			<1		**<1.0**	<1.0	2.9	6.1
C3-1.0	7/19/97	41		<20	<0.050	<0.10	<0.10	<0.15
C3-1.5		41.5		<20	<0.050	<0.10	<0.10	<0.15

TABLE 3. Asset's Laboratory Analytical Results - Soil

Sample ID	Date	Depth (ft bgs)	MTBE (mg/kg)	TRPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)
C3-6		46		110	**1.0**	0.80	5.2	25
D1-1.0	7/20/97	41		<20	<0.050	<0.10	<0.10	<0.15
D1-1.5		41.5		<20	<0.050	<0.10	<0.10	<0.15
D1-6		46		63	0.13	0.33	2.4	1.9
D2-1.0	7/20/97	41		<20	<0.050	0.12	0.31	0.17
D2-1.5		41.5		<20	<0.050	<0.10	0.11	<0.15
D2-6		46		240	**1.6**	1.6	2.6	26
D2-6(59)[1]			<25		**<25**	31	20	109
D3-1.0	7/20/97	41		<20	<0.050	<0.10	<0.10	<0.15
D3-1.5		41.5		<20	<0.050	<0.10	<0.10	<0.15
D3-6		46		49	0.37	0.59	2.1	8.2
D3-6(62)[1]			<1		**<1.0**	2.2	2.5	8.9
E1-1.0	7/20/97	41		<20	<0.050	<0.10	<0.10	<0.15
E1-1.5		41.5		<20	<0.050	<0.10	<0.10	0.19
E1-6		46		<20	<0.050	<0.10	<0.10	<0.15
E2-1.0	7/20/97	41		<20	**0.76**	1.9	2.3	7.5
E2-1.5		41.5		<20	<0.050	0.25	0.11	0.68
E2-6		46		37	<0.050	<0.10	<0.10	<0.15
E2-6(68)[1]			<1		**<1.0**	1.3	0.64	3.12
E3-1.0	7/20/97	41		<20	<0.050	<0.10	<0.10	<0.15
E3-1.0(69)[1]			<1		**<1.0**	<1.0	<1.0	0.51
E3-1.5		41.5		<20	<0.050	<0.10	<0.10	<0.15
E3-1.5(70)[1]			<1		**<1.0**	<1.0	<1.0	<1.0
E3-6		46		<20	0.46	0.45	2.3	8.9
E3-6(71)[1]		46	<1		**<1.0**	1.0	2.4	7.3
GPL	--	--	none	none	**0.71**	**400**	**120**	**2,100**

TRPH = Total recoverable petroleum hydrocarbons analyzed using ADHS Test Method 418.1AZ
BTEX analyzed using EPA Test Method 8020
[1] =BTEX and MTBE analyzed using EPA Method 8260 by Paragon Analytics, Inc.
GPL = Arizona Department of Environmental Quality Groundwater Protection Level (March 1996)
BOLD= Concentration and/or laboratory detection limit exceeds GPL

TABLE 4 . AGRA's Laboratory Analytical Results - Soil								
Sample ID	Date	Depth (ft bgs)	MTBE (mg/kg)	TRPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)
AEE-MW-A4-5	7/19/97		<0.1	<20	<0.050	<0.050	<0.050	<0.050
AEE-MW-A4-6			<0.1	22	<0.050	<0.050	<0.050	<0.050
AEE-MW-A4-7			<0.1	140	0.17	0.78	3.2	9.4
AEE-MW-A2-3	7/19/97	42.5	<0.1	33	<0.050	<0.050	<0.050	<0.050
AEE-MW-A2-6		45.5	<0.1	22	0.061	<0.050	0.310	0.890
AEE-A8-10	7/19/97	10	<0.1	33	<0.050	<0.050	<0.050	<0.050
AEE-A8-20		20	<0.1	49	<0.050	<0.050	<0.050	0.140
AEE-A8-30		30	<0.1	140	<0.050	1.4	3.1	16.0
AEE-A8-35		35	<0.1	39	**0.98**	0.950	2.8	11.0
AEE-A8-45		45	<0.1	<20	<0.050	<0.050	0.18	0.51
AEE-A8-50		50	<0.1	88	<0.050	<0.050	<0.050	<0.050
AEE-A6-10	7/19/97	10	<0.1	<20	<0.050	0.18	0.12	0.46
AEE-A6-20		20	<1.0	810	<0.5	4.70	9.9	61
AEE-A6-30		30	<1.0	2,800	<0.50	20	20	100
AEE-A6-35		35	<10.0	6,900	**11**	390	**130**	650
AEE-A6-40		40	<10.0	4,200	**17**	150	61	270
AEE-A6-45		45	<10.0	15,000	**9.3**	350	110	530
AEE-A1-1.5	7/19/97	42.0	<10.0	12,000	**130**	**760**	**260**	1,300
AEE-A1-6		45.5	<1.0	930	**21**	98	34	150
AEE-A2-1.5	7/19/97	42.0	<4.0	4,200	**51**	270	**120**	500
AEE-A2-6		45.5	<2.0	91	**38**	170	65	280
AEE-A3-1.5	7/19/97	42.0	<1.0	5,100	**16**	75	37	160
AEE-A3-6		45.5	<4.0	5,600	**72**	280	100	460
AEE-B1-1.5	7/19/97	42.0	<0.1	28	0.43	0.34	1.10	3.40
AEE-B1-6		45.5	<0.1	110	0.38	0.54	2.50	16.0
AEE-B2-1.5	7/19/97	42.0	<0.1	540	**1.80**	7.10	5.40	20.0
AEE-B2-6		45.5	<10.0	1,900	**45.00**	270	120	530
AEE-B3-1.5	7/19/97	42.0	<0.1	82	**0.84**	2.50	1.70	7.30
AEE-B3-6		45.5	<2.0	1,700	**14.0**	63	34	150
AEE-C1-1.5	7/19/97	41.5	<0.1	<20	<0.050	0.21	0.10	0.53
AEE-C1-6		46	<0.1	33	0.20	0.50	0.48	1.10
AEE-C2-1.5	7/19/97	41.5	<0.1	27	0.11	0.21	0.25	0.61
AEE-C2-6		46	<0.1	93	0.093	<0.050	1.70	2.40
AEE-C3-1.5	7/19/97	41.5	<0.1	<20	<0.050	0.18	0.17	0.55
AEE-C3-6		46	<0.1	93	0.30	0.20	1.60	2.90

TABLE 4 . AGRA's Laboratory Analytical Results - Soil

Sample ID	Date	Depth (ft bgs)	MTBE (mg/kg)	TRPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)
AEE-D1-1.5	7/20/97	41.5	<0.1	<20	<0.050	0.11	0.17	0.38
AEE-D1-6		46	<0.1	<20	<0.050	0.11	0.081	0.36
AEE-D2-1.5	7/20/97	41.5	<0.1	<20	<0.050	0.12	0.059	0.27
AEE-D2-6		46	<0.1	27	0.12	0.34	0.90	1.80
AEE-D3-1.5	7/20/97	41.5	<0.1	<20	<0.050	0.41	<0.050	<0.050
AEE-D3-6		46	<0.1	63	0.12	0.41	2.90	3.60
AEE-E1-1.5	7/20/97	41.5	<0.1	<20	<0.050	<0.050	<0.050	0.065
AEE-E1-6		46	<0.1	<20	<0.050	<0.050	<0.050	0.14
AEE-E2-1.5	7/20/97	41.5	<0.1	<20	<0.050	<0.050	<0.050	<0.050
AEE-E2-6		46	<0.1	<20	<0.050	0.085	<0.050	0.23
AEE-E3-1.5	7/20/97	41.5	<0.1	<20	<0.050	<0.050	0.16	0.33
AEE-E3-6		46	<0.1	<20	<0.050	<0.050	0.20	0.20
GPL	--	--	none	none	**0.71**	**400**	**120**	**2,100**

TRPH = Total recoverable petroleum hydrocarbons analyzed using ADHS Test Method 418.1AZ
BTEX and MTBE analyzed using EPA Test Method 8020
GPL = Arizona Department of Environmental Quality Groundwater Protection Level (March 1996)
BOLD= Concentration and/or laboratory detection limit exceeds GPL

TABLE 5

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

All Data in micrograms per liter (µg/L)

Well Identification	Date measured	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TRPH	MTBE	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,3,5-Trimethylbenzene
Camelback-MW-E	06/19/91	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	07/01/92	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA
Camelback-MW-E	04/29/93	0.9	8.6	2.1	8.1	<1000	NA	NA	NA	<1.0
Camelback-MW-E	07/16/93	2	14	86	260	<1000	NA	NA	NA	<2.0
Camelback-MW-E	11/06/93	11	15	58	140	<1000	NA	NA	NA	18
Camelback-MW-E	02/13/94	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	05/28/94	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	08/20/94	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	12/03/94	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	02/25/95	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	06/18/95	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	09/16/95	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	12/28/95	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	04/27/96	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	06/29/96	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	09/14/96	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	12/14/96	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-E	03/23/97	<0.5	<0.5	<0.5	<1.0	NA	NA	NA	NA	NA
Camelback-MW-E	06/14/97	<0.5	<0.5	<0.5	<1.0	NA	NA	NA	NA	NA
Camelback-MW-E	09/13/97	<0.5	<0.5	<0.5	<1.0	NA	NA	NA	NA	NA
Camelback-MW-E	12/06/97	<0.5	<0.5	<0.5	<1.0	NA	NA	NA	NA	NA
Camelback-MW-E	03/14/98	<0.5	<0.5	<0.5	<1.5	NA	NA	NA	NA	NA
Camelback-MW-N	06/19/91	80	880	630	3600	NA	NA	NA	NA	NA
Camelback-MW-N	07/06/92	16	55	101	412	NA	NA	NA	NA	NA
Camelback-MW-N	04/29/93	73	360	1000	3600	11000	NA	NA	NA	<100
Camelback-MW-N	07/16/93	<50	410	920	510	11000	NA	NA	NA	<100
Camelback-MW-N	11/06/93	110	560	870	3700	<5000	NA	NA	NA	170
Camelback-MW-N	02/13/94	<10	500	1100	2800	4000	NA	NA	NA	NA
Camelback-MW-N	05/28/94	40	460	950	3900	5000	NA	NA	NA	NA
Camelback MW-N	08/20/94	<250	400	1100	5500	8000	NA	NA	NA	NA
Camelback-MW-N	12/03/94	77	420	930	4300	8000	NA	NA	NA	NA
Camelback-MW-N	02/25/95	180	1100	1100	4900	8000	NA	NA	NA	NA
Camelback-MW-N	06/18/95	270	610	1100	5500	8000	<1000	NA	NA	NA
Camelback-MW-N	09/16/95	260	590	1000	5200	2000	NA	NA	NA	NA
Camelback-MW-N	12/28/95	890	840	1100	4100	8000	NA	NA	NA	NA

Western Technologies Inc.

NA Data not Available

TABLE 5

All Data in micrograms per liter (µg/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TRPH	MTBE	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,3,5-Trimethylbenzene
Camelback-MW-N	04/27/96	460	270	240	990	6000	NA	NA	NA	NA
Camelback-MW-N	06/29/96	1200	570	480	1600	5000	NA	NA	NA	NA
Camelback-MW-N	09/14/96	1700	790	660	1600	6000	NA	NA	NA	NA
Camelback-MW-N	12/14/96	1100	560	800	1900	6000	NA	NA	NA	NA
Camelback-MW-N	03/23/97	1100	400	720	1700	5000	NA	NA	NA	NA
Camelback-MW-N	06/14/97	920	290	660	1500	7000	NA	NA	NA	NA
Camelback-MW-N	09/13/97	810	190	730	1100	4000	NA	NA	NA	NA
Camelback-MW-N	12/06/97	780	350	850	1700	<1000	NA	NA	NA	NA
Camelback-MW-N	03/14/98	1100	460	850	1900	4300	NA	NA	NA	NA
Camelback-MW-S	06/19/91	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
Camelback-MW-S	07/01/92	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA
Camelback-MW-S	04/29/93	0.7	5.5	1.1	7.8	<1000	NA	NA	NA	NA
Camelback-MW-S	07/16/93	<2.5	10	35	111	<1000	NA	NA	NA	<1.0
Camelback-MW-S	11/06/93	10	13	26	65	<5000	NA	NA	NA	<5.0
Camelback-MW-S	02/13/94	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	7.5
Camelback-MW-S	05/28/94	2.2	18	37	160	<1000	NA	NA	NA	NA
Camelback-MW-S	08/20/94	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Camelback-MW-S	12/03/94	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Camelback-MW-S	02/25/95	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Camelback-MW-S	06/18/95	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Camelback-MW-S	09/16/95	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Camelback-MW-S	12/28/95	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Camelback-MW-S	04/27/96	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Camelback-MW-S	06/29/96	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Camelback-MW-S	09/14/96	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Camelback-MW-S	12/14/96	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Camelback-MW-S	03/23/97	<0.5	<0.5	<0.5	<1.0	<1000	NA	NA	NA	NA
Camelback-MW-S	06/14/97	<0.5	<0.5	<0.5	<1.0	<1000	NA	NA	NA	NA
Camelback-MW-S	09/13/97	<0.5	<0.5	<0.5	<1.0	<1000	NA	NA	NA	NA
Camelback-MW-S	12/06/97	<0.5	<0.5	<0.5	<1.0	<1000	NA	NA	NA	NA
Camelback-MW-S	03/14/98	<0.5	<0.5	<0.5	<1.5	2700	NA	NA	NA	NA
Camelback-MW-SW	04/29/93	370	NA	1400	4800	7000	NA	NA	NA	<100
Camelback-MW-SW	07/16/93	460	NA	1000	2410	4000	NA	NA	NA	<20
Camelback-MW-SW	11/06/93	530	NA	1700	2800	<5000	NA	NA	NA	760
Camelback-MW-SW	02/13/94	420	NA	1100	1500	5000	NA	NA	NA	NA

Western Technologies Inc.

NA - Data not Available

TABLE 5

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

All Data in micrograms per liter (µg/L)

Well Identification	Date measured	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TRPH	MTBE	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,3,5-Trimethylbenzene
Camelback-MW-SW	05/28/94	240	NA	890	960	1000	NA	NA	NA	NA
Camelback-MW-SW	08/20/94	160	NA	730	570	<1000	NA	NA	NA	NA
Camelback-MW-SW	12/03/94	200	NA	830	830	2000	NA	NA	NA	NA
Camelback-MW-SW	02/25/95	260	NA	1400	1200	4000	NA	NA	NA	NA
Camelback-MW-SW	06/18/95	150	NA	1400	1700	3000	NA	NA	NA	NA
Camelback-MW-SW	09/16/95	150	NA	1400	1500	3000	NA	NA	NA	NA
Camelback-MW-SW	12/28/95	160	NA	1100	1400	3000	NA	NA	NA	NA
Camelback-MW-SW	04/27/96	70	NA	820	580	3000	NA	NA	NA	NA
Camelback-MW-SW	06/29/96	73	NA	1000	930	2000	NA	NA	NA	NA
Camelback-MW-SW	09/14/96	64	NA	880	600	2000	NA	NA	NA	NA
Camelback-MW-SW	12/14/96	58	NA	1000	930	2000	NA	NA	NA	NA
Camelback-MW-SW	03/23/97	43	NA	830	580	2000	NA	NA	NA	NA
Camelback-MW-SW	06/14/97	30	NA	670	420	2000	NA	NA	NA	NA
Camelback-MW-SW	09/13/97	<50	NA	1100	650	1000	NA	NA	NA	NA
Camelback-MW-SW	12/06/97	15	NA	960	370	<1000	NA	NA	NA	NA
Camelback-MW-SW	03/14/98	<25.0	NA	740	440	1900	NA	NA	NA	NA
Camelback-MW-W	06/19/91	<250	<250	1500	3200	NA	NA	<250	<250	NA
Camelback-MW-W	07/01/92	490	140	3050	4400	NA	NA	1250	930	NA
Camelback-MW-W	04/29/93	200	20	1500	3200	3000	NA	<12.5	<12.5	<25.0
Camelback-MW-W	07/16/93	210	42	1100	1870	4000	NA	<12.5	<12.5	<25.0
Camelback-MW-W	11/06/93	390	97	2000	3600	<5000	NA	<10	<10	410
Camelback-MW-W	02/13/94	141	<10	2200	1800	2000	NA	<10	<10	NA
Camelback-MW-W	05/28/94	140	<50	1700	1900	2000	NA	<50	<50	NA
Camelback-MW-W	08/20/94	190	<50	2000	3300	3000	NA	<50	<50	NA
Camelback-MW-W	12/03/94	83	<5.0	930	810	2000	NA	<0.5	<0.5	NA
Camelback-MW-W	02/25/95	150	<25.0	1400	2500	3000	NA	<25.0	<25.0	NA
Camelback-MW-W	06/18/95	60	<25.0	1300	2300	2000	NA	<25.0	<25.0	NA
Camelback-MW-W	09/16/95	65	<25.0	1300	1700	10000	NA	<25.0	<25.0	NA
Camelback-MW-W	12/28/95	<12.5	<12.5	460	780	3000	NA	<12.5	<12.5	NA
Camelback-MW-W	04/27/96	<50	<50	290	410	3000	NA	<50	<50	NA
Camelback-MW-W	06/29/96	84	<25.0	1200	520	3000	NA	<25.0	<25.0	NA
Camelback-MW-W	09/14/96	76	<12.5	920	540	3000	NA	<12.5	<12.5	NA
Camelback-MW-W	12/14/96	120	<25.0	960	550	4000	NA	<25.0	<25.0	NA
Camelback-MW-W	03/23/97	120	11	1300	350	4000	NA	<5.0	<5.0	NA
Camelback-MW-W	06/14/97	100	6	1300	260	5000	NA	<5.0	<5.0	NA

Western Technologies Inc.

NA - Data not Available

ND - Analyte not Detected above labratory detection methods

TABLE 5

All Data in micrograms per liter (µg/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TRPH	MTBE	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,3,5-Trimethylbenzene
Camelback-MW-W	09/13/97	110	<50	1200	400	3000	NA	<50	<50	NA
Camelback-MW-W	12/06/97	29	8.6	300	130	<1000	NA	<2.5	<2.5	NA
Camelback-MW-W	03/14/98	<50	<50	920	540	2100	NA	<100	<100	NA
Exxon-MW-A1	07/26/97	<0.5	<0.5	<0.5	<0.5	<1000	<5	NA	NA	ND
Exxon-MW-A1	07/30/97	<0.5	<0.5	<0.5	<0.5	<1000	<10	NA	NA	ND
Exxon-MW-A1	11/13/97	<1.3	<1.3	<1.3	<1.3	<1000	NA	NA	NA	NA
Exxon-MW-A1	12/06/97	<0.5	<0.5	<0.5	<0.5	<1000	NA	NA	NA	NA
Exxon-MW-A1	03/14/98	<2.5	<2.5	<2.5	<5	<1000	<10	NA	NA	NA
Exxon-MW-A1	06/20/98	<2.5	<2.5	<2.5	<5	<1000	<5	NA	NA	NA
Exxon-MW-A2	07/26/97	<25	29	340	1770	2500	<5	NA	NA	160
Exxon-MW-A2	07/30/97	87	95	1000	4800	3000	<500	NA	NA	310
Exxon-MW-A2	11/13/97	44	17	600	700	3300	NA	NA	NA	NA
Exxon-MW-A2	12/06/97	57	<50	1200	3830	3400	NA	NA	NA	NA
Exxon-MW-A2	03/14/98	<50	<50	1000	3230	2600	<10	NA	NA	NA
Exxon-MW-A2	06/20/98	<100	<100	1000	3180	1300	<5	NA	NA	NA
Exxon-MW-A4	07/26/97	92	210	1500	4000	11000	<5	NA	NA	670
Exxon-MW-A4	07/30/97	230	99	1500	4300	8700	<500	NA	NA	540
Exxon-MW-A4	11/13/97	160	<50	2400	5300	8900	NA	NA	NA	NA
Exxon-MW-A4	12/06/97	150	<50	2000	4500	8300	NA	NA	NA	NA
Exxon-MW-A4	03/14/98	79	51	1500	3000	4700	<20	NA	NA	NA
Exxon-MW-A4	06/20/98	49	<25	440	900	1700	<5	NA	NA	NA
Exxon-MW-A5	01/29/98	<0.5	<0.5	<0.5	0.71	<1000	<10	NA	NA	NA
Exxon-MW-A5	03/14/98	<0.5	<0.5	<0.5	<1	<1000	<10	NA	NA	NA
Exxon-MW-A5	06/20/98	<0.5	<0.5	<0.5	<1	<1000	<5	NA	NA	NA
Exxon-MW-A6	01/29/98	1.1	<0.5	<0.5	0.78	<1000	110	NA	NA	NA
Exxon-MW-A6	03/14/98	1.3	<0.5	<0.5	<1	<1000	130	NA	NA	NA
Exxon-MW-A6	06/20/98	<0.5	<0.5	<0.5	<1	<1000	<5	NA	NA	NA
Exxon-MW-A8	07/26/97	<50	73	260	410	7900	<5	NA	NA	680
Exxon-MW-A8	07/30/97	<25	<25	140	107	4300	<500	NA	NA	440
Exxon-MW-A8	11/13/97	15	<13	110	59	4300	NA	NA	NA	NA
Exxon-MW-A8	12/06/97	55	<25	150	38	4100	NA	NA	NA	NA
Exxon-MW-A8	03/14/98	<10	18	56	53	1900	12	NA	NA	NA
Exxon-MW-A8	06/20/98	18	34	130	209	1300	<5	NA	NA	NA

Western Technologies Inc.

NA - Data not Available

TABLE 5

All Data in micrograms per liter (mg/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	Isopropylbenzene	1,2,4-Trimethylbenzene	n-Propylbenzene	Naphthalene	n-Butylbenzene	sec-Butylbenzene	P-Isopropyltoluene
Camelback-MW-E	06/19/91	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	07/01/92	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	04/29/93	<2.0	<0.5	<1.0	<1.0	<0.5	<0.5	NA
Camelback-MW-E	07/16/93	<4.0	47	<2.0	<2.0	<1.0	<1.0	NA
Camelback-MW-E	11/06/93	4.0	72	11	19	5.5	0.5	NA
Camelback-MW-E	02/13/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	05/28/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	08/20/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	12/03/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	02/25/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	06/18/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	09/16/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	12/28/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	04/27/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	06/29/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	09/14/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	12/14/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	03/23/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	06/14/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	09/13/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	12/06/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	03/14/98	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	06/19/91	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	07/06/92	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	04/29/93	<200	1000	<100	<100	<50	NA	NA
Camelback-MW-N	07/16/93	<200	68	<100	<100	<50	NA	NA
Camelback-MW-N	11/06/93	24	670	61	300	72	NA	NA
Camelback-MW-N	02/13/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	05/28/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	08/20/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	12/03/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	02/25/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	06/18/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	09/16/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	12/28/95	NA	NA	NA	NA	NA	NA	NA

Western Technologies Inc.

NA - Data not Available

TABLE 5

All Data in micrograms per liter (...g/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	Isopropylbenzene	1,2,4-Trimethylbenzene	n-Propylbenzene	Naphthalene	n-Butylbenzene	sec-Butylbenzene	P-Isopropyltoluene
Camelback-MW-N	04/27/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	06/29/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	09/14/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	12/14/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	03/23/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	06/14/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	09/13/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	12/06/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	03/14/98	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	06/19/91	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	07/01/92	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	04/29/93	<2.0	<0.5	<1.0	<1.0	<0.5	NA	NA
Camelback-MW-S	07/16/93	<10.0	22	<5.0	<5.0	<2.5	NA	NA
Camelback-MW-S	11/06/93	1.6	29	4.7	8.6	2.4	NA	NA
Camelback-MW-S	02/13/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	05/28/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	08/20/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	12/03/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	02/25/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	06/18/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	09/16/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	12/28/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	04/27/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	06/29/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	09/14/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	12/14/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	03/23/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	06/14/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	09/13/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	12/06/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	03/14/98	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	04/29/93	<200	1800	<100	<100	<50	<50	<50
Camelback-MW-SW	07/16/93	<40	1400	<20	<20	<10	<10	<10
Camelback-MW-SW	11/06/93	150	3500	440	520	430	26	5.9
Camelback-MW-SW	02/13/94	NA	NA	NA	NA	NA	NA	NA

Western Technologies Inc.

NA - Data not Available

TABLE 5

All Data in micrograms per liter (µg/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	Isopropylbenzene	1,2,4-Trimethylbenzene	n-Propylbenzene	Naphthalene	n-Butylbenzene	sec-Butylbenzene	P-Isopropyltoluene
Camelback-MW-SW	05/28/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	08/20/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	12/03/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	02/25/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	06/18/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	09/16/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	12/28/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	04/27/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	06/29/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	09/14/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	12/14/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	03/23/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	06/14/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	09/13/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	12/06/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	03/14/98	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	06/19/91	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	07/01/92	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	04/29/93	<50.0	1100	<25.0	<25.0	<12.5	<12.5	NA
Camelback-MW-W	07/16/93	<50.0	720	<25.0	<25.0	<12.5	<12.5	NA
Camelback-MW-W	11/06/93	130	1500	370	410	220	17	NA
Camelback-MW-W	02/13/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	05/28/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	08/20/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	12/03/94	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	02/25/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	06/18/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	09/16/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	12/28/95	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	04/27/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	06/29/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	09/14/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	12/14/96	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	03/23/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	06/14/97	NA	NA	NA	NA	NA	NA	NA

Western Technologies Inc.

NA - Data not Available

ND - Analyte not Detected above labratory detection methods

TABLE 5

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

All Data in micrograms per liter (ug/L)

Well Identification	Date measured	Isopropylbenzene	1,2,4-Trimethylbenzene	n-Propylbenzene	Naphthalene	n-Butylbenzene	sec-Butylbenzene	P-Isopropyltoluene
Camelback-MW-W	09/13/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	12/06/97	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A1	07/26/97	ND	1.9	ND	1.2	ND	NA	3.1
Exxon-MW-A1	07/30/97	ND	ND	ND	ND	ND	NA	ND
Exxon-MW-A1	11/13/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A1	12/06/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A1	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A1	06/20/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A2	07/26/97	28	630	110	60	64	NA	ND
Exxon-MW-A2	07/30/97	63	1200	210	140	ND	NA	ND
Exxon-MW-A2	11/13/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A2	12/06/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A2	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A2	06/20/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A4	07/26/97	86	2800	300	570	130	NA	ND
Exxon-MW-A4	07/30/97	67	2200	220	500	96	NA	ND
Exxon-MW-A4	11/13/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A4	12/06/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A4	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A4	06/20/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A5	01/29/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A5	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A5	06/20/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A6	01/29/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A6	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A6	06/20/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A8	07/26/97	98	1900	510	110	ND	NA	ND
Exxon-MW-A8	07/30/97	61	1000	310	56	ND	NA	ND
Exxon-MW-A8	11/13/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A8	12/06/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A8	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A8	06/20/98	NA	NA	NA	NA	NA	NA	NA

Western Technologies Inc.

NA - Data not Available

ND - Analyte not Detected above laboratory detection methods

TABLE 5

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

All Data in micrograms per lite ,g/l.)

Well Identification	Date measured	Chloroform	Dibromochloro methane	Bromodichloro methane	1,2-Dibromoethane	1,2-Dichloropropane	1,1-Dichloroethane	1,2-Dichloroethane
Camelback-MW-E	06/19/91	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-E	07/01/92	<1.0	<1.0	<1.0	NA	NA	NA	NA
Camelback-MW-E	04/29/93	1.8	<0.2	<0.2	NA	NA	NA	NA
Camelback-MW-E	07/16/93	3	<0.4	<0.4	NA	NA	NA	NA
Camelback-MW-E	11/06/93	<0.5	<0.5	<1.0	NA	NA	NA	NA
Camelback-MW-E	02/13/94	4.7	<0.2	<0.2	NA	NA	NA	NA
Camelback-MW-E	05/28/94	1.4	<0.2	<0.2	NA	NA	NA	NA
Camelback-MW-E	08/20/94	3.7	0.4	1.3	NA	NA	NA	NA
Camelback-MW-E	12/03/94	2.7	<0.2	<0.2	NA	NA	NA	NA
Camelback-MW-E	02/25/95	2.0	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	06/18/95	1.3	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	09/16/95	1.1	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	12/28/95	2.3	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	04/27/96	<0.5	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	06/29/96	<0.5	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	09/14/96	0.9	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	12/14/96	0.8	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	03/23/97	0.8	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	06/14/97	<0.5	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	09/13/97	<0.5	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	12/06/97	0.5	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-E	03/14/98	<0.5	<0.5	<0.5	NA	NA	NA	NA
Camelback-MW-N	06/19/91	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	07/06/92	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-N	04/29/93	NA	NA	NA	NA	NA	<1.0	<1.0
Camelback-MW-N	07/16/93	NA	NA	NA	NA	NA	<20	<20
Camelback-MW-N	11/06/93	NA	NA	NA	NA	NA	<20	<20
Camelback-MW-N	02/13/94	NA	NA	NA	NA	NA	<5.0	<5.0
Camelback-MW-N	05/28/94	NA	NA	NA	NA	NA	<4.0	<4.0
Camelback-MW-N	08/20/94	NA	NA	NA	NA	NA	<10.0	<10.0
Camelback-MW-N	12/03/94	NA	NA	NA	NA	NA	<100	<100
Camelback-MW-N	02/25/95	NA	NA	NA	NA	NA	<0.2	<0.5
Camelback-MW-N	06/18/95	NA	NA	NA	NA	NA	<50	<50
Camelback-MW-N	09/16/95	NA	NA	NA	NA	NA	<25.0	<25.0
Camelback-MW-N	12/28/95	NA	NA	NA	NA	NA	<100	<100
							30	<25.0

Western Technologies Inc.

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TABLE 5

All Data in micrograms per lite. (µg/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	Chloroform	Dibromochloro methane	Bromodichloro methane	1,2-Dibromoethane	1,2-Dichloropropane	1,1-Dichloroethane	1,2-Dichloroethane
Camelback-MW-N	04/27/96	NA	NA	NA	NA	NA	<50	<50
Camelback-MW-N	06/29/96	NA	NA	NA	NA	NA	<50	<50
Camelback-MW-N	09/14/96	NA	NA	NA	NA	NA	<25.0	<25.0
Camelback-MW-N	12/14/96	NA	NA	NA	NA	NA	<25.0	<25.0
Camelback-MW-N	03/23/97	NA	NA	NA	NA	NA	<5.0	26
Camelback-MW-N	06/14/97	NA	NA	NA	NA	NA	<10.0	29
Camelback-MW-N	09/13/97	NA	NA	NA	NA	NA	<50	<50
Camelback-MW-N	12/06/97	NA	NA	NA	NA	NA	<25.0	<25.0
Camelback-MW-N	03/14/98	NA	NA	NA	NA	NA	<50	<50
Camelback-MW-S	06/19/91	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-S	07/01/92	<1.0	NA	NA	NA	NA	NA	NA
Camelback-MW-S	04/29/93	0.6	NA	NA	NA	NA	NA	NA
Camelback-MW-S	07/16/93	<1.0	NA	NA	NA	NA	NA	NA
Camelback-MW-S	11/06/93	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	02/13/94	<0.2	NA	NA	NA	NA	NA	NA
Camelback-MW-S	05/28/94	<0.4	NA	NA	NA	NA	NA	NA
Camelback-MW-S	08/20/94	<0.2	NA	NA	NA	NA	NA	NA
Camelback-MW-S	12/03/94	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	02/25/95	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	06/18/95	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	09/16/95	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	12/28/95	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	04/27/96	1.1	NA	NA	NA	NA	NA	NA
Camelback-MW-S	06/29/96	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	09/14/96	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	12/14/96	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	03/23/97	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	06/14/97	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	09/13/97	<0.5	NA	NA	NA	NA	NA	NA
Camelback-MW-S	12/06/97	0.7	NA	NA	NA	NA	NA	NA
Camelback-MW-S	03/14/98	0.54	NA	NA	NA	NA	NA	NA
Camelback-MW-SW	04/29/93	NA	NA	NA	<100	<20	NA	<20
Camelback-MW-SW	07/16/93	NA	NA	NA	<20	<4.0	NA	<4.0
Camelback-MW-SW	11/06/93	NA	NA	NA	<10	<5.0	NA	<5.0
Camelback-MW-SW	02/13/94	NA	NA	NA	NA	<4.0	NA	<4.0

Western Technologies Inc.

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TABLE 5

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

All Data in micrograms per lite .-g/L)

Well Identification	Date measured	Chloroform	Dibromochloro methane	Bromodichloro methane	1,2-Dibromoethane	1,2-Dichloropropane	1,1-Dichloroethane	1,2-Dichloroethane
Camelback-MW-SW	05/28/94	NA	NA	NA	NA	<5.0	NA	<5.0
Camelback-MW-SW	08/20/94	NA	NA	NA	NA	<10.0	NA	<10.0
Camelback-MW-SW	12/03/94	NA	NA	NA	0.4	0.2	NA	1.5
Camelback-MW-SW	02/25/95	NA	NA	NA	NA	<25.0	NA	<25.0
Camelback-MW-SW	06/18/95	NA	NA	NA	NA	<50	NA	<50
Camelback-MW-SW	09/16/95	NA	NA	NA	NA	<25.0	NA	<25.0
Camelback-MW-SW	12/28/95	NA	NA	NA	NA	<25.0	NA	<25.0
Camelback-MW-SW	04/27/96	NA	NA	NA	NA	<50	NA	<50
Camelback-MW-SW	06/29/96	NA	NA	NA	NA	<25.0	NA	<25.0
Camelback-MW-SW	09/14/96	NA	NA	NA	NA	<12.5	NA	<12.5
Camelback-MW-SW	12/14/96	NA	NA	NA	NA	<25.0	NA	<25.0
Camelback-MW-SW	03/23/97	NA	NA	NA	NA	<12.5	NA	<12.5
Camelback-MW-SW	06/14/97	NA	NA	NA	NA	<5.0	NA	<5.0
Camelback-MW-SW	09/13/97	NA	NA	NA	NA	<50	NA	<50
Camelback-MW-SW	12/06/97	NA	NA	NA	NA	<10.0	NA	<10.0
Camelback-MW-SW	03/14/98	NA	NA	NA	NA	<25	NA	<25
Camelback-MW-W	06/19/91	NA	NA	NA	NA	NA	NA	NA
Camelback-MW-W	07/01/92	NA	NA	NA	NA	NA	NA	<1.0
Camelback-MW-W	04/29/93	NA	NA	NA	NA	NA	NA	<5.0
Camelback-MW-W	07/16/93	NA	NA	NA	NA	NA	NA	<5.0
Camelback-MW-W	11/06/93	NA	NA	NA	NA	NA	NA	<5.0
Camelback-MW-W	02/13/94	NA	NA	NA	NA	NA	NA	0.3
Camelback-MW-W	05/28/94	NA	NA	NA	NA	NA	NA	<20
Camelback-MW-W	08/20/94	NA	NA	NA	NA	NA	NA	<20
Camelback-MW-W	12/03/94	NA	NA	NA	NA	NA	NA	<0.5
Camelback-MW-W	02/25/95	NA	NA	NA	NA	NA	NA	<25.0
Camelback-MW-W	06/18/95	NA	NA	NA	NA	NA	NA	<25.0
Camelback-MW-W	09/16/95	NA	NA	NA	NA	NA	NA	<25.0
Camelback-MW-W	12/28/95	NA	NA	NA	NA	NA	NA	<12.5
Camelback-MW-W	04/27/96	NA	NA	NA	NA	NA	NA	<50
Camelback-MW-W	06/29/96	NA	NA	NA	NA	NA	NA	<25.0
Camelback-MW-W	09/14/96	NA	NA	NA	NA	NA	NA	<12.5
Camelback-MW-W	12/14/96	NA	NA	NA	NA	NA	NA	<25.0
Camelback-MW-W	03/23/97	NA	NA	NA	NA	NA	NA	<5.0
Camelback-MW-W	06/14/97	NA	NA	NA	NA	NA	NA	<5.0

Western Technologies Inc.

NA - Data not Available

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TABLE 5

All Data in micrograms per lit. . µg/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	Chloroform	Dibromochloro methane	Bromodichloro methane	1,2-Dibromoethane	1,2-Dichloropropane	1,1-Dichloroethane	1,2-Dichloroethane
Camelback-MW-W	09/13/97	NA	NA	NA	NA	NA	NA	<50
Camelback-MW-W	12/06/97	NA	NA	NA	NA	NA	NA	<2.5
Camelback-MW-W	03/14/98	NA	NA	NA	NA	NA	NA	<50
Exxon-MW-A1	07/26/97	1.1	NA	NA	NA	NA	NA	NA
Exxon-MW-A1	07/30/97	1.9	NA	NA	NA	NA	NA	NA
Exxon-MW-A1	11/13/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A1	12/06/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A1	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A1	06/20/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A2	07/26/97	ND	NA	NA	NA	NA	NA	NA
Exxon-MW-A2	07/30/97	ND	NA	NA	NA	NA	NA	NA
Exxon-MW-A2	11/13/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A2	12/06/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A2	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A2	06/20/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A4	07/26/97	ND	NA	NA	NA	NA	NA	NA
Exxon-MW-A4	07/30/97	ND	NA	NA	NA	NA	NA	NA
Exxon-MW-A4	11/13/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A4	12/06/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A4	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A4	06/20/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A5	01/29/98	3.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Exxon-MW-A5	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A5	06/20/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A6	01/29/98	0.55	<0.5	<0.5	<0.5	<0.5	<0.5	15
Exxon-MW-A6	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A6	06/20/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A8	07/26/97	ND	NA	NA	NA	NA	NA	NA
Exxon-MW-A8	07/30/97	ND	NA	NA	NA	NA	NA	NA
Exxon-MW-A8	11/13/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A8	12/06/97	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A8	03/14/98	NA	NA	NA	NA	NA	NA	NA
Exxon-MW-A8	06/20/98	NA	NA	NA	NA	NA	NA	NA

Western Technologies Inc.
NA - Data not Available
ND - Analyte not Detected above labratory detection methods

TABLE 5

All Data in micrograms per lit ,ug/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	1,1,1-Trichloroethane	PCE	TCE
Camelback-MW-E	06/19/91	NA	NA	NA
Camelback-MW-E	07/01/92	NA	<1.0	<1.0
Camelback-MW-E	04/29/93	NA	7.6	0.2
Camelback-MW-E	07/16/93	NA	89	0.4
Camelback-MW-E	11/06/93	NA	<0.5	<0.5
Camelback-MW-E	02/13/94	NA	<0.2	<0.2
Camelback-MW-E	05/28/94	NA	<0.2	<0.2
Camelback-MW-E	08/20/94	NA	<0.2	<0.2
Camelback-MW-E	12/03/94	NA	<0.5	<0.2
Camelback-MW-E	02/25/95	NA	<0.5	<0.5
Camelback-MW-E	06/18/95	NA	<0.5	<0.5
Camelback-MW-E	09/16/95	NA	<0.5	<0.5
Camelback-MW-E	12/28/95	NA	<0.5	<0.5
Camelback-MW-E	04/27/96	NA	<0.5	<0.5
Camelback-MW-E	06/29/96	NA	<0.5	<0.5
Camelback-MW-E	09/14/96	NA	<0.5	<0.5
Camelback-MW-E	12/14/96	NA	<0.5	<0.5
Camelback-MW-E	03/23/97	NA	<0.5	<0.5
Camelback-MW-E	06/14/97	NA	<0.5	<0.5
Camelback-MW-E	09/13/97	NA	<0.5	<0.5
Camelback-MW-E	12/06/97	NA	<0.5	<0.5
Camelback-MW-E	03/14/98	NA	<0.5	<0.5
Camelback-MW-N	06/19/91	NA	NA	NA
Camelback-MW-N	07/06/92	NA	NA	NA
Camelback-MW-N	04/29/93	NA	NA	NA
Camelback-MW-N	07/16/93	NA	NA	NA
Camelback-MW-N	11/06/93	NA	NA	NA
Camelback-MW-N	02/13/94	NA	NA	NA
Camelback-MW-N	05/28/94	NA	NA	NA
Camelback-MW-N	08/20/94	NA	NA	NA
Camelback-MW-N	12/03/94	NA	NA	NA
Camelback-MW-N	02/25/95	NA	NA	NA
Camelback-MW-N	06/18/95	NA	NA	NA
Camelback-MW-N	09/16/95	NA	NA	NA
Camelback-MW-N	12/28/95	NA	NA	NA
Camelback-MW-N	04/27/96	NA	NA	NA

Western Technologies Inc.

NA - Data not Available

ND - Analyte not Detected above labratory detection methods

TABLE 5

All Data in micrograms per lit (µg/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	1,1,1-Trichloroethane	PCE	TCE
Camelback-MW-N	06/29/96	NA	NA	NA
Camelback-MW-N	09/14/96	NA	NA	NA
Camelback-MW-N	12/14/96	NA	NA	NA
Camelback-MW-N	03/23/97	NA	NA	NA
Camelback-MW-N	06/14/97	NA	NA	NA
Camelback-MW-N	09/13/97	NA	NA	NA
Camelback-MW-N	12/06/97	NA	NA	NA
Camelback-MW-N	03/14/98	NA	NA	NA
Camelback-MW-S	06/19/91	NA	NA	NA
Camelback-MW-S	07/01/92	NA	<1.0	NA
Camelback-MW-S	04/29/93	NA	4.4	NA
Camelback-MW-S	07/16/93	NA	64	NA
Camelback-MW-S	11/06/93	NA	<0.5	NA
Camelback-MW-S	02/13/94	NA	<0.2	NA
Camelback-MW-S	05/28/94	NA	<0.4	NA
Camelback-MW-S	08/20/94	NA	<0.2	NA
Camelback-MW-S	12/03/94	NA	<0.5	NA
Camelback-MW-S	02/25/95	NA	<0.5	NA
Camelback-MW-S	06/18/95	NA	<0.5	NA
Camelback-MW-S	09/16/95	NA	<0.5	NA
Camelback-MW-S	12/28/95	NA	<0.5	NA
Camelback-MW-S	04/27/96	NA	<0.5	NA
Camelback-MW-S	06/29/96	NA	<0.5	NA
Camelback-MW-S	09/14/96	NA	<0.5	NA
Camelback-MW-S	12/14/96	NA	<0.5	NA
Camelback-MW-S	03/23/97	NA	<0.5	NA
Camelback-MW-S	06/14/97	NA	<0.5	NA
Camelback-MW-S	09/13/97	NA	<0.5	NA
Camelback-MW-S	12/06/97	NA	<0.5	NA
Camelback-MW-S	03/14/98	NA	<0.5	NA
Camelback-MW-SW	04/29/93	<20	<20	<20
Camelback-MW-SW	07/16/93	<4.0	50	<4.0
Camelback-MW-SW	11/06/93	<5.0	<5.0	<5.0
Camelback-MW-SW	02/13/94	<4.0	<4.0	<4.0
Camelback-MW-SW	05/28/94	<5.0	<5.0	<5.0
Camelback-MW-SW	08/20/94	<10.0	<10.0	<10.0

Western Technologies Inc.

NA - Data not Available

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TABLE 5

All Data in micrograms per li (µg/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	1,1,1-Trichloroethane	PCE	TCE
Camelback-MW-SW	12/03/94	<1.0	<0.5	0.2
Camelback-MW-SW	02/25/95	<25.0	<25.0	<25.0
Camelback-MW-SW	06/18/95	<50	<50.0	<50.0
Camelback-MW-SW	09/16/95	30	<25.0	<25.0
Camelback-MW-SW	12/28/95	<25.0	<25.0	<25.0
Camelback-MW-SW	04/27/96	<50	<50.0	<50.0
Camelback-MW-SW	06/29/96	<25.0	<25.0	<25.0
Camelback-MW-SW	09/14/96	<12.5	<12.5	<12.5
Camelback-MW-SW	12/14/96	<25.0	<25.0	<25.0
Camelback-MW-SW	03/23/97	<12.5	<12.5	<12.5
Camelback-MW-SW	06/14/97	<5.0	<5.0	<5.0
Camelback-MW-SW	09/13/97	<50	<50	<50
Camelback-MW-SW	12/06/97	<10.0	<10.0	<10.0
Camelback-MW-SW	03/14/98	<25	<25.0	<25.0
Camelback-MW-W	06/19/91	NA	NA	NA
Camelback-MW-W	07/01/92	NA	<1.0	<1.0
Camelback-MW-W	04/29/93	NA	<5.0	<5.0
Camelback-MW-W	07/16/93	NA	83	<5.0
Camelback-MW-W	11/06/93	NA	<5.0	<5.0
Camelback-MW-W	02/13/94	NA	<4.0	<4.0
Camelback-MW-W	05/28/94	NA	<20	<20
Camelback-MW-W	08/20/94	NA	<20	<20
Camelback-MW-W	12/03/94	NA	<0.5	0.2
Camelback-MW-W	02/25/95	NA	<25.0	<25.0
Camelback-MW-W	06/18/95	NA	<25.0	<25.0
Camelback-MW-W	09/16/95	NA	<25.0	<25.0
Camelback-MW-W	12/28/95	NA	<12.5	<12.5
Camelback-MW-W	04/27/96	NA	<50	<50
Camelback-MW-W	06/29/96	NA	<25.0	<25.0
Camelback-MW-W	09/14/96	NA	<12.5	<12.5
Camelback-MW-W	12/14/96	NA	<25.0	<25.0
Camelback-MW-W	03/23/97	NA	<5.0	15
Camelback-MW-W	06/14/97	NA	<5.0	11
Camelback-MW-W	09/13/97	NA	<50	<50
Camelback-MW-W	12/06/97	NA	<2.5	5.2
Camelback-MW-W	03/14/98	NA	<50	<50

Western Technologies Inc.

NA - Data not Available

ND - Analyte not Detected above labratory detection methods

TABLE 5

All Data in micrograms per liter (µg/L)

GROUNDWATER ANALYTICAL RESULTS-ONE CAMELBACK BUILDING

Conceptual Site Model

Central and Cameback Area

Well Identification	Date measured	1,1,1-Trichloroethane	PCE	TCE
Exxon-MW-A1	07/26/97	NA	13	NA
Exxon-MW-A1	07/30/97	NA	12	NA
Exxon-MW-A1	11/13/97	NA	11	NA
Exxon-MW-A1	12/06/97	NA	16	NA
Exxon-MW-A1	03/14/98	NA	53	NA
Exxon-MW-A1	06/20/98	NA	74	NA
Exxon-MW-A2	07/26/97	NA	<25	NA
Exxon-MW-A2	07/30/97	NA	<50	NA
Exxon-MW-A2	11/13/97	NA	<13	NA
Exxon-MW-A2	12/06/97	NA	<50	NA
Exxon-MW-A2	03/14/98	NA	<50	NA
Exxon-MW-A2	06/20/98	NA	<100	NA
Exxon-MW-A4	07/26/97	NA	<50	NA
Exxon-MW-A4	07/30/97	NA	<50	NA
Exxon-MW-A4	11/13/97	NA	<50	NA
Exxon-MW-A4	12/06/97	NA	<50	NA
Exxon-MW-A4	03/14/98	NA	<50	NA
Exxon-MW-A4	06/20/98	NA	<25	NA
Exxon-MW-A5	01/29/98	<0.5	<0.5	<0.5
Exxon-MW-A5	03/14/98	NA	<0.5	NA
Exxon-MW-A5	06/20/98	NA	<0.5	NA
Exxon-MW-A6	01/29/98	<0.5	<0.5	<0.5
Exxon-MW-A6	03/14/98	NA	<0.5	NA
Exxon-MW-A6	06/20/98	NA	<0.5	NA
Exxon-MW-A8	07/26/97	NA	<50	NA
Exxon-MW-A8	07/30/97	NA	<25	NA
Exxon-MW-A8	11/13/97	NA	<13	NA
Exxon-MW-A8	12/06/97	NA	<25	NA
Exxon-MW-A8	03/14/98	NA	<10	NA
Exxon-MW-A8	06/20/98	NA	<10	NA

Western Technologies Inc.

NA - Data not Available

TABLE 6

SUMMARY OF GROUNDWATER ELEVATIONS

Conceptual Site Model

Central and Camelback Area-Phoenix, Arizona

Well Identification	Date Measured	Groundwater Elevation (Feet AMSL)	Water Depth to Water (feet bgs)
Camelback-MW-E	10/07/92	1084.17	-46.44
Camelback-MW-E	12/30/92	1083.54	-47.07
Camelback-MW-E	01/05/93	1083.60	-47.01
Camelback-MW-E	01/26/93	1083.53	-47.08
Camelback-MW-E	02/09/93	1083.32	-47.29
Camelback-MW-E	03/23/93	1083.02	-47.59
Camelback-MW-E	04/29/93	1083.00	-47.61
Camelback-MW-E	04/30/93	1083.08	-47.53
Camelback-MW-E	05/14/93	1083.27	-47.34
Camelback-MW-E	07/16/93	1083.91	-46.69
Camelback-MW-E	11/06/93	1084.68	-45.93
Camelback-MW-E	02/13/94	1083.71	-46.89
Camelback-MW-E	02/24/94	1084.08	-46.53
Camelback-MW-E	05/28/94	1086.72	-43.89
Camelback-MW-E	08/20/94	1086.02	-44.59
Camelback-MW-E	12/03/94	1086.53	-44.08
Camelback-MW-E	02/25/95	1085.82	-44.79
Camelback-MW-E	06/18/95	1085.52	-45.09
Camelback-MW-E	09/16/95	1086.15	-44.46
Camelback-MW-E	12/28/95	1085.61	-45.00
Camelback-MW-E	04/27/96	1086.80	-43.81
Camelback-MW-E	06/29/96	1087.36	-43.25
Camelback-MW-E	09/14/96	1088.33	-42.28
Camelback-MW-E	12/14/96	1087.55	-43.06
Camelback-MW-E	03/23/97	1086.96	-43.65
Camelback-MW-E	06/14/97	1088.03	-42.58
Camelback-MW-E	09/13/97	1088.49	-42.12
Camelback-MW-E	12/06/97	1088.45	-42.16
Camelback-MW-E	03/14/98	1087.80	-42.81
Camelback-MW-E	06/20/98	1087.63	-42.98
Camelback-MW-N	10/07/92	1083.12	-47.33
Camelback-MW-N	12/30/92	1082.58	-47.87
Camelback-MW-N	01/05/93	1082.87	-47.58
Camelback-MW-N	01/26/93	1082.90	-47.55
Camelback-MW-N	02/09/93	1082.72	-47.73
Camelback-MW-N	03/23/93	1082.55	-47.90
Camelback-MW-N	04/29/93	1082.58	-47.87
Camelback-MW-N	04/30/93	1082.58	-47.87
Camelback-MW-N	05/14/93	1082.68	-47.77
Camelback-MW-N	07/16/93	1083.10	-47.35
Camelback-MW-N	11/06/93	1083.93	-46.52
Camelback-MW-N	02/13/94	1083.21	-47.24
Camelback-MW-N	02/24/94	1083.45	-47.00
Camelback-MW-N	05/28/94	1085.00	-45.45
Camelback-MW-N	08/20/94	1084.69	-45.76

Western Technologies Inc.

NA: Data not Available

TABLE 6

SUMMARY OF GROUNDWATER ELEVATIONS
Conceptual Site Model
Central and Camelback Area-Phoenix, Arizona

Well Identification	Date Measured	Groundwater Elevation (Feet AMSL)	Water Depth to Water (feet bgs)
Camelback-MW-N	12/03/94	1085.10	-45.35
Camelback-MW-N	02/25/95	1084.67	-45.78
Camelback-MW-N	06/18/95	1084.22	-46.23
Camelback-MW-N	09/16/95	1084.70	-45.75
Camelback-MW-N	12/28/95	1084.56	-45.89
Camelback-MW-N	04/27/96	1085.50	-44.95
Camelback-MW-N	06/29/96	1085.85	-44.60
Camelback-MW-N	09/14/96	1086.50	-43.95
Camelback-MW-N	12/14/96	1086.08	-44.37
Camelback-MW-N	03/23/97	1085.72	-44.73
Camelback-MW-N	06/14/97	1086.43	-44.02
Camelback-MW-N	09/13/97	1086.99	-43.46
Camelback-MW-N	12/06/97	1086.93	-43.52
Camelback-MW-N	03/14/98	1086.28	-44.17
Camelback-MW-N	06/20/98	1086.32	-44.13
Camelback-MW-S	10/07/92	1084.62	-45.07
Camelback-MW-S	12/30/92	1083.99	-45.70
Camelback-MW-S	01/05/93	1084.02	-45.67
Camelback-MW-S	01/26/93	1083.81	-45.88
Camelback-MW-S	02/09/93	1083.64	-46.05
Camelback-MW-S	03/23/93	1083.30	-46.39
Camelback-MW-S	04/29/93	1083.46	-46.23
Camelback-MW-S	04/30/93	1083.46	-46.23
Camelback-MW-S	05/14/93	1083.63	-46.06
Camelback-MW-S	07/16/93	1084.38	-45.31
Camelback-MW-S	11/06/93	1084.99	-44.70
Camelback-MW-S	02/13/94	1083.80	-45.89
Camelback-MW-S	02/24/94	1084.26	-45.43
Camelback-MW-S	05/28/94	1086.30	-43.39
Camelback-MW-S	08/20/94	1086.27	-43.42
Camelback-MW-S	12/03/94	1086.64	-43.05
Camelback-MW-S	02/25/95	1085.82	-43.87
Camelback-MW-S	06/18/95	1085.41	-44.28
Camelback-MW-S	09/16/95	1086.08	-43.61
Camelback-MW-S	12/28/95	1085.35	-44.34
Camelback-MW-S	04/27/96	1086.70	-42.99
Camelback-MW-S	06/29/96	1087.22	-42.47
Camelback-MW-S	09/14/96	1088.05	-41.64
Camelback-MW-S	12/14/96	1087.11	-42.58
Camelback-MW-S	03/23/97	1086.61	-43.08
Camelback-MW-S	06/14/97	1087.78	-41.91
Camelback-MW-S	09/13/97	1088.08	-41.61
Camelback-MW-S	12/06/97	1087.92	-41.77
Camelback-MW-S	03/14/98	1087.32	-42.37
Camelback-MW-S	06/20/98	1087.12	-42.57

Western Technologies Inc.
NA: Data not Available

TABLE 6

SUMMARY OF GROUNDWATER ELEVATIONS

Conceptual Site Model

Central and Camelback Area-Phoenix, Arizona

Well Identification	Date Measured	Groundwater Elevation (Feet AMSL)	Water Depth to Water (feet bgs)
Camelback-MW-SW	01/26/93	1083.97	-44.31
Camelback-MW-SW	02/09/93	1083.77	-44.51
Camelback-MW-SW	03/23/93	1083.48	-44.80
Camelback-MW-SW	04/29/93	1083.57	-44.71
Camelback-MW-SW	04/30/93	1083.57	-44.71
Camelback-MW-SW	05/14/93	1083.81	-44.47
Camelback-MW-SW	07/16/93	1084.46	-43.82
Camelback-MW-SW	11/06/93	1085.28	-43.00
Camelback-MW-SW	02/13/94	1084.06	-44.22
Camelback-MW-SW	02/24/94	1084.55	-43.73
Camelback-MW-SW	05/28/94	1086.56	-41.72
Camelback-MW-SW	08/20/94	1086.61	-41.67
Camelback-MW-SW	12/03/94	1084.08	-44.20
Camelback-MW-SW	02/25/95	1086.11	-42.17
Camelback-MW-SW	06/18/95	1085.56	-42.72
Camelback-MW-SW	09/16/95	1086.20	-42.08
Camelback-MW-SW	12/28/95	1085.65	-42.63
Camelback-MW-SW	04/27/96	1086.86	-41.42
Camelback-MW-SW	06/29/96	1087.33	-40.95
Camelback-MW-SW	09/14/96	1088.23	-40.05
Camelback-MW-SW	12/14/96	1087.48	-40.80
Camelback-MW-SW	03/23/97	1086.95	-41.33
Camelback-MW-SW	06/14/97	1088.16	-40.12
Camelback-MW-SW	09/13/97	1088.08	-40.20
Camelback-MW-SW	12/06/97	1087.92	-40.36
Camelback-MW-SW	03/14/98	1087.32	-40.96
Camelback-MW-SW	06/20/98	1087.12	-41.16
Camelback-MW-W	10/07/92	1084.11	-44.75
Camelback-MW-W	12/30/92	1083.63	-45.23
Camelback-MW-W	01/05/93	1083.64	-45.22
Camelback-MW-W	01/26/93	1083.52	-45.34
Camelback-MW-W	02/09/93	1083.31	-45.55
Camelback-MW-W	03/23/93	1083.05	-45.81
Camelback-MW-W	04/29/93	1083.08	-45.78
Camelback-MW-W	04/30/93	1083.15	-45.71
Camelback-MW-W	05/14/93	1083.32	-45.54
Camelback-MW-W	07/16/93	1083.99	-44.87
Camelback-MW-W	11/06/93	1084.76	-44.09
Camelback-MW-W	02/13/94	1083.73	-45.13
Camelback-MW-W	02/24/94	1084.12	-44.74
Camelback-MW-W	05/28/94	1085.98	-42.88
Camelback-MW-W	08/20/94	1085.95	-42.91
Camelback-MW-W	12/03/94	1086.47	-42.39
Camelback-MW-W	02/25/95	1086.63	-42.23
Camelback-MW-W	06/18/95	1085.12	-43.74

Western Technologies Inc.

NA: Data not Available

TABLE 6

SUMMARY OF GROUNDWATER ELEVATIONS

Conceptual Site Model

Central and Camelback Area-Phoenix, Arizona

Well Identification	Date Measured	Groundwater Elevation (Feet AMSL)	Water Depth to Water (feet bgs)
Camelback-MW-W	09/16/95	1085.68	-43.18
Camelback-MW-W	12/28/95	1085.32	-43.54
Camelback-MW-W	04/27/96	1086.33	-42.53
Camelback-MW-W	06/29/96	1086.72	-42.14
Camelback-MW-W	09/14/96	1087.61	-41.25
Camelback-MW-W	12/14/96	1086.92	-41.94
Camelback-MW-W	03/23/97	1086.39	-42.47
Camelback-MW-W	06/14/97	1087.45	-41.41
Camelback-MW-W	09/13/97	1087.84	-41.02
Camelback-MW-W	12/06/97	1087.82	-41.04
Camelback-MW-W	03/14/98	1087.18	-41.68
Camelback-MW-W	06/20/98	1087.05	-41.81
Camelback-TW-1	10/07/92	1084.05	-45.05
Camelback-TW-1	12/30/92	1083.54	-45.56
Camelback-TW-1	01/05/93	1083.55	-45.55
Camelback-TW-1	01/26/93	1083.48	-45.62
Camelback-TW-1	02/09/93	1083.25	-45.85
Camelback-TW-1	03/23/93	1082.96	-46.14
Camelback-TW-1	04/29/93	1082.96	-46.14
Camelback-TW-1	04/30/93	1083.08	-46.02
Camelback-TW-1	05/14/93	1083.27	-45.83
Exxon-MW-A2	07/30/97	1087.32	NA
Exxon-MW-A2	08/26/97	1087.63	NA
Exxon-MW-A2	09/18/97	1087.63	NA
Exxon-MW-A2	10/30/97	1087.88	NA
Exxon-MW-A2	11/13/97	1087.84	NA
Exxon-MW-A2	12/06/97	1087.57	NA
Exxon-MW-A2	03/14/98	1087.81	NA
Exxon-MW-A8	07/26/97	1087.46	NA
Exxon-MW-A8	07/30/97	1087.44	NA
Exxon-MW-A8	08/26/97	1087.79	NA
Exxon-MW-A8	09/18/97	1087.75	NA
Exxon-MW-A8	10/30/97	1087.99	NA
Exxon-MW-A8	11/13/97	1087.95	NA
Exxon-MW-A8	12/06/97	1087.95	NA
Exxon-MW-A8	03/14/98	1087.82	NA

Western Technologies Inc.

NA: Data not Available

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1997 Annual Water Quality Report, Salt River Project.

Contained in ADEQ's WQARF File for Central and Camelback. Will be made available to the EPA upon request.

Letter, Georgia Waters, Southwest Groundwater Consultants, to David Yoblick, AREEA Investment Advisory and Management Services, Inc., "December 1996 Quarterly Ground-water Monitoring Results, One Camelback Site, Phoenix, Arizona," January 9, 1997.

Contained in the PA/SI file for One Camelback. Will be made available to the EPA upon request. Data summarized in the Conceptual Model Report previously submitted to the EPA.

"Site Assessment Report, Chevron Products Company, Former Service Station #9-3660, Facility ID #4617.01 - 4617.07, 3 West Camelback Road, Phoenix, Arizona," Holguin, Fahan, and Associates, February 14, 1997.

Contained in ADEQ's Underground Storage Tanks Section file for Chevron #9-3660. Will be made available to the EPA upon request. Data summarized in the Conceptual Model Report previously submitted to the EPA.

Letter, Georgia Waters, Southwest Groundwater Consultants, to David Yoblick, AREEA Investment Advisory and Management Services, Inc., "March 1997 Quarterly Ground-water Monitoring Results, One Camelback Site, Phoenix, Arizona," April 15, 1997.

Contained in ADEQ's Underground Storage Tanks Section file for OCI/Enco/Humble Oil/Exxon. Will be made available to the EPA upon request. Data summarized in the Conceptual Model Report previously submitted to the EPA.

"One East Camelback: Sampling Report," ADEQ Emergency Response Unit, ERU #97-036-D, May 1997.

Enclosed.

Letter, Georgia Waters, Southwest Groundwater Consultants, to David Yoblick, AREEA Investment Advisory and Management Services, Inc., "June 1997 Quarterly Ground-water Monitoring Results, One Camelback Site, Phoenix, Arizona," July 8, 1997.

Contained in the PA/SI file for One Camelback. Will be made available to the EPA upon request. Data summarized in the Conceptual Model Report previously submitted to the EPA.

"Summary of Observations and Investigation Results; AEE Oversight of Exxon's Site Investigation; One Camelback Inc., Phoenix, Arizona," AGRA Earth and Environmental Inc., September 8, 1997.

Enclosed.

"Report on Interim Site Characterization, Monitor Well Installation, and Initial Groundwater Monitoring Results, Facility ID No. 0-00848, LUST File No. 4366.01, Former Humble Oil Station No. 7-7846, One East Camelback Road, Phoenix, Arizona"; Asset Environmental Services, September 30, 1997.

Enclosed.

"Ambient Air Sampling One Camelback 5th Floor Parking Garage," Frank Mendola, Asset Environmental Services, Inc., January 29, 1998.

Enclosed.

"Groundwater Monitoring Well Installation, Former Service Station 7-7846, One East Camelback Road, Phoenix, Arizona," Elizabeth Ann Schwartz, Asset Environmental Services, Inc., February 16, 1998.

Enclosed.

"Summary of Inspection - Wastewater, One Camelback, Inc." ADEQ Water Quality Compliance Section, June 18, 1998.

Contained in the "2nd Quarter 1998 Report - Extended Dewatering Permit No. 59-540940, One Camelback Site, Phoenix, Arizona," Georgia Waters, Southwest Groundwater Consultants, Inc., July 21, 1998.

"2nd Quarter 1998 Report - Extended Dewatering Permit No. 59-540940, One Camelback Site, Phoenix, Arizona," Georgia Waters, Southwest Groundwater Consultants, Inc., July 21, 1998.

Enclosed.

Report on Corrective Action Plan, Former Service Station No. 7-7846, One East Camelback Road, Phoenix, Arizona, Asset Environmental Services, LLC, July 31, 1998.

Contained in the Report on Corrective Action Plan, Former Service Station No. 7-7846, One East Camelback Road, Phoenix, Arizona, Asset Environmental Services, LLC, September 8, 1999.

"Corrective Action Plan, Supplement No. 1," John Patton, Asset Environmental Services, LLC, November 17, 1998.

Contained in the Report on Corrective Action Plan, Former Service Station No. 7-7846, One East Camelback Road, Phoenix, Arizona, Asset Environmental Services, LLC, September 8, 1999.

"Corrective Action Plan, Supplement No. 2," John Patton, Asset Environmental Services, LLC, April 6, 1999.

Contained in the Report on Corrective Action Plan, Former Service Station No. 7-7846, One East Camelback Road, Phoenix, Arizona, Asset Environmental Services, LLC, September 8, 1999.

"Former Service Station NO. 7-7846," John Patton, Asset Environmental Services, LLC, August 13, 1999.

Contained in the Report on Corrective Action Plan, Former Service Station No. 7-7846, One East Camelback Road, Phoenix, Arizona, Asset Environmental Services, LLC, September 8, 1999.

"Site Registry Report, Central and Camelback Water Quality Assurance Revolving Fund (WQARF) Site, Southwest Corner Source Area Portion, Phoenix, Maricopa County, Arizona," ADEQ Superfund Programs Section, August 13, 1998.

Enclosed.

1998 Annual Water Withdrawal and Use Report - Provider Summary, City of Phoenix, Right/Permit No. 56-002030.0000, March 23, 1999.

Contained in ADEQ's PA/SI Reference Materials. Will be made available to the EPA upon request.

"Groundwater Monitoring Well Installation," Elizabeth Ann Schwartz, Asset Environmental Services, LLC, August 17, 1999.

Enclosed.

Report on Corrective Action Plan, Former Service Station No. 7-7846, One East Camelback Road, Phoenix, Arizona, Asset Environmental Services, LLC, September 8, 1999.

Enclosed.

Conceptual Site Model, Central and Camelback Area, Phoenix, Arizona, Western Technologies, Inc., Job No. 2189JF001, September 15, 1999.

Previously submitted to the EPA.

QUESTIONNAIRE

Preliminary Assessment Questionnaire, One Camelback, Inc., May 18, 1994.

Enclosed.

MAPS

"Sunnyslope Quadrangle," Arizona, U. S. Geological Survey 7.5-Minute Series, 1965, Photorevised 1973.

Contained in ADEQ's PA/SI Reference Materials. Will be made available to the EPA upon request.

Flood Insurance Rate Map, Maricopa County, Arizona, and Incorporated Areas, Map # 04013C1665D, Panel 1665 of 4350, Federal Emergency Management Agency, Effective Date April 15, 1988.

Contained in ADEQ's PA/SI Reference Materials. Will be made available to the EPA upon request.

Brown, James G., and D. R. Pool, Hydrogeology of the Western Part of the Salt River Valley Area, Maricopa County, Arizona, U. S. G. S. Water-Resources Investigations Report 88-4202, Tucson, Arizona, 1989.

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"Central and Camelback WQARF Site Southwest Corner Source Area Portion Site Boundary Map," ADEQ Superfund Programs Section, August 1998.

Enclosed.

CORRESPONDENCE

Letter, David Fisher, Shepherd Boyd USA, to William Carey, City of Phoenix, "Thunderbird Bank Building Architect Project No. 340," March 4, 1982.

Enclosed.

Letter, Robert Harding, Dames & Moore, to AREEA Investment Managers, Inc., "Status Report June 10-21, 1991, Environmental Investigation, One East Camelback Building, Phoenix, Arizona," June 24, 1991.

Enclosed.

Letter, Robert Harding, Dames & Moore, to David Yoblick, AREEA Investment Managers, Inc., "Status Report, Soils Investigation and Leak Detection Survey, One Camelback Building, One East Camel back Road, Phoenix, Arizona," November 21, 1991.

Enclosed.

Robert Harding, Dames & Moore, to AREEA Investment Managers, Inc., "Status Report, Ground-Water Seepage Investigation, One Camelback Building, One East Camelback Road, Phoenix, Arizona," December 23, 1991.

Enclosed.

Letter, Paul Scott, Caruso Turley Scott, to Allene Pierce-Avey, "One Camelback - Water Seepage at Bottom Garage Level," November 3, 1992.

Enclosed.

Letter, Paul G. Scott, Caruso Turley Scott, Inc., to Allene Pierce, One Camelback, Inc., "One Camelback - Water Seepage at Bottom Garage Level," November 11, 1992.

Enclosed.

Letter, Charles Wiles, Metro Environmental Company, to Paul Berkowitz, Greenberg Traurig, "Carbon Monoxide Tests in Garage," January 14, 1993.

Enclosed.

Letter, Thomas Klimek, Water Resources Associates, to David Yoblick AREEA Investment Managers, Inc., February 12, 1993.

Enclosed.

Letter, Alan Thomas, Water Resources Associates, to Allene Pierce, One Camelback, Inc., "Interim Report of Indoor Air Quality Investigation at One Camelback," March 2, 1993.

Contained in the enclosed report, "One East Camelback: Sampling Report," ADEQ Emergency Response Unit, ERU #97-036-D, May 1997.

Letter, Allene Pierce-Avey, One Camelback, Inc., to Jeff Minke, City of Phoenix, "Industrial Waste Permit Application for One East Camelback Road, Phoenix, Arizona 85012," July 21, 1993.

Enclosed.

Letter, Jeff Menke, City of Phoenix, to Allene Pierce-Avey, One Camelback, Inc., "Discharge of Groundwater from the One Camelback Building, One East Camelback Road," August 12, 1993.

Enclosed.

Memorandum, Lori Landrith, City of Phoenix, to Michael Rose, City of Phoenix, "One East Camelback - Groundwater Discharge - Area Investigation," September 23, 1993.

Enclosed.

Letter, Walter Cunningham, GPI Engineers, to Allene Pierce-Avey, One Camelback, Inc., "Air Monitoring/Sampling, Parking Garage, Fifth Level, One East Camelback, GPI Project No. 93130," October 1, 1993.

Contained in the enclosed report, "One East Camelback: Sampling Report," ADEQ Emergency Response Unit, ERU #97-036-D, May 1997.

Memorandum, John Watson, City of Phoenix, to Lori Landrith, City of Phoenix, "Aquifer Dewatering Proposal at One Camelback," October 12, 1993.

Enclosed.

Letter, Alan Olson, City of Phoenix, to Allene Pierce-Avey, AREEA Investment Managers, Inc., "One Camelback Groundwater Problem," October 13, 1993.

Enclosed.

"Garage Dewatering Pilot Project, One East Camelback, CTS Job # 93-482," November 11, 1993.

Enclosed.

Letter, Michael Y. Cannon, One Camelback, Inc., to Alan P. Olson, City of Phoenix Development Services Department, November 16, 1993.

Enclosed.

Letter, Charles Wiles, Metro Environmental Company, to Allene Pierce, One Camelback, "Air Testing of B-5," November 22, 1993.

Enclosed.

Letter, Michael Cannon, AREEA Investment Advisory Services, Inc., to Edward Fox, ADEQ, November 24, 1993.

Included as an attachment to the Preliminary Assessment Questionnaire, One Camelback, Inc., May 18, 1994.

Letter, Paul Scott, Caruso Turley Scott, Inc., to Allene Pierce, One Camelback, "Phase I Structural Review, One East Camelback, Phoenix, Arizona, CTS Job No. 93-482," December 2, 1993.

Enclosed.

Working Paper: Stephen Noel, Southwest Ground-water Consultants, Inc., to Allene Pierce-Avey, AREEA Investment Managers, Inc., "Ground-water Conditions in and around the One Camelback Property," December 31, 1993.

Enclosed.

Letter, Stephen Noel, Southwest Groundwater Consultants, Inc., to John Trujillo, City of Phoenix, "One Camelback Inc. Class B Ground-water Discharge Permit No. 9401-5296," February 28, 1994.

Enclosed.

Letter, John Trujillo, City of Phoenix, to Allene Pierce-Avey, One Camelback, "Temporary Increase in Self Monitoring for Benzene," March 14, 1994.

Enclosed.

Letter, Stephen Noel, Southwest Groundwater Consultants, Inc., to John Trujillo, City of Phoenix, "Investigative Report for the March 14, 1994, Notice of Violation - One Camelback Inc., Permit No. 9402-5296," March 28, 1994.

Enclosed.

Memorandum, Stephen Noel, Southwest Groundwater Consultants, Inc., to Michael Cannon, One Camelback, Inc., April 23, 1994.

Enclosed.

Letter: John Trujillo, City of Phoenix, to Allene Pierce-Avey, One Camelback, May 4, 1994.

Enclosed.

Letter: Charles Wiles, Metro Environmental Company, to Allene Pierce-Avey, One Camelback, May 11, 1994.

Enclosed

Letter: Georgia Waters, Southwest Groundwater Consultants, "Temporary Dewatering Withdrawal Permit No. 59-540940 for One Camelback Inc., Phoenix, Arizona," to Kathy Willman, Arizona Department of Water Resources, May 16, 1994.

Enclosed.

Letter, John Trujillo, City of Phoenix, to Allene Pierce-Avey, One Camelback, July 26, 1994.

Enclosed.

Letter, James Matteson, City of Phoenix, to Allene Pierce-Avey, One Camelback, August 11, 1994.

Enclosed.

Letter, Allene Pierce-Avery, One Camelback, Inc., to John Trujillo, City of Phoenix, "Termination of Dewatering Permit," August 30, 1994.

Enclosed.

Letter, Charles Wiles, Metro Environmental Company, to Allene Pierce-Avey, One Camelback, "One Camelback Indoor Air Quality B-5 Remediation Project," September 12, 1994.

Enclosed.

Letter, John Watson, City of Phoenix, to Allene Pierce-Avey, One Camelback, "Wastewater Discharge Permit No. 9402-5296," September 13, 1994.

Enclosed.

Letter, Bob Leivian, W. D. Manor Plumbing and Heating, Inc., to Allene Pierce-Avey, One East Camelback, October 11, 1994.

Enclosed.

Memorandum, Wayne Palsma, ADEQ Engineering Review and Permits Unit, to Brian Munson, ADEQ Water Quality Division, "One Camelback, Incorporated, NPDES Permit No. AZ0023868," October 26, 1994.

Enclosed.

Memorandum, Wayne Palsma, ADEQ Engineering Review and Permits Unit, to Ed Swanson, Engineering Review and Permits Unit, "One East Camelback, Inc., NPDES Permit No. AZ0023868," October 31, 1994.

Enclosed.

Letter, Georgia Waters, Southwest Groundwater Consultants, to Kathy Willman, Arizona Department of Water Resources, November 18, 1994.

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Letter, Georgia Waters, Southwest Groundwater Consultants, Inc., to Lawrence Ramsey, Arizona Department of Water Resources, "One Camelback Inc., 1994 Annual Reporting Pursuant to Temporary Dewatering Permit No. 59-540940," February 16, 1995.

Enclosed.

Letter, Janice Petticrew, Industrial Compliance, to Allene Pierce-Avey, One Camelback, Inc., "Confirmation of Spent Carbon Reactivation," February 23, 1995.

Enclosed.

Letter, Georgia Waters, Southwest Groundwater Consultants, Inc., to Lawrence Ramsey, Arizona Department of Water Resources, "Temporary Dewatering Withdrawal Permit No. 59-540940 for One Camelback Inc., Phoenix, Arizona," March 7, 1995.

Enclosed.

Letter, Georgia Waters, Southwest Ground-water Consultants, Inc., to Lawrence Ramsey, Arizona Department of Water Resources, "1st Quarter Report - Temporary Dewatering Permit No. 59-540940, One Camelback Site, Phoenix, Arizona," April 11, 1995.

Enclosed.

Letter: Suzanne Gunderman, Agra Earth & Environmental, to Allene Pierce-Avey, One Camelback, Inc., "Monthly Status Report, O&M Activities, June 1995, Dewatering and Water Treatment System, B-5 Level - One Camelback," July 13, 1995.

Enclosed.

Letter: Georgia Waters, Southwest Ground-water Consultants, Inc., to Lawrence Ramsey, Arizona Department of Water Resources, "2nd Quarter Report - Temporary Dewatering Permit No. 59-540940, One Camelback Site, Phoenix, Arizona," July 18, 1995.

Enclosed.

Letter, Suzanne Gunderman, Agra Earth & Environmental, to Allene Pierce-Avey, One Camelback, Inc., "Monthly Status Report, O&M Activities, August 1995, Dewatering & Water Treatment System, B-5 Level - One Camelback," September 18, 1995.

Enclosed.

Letter, Georgia Waters, Southwest Ground-water Consultants, Inc., to Lawrence Ramsey, Arizona Department of Water Resources, "3rd Quarter 1995 Report - Temporary Dewatering Permit No. 59-540940, One Camelback Site, Phoenix, Arizona," November 2, 1995.

Enclosed.

Letter, Quinn Thacker, ADEQ UST Section, to Roger Hicks, Exxon Company USA, "Determination on UST Ownership and Volunteer Status and Request for UST owner Option on Corrective Action Lead," March 6, 1996.

Enclosed.

Letter, Quinn Thacker, ADEQ UST Section, to Roger Hicks, Exxon Company USA, "Request for 14-Day and Site Characterization Reports and Notification of Case File Number Information," March 6, 1996.

Enclosed.

Letter, Herman Bouwer, Groundwater Consultant, to Peter T. Wlasuk, August 20, 1996.

Enclosed.

Letter, Quinn Thacker, ADEQ UST Section, to Roger Hicks, Exxon Company USA, "Final Request for UST Owner Option on Corrective Action Lead & SAF Payment Preference, and Denial of Multiple Release Assignments," September 3, 1996.

Enclosed.

Letter, Quinn Thacker, ADEQ UST Section, to Roger Hicks, Exxon Company USA, "Final UST Ownership Determination" October 16, 1996.

Enclosed.

Letter: Chuck Dickens, Groundwater Resources Consultants, Inc., to Jerry Smit, UST Section Manager, "Submittal of Report: Summary of Shallow Groundwater Conditions in the Vicinity of the Weico and One East Camelback Sites, Camelback Road and Central Avenue, Phoenix, Arizona, dated July 25, 1996; Lust File Number 4715.1604; Facility ID Number 0-005589," October 23, 1996.

Enclosed.

Letter, Patrick J. Paul, Snell & Wilmer, to Quinn Thacker, ADEQ UST Section, "Notice of Appeal of ADEQ Final UST Ownership Determination, LUST File #4366.01, Facility ID #0-008848," November, 18, 1996.

Enclosed.

Letter: Rolf von Oppenfeld, Kane Jorden von Oppenfeld, to Julie Anderson, EPA Region IX, March 19, 1997.

Contained in the enclosed report, "One East Camelback: Sampling Report," ADEQ Emergency Response Unit, ERU #97-036-D, May 1997.

Letter: Frank Mendola, Asset Environmental Services, Inc., to Gene Ortega, Exxon Company, USA, August 3, 1998.

Enclosed.

Letter: Michael Latin, ADEQ UST Corrective Action Section, to Gene Ortega, Exxon Company, USA, August 18, 1998.

Enclosed.

Letter: Michael Latin, ADEQ UST Corrective Action Section to Gene Ortega, Exxon Company, USA, January 8, 1999.

Enclosed.

Memo: Mary Hessler, ADEQ Site Assessment Unit, to Central and Camelback Southwest Corner Source Area Portion WQARF File, January 20, 1999.

Enclosed.

Letter: Aimee MacIlroy, Arizona Game and Fish Department, to Frank Dickerman, Western Technologies, Inc., January 26, 1999.

Contained in the Conceptual Model Report previously submitted to the EPA. Will be made available to the EPA upon request.

Letter: Patrick Paul, Snell & Wilmer, to Lavonne Watkins, ADEQ Office of Administrative Counsel, March 15, 1999.

Enclosed.

Letter: Linda Taunt, ADEQ Federal Permits and Policy Development, to Allene Pierce-Avey, One Camelback, March 24, 1999.

Enclosed.

Letter: Thomas Di Domizio, ADEQ UST Corrective Action Section, to Gene Ortega, Exxon Company, USA, April 15, 1999.

Enclosed.

Letter: Thomas Di Domizio, ADEQ UST Corrective Action Section, to Gene Ortega, Exxon Company, USA, June 29, 1999.

Enclosed.

Letter: Thomas Di Domizio, ADEQ UST Corrective Action Section, to Gene Ortega, Exxon Company, USA, July 16, 1999.

Letter: Georgia Waters, Southwest Groundwater Consultants, to Linda Taunt, ADEQ Federal Permits and Policy Development, October 14, 1999.

Included in EPA's files for NPDES Permit # AZ0023868.

PERMITS

Permit # 10267, City of Phoenix Fire Department, Division of Fire Prevention, January 31, 1974.

Enclosed.

Arizona Department of Water Resources, Emergency Dewatering Permit # 59-540940, October 7, 1993.

Enclosed.

Arizona Department of Water Resources, Temporary Dewatering Permit # 59-540940, November 23, 1993.

Enclosed.

Class B Groundwater Discharge Permit No. 9401-5296, City of Phoenix, Effective Date February 10, 1994.

Enclosed.

Arizona Department of Water Resources, Emergency Dewatering Permit # 59-540940, December 9, 1994.

Enclosed.

Authorization to Discharge Under the National Pollutant Discharge Elimination System, Permit No. AZ0023868, Effective Date December 26, 1994.

Enclosed.

Arizona Department of Water Resources, Temporary Dewatering Permit # 59-540940, March 10, 1995.

Enclosed.

ORDER

"Amended Compliance Order," February 12, 1999.

Enclosed.

OTHER

Lease Agreement, James A. and Sallie M. Berridge, Lessors, to Sahuaro Petroleum Products Company, Lessee, Maricopa County Recorder's Office, March 9, 1957, 10084-1491 through 10084-1494.

Enclosed.

Agreement Extending, Amending and Modifying Lease, Sallie M. Berridge, Lessor, to Exxon Corporation, Lessee, January 8, 1973, Maricopa County Recorder's Office, 10084-1497 through 10084-1499.

Enclosed.

Petition of Appeal to the Building Official, City of Phoenix, Building Safety Department, Case No. 41-82, February 16, 1982.

Enclosed.

Occupancy Activity Report, 1 E. Camelback Road, City of Phoenix Fire Department, January 16, 1985.

Enclosed.

Certificate of Occupancy, City of Phoenix, Building Safety Department, 1 East Camelback, February 22, 1985.

Enclosed.

Occupancy Activity Report, 1 E. Camelback Road, City of Phoenix Fire Department, April 1, 1985.

Enclosed.

Occupancy Activity Report, 1 E. Camelback Road, City of Phoenix Fire Department, January 30, 1986.

Enclosed.

Occupancy Activity Report, 1 E. Camelback Road, City of Phoenix Fire Department, May 8, 1986.

Enclosed.

Occupancy Activity Report, 1 E. Camelback Road, City of Phoenix Fire Department, August 10, 1987.

Enclosed.

1990 Census of Population and Housing, P. L. 94-171 Data, Arizona State Data Center, DES Population Statistics Unit.

Available from the Arizona State Data Center.

Occupancy Activity Report, 1 E. Camelback Road, City of Phoenix Fire Department, March 21, 1990.

Enclosed.

ADEQ Drinking Water Database, Arizona Drinking Water System Inventory, System 07424, Singing Spur Mobile Home Park, April 4, 1995.

Enclosed.

ADEQ Drinking Water Database, Arizona Drinking Water System Inventory, System 07621, Michigan Trailer Park, April 4, 1995.

Enclosed.

ADEQ Drinking Water Database, Arizona Drinking Water System Inventory, system 07025, Phoenix Municipal Water System, April 4, 1995.

Enclosed.

"Modification of an Issued NPDES Permit for One Camelback, Incorporated, One East Camelback Road, Suite 660, Phoenix, AZ 85012, NPDES Permit No. AZ0023868," U. S. Environmental Protection Agency, August 8, 1997.

Enclosed.

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), January 10, 2000.

Available in EPA's files.

Arizona Department of Environmental Quality, Water Quality Database, February 8, 2000.

On-line database. Contact ADEQ for more information.

CONTACT LOG AND CONTACT REPORTS ATTACHED

APPENDIX A

CONTACT LOG AND CONTACT REPORTS

PA/SI CONTACT LOG

Facility Name: One Camelback

EPA ID Number: AZ0001039148

NAME	AFFILIATION	PHONE	DATE	INFORMATION
Phoenix City Directories	Phoenix Public Library	(602) 262-4636	5/5/94	See Contact Report
City of Phoenix Telephone Books	Phoenix Public Library	(602) 262-4636	5/5/94	See Contact Report
Not Available	Maricopa County Assessor's Office	(602) 506-3406	5/23/94	See Contact Report
Mike Loffa	City of Phoenix Street Transportation	(602) 256-3511	3/30/95	See Contact Report
Not Available	Maricopa County Health Department	(602) 506-6464	4/4/95	See Contact Report
Not Available	Maricopa County Assessor's Office	(602) 506-3406	4/18/95	See Contact Report
Mike Rose	City of Phoenix	(602) 262-1859	4/20/95	See Contact Report
Jeff Menke	City of Phoenix	(602) 256-3190	6/8/95	See Contact Report
City of Phoenix Telephone Books	Phoenix Public Library	(602) 262-4636	6/13/95	See Contact Report
Allene Pierce-Avey	One Camelback, Inc.	(602) 265-0411	4/2/97	See Site Reconnaissance Interview and Observations Report

PA/SI CONTACT LOG

Facility Name: One Camelback

EPA ID Number: AZ0001039148

NAME	AFFILIATION	PHONE	DATE	INFORMATION
Charlotte Walton	Maroney's Cleaners	(602) 264-5964	7/17/97	See Site Reconnaissance Interview and Observations Report
Phoenix City Directories	Phoenix Public Library	(602) 262-4636	8/14/97	See Contact Report
Sonia Valdez	ADEQ Drinking Water Section	(602) 207-4619	4/10/98	See Contact Report

CONTACT REPORT

AGENCY AFFILIATION: Phoenix City Directories		
DEPARTMENT:		
ADDRESS/CITY: Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona		
CONTACT	**TITLE**	**PHONE**
1. Phoenix City	Directories	
2.		
PERSON MAKING CONTACT: Mary E. Hessler MEH		**DATE:** 5/5/94
SUBJECT: Occupancy Information		
SITE NAME: One Camelback		**EPA ID:** AZ0001039148

INFORMATION RECEIVED

Thunderbird Bank building, 1 E. Camelback Road was historically occupied by the following addresses: 4961, 4963, 4967, 4969, 4973, 4975, and 4995 N. Central Avenue and 21, 23, 25, 27, 29, 31, 35, and 37 E. Camelback Road. The former occupants of each address were looked up.

1 E. Camelback Road

Directory	Year	Page	Listing
Cole's	1980	223	No Listing
Cole's	1982	231	No Listing
Cole's	1984	244	No Listing
Cole's	1986	267	Thunderbird Bank
Cole's	1988	278	One Camelback Building
Cole's	1993		One Camelback Building

4961 N. Central Avenue

Directory	Year	Page	Listing
Mullin-Kille	1952		No Listing
Mullin-Kille	1956		Truxal Ed Realty
Mullin-Kille	1958	424	Truxal Ed Realty
Mullin-Kille	1959	438	No Listing
Mullin-Kille	1961	494	Thunderbird Leasing Co
Cole's	1963	127	American Trailer Rental
Cole's	1965	145	Harrington Co
Cole's	1967	151	No Listing
Cole's	1970	141	Olan Mills Studios
Cole's	1978	234	Olan Mills Studios
Cole's	1980	242-43	American Thought Exchange

No Listing after 1980

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback **EPA ID:** AZ0001039148

4963 N. Central Avenue

Directory	Year	Page	Listing
Mullin-Kille	1952		No Listing
Mullin-Kille	1956		Geare's Jimmy Liquor Store
Mullin-Kille	1959	438	Geare's Jimmy Liquor Store
Mullin-Kille	1961	494	Pinmey's Package Liquor
Cole's	1963	127	Pinmey's Package Liquor
Cole's	1965	145	Madison Liquors
Cole's	1967	151	Spot Liquors
Cole's	1970	141	Spot Liquors
Cole's	1972	166	Barden's Spot Liquors
Cole's	1978	234	Barden's Spot Liquors
Cole's	1980	242-43	No Listing
Cole's	1982	251	Central Skate Inc

No Listing after 1982

4967 N. Central Avenue

Directory	Year	Page	Listing
Mullin-Kille	1959	438	No Listing
Mullin-Kille	1961	494	Vacant
Cole's	1963	127	Central Camera
Cole's	1965	145	The Photo Shop
Cole's	1967	151	The Photo Shop
Cole's	1970	141	Crown Credit Corp
Cole's	1972	166	Fur, Fin, & Feather
Cole's	1975	177-78	D Heiple Red Carpet Realtor
Cole's	1978	234	D Heiple Red Carpet Realtor
Cole's	1980	242-43	No Listing
Cole's	1982	251	Thalheimer Real Estate

No Listing after 1982

4969 N. Central Avenue

Directory	Year	Page	Listing
Mullin-Kille	1952		No Listing
Mullin-Kille	1956		Phoenix Title & Trust Co
Mullin-Kille	1959	438	Phoenix Title & Trust Co
Mullin-Kille	1961	494	Maison Bernard Hair Styles
Cole's	1967	151	Maison Bernard Hair Styles
Cole's	1970	141	No Listing
Cole's	1972	166	Bill Fry's Music Center

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback **EPA ID:** AZ0001039148

4969 N. Central Avenue (Continued)

Directory	Year	Page	Listing
Cole's	1975	177-78	Bill Fry's Music Center

No Listing after 1975

4973 N. Central Avenue

Directory	Year	Page	Listing
Phoenix City Directory	1949-50		No Listing
Mullin-Kille	1951		Geare Jimmy Liquors
Mullin-Kille	1952		Geare Jimmy Liquors
Mullin-Kille	1956		Beverly's Vanity Fair
Cole's	1965	145	Beverly's Vanity Fair
Cole's	1970	141	Beverly's Vanity Fair
Cole's	1972	166	Michael's Apple Pie
Cole's	1978	234	Michael's Apple Pie
Cole's	1980	242-43	Stoney's
Cole's	1982	251	Stoney's
Cole's	1984	244	No Phone
Cole's	1990	304	No Phone

No Listing after 1990

4975 N. Central Avenue

Directory	Year	Page	Listing
Phoenix City Directory	1946-47		No Listing
Phoenix City Directory	1947-48		H S Maza (Drugs)
Mullin-Kille	1951		Maza Drugs
Cole's	1963	127	Maza Drugs
Cole's	1965	145	Adams Office Supply
Cole's	1972	166	Adams Office Supply
Cole's	1982	251	Adams Office Supply

No Listing after 1982

4995 N. Central Avenue

Directory	Year	Page	Listing
Phoenix City Directory	1946-47		Associated Service Station

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback **EPA ID:** AZ0001039148

4995 N. Central Avenue (Continued)

Directory	Year	Page	Listing
Phoenix City Directory	1949-50		W T Rose (Service Station)
Mullin-Kille	1951		Lovelady LP Service Station
Mullin-Kille	1952		Lovelady LP Servie Station
Mullin-Kille	1956		Duriscoe Gulf Service
Mullin-Kille	1959	438	Duriscoe Gulf Service
Mullin-Kille	1961	494	Driscoe's Humble Service Sta
Cole's	1963	127	George Enco
Cole's	1965	145	Duriscoe Service Station
Cole's	1970	141	Duriscoe Service Station
Cole's	1972	166	Duriscoe Enco Products
Cole's	1975	177-78	Fotomat
Cole's	1982	251	Fotomat

No Listing after 1982

21 E. Camelback Road

Directory	Year	Page	Listing
Phoenix City Directory	1947-48		No Listing
Phoenix City Directory	1948-49		Bank of Douglas
Phoenix City Directory	1949-50		Bank of Douglas
Mullin-Kille	1951		Vacant
Mullin-Kille	1952		Norell, Al, Co
Mullin-Kille	1956		Norell, Al, Co Realtors
Mullin-Kille	1958	406-07	Olson's Shoe Repair
Mullin-Kille	1959	420	Vacant
Mullin-Kille	1961	473	Kaplan Melvin Optometrist
Cole's	1967	139	Kaplan Melvin Optometrist

No Listing after 1967

23 E. Camelback Road

Directory	Year	Page	Listing
Phoenix City Directory	1946-47		No Listing
Phoenix City Directory	1947-48		V M Curry (Photographer)

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback **EPA ID:** AZ0001039148

23 E. Camelback Road (Continued)

Directory	Year	Page	Listing
Phoenix City Directory	1948-49		Don Keller's Photo Lab
Phoenix City Directory	1949-50		Don Keller's Photo Lab
Mullin-Kille	1951		Camelback Photo Center
Mullin-Kille	1956		Camelback Photo Center
Mullin-Kille	1961	473	Camelback Photo Center
Cole's	1963	117	No Listing
Cole's	1965	134	Phoenix Uniform Center
Cole's	1975	164	Phoenix Uniform Center
Cole's	1978	216	Stan Gilson Uniforms
Cole's	1980	223	Stan Gilson Uniforms

No Listing after 1980

25 E. Camelback Road

Directory	Year	Page	Listing
Phoenix City Directory	1946-47		No Listing
Phoenix City Directory	1947-48		Steven's Beauty Salon
Phoenix City Directory	1949-50		Steven's Beauty Salon
Mullin-Kille	1951		Pastor, Marie, Beauty Salon
Mullin-Kille	1956		Pastor's, Marie, Beauty Salon
Mullin-Kille	1958	406-07	Beauty by Eugene's
Mullin-Kille	1959	420	Beauty by Eugene's
Mullin-Kille	1961	473	Camelback Coiffeurs
Cole's	1967	139	Camelback Coiffeurs
Cole's	1972	153	Camelback Coiffeur
Cole's	1975	164	Bell Jewelers
Cole's	1978	216	New to Me
Cole's	1980	223	New to Me

No Listing after 1980

27 E. Camelback Road

Directory	Year	Page	Listing
Phoenix City Directory	1947-48		No Listing

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback **EPA ID:** AZ0001039148

27 E. Camelback Road (Continued)

Directory	Year	Page	Listing
Phoenix City Directory	1948-49		Esquire Cleaners
Phoenix City Directory	1949-50		Esquire Cleaners
Mullin-Kille	1951		Esquire Cleaners
Mullin-Kille	1952		House of Notions
Mullin-Kille	1956		No Listing
Mullin-Kille	1958	406-07	Vacant
Mullin-Kille	1959	420	Squaw Center Finer Fabrics
Mullin-Kille	1961	473	Plaza Barber Shop
Cole's	1965	134	Plaza Barber Shop
Cole's	1978	216	Plaza Barber Shop
Cole's	1980	223	Metropolitan Marketing

No Listing after 1980

29 E. Camelback Road

Directory	Year	Page	Listing
Phoenix City Directory	1946-47		No Listing
Phoenix City Directory	1947-48		House of Notions
Mullin-Kille	1956		House of Notions
Mullin-Kille	1958	406-07	No Listing
Mullin-Kille	1959	420	Squaw Center Finer Fabrics
Mullin-Kille	1961	473	Culshaw Star Safes & Vaults
Cole's	1963	117	No Listing
Cole's	1965	134	No Listing
Cole's	1967	139	B Cavanaugh Real Estate
Cole's	1975	164	B Cavanaugh Real Estate
Cole's	1978	216	No Listing
Cole's	1980	223	Bra Command Performance
Cole's	1982	231	Bra Command Performance

No Listing after 1982

31 E. Camelback Road

Directory	Year	Page	Listing
Mullin-Kille	1951		No Listing
Mullin-Kille	1952		House of Notions

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH | **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback | **EPA ID:** AZ0001039148

31 E. Camelback Road (Continued)

Directory	Year	Page	Listing
Mullin-Kille	1956		No Listing
Mullin-Kille	1959	420	No Listing
Mullin-Kille	1961	473	Camelback Health Foods
Cole's	1972	153	Camelback Health Foods

No Listing after 1972

33 E. Camelback Road

Directory	Year	Page	Listing
Phoenix City Directory	1947-48		No Listing
Phoenix City Directory	1948-49		Windsor Shop (Men's Wear)
Mullin-Kille	1956		Windsor Shop

No Listing after 1956

35 E. Camelback Road

Directory	Year	Page	Listing
Phoenix City Directory	1946-47		No Listing
Phoenix City Directory	1947-48		Pay N Takit
Phoenix City Directory	1948-49		Kool Spot (Restaurant)
Mullin-Kille	1951		Kool Spot
Mullin-Kille	1952		Refused Into
Mullin-Kille	1956		Nelson's Gourmet Shop
Mullin-Kille	1958	406-07	Upton's Candy Store
Mullin-Kille	1961	473	Upton's Candy Store
Cole's	1963	117	Katz Sandwich Shop
Cole's	1978	216	Katz Sandwich Shop
Cole's	1982	231	Katz Sandwich Shop

No Listing after 1982

37 E. Camelback Road

Directory	Year	Page	Listing
Phoenix City Directory	1947-48		No Listing

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback **EPA ID:** AZ0001039148

37 E. Camelback Road (Continued)

Directory	Year	Page	Listing
Phoenix City Directory	1948-49		Pay N Takit
Mullin-Kille	1956		Pay N Takit
Mullin-Kille	1958	406-07	Thom McAn Shoes
Cole's	1967	139	Thom McAn Shoes
Cole's	1970	130	Empress Beauty & Barber
Cole's	1980	223	Empress Beauty & Barber
Cole's	1982	231	Antique Faire

No Listing after 1982

The vacant lot at the northwest corner of Central Avenue and Camelback is one lot that includes the following addresses: 5004, 5014, 5016, and 5018 N. Central Avenue, and 4 and 8 W. Camelback Road.

5004 N. Central Avenue

Directory	Year	Page	Listing
Phoenix City Directory	1949-50		No Listing
Mullin-Kille	1951		Bittner B H Service Station
Mullin-Kille	1956		Bittner Union Service Station
Mullin-Kille	1959	438	Bittner Union Service Station
Mullin-Kille	1961	494	Cox's Union Service Station
Cole's	1967	151	Cox's Union Service Station

No Listing after 1967

5014 N. Central Avenue

Directory	Year	Page	Listing
Phoenix City Directory	1949-50		No Listing
Mullin-Kille	1951		Windsor Square Dry Cleaners
Mullin-Kille	1956		Windsor Square Dry Cleaners
Mullin-Kille	1959	438	Windsor Square Dry Cleaners
Mullin-Kille	1961	494	Vacant

No Listing after 1961.

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback **EPA ID:** AZ0001039148

5016 N. Central Avenue

Directory	Year	Page	Listing
Phoenix City Directory	1948-49		No Listing
Phoenix City Directory	1949-50		Kistler's Radar Sandwiches
Mullin-Kille	1951		King's Women's Apparel
Mullin-Kille	1959	438	King's Women's Apparel
Mullin-Kille	1961	494	Baskin-Robbins
Cole's	1980	242-3	Baskin-Robbins
Cole's	1993		Baskin-Robbins

Presently occupied by Baskin-Robbins.

5018 N. Central Avenue

Directory	Year	Page	Listing
Phoenix City Directory	1948-49		No Listing
Phoenix City Directory	1949-50		Andrew Reichardt Interiors
Mullin-Kille	1956		Andrew Reichardt Interiors
Mullin-Kille	1958	424	Vacant
Mullin-Kille	1959	438	Household Financial Corp
Cole's	1967	151	Household Financial Corp
Cole's	1975	177-78	Household Financial Corp
Cole's	1978	234	Little Professor Book Center
Cole's	1980	242-43	Handbags Unlimited
Cole's	1982	251	Handbags Unlimited
Cole's	1984	265	Arizona Trading & Distributing
Cole's	1986	289	No Listing
Cole's	1988	300	Plantability Skills
Cole's	1990	304	Next to Nature
Cole's	1993		Next to Nature

Presently occupied by Next to Nature.

4 W. Camelback Road

Directory	Year	Page	Listing
Phoenix City Directory	1948-49		No Listing
Phoenix City Directory	1949-50		The Broiler (Restaurant)

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH | **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback | **EPA ID:** AZ0001039148

4 W. Camelback Road (Continued)

Directory	Year	Page	Listing
Mullin-Kille	1951		Bobbie Pin Beauty Salon
Mullin-Kille	1956		Vacant
Mullin-Kille	1958	409	No Listing
Mullin-Kille	1959	422	Duke Beauty Salon
Mullin-Kille	1961	476	Totem Pole Bar
Cole's	1963	118	No Listing
Cole's	1967	141	No Listing
Cole's	1970	132	Layton Union Service
Cole's	1972	156	Pete's Union Oil
Cole's	1975		B & G Union 76
Cole's	1978	219	Union Oil Service
Cole's	1980	227	No Listing
Cole's	1984	248	No Listing
Cole's	1986	271	Union 76 Carioca
Cole's	1993		Union 76 Carioca

Presently a vacant lot.

8 W. Camelback Road

Directory	Year	Page	Listing
Phoenix City Directory	1949-50		No Listing
Mullin-Kille	1951		Tic Toc Tavern
Mullin-Kille	1956		Totem Pole Bar
Cole's	1967	141	Totem Pole Bar

No listing after 1967.

The former occupants of Kinko's Copies, 4801 & 4803 N. Central Avenue, were also looked up.

4801 N. Central Avenue

Directory	Year	Page	Listing
Mullin-Kille	1951		No Listing
Mullin-Kille	1956		Malco Restaurants Inc.
Mullin-Kille	1958	424	Malcoff's Stein & Sirloin
Cole's	1965	145	Malcoff's Stein & Sirloin
Cole's	1967	151	No Listing
Cole's	1970	141	Stein & Sirloin
Cole's	1972	166	No Listing

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback **EPA ID:** AZ0001039148

4801 N. Central Avenue (Containued)

Directory	Year	Page	Listing
Cole's	1975	177-78	N Y Bagels & Bialys
Cole's	1978	234	Bagel Joynt
Cole's	1980	242-43	Munch A Bagel
Cole's	1982	251	Munch A Bagel
Cole's	1984	265	Opie Taylor's Pizza
Cole's	1986	289	Little Italy Restaurant
Cole's	1988	300	Kinko's Copies
Cole's	1993		Kinko's Copies

Presently occupied by Kinko's Copies.

4803 N. Central Avenue

Directory	Year	Page	Listing
Mullin-Kille	1951		No Listing
Mullin-Kille	1956		Malcoff's Delicatessin
Mullin-Kille	1958	424	Malcoff's Stein & Sirloin
Mullin-Kille	1959	438	No Listing
Cole's	1975	177-78	T Y Lorran's Mens
Cole's	1978	234	No Listing
Cole's	1980	242-43	Becker Uniforms
Cole's	1988	300	Becker Uniforms
Cole's	1993		No Listing

Presently occupied by Kinko's Copies.

4805 N. Central Avenue

Directory	Year	Page	Listing
Mullin-Kille	1956		Vacant
Mullin-Kille	1958	424	Olan Mills Studio
Cole's	1967	151	Olan Mills Studio
Cole's	1970	141	Maternity Shop
Cole's	1972	166	A&A Litho
Cole's	1975	177-78	A&A Litho
Cole's	1978	234	No Listing
Cole's	1980	242-43	Oakwoode Antiques
Cole's	1982	251	No Listing
Cole's	1984	265	No Listing
Cole's	1986	289	Adventure III

No listing after 1986. Presently vacant.

CONTACT	TITLE	PHONE
1. Phoenix City Directory		

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback **EPA ID:** AZ0001039148

The following addresses were also checked because dry cleaners operated there:

4821 N. Central Avenue

Directory	Year	Page	Listing
Phoenix City Directory	1949-50		No Listing
Mullin-Kille	1951		Phoenix Laundry & Dry Cleaners
Mullin-Kille	1959	438	Phoenix Laundry & Dry Cleaners
Cole's	1963	127	Phoenix Laundry & Dry Cleaning
Cole's	1965	145	Tom Gilroy Realty
Cole's	1967	151	Don Heiple & Associates
Cole's	1970	141	Don Heiple & Associates
Cole's	1972	166	Jeanne Sweets
Cole's	1975	177-78	White Shield Nutrition Center
Cole's	1978	234	Golden Temple Restaurant
Cole's	1980	242-43	Golden Temple Restaurant
Cole's	1982	251	New Age Health Center
Cole's	1984	265	New Age Health Center

No listing after 1984. Presently occupied by the drive-in teller for Thunderbird Bank.

5104 N. Central Avenue

Directory	Year	Page	Listing
Mullin-Kille	1951		No Listing
Mullin-Kille	1952		Blue, Sam L., Dry Cleaners
Mullin-Kille	1963	127	Blue, Sam L. Dry Cleaners
Mullin-Kille	1965	145	Uptowne Dry Cleaning
Cole's	1975	177-78	Uptowne Dry Cleaning
Cole's	1988	300	Uptowne Dry Cleaning
Cole's	1993		Uptowne Dry Cleaning

Presently occupied by Uptowne Dry Cleaning.

CONTACT REPORT

AGENCY AFFILIATION: City of Phoenix Telephone Books		
DEPARTMENT:		
ADDRESS/CITY: Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona		
CONTACT	**TITLE**	**PHONE**
1. City of Phoenix	Telephone Books	
2.		
PERSON MAKING CONTACT: Mary E. Hessler MEH	**DATE:** 5/5/94	
SUBJECT: Occupancy Information		
SITE NAME: One Camelback	**EPA ID:** AZ0001039148	

INFORMATION RECEIVED

The yellow pages of the City of Phoenix telephone book were consulted. The following information was listed under the "Cleaners and Dyers" heading.

Esquire Laundry and Dry Cleaning was listed at 27 E. Camelback Road in the 1951 telephone directory, but was not listed in the 1952 telephone directory.

Phoenix Laundry and Dry Cleaning was listed at N. Central Avenue and Mariposa in the 1951 and 1952 directories. It was listed at 4821 N. Central Avenue in the 1960 and 1964 directories, but was not listed at this address in the 1965 directory. Phoenix Laundry and Dry Cleaning continued to operate at other locations in Phoenix through 1974. The 1961 ad read "Established since 1893."

Blue, Sam L., Dry Cleaners was listed at 5104 N. Central in the 1952 and 1960 directories. Uptowne Dry Cleaning is the present occupant of 5104 N. Central.

Windsor Square Dry Cleaners was listed at 5014 N. Central in the 1951, 1952, and 1960 directories. Windsor Square was listed at 167 W. Camelback Road in the 1961, 1966, and 1972 directories. There was no listing for Windsor Square in the 1973 directory. The 1961 ad stated "We operate our own plant."

CONTACT	TITLE	PHONE
1. City of Phoenix	Telephone Books	

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback **EPA ID:** AZ0001039148

Maroney's was listed at 4902 N. Central Avenue in the 1952 and 1960 directories. Best Dry Cleaners was listed at 1515 N. 7th Avenue in the 1951 directory.

The following information was gathered from the yellow pages under the heading "Photographers."

Don Keller's Photo Lab was listed at 23 E. Camelback Road in the 1948 directory. The advertisement included "Custom Photo Finishing" and "Fine Grain Film Developing." Don Keller was listed at 316 W. Mariposa in 1951.

The following information was gathered from the yellow pages under the heading "Photographic Equipment and Supplies."

Camelback Photo Center was listed at 23 W. Camelback Road in the 1951 and 1960 directories. The ad stated "Photo-finishing" and "Everything Photographic."

The Photo Shop was listed at 4967 N. Central Avenue in the 1964, 1965, 1966, 1967, and 1968 directories. The Photo Shop was not listed at 4967 N. Central in the 1963 or 1969 directories, but was listed at other locations in Phoenix.

Central Camera was listed at 4967 N. Central Avenue in the 1962 and 1963 directories, but was not listed in the 1961 or 1964 directories.

The following information was listed under the heading "Photofinishing-Retail."

Fotomat was listed at 4995 N. Central Avenue in the 1973, 1974, 1976, and 1982 directories. Fotomat was not listed at this address in the 1972 or 1983 directories. Fotomat operated at other locations in Phoenix in 1983.

CONTACT	TITLE	PHONE
1. City of Phoenix	Telephone Books	

PERSON MAKING CONTACT: Mary E. Hessler MEH | **DATE:** 5/5/94

SUBJECT: Occupancy Information

SITE NAME: One Camelback | **EPA ID:** AZ0001039148

The following information was listed under the heading "Printers."

A&A Litho was listed at 4805 N. Central in the 1972, 1976, and 1977 directories. The ad in the 1972 directory stated "Complete Facilities"; "Offset & Letterpress"; and "Typesetting & Bindery." In the 1978 directory, A&A Litho was listed at 4700 N. 12th Street.

Ads under the heading "Uniforms" were checked. Phoenix Uniform Center's 1969 ad stated "Uniforms at discount." Becker Uniforms' ad stated "Arizona Discount Outlet." Stan Gilson Uniforms' ads included several brand names and occupations, and also stated "Special Service to Groups and Graduation." The ad was observed in the 1976 directory and in other directories as well. The ads did not mention laundering or uniform service.

CONTACT REPORT

AGENCY AFFILIATION: Maricopa County Assessor's Office		
DEPARTMENT:		
ADDRESS/CITY: 301 W. Jefferson, Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona 85003		
CONTACT	**TITLE**	**PHONE**
1.		506-3406
2.		
PERSON MAKING CONTACT: Mary E. Hessler MEH		**DATE:** 5/23/94
SUBJECT: Ownership Information		
SITE NAME: Unocal 3166		**EPA ID:**

INFORMATION RECEIVED

The owner of Lot 83 at the northwest corner of Central Avenue and Camelback Road (which includes 5014 N. Central) is:
Medlock, Natalie TR
P. O. Box 9386
Phoenix, AZ 85068
Docket: 870644714, 10/21/87
Parcel: 162-23-46D

5104 N. Central Avenue corresponds to Medlock PL and PT Lot 37, north 48'. The owner is:
Silliman, Neil D and Marilyn
11221 N. 31st Place
Phoenix, AZ 85020
Docket: 14685-0705, 9/15/90
Parcel: 162-23-76A

The One Camelback building consists of three parcels: 155-27-001, 155-27-002, and 155-27-003. All three parcels are owned by:
One Camelback Inc.
1 E. Camelback Road, Suite 650
Phoenix, AZ 85012
Docket: 850233258, 5/22/85

CONTACT	TITLE	PHONE
1.		

PERSON MAKING CONTACT: Mary E. Hessler MEH **DATE:** 5/23/94

SUBJECT: Ownership Information

SITE NAME: Unocal 3166 **EPA ID:**

4817 N. Central Avenue consists of two parcels, 155-27-032A and 155-27-032B. Parcel A is at the southeast corner of CentralAvenue and Mariposa. Parcel B is directly south of Parcel A. The dimensions of parcel 32A are 75.01' x 116'. The dimensions of parcel 32B are 60' x 116'. The owner of both parcels is:

Thunderbird Bank
2031 W. Camelback Road
Phoenix, AZ 85015
Docket: 840296138, 7/6/84

The property at 4902 N. Central corresponds to parcel 155-28-080. The dimensions are 64.5' x 160'. The owner is:

Jerry Steer
2515 E. Thomas Road
Phoenix, AZ 85016-7945
Docket: 840492709, 11/14/84

The property at the southeast corner of 3rd Avenue and Camelback road consists of three parcels: 155-28-59A, 155-28-60, and 155-28-61. The owner of all three parcels is:

Quan, Donald C & Polly Co-TR
2929 E. Turney
Phoenix, AZ 85016
Docket: 890542352, 11/24/89

CONTACT REPORT

AGENCY AFFILIATION: City of Phoenix		
DEPARTMENT: Street Transportation		
ADDRESS/CITY: 200 W. Washington Street, Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona 85003		
CONTACT	**TITLE**	**PHONE**
1. Mike Loffa	Storm Drain Program	256-3511
2.		
PERSON MAKING CONTACT: Mary E. Hessler MEH	**DATE:** 3/30/95	
SUBJECT: Storm Drains at Central and Camelback		
SITE NAME: One Camelback	**EPA ID:** AZ0001039148	

INFORMATION RECEIVED

The storm drains at Central Avenue and Camelback Road carry stormwater along Camelback Road to Central Avenue. Stormwater flows through the storm drain along Central (called the ADOT Tunnel) until it reaches the Salt River.

One Camelback has recently requested a NPDES permit from the EPA. One Camelback recently connected the sump discharge to the storm drain system. Thus, the sump is no longer connected to the sewer. One Camelback has sampled the liquid discharged from the sump, and has found nothing of significance. Sampling results are sent to the City on a monthly basis.

CONTACT REPORT

AGENCY AFFILIATION: Maricopa County Health Department		
DEPARTMENT: Bureau of Air Pollution Control		
ADDRESS/CITY: 2406 S. 24th Street, Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona		
CONTACT	**TITLE**	**PHONE**
1. Linda Stevens		506-6464
2.		
PERSON MAKING CONTACT: Mary Hessler MEH	**DATE:** 4/4/95	
SUBJECT: Air Permit Information		
SITE NAME: Ari-Tex Rubber	**EPA ID:**	

INFORMATION RECEIVED

The Maricopa County Bureau of Air Pollution Control has an archived file for the One Camelback building. The permit expired on February 28, 1994. The permit was for a power generator. The file has been closed out and archived.

The County had no records for the following businesses: Duriscoe Service Station, Olan Mills Studios, and Adams Office Supply.

The County does not issue permits for businesses such as restaurants.

CONTACT REPORT

AGENCY AFFILIATION: Maricopa County Assessor's Office		
DEPARTMENT:		
ADDRESS/CITY: 301 W. Jefferson, Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona 85003		
CONTACT	**TITLE**	**PHONE**
1.		506-3406
2.		
PERSON MAKING CONTACT: Mary E. Hessler MEH		**DATE:** 4/18/95
SUBJECT: Ownership Information		
SITE NAME: One Camelback		**EPA ID:** AZ0001039148

INFORMATION RECEIVED

The One Camelback building consists of three parcels: 155-27-001, 155-27-002, and 155-27-003. The area of the three parcels was calculated to be approximately 1.5 acres.

CONTACT	TITLE	PHONE
1.		

PERSON MAKING CONTACT: Mary E. Hessler MEH | **DATE:** 4/18/95

SUBJECT: Ownership Information

SITE NAME: One Camelback | **EPA ID:** AZ0001039148

4817 N. Central Avenue consists of two parcels, 155-27-032A and 155-27-032B. Parcel A is at the southeast corner of CentralAvenue and Mariposa. Parcel B is directly south of Parcel A. The dimensions of parcel 32A are 75.01' x 116'. The dimensions of parcel 32B are 60' x 116'. The owner of both parcels is:

Thunderbird Bank
2031 W. Camelback Road
Phoenix, AZ 85015
Docket: 840296138, 7/6/84

The property at 4902 N. Central corresponds to parcel 155-28-080. The dimensions are 64.5' x 160'. The owner is:

Jerry Steer
2515 E. Thomas Road
Phoenix, AZ 85016-7945
Docket: 840492709, 11/14/84

The property at the southeast corner of 3rd Avenue and Camelback road consists of three parcels: 155-28-59A, 155-28-60, and 155-28-61. The owner of all three parcels is:

Quan, Donald C & Polly Co-TR
2929 E. Turney
Phoenix, AZ 85016
Docket: 890542352, 11/24/89

CONTACT REPORT

AGENCY AFFILIATION: City of Phoenix		
DEPARTMENT: Wastewater Discharge Permits		
ADDRESS/CITY: 3319 W. Earll Drive, Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona 85017		
CONTACT	**TITLE**	**PHONE**
1. Mike Rose		262-1859
2.		
PERSON MAKING CONTACT: Mary Hessler MEH		**DATE:** 4/20/95
SUBJECT: Wastewater Discharge Permits		
SITE NAME: One Camelback	**EPA ID:**	

INFORMATION RECEIVED

Presently, there are no wastewater discharge permits for the One Camelback Building, located at 1 E. Camelback Road. The building used to discharge water from the basement to the sanitary sewer. But, this has been changed, and, now, the water is discharged to the storm sewer.

CONTACT REPORT

AGENCY AFFILIATION: City of Phoenix		
DEPARTMENT: Storm Drain Program		
ADDRESS/CITY: 200 W. Washington, Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona 85003-1611		
CONTACT	**TITLE**	**PHONE**
1. Jeff Menke		256-3190
2.		
PERSON MAKING CONTACT: Mary Hessler MEH	**DATE:** 6/8/95	
SUBJECT: NPDES Permit Information		
SITE NAME: One Camelback	**EPA ID:**	

INFORMATION RECEIVED

The One Camelback building pumps groundwater from the parking garage using a sump pump. The water is treated via carbon filtration before it enters the sump. The treated water is then discharged to the City of Phoenix storm drain system.

One Camelback obtained a NPDES permit, # AZ0023868, effective date 12/26/94, from the USEPA. Groundwater monitoring is required. One Camelback sends monitoring results to the ADEQ Surface Water Section, Enforcement Unit, and sends copies to the City of Phoenix.

Groundwater is sampled from the sump, after it passes through the carbon filter. No TCE or PCE have been indicated in groundwater monitoring samples to date. Some BTEX have been found, but there have been no permit violations to date.

CONTACT REPORT

AGENCY AFFILIATION: Phoenix Telephone Directories		
DEPARTMENT:		
ADDRESS/CITY: Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona		
CONTACT	**TITLE**	**PHONE**
1. Phoenix City	Directories	
2.		
PERSON MAKING CONTACT: Mary E. Hessler MEH	**DATE:** 6/13/95 & 6/19/95	
SUBJECT: Occupancy Information		
SITE NAME: One Camelback	**EPA ID:**	

INFORMATION RECEIVED

Thunderbird Bank building, 1 E. Camelback Road was historically occupied by the following addresses: 4961, 4963, 4967, 4969, 4973, 4975, and 4995 N. Central Avenue and 21, 23, 25, 27, 29, 31, 35, and 37 E. Camelback Road. Previous research turned up several businesses such as office supply, equipment rental, and photography. (See Contact Report: Phoenix City Directories, 5/5/94). Some of these businesses were looked up in the yellow pages to see if there were any indications of chemical usage.

Thunderbird Leasing Co and American Trailer Rental:

Both American Trailer Rental and Thunderbird Leasing Co were listed at 4961 N. Central Avenue in the White pages, 1961 and 1962. However, in the yellow pages under the heading "Trailer Renting and Leasing," the advertisement for American Trailer Rental listed "where to rent them," which included some gas stations, which were several miles from Central and Camelback.

Olan Mills Studios:

Olan Mills Studios was listed in the yellow pages under "Photographers-Portrait" from 1967 through 1978. The "North Central Studio" was listed at 4961 N. Central from 1967 through 1970. The "Business Office" was listed at 4961 N. Central frm 1971 through 1978.

CONTACT	TITLE	PHONE
1. Phoenix Tel. Directory		

PERSON MAKING CONTACT: Mary E. hessler MEH | **DATE:** 6/13/95

SUBJECT: Occupancy Information

SITE NAME: One Camelback | **EPA ID:**

Adams Office Supply:

Adams Office Supply & Equipment Inc. at 4975 N. Central was listed under "Office Supplies" in the yellow pages from 1962 through 1980. Adams Office Supply & Equipment Inc. at 4975 N. Central was listed under "Stationers-Retail" from 1981 through 1983. The 1965 ad in the yellow pages read "Exclusive McDowell-Craig Office Furniture." Other items advertised included pens, accounting forms, multi-kopy ribbon, Victor visible equipment, and filing supplies.

Various Service Stations and Fotomat at 4995 N. Central:

A service station was first listed in the yellow pages under "Service Stations" in the Summer, 1939, directory. Several different service stations were listed at the site in the following years. From 1975 until 1982, Fotomat at 4995 N. Central was listed in the yellow pages under "Photofinishing-Retail."

V M Curry (Photographer)

The Curry Photographic Studio was listed at 23 E. Camelback Road in the June, 1947, yellow pages.

Esquire Cleaners, Squaw Center Finer Fabrics, and House of Notions

Esquire Laundry & Dry Cleaning at 27 E. Camelback Road was listed in the yellow pages under "Cleaners" from July, 1948, through January, 1950. No other cleaners were listed 27, 29, and 31 E. Camelback Road through 1959. Neither Squaw Center nor House of Notions was listed under "Cleaners" through 1959.

SITE RECONNAISSANCE INTERVIEW AND OBSERVATIONS REPORT

Arizona Department of Environmental Quality
3033 North Central Avenue
Phoenix, AZ 850012

OBSERVATIONS MADE BY: DATE: April 2, 1997

Mary E. Hessler
Shelley J. Miller

FACILITY REPRESENTATIVE and TITLE:

Allene Pierce-Avey, One Camelback , Inc.

SITE:

One Camelback

EPA ID: AZ0001039148 STATE ID: 1342

INFORMATION RECEIVED:

The site includes a paved parking area, a concrete ramp to an underground parking garage, one office building, and landscaped areas. The site is not fenced, but access to the underground parking garage is restricted. During business hours, a parking card system limits access to the garage. After business hours, the gates to the garage are closed and locked.

The site is bordered to the north by Camelback Road, to the south by Mariposa Street, to the east by 1st Street, and to the west by Central Avenue. North of Camelback Road is Uptown Plaza. South of Mariposa Street is a vacant lot and the Thunderbird Bank Drive-in Teller. East of 1st Street is the Bank of America and a residential area. West of Central Avenue is Isberto's Restaurant, Maroney's Cleaners, and two vacant lots.

The building has office space for up to 600 workers. One Camelback estimates that aproximately 550 perople presently work in the building.

History: Onsite workers began to notice odors in the fifth level of underground parking in 1989. One Camelback traced the odors to the oil/water separator. It appeared that groundwater was leaking into the oil/water separator. In the following years, groundwater began to leak into the floor of the parking garage around the steel pylons and through cracks in the floor. A black, slimy substance was observed in these areas.

One Camelback initially pumped the groundwater to the City of Phoenix sewer system, and now pumps to the City of Phoenix storm drain system, which discharges to the waters of the state. One Camelback obtained a NPDES permit in accordance with applicable laws.

The water treatment system includes 14 shallow groundwater collection wells in the bottom of the parking garage. Water from these wells is sent to a treatment unit to remove microbial growth. The water is then sent to a prefilter and two granular activated carbon (GAC) units in series. Wastes are taken to the Butterfield Landfill for disposal, and One Camelback receives a certificate of disposal.

SITE RECONNAISSANCE INTERVIEW AND OBSERVATIONS REPORT

Arizona Department of Environmental Quality
3033 North Central Avenue
Phoenix, AZ 850012

OBSERVATIONS MADE BY: DATE: 7/17/97

Mary Hessler, Environmental Health Specialist II
Tom Lazzelle, Environmental Health Specialist II

FACILITY REPRESENTATIVE and TITLE:

Charlotte Walton, President, Maroney's Cleaners
Dick Walton, Maroney's Cleaners
Craig, Manager, Maroney's Cleaners
Patrick Paul, Snell & Wilmer (Represents Maroney's Cleaners)
Walter Rusinek, Gallagher & Kennedy (Represents Steer West Enterprises)

SITE:

Maroney's Cleaners, 4902 N. Central Avenue, Phoenix, Arizona

EPA ID: AZD981693351 STATE ID: 1337

INFORMATION RECEIVED:

The Maroney's dry cleaning facility is located in a building on the northwest corner of Central Avenue and Mariposa Street. There are unpaved vacant lots adjacent to the north and to the west of the site. There is a vacant paved lot to the northwest of the site. South of Mariposa Street is Raliberto's restaurant. East of Central Avenue is the One Camelback building and the drive-in teller for Thunderbird Bank.

The dry cleaning machine is located in the center of the building. According to Maroney's, the dry cleaning machine has always been in this location. There was one white five-gallon bucket next to (south) of the machine with tubing in it. The bucket appeared to be slightly wet, with less than ¼ inch of clear liquid standing in it. There is an evaporator (a.k.a. separator) on the north side of the unit. According to Maroney's, the wastewater from the dry cleaning machine contains 120 parts per billion of tetrachloroethylene (PCE). The evaporator evaporates the wastewater and discharges it through a pipe leading to the roof.

Sludge from the dry cleaning machine is kept in three closed 30-gallon drums labeled "hazardous waste", and is disposed by Safety-Kleen. Safety-Kleen has been handling the waste since Charlotte Walton has operated the business (1986). Waste filters from the dry cleaning machine are also disposed by Safety-Kleen.

The Maroney's facility is connected to the sewer. Maroney's is not aware of any septic tanks or cesspools onsite. Patrick Paul thinks that the site was connected to the sewer in 1952.

Maroney's keeps a copy of Material Safety Data Sheets onsite. Chemicals used in the dry cleaning process include PCE and Stoddard solvent. Several spotters are also used, but the indgredients are trade secrets in most cases. Small amounts of spotters are used to remove stains.

Maroney's also operates a laundry onsite. There are several washing machines and dryers, along with press equipment in the large room on the west side of the building.

There is a boiler in a covered area on the north side of the building. The boiler supplies steam for the press equipment used onsite. The boiler is fed from the boiler make-up tank. There is a sump, approximately 3 feet by 3 feet and 2 feet deep, on the east side of the boiler, and it appears to have 2 to 3 inches of water in it. This water is blowdown from the boiler. There is a hole, about 1 inch wide, at one corner of the sump cover.

The floor of the building and the covered area is concrete. There did not appear to be any sumps or floor drains inside the building. The concrete appeared to be cracked in some places, but was intact around the dry cleaning machine. The land surrounding the building is paved and is used for parking. No lint trap was observed.

The north part of the building includes offices, a storage area, and a break room.

The Grand Canal, located approximately ⅛ mile south of the site, is not bermed.

CONTACT REPORT		
AGENCY AFFILIATION: Phoenix City Directories		
DEPARTMENT:		
ADDRESS/CITY: Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona		
CONTACT	**TITLE**	**PHONE**
1.		
2.		
PERSON MAKING CONTACT: Mary E. Hessler MEH	**DATE:** 8/14/97	
SUBJECT: Occupancy Information		
SITE NAME: One Camelback	**EPA ID:** AZ0001039148	

INFORMATION RECEIVED

The following occupancy information was obtained from the Cole's Directory of Phoenix and Suburbs (1962-97), the Mullin-Kille Phoenix, Arizona ConSurvey City Directory (1951-61), and the Phoenix City Directory (1938-50).

Address: 4900 N. St. Francis

Date	Page	Occupant
1938	715	No Listing
1939	717	No Listing
1940	633	EM Romley
1942	667	EM Romley
1946-47	1125	EM Romley
1949-50	830	EM Romley
1951	431	EM Romley
1953	553	EM Romley
1957	667	EM Romley
1959	438	EM Romley

No Listing after 1959.

CONTACT REPORT		
Page 2 of		
CONTACT	**TITLE**	**PHONE**
1.		
PERSON MAKING CONTACT: Mary E. Hessler MEH	**DATE:** 8/14/97	
SUBJECT: Occupancy Information		
SITE NAME: One Camelback	**EPA ID:** AZ0001039148	

INFORMATION RECEIVED

Address:4900 N. 1st Street

Date	Page	Occupant
1961	823	EM Romley
1962	3	Elias M. Romley
1965	4	Elias M. Romley
1969	3	Molly Jo Harms/Frederick Miller
1970	3	Molly Jo Harms/Frederick Miller
1971	3	FJ Miller
1973	3	FJ Miller
1974	3	Robert Rawlins
1976	3	Robert Rawlins
1978	3	No Phone
1979	3	No Phone

No listing after 1979.

Address: 4990 N. St. Francis

Date	Page	Occupant
1938	715	No Listing
1940	633	No Listing
1946-47	1125	No Listing
1947-48	701	No Listing
1948-49	118	Harold Ekman (archt)
1949-50	830	Harold Ekman (archt)
1951	431	Harold Ekman (archt)
1952	849	Harold Ekman (archt)
1953	553	Vacant

CONTACT REPORT		
Page 3 of		
CONTACT	**TITLE**	**PHONE**
1.		
PERSON MAKING CONTACT: Mary E. Hessler MEH	**DATE:** 8/14/97	
SUBJECT: Occupancy Information		
SITE NAME: One Camelback	**EPA ID:** AZ0001039148	

INFORMATION RECEIVED

Address: 4990 N. St. Francis (Continued)

Year	Page	Occupant
1955	448	Camelback Shoe Repair
1957	667	Camelback Shoe Repair
1958	623	Airken Sls & Srv
1959	647	Louie's Shoe Repair

No listing after 1959.

Address: 4990 N. 1st Street

Date	Page	Occupant
1961	823	No Information Available
1962	3	Louie's Shoe Service
1963	3	Louie's Shoe Service
1964	4	Pat's Shoe Service
1965	4	Pat's Shoe Service
1966	3	Pat's Shoe Service
1967	4	Pat's Shoe Service
1968	3	Pat's Shoe Service
1969	3	Pat's Shoe Service
1970	3	Pat's Shoe Service
1971	3	Pat's Shoe Service
1972	3	Pat's Shoe Service
1973	3	Pat's Shoe Service
1974	3	Pat's Shoe Service

CONTACT REPORT		
Page 4 of		
CONTACT	TITLE	PHONE
1.		
PERSON MAKING CONTACT: Mary E. Hessler MEH	DATE: 8/14/97	
SUBJECT: Occupancy Information		
SITE NAME: One Camelback	EPA ID: AZ0001039148	

INFORMATION RECEIVED

Address: 4990 N. 1st Street

Date	Page	Occupant
1975	3	Pat's Shoe Service
1976	3	Pat's Shoe Service
1978	3	Pat's Shoe Service
1979	3	Pat's Shoe Service

No listing after 1979.

CONTACT REPORT		
AGENCY AFFILIATION: Arizona Department of Environmental Quality		
DEPARTMENT: Drinking Water Section		
ADDRESS/CITY: 3033 N. Central Avenue, Phoenix		
COUNTY/STATE/ZIP: Maricopa, Arizona 85012		
CONTACT	**TITLE**	**PHONE**
1. Sonia Valdez		(602) 207-4619
2.		
PERSON MAKING CONTACT: Mary E. Hessler MEH	**DATE:** 4/10/98	
SUBJECT: Drinking Water System Information		
SITE NAME: One Camelback	**EPA ID:** AZ0001039148	

INFORMATION RECEIVED

The Singing Spur Trailer Park drinking water system (PWS # 07427) is a transient system, and is only tested for bacteria, nitrates, and nitrites. There have been no detections. The Michigan Trailer Park drinking water system (PWS # 07621) is tested for VOCs, and none have been detected since 1993.

APPENDIX B

PHOTOGRAPHS

DATE: 4/3/97

TIME: 8:30 a.m.

DIRECTION: Left from door to treatment room

WEATHER: Indoor Photo

PHOTOGRAPHER:

Allene Pierce-Avey,
One Camelback, Inc.

DESCRIPTION:

Photo # 1. Carbitrol Filtering System.

DATE: 4/3/97

TIME: 8:30 a.m.

DIRECTION: Right from door to treatment room

WEATHER: Indoor Photo

PHOTOGRAPHER:

Allene Pierce-Avey
One Camelback, Inc.

DESCRIPTION:

Photo # 2. GAC Treatment System.

DATE: 4/3/97

TIME: 8:30 a.m.

DIRECTION: Right from door to treatment room.

WEATHER: Indoor Photo

PHOTOGRAPHER:

Allene Pierce-Avey,
One Camelback, Inc.

DESCRIPTION:

Photo # 3. GAC Treatment System.

DATE: 4/3/97

TIME: 9:00 a.m.

DIRECTION: West

WEATHER: Indoor Photo

PHOTOGRAPHER:

Allene Pierce-Avey
One Camelback, Inc.

DESCRIPTION:

Photo # 4. Wall Piezometer.

DATE: 4/3/97

TIME: 9:00 a.m.

DIRECTION:

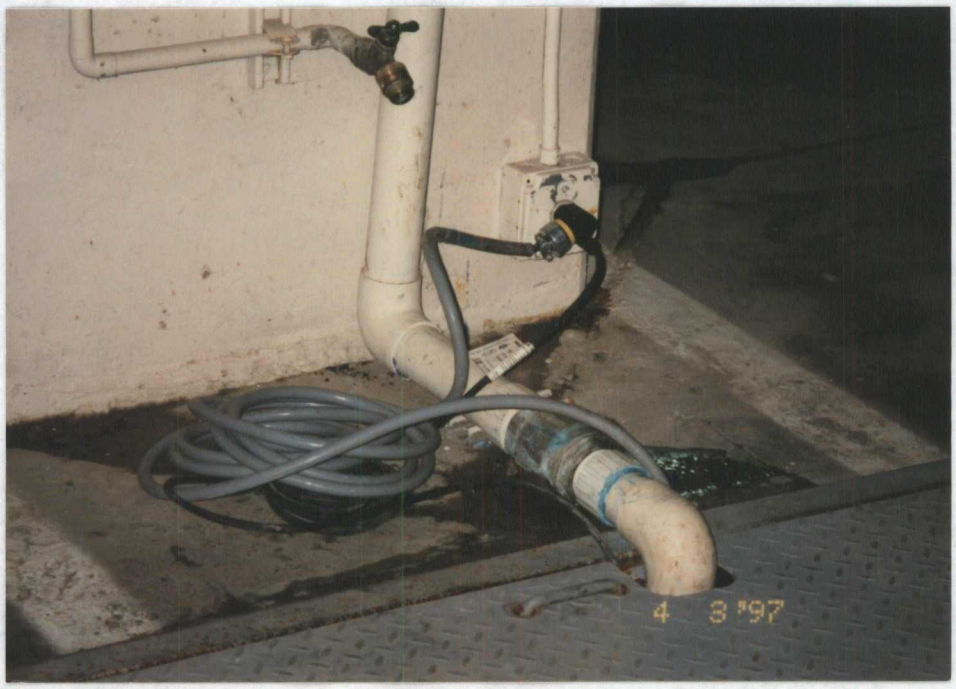
WEATHER: Indoor Photo

PHOTOGRAPHER:

Allene Pierce-Avey,
One Camelback, Inc.

DESCRIPTION:

Photo # 5. Sump Pump.



DATE: 4/3/97

TIME: 9:00 a.m.

DIRECTION:

WEATHER: Indoor Photo

PHOTOGRAPHER:

Allene Pierce-Avey
One Camelback, Inc.

DESCRIPTION:

Photo # 6. Sump Pump.

DATE: 4/3/97

TIME: 9:00 a.m.

DIRECTION: Uncertain

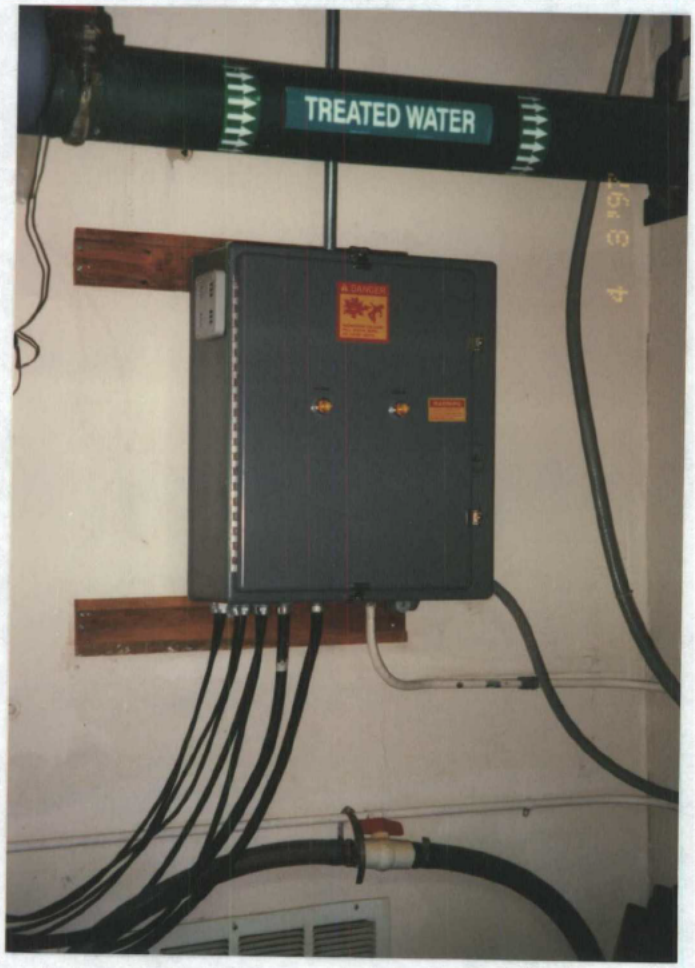
WEATHER: Indoor Photo

PHOTOGRAPHER:

Allene Pierce-Avey,
One Camelback, Inc.

DESCRIPTION:

Photo # 7. Basement of Parking Garage.



DATE: 4/3/97

TIME: 9:00 a.m.

DIRECTION: Uncertain

WEATHER: Indoor Photo

PHOTOGRAPHER:

Allene Pierce-Avey
One Camelback, Inc.

DESCRIPTION:

Photo # 8. Treated Water Line.

OMB Approval Number: 2050-0095
Approved for Use Through: 1/92

EPA Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: AZ | CERCLIS Number: AZ0001037143

CERCLIS Discovery Date: 2/27/95

1. General Site Information

Name: One Camelback	Street Address: 1 E Camelback Road				
City: Phoenix	State: AZ	Zip Code: 85012	County: Maricopa	Co. Code:	Cong. Dist:
Latitude: 33° 30' 33."	Longitude: 112° 04' 23."	Approximate Area of Site: 1.5 Acres ____ Square Ft	Status of Site: ☐ Active ☐ Not Specified ☐ Inactive ☒ NA (GW plume, etc.)		

2. Owner/Operator Information

Owner	Operator
One Camelback, Inc	One Camelback, Inc
Street Address: 1 E Camelback Road	Street Address: 1 E Camelback Road
City: Phoenix	City: Phoenix
State: AZ; Zip Code: 85012; Telephone: (602) 265-0411	State: AZ; Zip Code: 85012; Telephone: (602) 265-0411

Type of Ownership:
- ☒ Private
- ☐ Federal Agency Name ____
- ☐ State
- ☐ Indian
- ☐ County
- ☐ Municipal
- ☐ Not Specified
- ☐ Other ____

How Initially Identified:
- ☐ Citizen Complaint
- ☐ PA Petition
- ☒ State/Local Program
- ☐ RCRA/CERCLA Notification
- ☐ Federal Program
- ☐ Incidental
- ☐ Not Specified
- ☐ Other ____

3. Site Evaluator Information

Name of Evaluator: Mary E Hessler	Agency/Organization: Arizona Dept of Env Quality	Date Prepared: 3/4/98
Street Address: 3033 N Central Avenue #620	City: Phoenix	State: AZ
Name of EPA or State Agency Contact:	Street Address:	
City:	State:	Telephone: ( )

4. Site Disposition (for EPA use only)

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: ____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other ____ Date: ____	Signature: Name (typed): Position:

EPA

Potential Hazardous Waste Site
Preliminary Assessment Form - Page 2 of 4

CERCLIS Number: AZ0001039148

5. General Site Characteristics

Predominant Land Uses Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☒ Commercial
- ☒ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☐ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility
- ☐ Other

Site Setting:

- ☒ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1939

Ending Year Present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals (e.g., pesticides, fertilizers)
  - ☐ Miscellaneous Chemical Products (e.g., adhesives, explosives, ink)
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☒ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☐ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non- or Late Filer"
- ☐ Not Specified
- ☐ Other

Waste Generated:

- ☒ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☐ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☒ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☒ No

Distance to Nearest Dwelling, School, or Workplace:

0 Feet

6. Waste Characteristics Information

Source Type: (check all that apply)	Source Waste Quantity: (include units)	Tier*:
☐ Landfill		
☐ Surface Impoundment		
☐ Drums		
☐ Tanks and Non-Drum Containers		
☐ Chemical Waste Pile		
☐ Scrap Metal or Junk Pile		
☐ Tailings Pile		
☐ Trash Pile (open dump)		
☐ Land Treatment		
☐ Contaminated Ground Water Plume (unidentified source)		
☐ Contaminated Surface Water/Sediment (unidentified source)		
☒ Contaminated Soil	Unknown	
☐ Other		
☐ No Sources		

* C = Constituent, W = Wastestream, V = Volume, A = Area

General Types of Waste (check all that apply)

- ☒ Metals
- ☒ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☐ Other

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☒ Liquid
- ☐ Gas

EPA Potential Hazardous Waste Site
Preliminary Assessment Form - Page 3 of 4

CERCLIS Number: AZ0001039148

7. Ground Water Pathway

Is Ground Water Used for Drinking Water Within 4 Miles:
- [x] Yes
- [ ] No

Type of Drinking Water Wells Within 4 Miles (check all that apply):
- [ ] Municipal
- [x] Private
- [ ] None

Is There a Suspected Release to Ground Water:
- [ ] Yes
- [x] No

Have Primary Target Drinking Water Wells Been Identified:
- [ ] Yes
- [x] No

If Yes, Enter Primary Target Population: _____ People

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - ¼ Mile	5
> ¼ - ½ Mile	0
> ½ - 1 Mile	10
> 1 - 2 Miles	21
> 2 - 3 Miles	106
> 3 - 4 Miles	407
Total Within 4 Miles	549

Depth to Shallowest Aquifer: 40 Feet

Karst Terrain/Aquifer Present:
- [ ] Yes
- [x] No

Nearest Designated Wellhead Protection Area:
- [ ] Underlies Site
- [ ] > 0 - 4 Miles
- [x] None Within 4 Miles

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):
- [ ] Stream
- [x] River
- [ ] Pond
- [ ] Lake
- [ ] Bay
- [ ] Ocean
- [ ] Other _____

Shortest Overland Distance From Any Source to Surface Water:
_____ Feet
¼ Miles

Is There a Suspected Release to Surface Water:
- [ ] Yes
- [x] No

Site is Located in:
- [ ] Annual - 10 yr Floodplain
- [x] > 10 yr - 100 yr Floodplain
- [ ] > 100 yr - 500 yr Floodplain
- [ ] > 500 yr Floodplain

Drinking Water Intakes Located Along the Surface Water Migration Path:
- [ ] Yes
- [x] No

Have Primary Target Drinking Water Intakes Been Identified:
- [ ] Yes
- [ ] No

If Yes, Enter Population Served by Primary Target Intakes: _____ People

List All Secondary Target Drinking Water Intakes:

Name	Water Body	Flow (cfs)	Population Served

Total within 15 Miles _____

Fisheries Located Along the Surface Water Migration Path:
- [ ] Yes
- [x] No

Have Primary Target Fisheries Been Identified:
- [ ] Yes
- [ ] No

List All Secondary Target Fisheries:

Water Body/Fishery Name	Flow (cfs)

EPA Potential Hazardous Waste Site
Preliminary Assessment Form - Page 4 of 4

CERCLIS Number: AZ0001039148

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:
- ☐ Yes
- ☒ No

Have Primary Target Wetlands Been Identified:
- ☐ Yes
- ☐ No

List Secondary Target Wetlands:

Water Body	Flow (cfs)	Frontage Miles

Other Sensitive Environments Located Along the Surface Water Migration Path:
- ☐ Yes
- ☒ No

Have Primary Target Sensitive Environments Been Identified:
- ☐ Yes
- ☐ No

List Secondary Target Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type

9. Soil Exposure Pathway

Are People Occupying Residences or Attending School or Daycare on or Within 200 Feet of Areas of Known or Suspected Contamination:
- ☐ Yes
- ☒ No

If Yes, Enter Total Resident Population:

_____ People

Number of Workers Onsite:
- ☐ None
- ☐ 1 - 100
- ☒ 101 - 1,000
- ☐ >1,000

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:
- ☐ Yes
- ☒ No

If Yes, List Each Terrestrial Sensitive Environment:

_____

10. Air Pathway

Is There a Suspected Release to Air:
- ☐ Yes
- ☒ No

Enter Total Population on or Within:

Onsite	550
0 - ¼ Mile	912
> ¼ - ½ Mile	2,289
> ½ - 1 Mile	11,313
> 1 - 2 Miles	50,112
> 2 - 3 Miles	70,976
> 3 - 4 Miles	93,254
Total Within 4 Miles	

Wetlands Located Within 4 Miles of the Site:
- ☐ Yes
- ☒ No

Other Sensitive Environments Located Within 4 Miles of the Site:
- ☐ Yes
- ☒ No

List All Sensitive Environments Within ½ Mile of the Site:

Distance	Sensitive Environment Type/Wetlands Area (acres)
Onsite	
0 - ¼ Mile	
> ¼ - ½ Mile	

APPENDIX A

CERCLA ELIGIBILITY QUESTIONNAIRE

Site Name: One Camelback

City: Phoenix State: AZ

EPA ID Number: _____

I	CERCLA ELIGIBILITY	Yes	No
	Did the facility cease operations prior to November 19, 1980?	___	X
	If answer YES, STOP, facility is probably a CERCLA site.		
	If answer NO, Continue to Part II		

II	RCRA ELIGIBILITY	Yes	No
	Did the facility file a RCRA Part A application?	___	✓
	if YES:		
	1 Does the facility currently have interim status?	___	___
	2 Did the facility withdraw its Part A application?	___	___
	3 Is the facility a known or possible protective filer? (facility filed in error)	___	___
	4 Type of facility: Generator _____ Transporter _____ Recycler _____ TSD (Treatment/Storage/Disposal) _____		
	Does the facility have a RCRA operating or post closure permit?	___	✓
	Is the facility a late (after 11/19/80) or non-filer that has been identified by the EPA or the State? (facility did not know it needed to file under RCRA)	___	✓
	If all answers to questions in Part II are NO, STOP, the facility is a CERCLA eligible site.		
	If answer to #2 or #3 is YES, STOP, the facility is a CERCLA eligible site.		
	If answer #2 and #3 are NO, and any OTHER answer is YES, site is RCRA, continue to Part III.		

III	RCRA SITES ELIGIBLE FOR NPL	Yes	No
	Has the facility owner filed for bankruptcy under federal or state laws?	___	___
	Has the facility lost RCRA authorization to operate or shown probable unwillingness to carry out corrective action?	___	___
	Is the facility a TSD that converted to a generator, transporter, or recycler facility after November 19, 1980?	___	___

LATITUDE AND LONGITUDE CALCULATION WORKSHEET #1
LI USING CUSTOM RULER OR COORDINATOR™

SITE NAME: One Camelback CERCLIS #: _____

AKA: _____ SSID: _____

ADDRESS: 1 E Camelback Road

CITY: Phoenix STATE: AZ ZIP CODE: 85012

SITE REFERENCE POINT: SEC Camelback & Central

USGS QUAD MAP NAME: Sunnyslope TOWNSHIP: 2 (N)/S RANGE: 3 (E)/W

SCALE: 1:24,000 MAP DATE: 1982 SECTION: 20 1/4 NW 1/4 NW 1/4 NE

MAP DATUM: 1927 1983 (CIRCLE ONE) MERIDIAN: Gila & Salt River Baseline & Meridian

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 7.5' MAP (attach photocopy):

LONGITUDE: 112° 00' 00" LATITUDE: 33° 30' 00"

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 2.5' GRID CELL:

LONGITUDE: 112° 02' 30" LATITUDE: 33° 30' 00"

CALCULATIONS: LATITUDE (7.5' QUADRANGLE MAP)

A) ALIGN THE BOTTOM OF THE SCALE WITH BOTTOM OF GRID. ALIGN THE TOP OF THE SCALE WITH THE TOP OF GRID. POSITION EDGE OF RULER OVER SITE REFERENCE POINT WHILE KEEPING TOP AND BOTTOM ALIGNED.

B) READ TICS ON RULER AT 1- OR 0.5-SECOND INTERVALS (INTERPOLATE).

C) EXPRESS IN MINUTES AND SECONDS (1'= 60"): 0' 33.00"

D) ADD TO STARTING LATITUDE: 33° 30' 00.___" + 0' 33.00 =

SITE LATITUDE: 33° 30' 33.00"

CALCULATIONS: LONGITUDE (7.5' QUADRANGLE MAP)

A) ALIGN THE BOTTOM OF THE SCALE WITH RIGHT SIDE OF GRID. ALIGN THE TOP OF THE SCALE WITH THE LEFT SIDE OF GRID. POSITION EDGE OF RULER OVER SITE REFERENCE POINT WHILE KEEPING TOP AND BOTTOM ALIGNED.

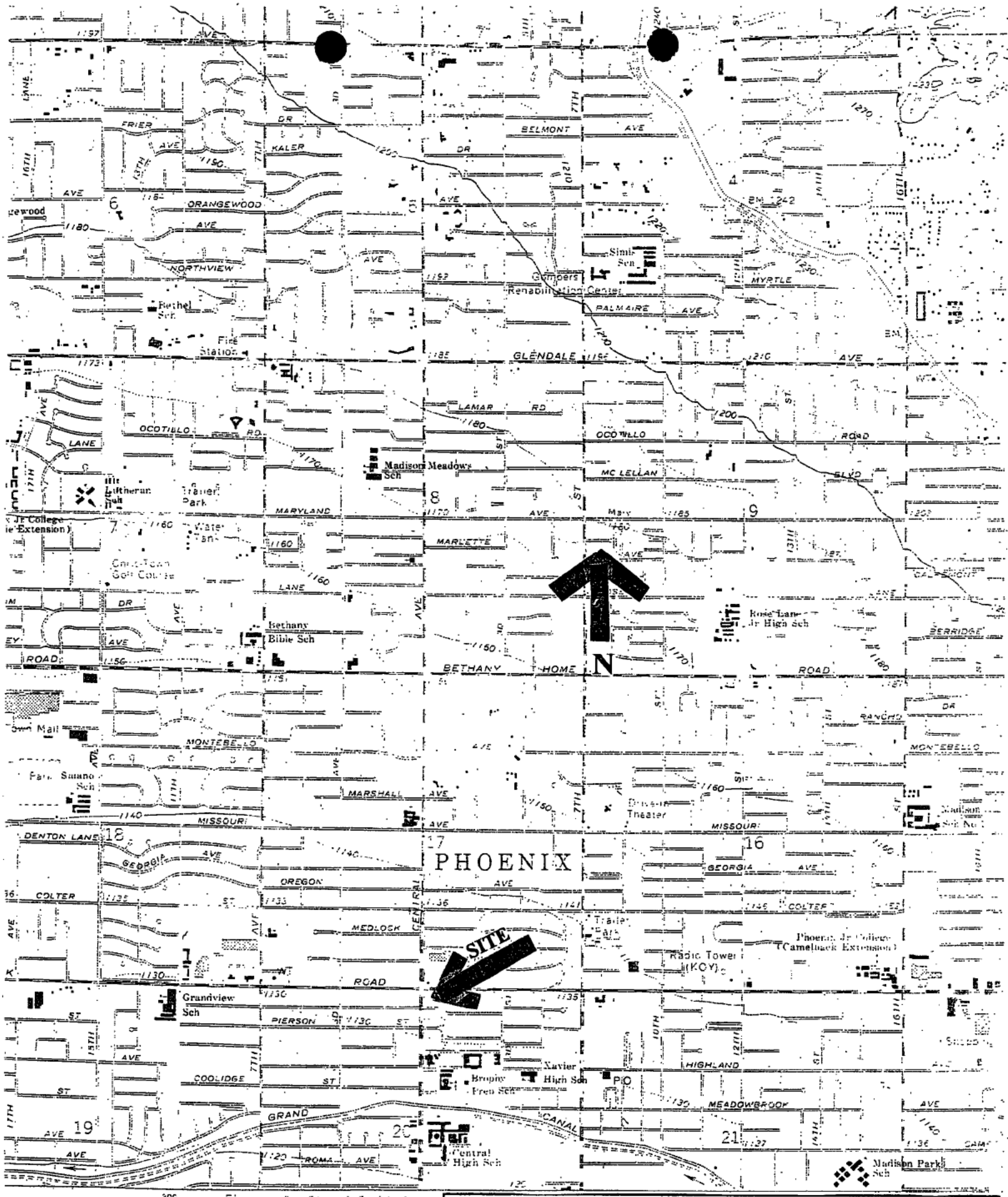
B) READ TICS ON RULER AT 1- or 0.5-SECOND INTERVALS. (INTERPOLATE)

C) EXPRESS IN MINUTES AND SECONDS (1'= 60"): 1' 53.00"

D) ADD TO STARTING LONGITUDE: 112° 02' 30.___" + 1' 53.00 =

SITE LONGITUDE: 112° 04' 23.00"

INVESTIGATOR: Mary E. Kerlan DATE: 1/12/95



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY	
FIGURE 1	SITE LOCATION MAP
PREPARED BY MARY HESSLER	ONE CAMELBACK

4931

U.S. Environmental Protection Agency
External Copy/Distribution

Facility: One Camelback

EPA ID#: AZ0001039148 State ID#: 1342 Author: Mary Hessler and Wael Hassinan

Date of PA/SI: 4/27/00 Today's Date: 4/27/00

Number of copies needed: _____

Landowner and Address: Mr. Michael Y. Cannon, President
One Camelback, Inc., c/o AREEA Investment Advisory Services, Inc.
9400 S. Dadeland Blvd., Penthouse One
Miami, FL 33156-2817

Date Sent: _____

Additional copies to: 1) Ms. Allene Pierce-Avey, Property Manager
One Camelback, Inc.
One East Camelback Road
Phoenix, AZ 85012

Date Sent: _____

2) _____

Date Sent: _____

3) _____

Date Sent: _____

Comments: _____

Note: Return this form to ADEQ after report copies have been sent to the persons listed above. Please make sure that the date this report is sent has been entered on the form. This form will be filed in the case file as a reference document.

:hm
a:epacopy.frm#te1 (rev. 04/0)

4931

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
INTEROFFICE MEMORANDUM

DATE: January 20, 1999

TO: Central and Camelback Southwest Corner Source Area Portion WQARF File

FROM: Mary Hessler, Site Assessment Manager
Site Assessment Unit

SUBJECT: **Responsiveness Summary of Comments Received pursuant to A.R.S. § 49-287.01 for the Central and Camelback Southwest Corner Source Area Portion Water Quality Assurance Revolving Fund (WQARF) Project**

On August 17, 1998, the Arizona Department of Environmental Quality (ADEQ) issued a written notice of intent under A.R.S. § 287.01 to owners and operators of the Central and Camelback Southwest Corner Source Area Portion Water Quality Assurance Revolving Fund (WQARF) site of its intentaion to place the site on the WQARF site registry. The owners and operators were provided a 15-day comment period which ended September 9, 1998.

On October 10 through October 13, 1998, ADEQ placed a notice, in accordance with A.R.S. § 49- 287.01 in the Arizona Republic, a daily local newspaper, of the availability for public review and comment of the registry documentation on the site. The 30-day public review and comment period ended November 25, 1998.

One letter was received, but the comments did not pertain to the proposed placement of the site on the WQARF site registry. ADEQ sent a letter to the respondent. Copies of both letters are attached. Upon placement of this memorandum in the site file, this site is on the WQARF site registry.

4931

DEPARTMENT OF ENVIRONMENTAL QUALITY
INTRA-OFFICE MEMORANDUM

ERP:94-1011 File No. AZ0023868

Date: October 31, 1994

To: Ed Swanson, Manager
Engineering Review and Permits Unit

From: Wayne H. Palsma whp
Engineering Review and Permits Unit
Surface Water Section

Re: One East Camelback, Inc.
NPDES Permit No. AZ0023868

Thank you for your comments on this proposed permit. Your comments and my responses follow:

1. Comment: Where does the GAC wastes get disposed to?

   Response: The Granular Activated Carbon is returned to the provider after it is exhausted. The provider re-generates the carbon and uses it again.

2. Comment: Is this the raw groundwater or effluent from GCA? (This comment is referring to the contamination levels listed in the application.)

   Response: The section of the application you are referring to contains the chemical analysis of the raw contaminated groundwater. The level of contaminants coming out of the Granular Activated Carbon will be considerably less than these values.

3. Comment: Why not? (Referring to the Statement of Basis and why we are not requiring toxicity testing of the effluent.)

   Response: This is a relatively innocuous discharge which is going to a city storm sewer. This storm sewer, which is normally dry, travels several miles and then discharges to the Salt River Bed, which is also dry. When there is flow from this storm sewer to the river bed, it will primarily consist of stormwater. We are also requiring the discharge to meet the Aquatic and Wildlife water quality standards at

the point of discharge. Therefore, I do not expect this discharge to have any impact on any aquatic or wildlife in the Salt River and do not believe that the expense of toxicity testing is justified.

If you have any questions concerning this matter, please let me know.

WHP/me

4131

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
INTER-OFFICE MEMORANDUM

ERP:94-1000 File No.AZ0023868

TO: Brian Munson, Director
Water Quality Division

THRU: Jack Bale, Manager JBale
Surface Water Section

Edwin K. Swanson, Manager
Engineering Review and Permits Unit EKS

FROM: Wayne H. Palsma WHP
Engineering Review and Permits Unit

DATE: October 26, 1994

RE: One Camelback, Incorporated
NPDES Permit No. AZ0023868

This is a new permit allowing the discharge of treated groundwater, from the basement of One Camelback Building, located at One East Camelback Road in Phoenix. Groundwater, contaminated with benzene, chloroform, ethylbenzene, naphthalene, tetrachloroethylene, toluene, trchloroethylene and xylene is seeping into the fifth basement of this building. This facility collects the contaminated groundwater, treats it with a combination of air stripping and carbon adsorption and then discharges the treated water to the city stormsewer. The City of Phoenix has given their approval to this discharge. Their maximum discharge will be 0.288 mgd. This stormsewer is tributary to the Salt River. This segment of the Salt River has designated uses of Aquatic and Wildlife (warm water fishery) and Partial Body Contact.

The U.S. Environmental Protection Agency has published their intent to issue and our intent to certify this permit in the Arizona Business Gazette on August 4, 1994. This public notice did not generate any comments or objections to this proposed permit

Therefore, I recommend we certify this permit.

WHP/me

(5)

UST-ADWR-5
4931

Southwest Ground-water Consultants, Inc.

RECEIVED
JUN 24 1996
UST SECTION - ADEQ/WPD

MEMORANDUM

DATE: April 23, 1994

TO: Ms. Allene Pierce-Avey, Property Manager, One Camelback Inc.
Mr. Michael Cannon, President, One Camelback Inc.
Mr. David Yoblick, Director of Building Management
Mr. Thomas Klimek, P.E., Project Manager
Dr. Lawrence A. Hansen, P.E., AGRA

FROM: Mr. Stephen D. Noel, P.G., Southwest Ground-water Consultants, Inc. SDN
Dr. Herman Bouwer, Groundwater Consultant

SUBJECT: Ground-water Study Update

This memorandum has been prepared in order to update the management of One Camelback Inc. as to the status of the various ground-water investigations currently in progress by SGC in and around the property. The data presented in this memorandum will be presented in detail to management during the scheduled project meeting dated April 27, 1994 at 10:00 pm.

City of Phoenix Class B Permit

Ten sampling rounds have been conducted pursuant to the Class B Permit requirements. These sampling events began on February 17 and have included three sampling rounds for metals and BTEX. The remaining sampling rounds have been for BTEX only. Since the March 14, 1994 Notice of Violation (NOV), all scheduled samples have met permit standards (Attachment A) as well as the additional individual benzene samples (TISM) that were required to be collected weekly and analyzed during the four week period from March 21 through April 11, 1994.

In addition to the scheduled permit sampling requirements, internal quality control samples of the carbon treatment system were collected and analyzed for BTEX, pH, iron, and manganese. The results of the initial quality control sampling program confirmed that the carbon treatment system was working as designed and that BTEX was being removed prior to discharge to the sump. A follow-up system check was conducted following the NOV on March 2, 1994. The results of this sampling was presented in the March 28, 1994 response to the City of Phoenix regarding the NOV, and indicated that the carbon treatment system was removing BTEX from the pumped water as designed.

OCI 04370

NB10

3030 North 3rd Street, Suite 1100
Phoenix, Arizona 85012-3039
(602) 241-8520 Fax (602) 241-8595

Phoenix, Arizona
Prescott, Arizona

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The most recent system quality control check was conducted on April 11, 1994. This check was prompted by the increase in pre-filter clogging. Samples were collected between the system A carbon canisters and the discharge line prior to mixing with the sump water. (System B samples were not collected because there was not enough flow passing through the system at the time of sampling). Review of all of the BTEX sample results again indicated that the carbon system was working properly and that BTEX concentrations were less than the laboratory detection limit. The preliminary laboratory results of these samples are presented in Attachment B.

Because of the increased pre-filter clogging problems, iron and manganese concentrations were analyzed from samples collected from the B-5 level west dewatering well and the post carbon treatment water prior to discharging into the sump. In addition, the water sampled for the regularly scheduled metal analyses (April 4, 1994) was analyzed for iron and manganese. The results of those analyses are summarized below.

*	April 4, 1994 spigot sample	iron	0.180 milligrams per liter (mg/l)
		manganese	0.610 mg/l
*	April 11, 1994 samples		
	System B prior to discharge into the sump	iron	0.020 mg/l
		manganese	0.858 mg/l
		pH	7.8
	West dewatering well (pre-treatment)	iron	0.321 mg/l
		manganese	0.840 mg/l
		pH	7.7

Review of the above data indicates that iron concentrations are reduced as they pass through the treatment system. This may be the cause and/or the result of the pre-filter clogging problem and the slime build-up on the top of the carbon. CARBTROL personnel will be at the site on April 27 - 28 to inspect the system and to provide recommendations as to the system operation. Information regarding iron removal from CARBTROL is presented in Attachment C.

Salt River Project Well Testing

Aquifer tests were conducted in three of the four SRP wells during the month of April. The fourth well was not tested because of mechanical problems. SRP personnel were very helpful during the test coordination. The location of the test wells are presented as Figure 1 in Attachment D.

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The plots of the aquifer test data are presented on Figures 2, 3, and 4 in Attachment E. SRP baseline data for the test wells is also presented in Attachment E. Review of the test data, based on the Cooper-Jacob (1946), indicates that the average aquifer transmissivity is 5,400 gallons per day per foot of drawdown (gpd/f). The hydraulic conductivity for the aquifer material is 23 gallons per day per square foot (gpd/ft^2). These values are very consistent between the wells indicating that the aquifer system in and around the One Camelback property is relatively homogeneous.

The calculated impact of pumping one well (along the canal) was estimated based on no urban irrigation recharge (Theis Method, 1935). The result of this analysis was that after 100 days of pumping, a projected drawdown at the One Camelback property was 1 foot. This analyses indicates that pumping one or more of the surrounding SRP wells would have an impact on the ground-water surface at the property. However, due to urban irrigation, the cone of depression surrounding the pumping well does not extend radially as far as would be anticipated due to urban irrigation recharge. This phenomena is shown graphically on Figure 3 (Attachment E) where the drawdown curve flattens after about 20 minutes of pumping. At this point, the amount of pumped water is equal to the amount of water taken from storage (saturated voids between the clay, silt, and sand size particles that comprise the aquifer) plus the amount of urban irrigation recharging the system. Dr. Bouwer is currently calculating this impact and he will be able to present his conclusions on Wednesday when we meet.

The urban irrigation recharge phenomenon is not as drastic in the other two wells (Figures 2 and 4). In those wells, the drawdown curves do not flatten as significantly as in Figure 3, indicating that these two wells will have a greater zone of influence. It also appears that urban irrigation may not be as significant near these two wells because of the lower amount of turf acreage surrounding these wells.

Local Ground-water Flow System

Further review of ground-water elevations in local wells has revealed that the ground-water surface in the vicinity of the One Camelback property may have flowed southeast in April of 1973, west to west northwest in January of 1979, to north in April of 1994. Because of the need to check all water level sources and to further expand the review of wells in the region, details of these findings will be presented during the April 27 meeting.

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ATTACHMENT A

TREATMENT SYSTEM WATER QUALITY DATA

THIS DOCUMENT IS CONFIDENTIAL AND/OR PRIVILEGED PURSUANT TO THE ATTORNEY/CLIENT PRIVILEGE, WORK-PRODUCT DOCTRINE, AND/OR A.R.S. §49-1012. IT SHOULD NOT BE DISCLOSED TO THE PUBLIC WITHOUT THE EXPRESS WRITTEN PERMISSION OF ONE CAMELBACK INCORPORATED.

CLASS B GROUNDWATER DISCHARGE MONITORING REPORT FORM

User Name: One Camelback

User #: 9401-5296

Period of Report: February 1994

Compliance Sampling Point (1): Sampling port above risers

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type (2)	Date(3) 02/17/94	Date(4) 02/22/94	Date / /	Date / /	Date / /	Date / /
Benzene	ug/l	130.0	1/ Weekly	Grab	120	240				
Ethylbenzene	ug/l	1000.0	1/ Weekly	Grab	37	110				
Toluene	ug/l	1000.0	1/ Weekly	Grab	110	220				
Xylene	ug/l	1000.0	1/ Weekly	Grab	120	240				
Arsenic	mg/l	0.100	1/ Monthly	Composite	0.006	NS *				
Boron	mg/l	5.600	1/ Monthly	Composite	0.93	NS				
Cadmium	mg/l	0.047	1/ Monthly	Composite	<0.0005	NS				
Chromium	mg/l	1.400	1/ Monthly	Composite	<0.010	NS				
Copper	mg/l	1.700	1/ Monthly	Composite	0.019	NS				
Lead	mg/l	0.500	1/ Monthly	Composite	0.024	NS				
Mercury	mg/l	0.050	1/ Monthly	Composite	<0.0002	NS				
Nickel	mg/l	5.000	1/ Monthly	Composite	<0.020	NS				
Selenium	mg/l	0.100	1/ Monthly	Composite	<0.005	NS				
Silver	mg/l	0.500	1/ Monthly	Composite	<0.010	NS				
Zinc	mg/l	5.400	1/ Monthly	Composite	0.242	NS				

* See sampling frequency

Notes:
(1) This form is to be submitted for each sampling point.
(2) Sampling type: "C" is a composite sample; "G" is a grab sample; C/G is a composite and/or grab sample (Some Toxic Organic Compounds may not be sampled with automatic sampling equipment (cf. 40 CFR 136)).
(3) Indicate "NS" if no sample was taken for that parameter on the sampling date. Attach an explanation for not sampling for those parameters.
(4) Do not use "ND" for sampling results. Use less than (<) the detection limit for those parameters.

3

OCI 04374

NB10

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CLASS "B" GROUND WATER DISCHARGE MONITORING REPORT FORM

User Name: One Camelback

User #: 9401-5296

Period of Report: March 1994

Compliance Sampling Point (1): Sampling port above risers

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type (2)	Date(3) 03/01/94	Date(4) 03/07/94	Date 03/14/94	Date 03/21/94	Date 03/28/94	Date
Benzene	ug/l	130.0	1/ Weekly	Grab	3.0	3.9	4.2	3.1	3.3	
Ethylbenzene	ug/l	1000.0	1/ Weekly	Grab	2.3	2.9	3.0	2.1	2.1	
Toluene	ug/l	1000.0	1/ Weekly	Grab	6.3	7.9	9.3	5.4	6.3	
Xylene	ug/l	1000.0	1/ Weekly	Grab	7.8	9.7	9.6	7.1	8.2	
Arsenic	mg/l	0.100	1/ Monthly	Composite	0.010	NS*	NS	NS	NS	
Boron	mg/l	5.600	1/ Monthly	Composite	0.83	NS	NS	NS	NS	
Cadmium	mg/l	0.047	1/ Monthly	Composite	< 0.0005	NS	NS	NS	NS	
Chromium	mg/l	1.400	1/ Monthly	Composite	< 0.010	NS	NS	NS	NS	
Copper	mg/l	1.700	1/ Monthly	Composite	0.023	NS	NS	NS	NS	
Lead	mg/l	0.500	1/ Monthly	Composite	0.028	NS	NS	NS	NS	
Mercury	mg/l	0.050	1/ Monthly	Composite	< 0.0002	NS	NS	NS	NS	
Nickel	mg/l	5.000	1/ Monthly	Composite	< 0.020	NS	NS	NS	NS	
Selenium	mg/l	0.100	1/ Monthly	Composite	< 0.005	NS	NS	NS	NS	
Silver	mg/l	0.500	1/ Monthly	Composite	< 0.010	NS	NS	NS	NS	
Zinc	mg/l	5.400	1/ Monthly	Composite	0.130	NS	NS	NS	NS	

* Not sampled. See sampling frequency.

Notes:
(1) This form is to be submitted for each sampling point.
(2) Sampling type: "C" is a composite sample; "G" is a grab sample; C/G is a composite and/or grab sample (Some Toxic Organic Compounds may not be sampled with automatic sampling equipment (cf. 40 CFR 136)).
(3) Indicate "NS" if no sample was taken for that parameter on the sampling date. Attach an explanation for not sampling for those parameters.
(4) Do not use "ND" for sampling results. Use less than (<) the detection limit for those parameters.

3

OCI 04376

NB10

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CLASS "B" GROUNDWATER DISCHARGE MONITORING REPORT FORM

User Name: One Camelback

User #: 9401-5296

Period of Report: 1 - 1 APRIL 1994

Compliance Sampling Point (1): Sampling port above risers

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type (2)	Date(3) 4/14/94	Date(4) 4/11/94	Date 4/18/94	Date / /	Date / /	Date / /
Benzene	ug/l	130.0	1/ Weekly	Grab	4.1	5.6	5.8			
Ethylbenzene	ug/l	1000.0	1/ Weekly	Grab	2.3	2.8	2.4			
Toluene	ug/l	1000.0	1/ Weekly	Grab	6.6	8.1	7.4			
Xylene	ug/l	1000.0	1/ Weekly	Grab	8.4	9.8	8.8			
Arsenic	mg/l	0.100	1/ Monthly	Composite	<0.005	NS				
Boron	mg/l	5.600	1/ Monthly	Composite	0.98	NS				
Cadmium	mg/l	0.047	1/ Monthly	Composite	<0.0005	NS				
Chromium	mg/l	1.400	1/ Monthly	Composite	<0.01	NS				
Copper	mg/l	1.700	1/ Monthly	Composite	0.026	NS				
Lead	mg/l	0.500	1/ Monthly	Composite	0.011	NS				
Mercury	mg/l	0.050	1/ Monthly	Composite	<0.0002	NS				
Nickel	mg/l	5.000	1/ Monthly	Composite	<0.02	NS				
Selenium	mg/l	0.100	1/ Monthly	Composite	<0.005	NS				
Silver	mg/l	0.500	1/ Monthly	Composite	<0.01	NS				
Zinc	mg/l	5.400	1/ Monthly	Composite	0.118	NS				

Notes:
(1) This form is to be submitted for each sampling point.
(2) Sampling type: "C" is a composite sample; "G" is a grab sample; C/G is a composite and/or grab sample (Some Toxic Organic Compounds may not be sampled with automatic sampling equipment [cf. 40 CFR 136]).
(3) Indicate "NS" if no sample was taken for that parameter on the sampling date. Attach an explanation for not sampling for these parameters.
(4) Do not use "ND" for sampling results. Use less than (<) the detection limit for those parameters.

3

OCI 04376

NR10

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ATTACHMENT B

TREATMENT SYSTEM QUALITY CONTROL

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FIELD NOTES

Southwest Ground-water Consultants, Inc.

PROJECT: One Camelback Water Sampling PROJECT #: B.061 A

DATE: 4-11-94 RECORDED BY: G. Waters PAGE 1 of 1

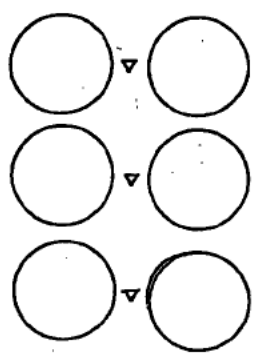
SAMPLING FOR METALS ANALYSES:

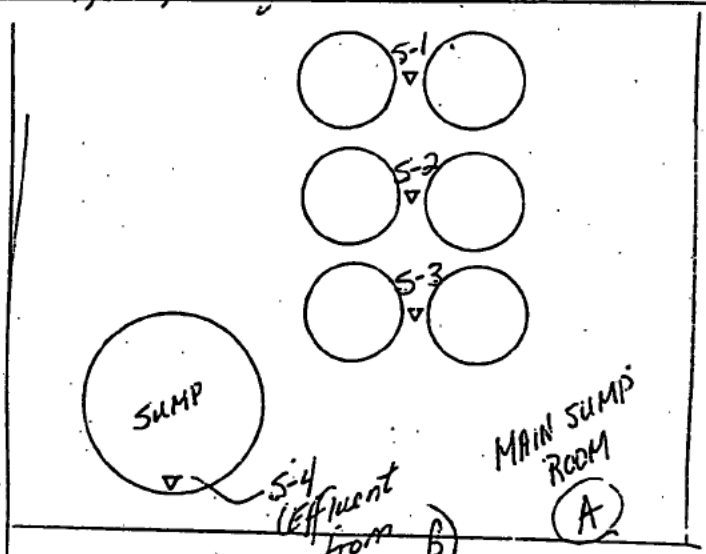
1. Time metals ~~alloquot #1 (250 ml)~~ S-4 (Fe, Mn, pH) collected: 1045 hrs
   Meter reading: _____ gallons
2. Time metals ~~alloquot #2 (250 ml)~~ S-5 (Fe, Mn, pH) collected: 1052 hrs
   Meter reading: _____ gallons
3. Time metals alloquot #3 (250 ml) collected: _____
   Meter reading: _____ gallons
4. Time metals alloquot #4 (250 ml) collected: _____
   Meter reading: _____ gallons

SAMPLING FOR BTEX ANALYSES:

1. Time BTEX sample (~~3~~ 2, 40 ml VOAs) collected: 1012 (S-1); 1018 (S-2); 1020 (S-3)
   Meter reading: 4,141,900 gal @ 1100 hrs gallons
   4,140,100 gal @ 1005 hrs

COMMENTS:





* NOTE
no samples collected from canisters B System because water would not come out of spigots.

* S-5 (untreated water from west dewatering well)

OCI 04378
NB10

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CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS DATE RECEIVED : 04/11/94
PROJECT # : B.061A
PROJECT NAME : 1 CAMELBACK REPORT DATE : 04/22/94
ATI I.D. : 404705

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	S-1	AQUEOUS	04/11/94
02	S-2	AQUEOUS	04/11/94
03	S-3	AQUEOUS	04/11/94
04	S-4	AQUEOUS	04/11/94
05	S-5	AQUEOUS	04/11/94
06	S-6 (TRIP BLANK)	AQUEOUS	04/11/94

PRELIMINARY

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	6

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

OCI 04379
NB10

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GENERAL CHEMISTRY RESULTS

ATI I.D. : 404705

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS
PROJECT # : B.061A
PROJECT NAME : 1 CAMELBACK

DATE RECEIVED : 04/11/94
REPORT DATE : 04/22/94

PARAMETER	UNITS	04	05
PH (EPA 150.1)	UNITS	7.8	7.7

OCI 04380
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METALS RESULTS

ATI I.D. : 404705

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS
PROJECT # : B.061A
PROJECT NAME : 1 CAMELBACK

DATE RECEIVED : 04/11/94
REPORT DATE : 04/22/94

PARAMETER	UNITS	04	05
IRON (EPA 200.7/6010)	MG/L	0.020	0.321
MANGANESE (EPA 200.7/6010)	MG/L	0.858	0.840

OCI 04381
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GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40470501

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/11/94
PROJECT #	: B.061A	DATE RECEIVED	: 04/11/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-1	DATE ANALYZED	: 04/12/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	100

OCI 04382

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GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40470502

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/11/94
PROJECT #	: B.061A	DATE RECEIVED	: 04/11/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-2	DATE ANALYZED	: 04/12/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	105

OCI 04383

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GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40470503

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/11/94
PROJECT #	: B.061A	DATE RECEIVED	: 04/11/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-3	DATE ANALYZED	: 04/12/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5
SURROGATE PERCENT RECOVERIES	
BROMOFLUOROBENZENE (%)	100

OCI 04384

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GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40470506

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/11/94
PROJECT #	: B.061A	DATE RECEIVED	: 04/11/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-6 (TRIP BLANK)	DATE ANALYZED	: 04/12/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	104

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ATTACHMENT C

CARBTROL IRON FILTER SYSTEM

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CARBTROL®

ENGINEERED SYSTEMS FOR ENVIRONMENTAL CONTROL

39 RIVERSIDE AVENUE
WESTPORT, CT 06880

(203) 226-5642
(800) 242-1150
FAX: (203) 226-5322

TO: Ms. Georgia Waters
COMPANY: SOUTHWEST GROUND-WATER
REF: One Camelback Road

FAX NUMBER: (602) 241-8595
DATE: 20 April 1994
TOTAL PAGES: Five (5)

MESSAGE: Georgia ---We reviewed the latest information regarding One Camelback. It would appear that a possible solution is the use of an Iron Removal Filter. As long as the incoming ground water is reasonably aerated, the scum that is presently fouling the pre filters and carbon canisters, should form on the Iron (Manganese) Removal Filter. Therefore, the maintenance shifts to this device.

Using the Iron Removal Filter, should eliminate the need to open the carbon canisters to remove the scum. It should also eliminate the need to replace the pre filters on a regular basis. The amount of time required to perform these maintenance tasks should be greatly reduced. The maintenance schedule on the Iron Removal Filter is, unfortunately, unknown.

The unit, which costs $ 2900, is supplied with enough filter media for ten (10) changes. Additional filtration media is sold by the roll. Each roll, for ten (10) changes, costs and additional $ 165. Both costs are F.O.B. Bridgeport, CT.

As of this moment, it looks as though I can be in Phoenix on Wednesday afternoon, April 27 and all day Thursday , April 28. Can you recommend a reasonable motel in the area ?

OCI 04387

NB10

FROM: Mario Napolitano

CARBTROL

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CARBTROL
CORPORATION

April 20, 1994

Ms. Georgia Waters
SOUTHWEST GROUNDWATER

QUOTATION

ITEM	QTY	DESCRIPTION	PRICE
1	1	Iron Removal Filter per the attached "AT" sheet.	$2,900.00
2	1	Spare Set of Filtration Media (good for 10 changes)	$165.00

Availability: 2-3 Weeks after Receipt of Order

SALESPERSON: MLN
TERMS: Net 30 Days
COMMENTS: F.O.B. Bridgeport, CT

QUOTATION VALID FOR SIXTY DAYS

MLN:vlm

OCI 04388
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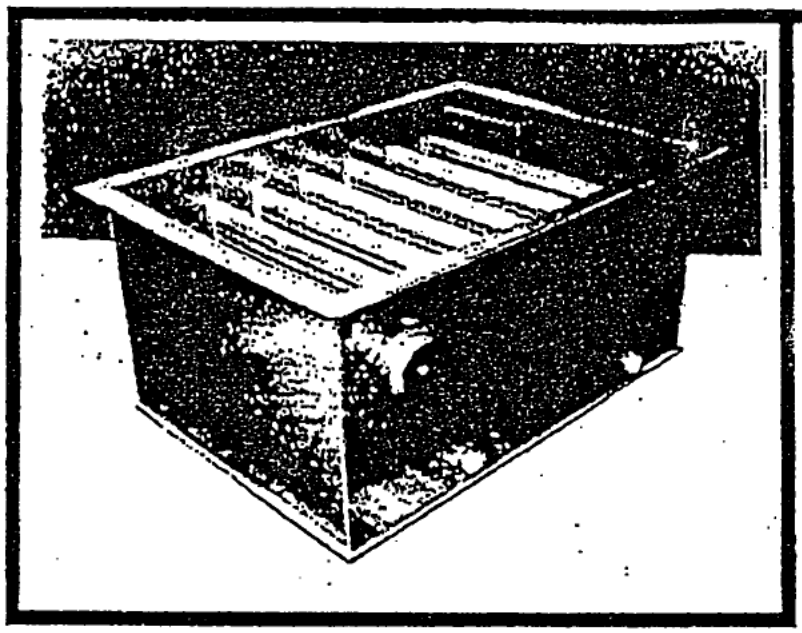
IRON REMOVAL FILTER



APPLICATIONS

Iron and sediment removal prior to carbon adsorption or subsurface injection.

PRODUCT DESCRIPTION

The CARBTROL Iron Removal Filter is designed to remove suspended particulate and iron bacterial residue from contaminated groundwater.

Particulates are removed by a combination of gravity settling and filtration on a series of non- woven fabric filter plates. Each of six filter plates are covered by a special filter media which promotes coagulation of suspended iron particulates and biological growth of iron bacteria.

Groundwater is distributed to the head end of the clarifier through a submerged distribution header. It then passes successively through the vertical filter plates. and then through a skimmer box prior to discharge.

When individual filter plates become blinded, they are easily removed for fabric media replacement. Sediment buildup in the bottom of the unit is removed by wet vacuum.

SPECIFICATIONS

FLOW CAPACITY:	40 gpm Max.
MATERIALS:	UV protected PVC
SHIPPING WEIGHT:	150 lbs.
VOLUMETRIC CAPACITY:	140 gallons
INLET:	4" FPT
OUTLET:	4" FPT
DRAIN:	2" Plug
LID:	PVC

OCI 04389

NB10

CARBTROL CORPORATION

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AT-803/93

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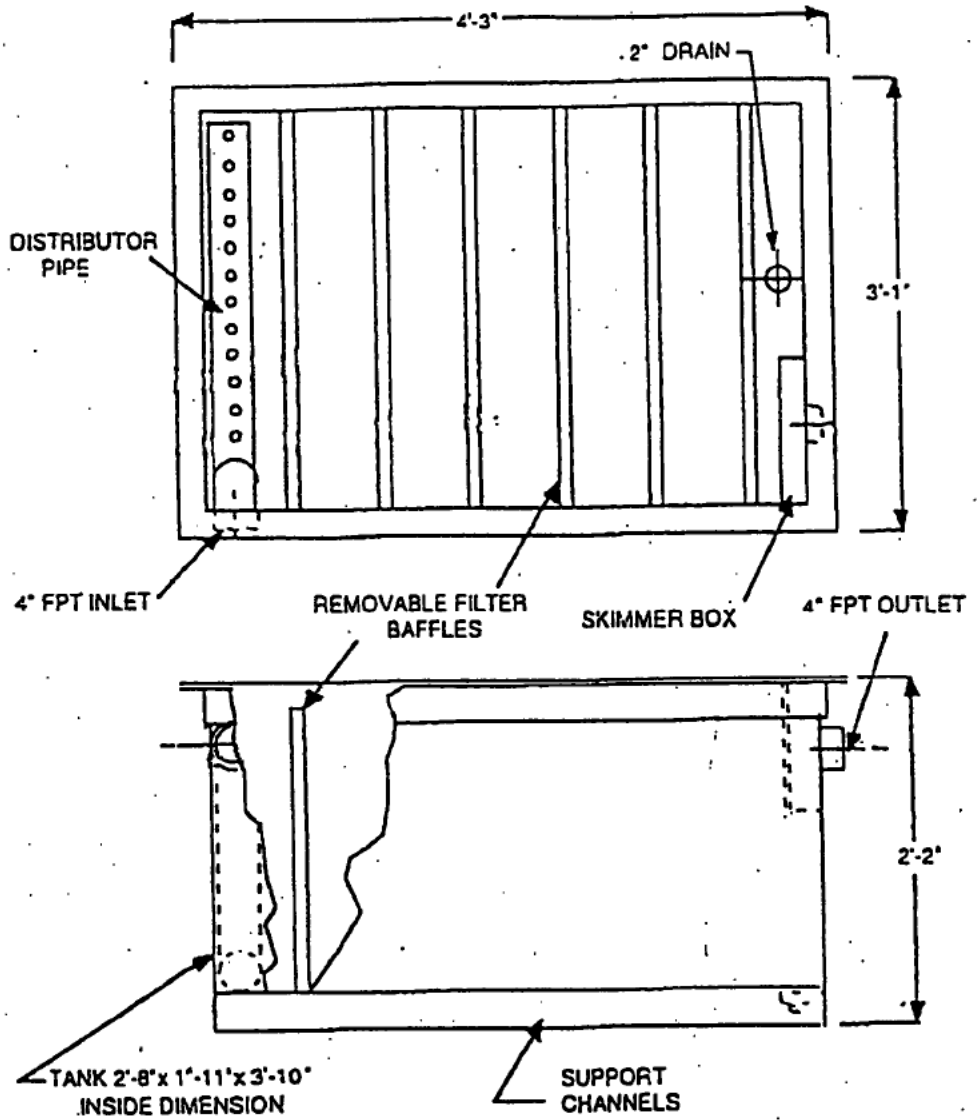
IRON REMOVAL FILTER



NOTES - DIMENSIONS ARE APPROXIMATE.
- PVC TANK CONSTRUCTION.

OCI 04390

NB10

CARBTROL CORPORATION

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SPECIFICATION

IRON REMOVAL FILTER

Design Flow - maximum (GPM):		40
Design Features:		
No. of Filter Panels:		Six (6)
Construction:	Tank:	Welded PVC construction with PVC channel supports.
	Filter Panels:	Aluminum.
	Filter Media:	Non-woven polyester.
	Lid:	PVC, bolted onto tank.
Dimensions:	Tank:	4'-3" X 3'-1" X 2'-2" high.
	Filter Panels:	2'-7 3/4" X 1'-6".
Connections:	Inlet:	4" FPT
	Outlet:	4" FPT
	Drain:	2" FPT
	Auxiliary:	Two (2) 1" FPT connections for optional winterizing heaters.
Filter Media:		One (1) roll of filter media, containing enough for 10 changes.
Options:		- Winterizing Kit, with weatherproof or explosionproof electrical enclosures. - Support stand, of pressure treated lumber construction. - Lid venting connection.
Shipping Weight (lbs.):		150
Availability:		From stock
Drawing Number:		S-1520

3/16/93
SP-800

OCI 04391
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ATTACHMENT D

FIGURE 1 - WELL LOCATION MAP

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Exemption 9

ATTACHMENT E

FIGURES 2, 3, AND,4 - AQUIFER TEST DATA PLUS SRP WELL COMPLETION REPORTS

OCI 04394

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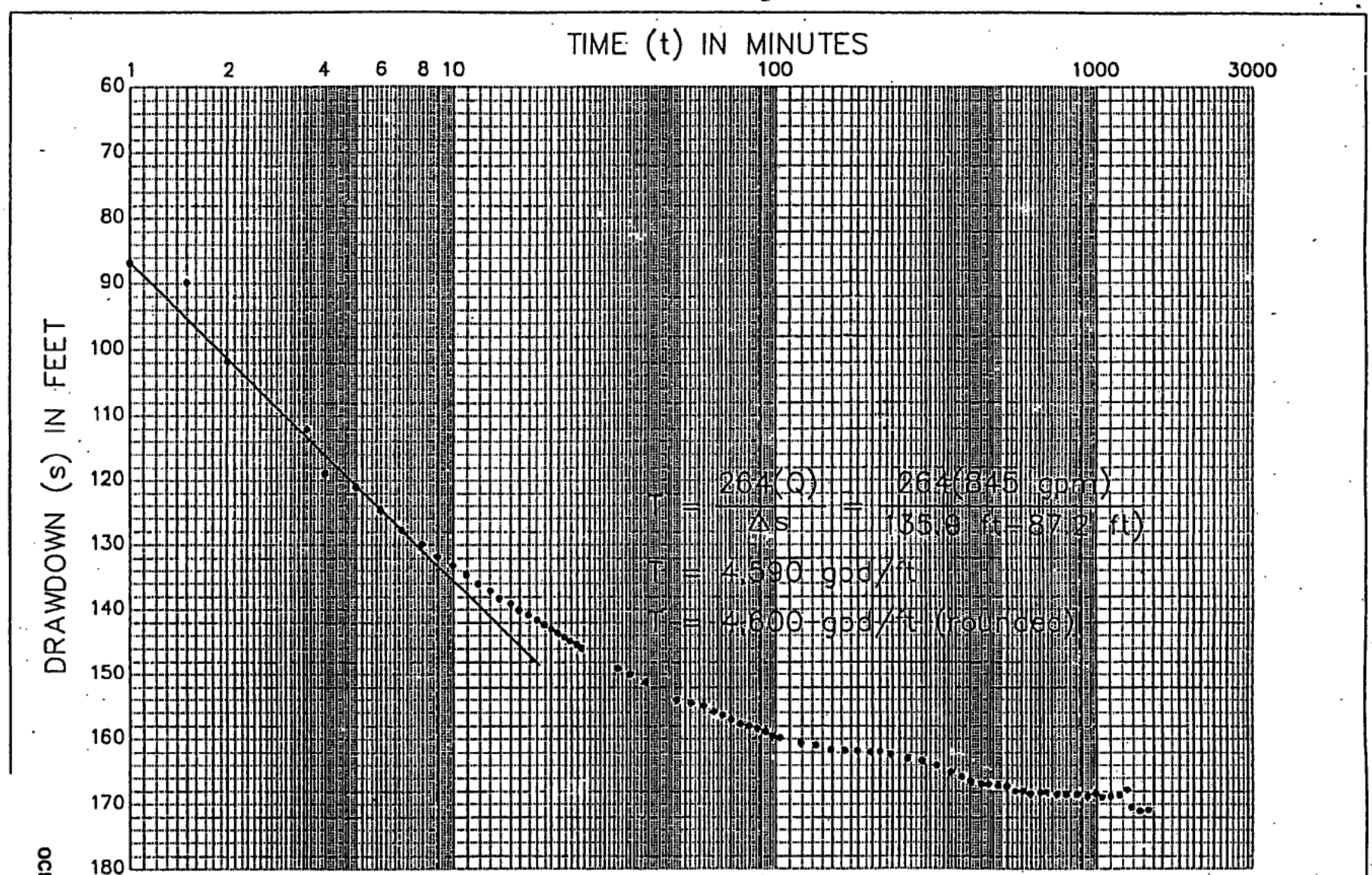

24-HOUR PUMPING TEST
SRP WELL 13E-8.6N

Southwest Ground-water Consultants, Inc.			Figure 2
Project No. B.075	Date 4/5/94		

OCI 04395
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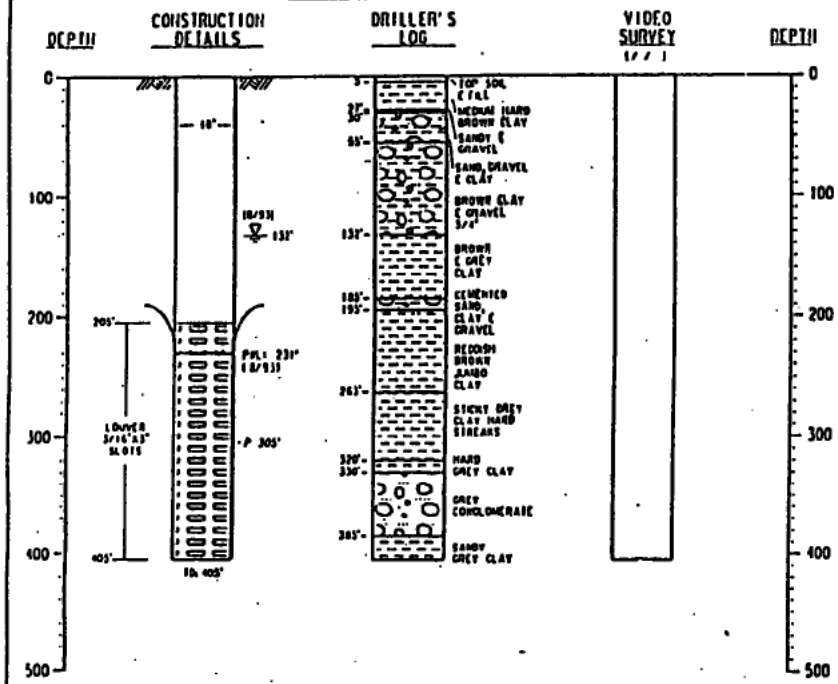
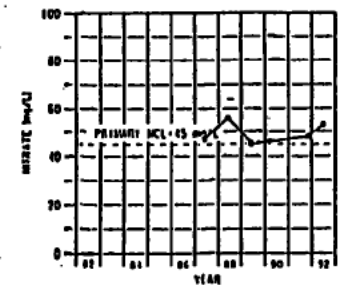
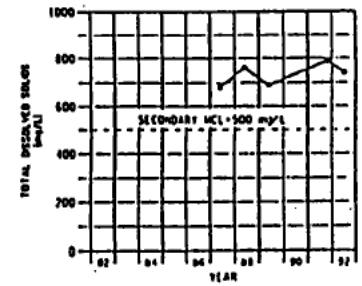
BASELINE DATA GRP WELL 13.0E-8.6N

PHYSICAL WELL DATA



WATER QUALITY DATA





ORGANICS	7/83	7/84	8/85	8/86	6/87	6/89	11/91	7/92	STANDARD
1,1,1-TRICHLOROETHANE (TCA), ug/L	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	200.0 (MCL)
TRICHLOROETHENE (TCE), ug/L	ND	0.1	ND	ND	ND	<0.5	<0.5	<0.5	5.0 (MCL)
TETRACHLOROETHYLENE (PCE), ug/L	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	5.0 (MCL)
CHLOROFORM, ug/L	--	--	--	0.57	ND	<0.5	0.8	<0.5	100.0 (MCL)
DIBROMOCHLOROPROPANE (DBCP), ug/L	--	--	--	--	--	--	<0.005	<0.005	0.2 (MCL)
ETHYLENE DIBROMIDE (EDB), ug/L	--	--	--	--	--	--	<0.005	<0.005	0.05 (MCL)
TRACE METALS									
ARSENIC (As), ug/L	--	--	--	--	--	--	23.0	5.0	50.0 (MCL)
BARIUM (Ba), ug/L	--	--	--	--	--	--	142.0	172.0	1000 (MCL)
CADMIUM (Cd), ug/L	--	--	--	--	--	--	<0.2	<10.0	5.0 (MCL)
CHROMIUM (Cr), ug/L	--	--	--	--	--	--	10.0	<10.0	100.0 (MCL)
LEAD (Pb), ug/L	--	--	--	--	--	--	<5.0	<2.0	15.0 (MCL)
MERCURY (Hg), ug/L	--	--	--	--	--	--	0.4	<0.2	2.0 (MCL)
SELENIUM (Se), ug/L	--	--	--	--	--	--	<2.0	<2.0	50.0 (MCL)
SILVER (Ag), ug/L	--	--	--	--	--	--	<1.0	<10.0	50.0 (MCL)

MISC. DATA

DRILLED: 9-28-1971

DRILLING METHOD: CABLE TOOL

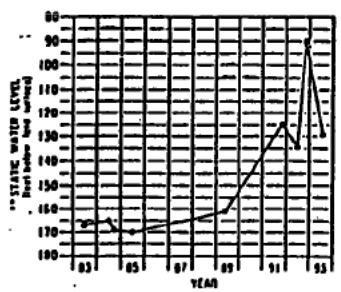
TRANSMISSIVITY: N/A

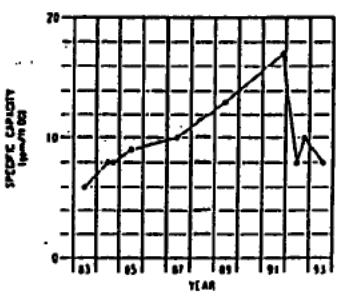
COMMENTS: 68 TONS GRAVEL INSTALLED IN WELL

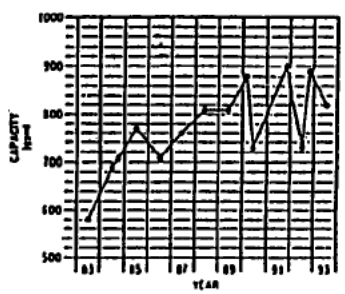
* LAB ANALYSIS WAS FOR DISSOLVED METALS (OTHER METALS DATA WAS COLLECTED BY TOTAL METALS PROCEDURES.)

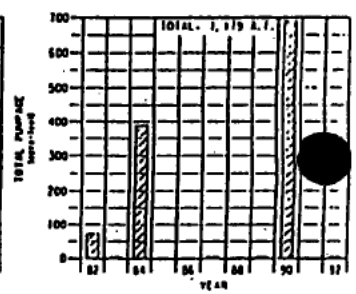
** STATIC WATER LEVEL DATA FROM CICS DATA BASE

WATER QUANTITY DATA









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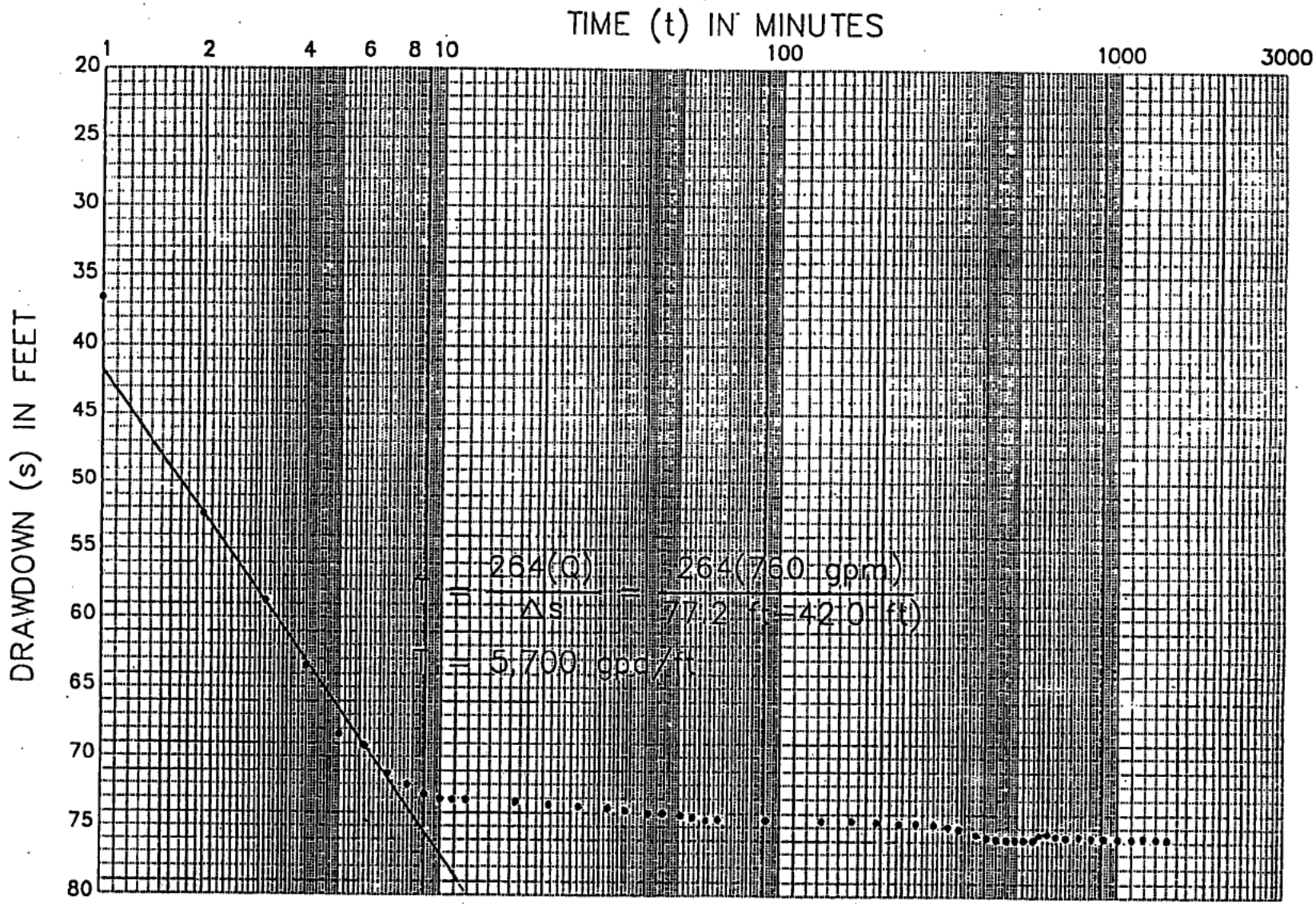

24-HOUR PUMPING TEST
SRP WELL 13.5E-19.4N

Southwest Ground-water Consultants, Inc.				Figure 3
Project No.	B.075	Date	4/5/94	

OCI 04397
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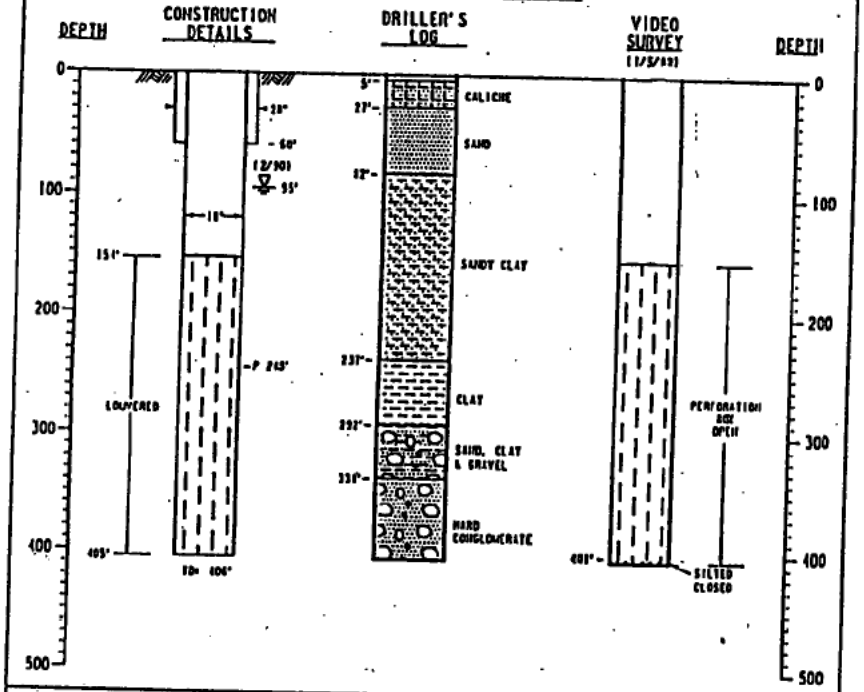
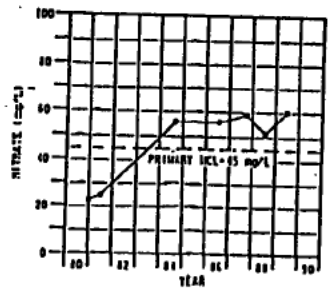
BASELINE DATA SRP WELL 13.5E-9.4N

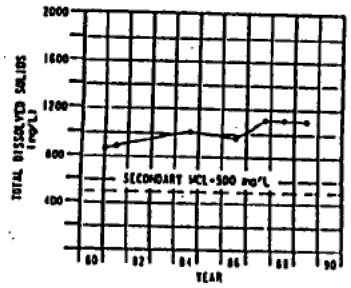
REASON WELL REMOVED FROM SERVICE: VOC CONTAMINATION

PHYSICAL WELL DATA



WATER QUALITY DATA





ORGANICS	8/84	7/85	7/86	9/87	7/88	6/89	STANDARD
1,1,1-TRICHLOROETHANE (TCA) ug/L	BDL	BDL	0.53	1.24	—	—	200.0 (MCL)
TRICHLOROETHENE (TCE) ug/L	BDL	BDL	1.15	5.62	8.7	0.70	5.0 (MCL)
TETRACHLOROETHYLENE (PCE) ug/L	9.1	25.1	25.63	26.79	17.6	14.4	5.0 (MCL)
CHLOROFORM ug/L	N/A	N/A	N/A	1.46	BDL	BDL	100.0 (MCL)
DIBROMOCHLOROPROPANE (DBCP) ug/L	N/A	N/A	N/A	N/A	N/A	BDL	0.21 (MCL)
ETHYLENE DIBROMIDE (EDB) ug/L	N/A	N/A	N/A	N/A	N/A	BDL	0.010 (AWL)
METALS							
ARSENIC (As) ug/L	N/A	N/A	N/A	N/A	N/A	BDL	50.0 (MCL)
BARIUM (Ba) ug/L	N/A	N/A	N/A	N/A	N/A	116.0	1000 (MCL)
CADMIUM (Cd) ug/L	N/A	N/A	N/A	N/A	N/A	—	10.0 (MCL)
CHROMIUM (Cr) ug/L	N/A	N/A	N/A	N/A	N/A	24.0	50.0 (MCL)
LEAD (Pb) ug/L	N/A	N/A	N/A	N/A	N/A	BDL	15.0 (MCL)
MERCURY (Hg) ug/L	N/A	N/A	N/A	N/A	N/A	0.2	2.0 (MCL)
SELENIUM (Se) ug/L	N/A	N/A	N/A	N/A	N/A	BDL	10.0 (MCL)
SILVER (Ag) ug/L	N/A	N/A	N/A	N/A	N/A	—	50.0 (MCL)

MISC. DATA

DRILLED: 8-1971

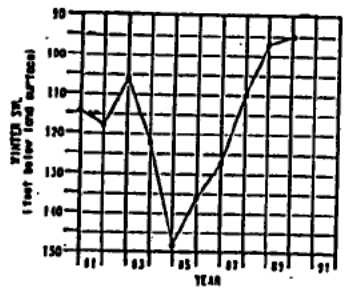
DRILLING METHOD: CABLE TOOL

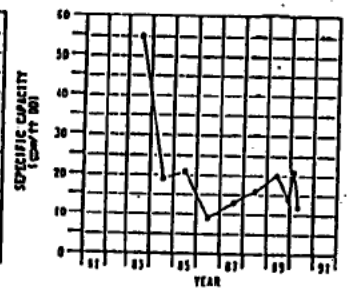
TRANSMISSIVITY:

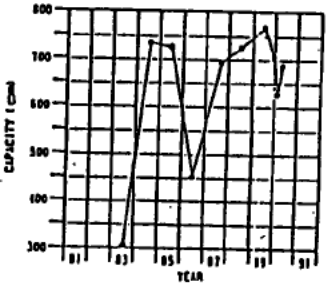
CAPACITY: 675 gpm (5/90)

SPECIFIC CAPACITY: 12 (5/90)

WATER QUANTITY DATA







OCI 04398

NB10

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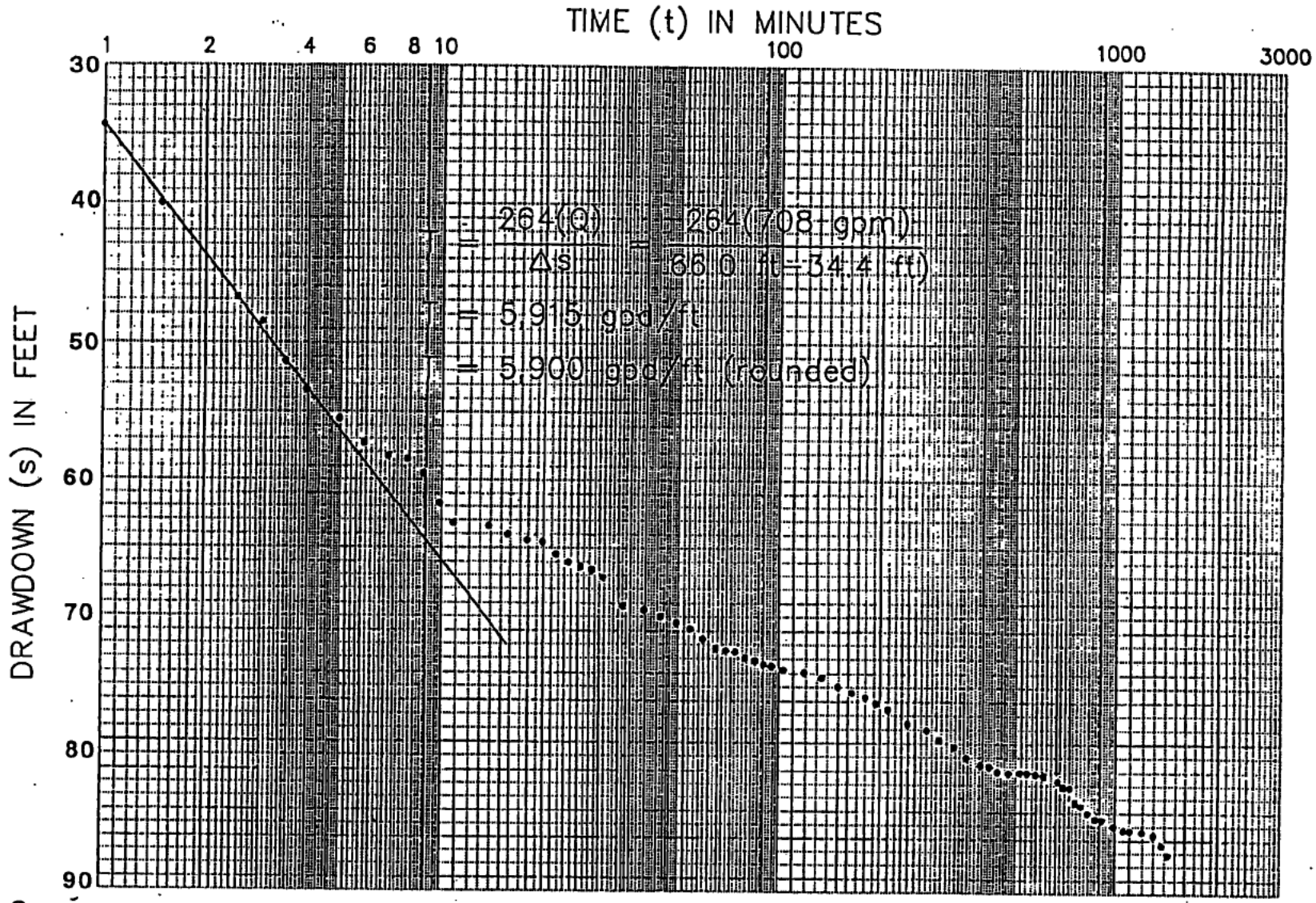


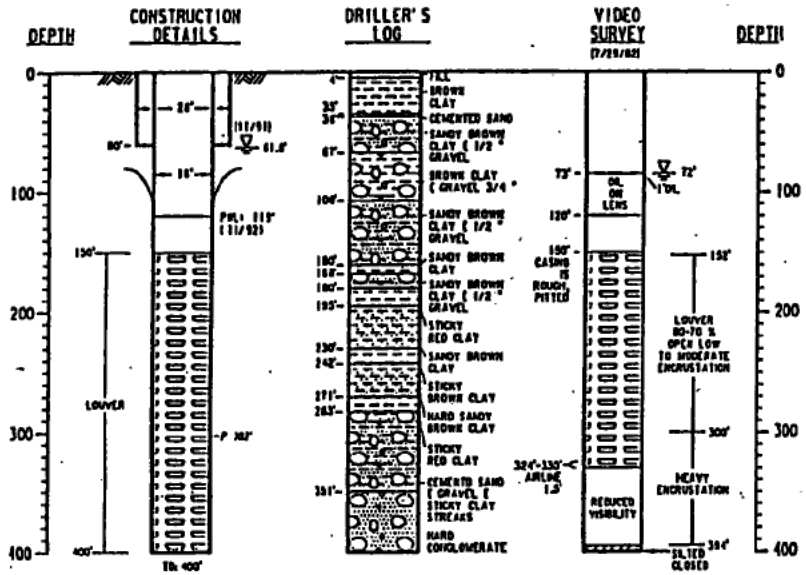
24-HOUR PUMPING TEST
SRP WELL 14E-8.5

Southwest Ground-water Consultants, Inc.			Figure 4
Project No. B.075	Date 4/5/94		

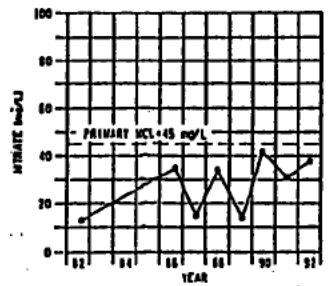
OCI 04399
NB10

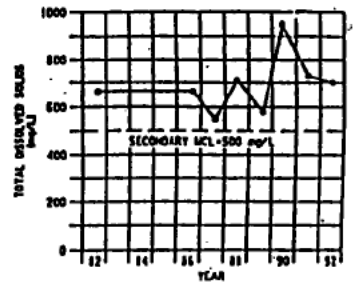
THIS DOCUMENT IS CONFIDENTIAL AND/OR PRIVILEGED PURSUANT TO THE ATTORNEY/CLIENT PRIVILEGE, WORK-PRODUCT DOCTRINE, AND/OR A.R.S. §49-1012. IT SHOULD NOT BE DISCLOSED TO THE PUBLIC WITHOUT THE EXPRESS WRITTEN PERMISSION OF ONE CAMELBACK INCORPORATED.

PHYSICAL WELL DATA



WATER QUALITY DATA





ORGANICS	10/83	5/84	9/86	8/87	8/89	6/90	7/91	7/92	STANDARD
1,1,1-TRICHLOROETHANE (TCA). . ug/L	ND	ND	ND	ND	<0.5	0.6	3.1	1.85	200.0 (MCL)
TRICHLOROETHENE (TCE). . . . . ug/L	ND	ND	ND	ND	<0.5	<0.5	1.1	2.1	5.0 (MCL)
TETRACHLOROETHYLENE (PCE). . . ug/L	ND	ND	ND	ND	<0.5	<0.5	1.4	1.5	5.0 (MCL)
CHLOROFORM . . . . . ug/L	—	—	ND	ND	<0.5	<0.5	0.9	1.0	100.0 (MCL)
DIBROMOCHLOROPROPANE (DBCP). . ug/L	—	—	—	—	—	<0.005	<0.005	<0.005	0.2 (MCL)
ETHYLENE DIBROMIDE (EDB). . . ug/L	—	—	—	—	—	<0.005	<0.005	<0.005	0.05 (MCL)
TRACE METALS									
ARSENIC (As). . . . . ug/L	—	—	—	—	—	—	5.0	<4.0	50.0 (MCL)
BARIUM (Ba). . . . . ug/L	—	—	—	—	—	—	102.0	103.0	1000 (MCL)
CADMIUM (Cd). . . . . ug/L	—	—	—	—	—	—	<0.2	<10.0	5.0 (MCL)
CHROMIUM (Cr). . . . . ug/L	—	—	—	—	—	—	<10.0	<10.0	100.0 (MCL)
LEAD (Pb). . . . . ug/L	—	—	—	—	—	—	3.0	<2.0	15.0 (MCL)
MERCURY (Hg). . . . . ug/L	—	—	—	—	—	—	0.3	<0.2	2.0 (MCL)
SELENIUM (Se). . . . . ug/L	—	—	—	—	—	—	<2.0	<2.0	50.0 (MCL)
SILVER (Ag). . . . . ug/L	—	—	—	—	—	—	<1.0	<10.0	50.0 (MCL)

MISC. DATA

REDRILLED: 1-15-1968

DRILLED: 4-5-1922

DRILLING METHOD: CABLE TOOL

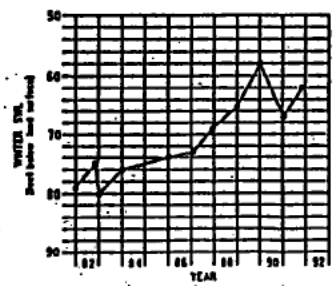
TRANSMISSIVITY: N/A

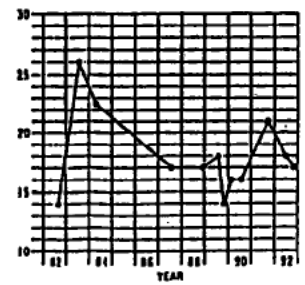
GAP SEQ NO:

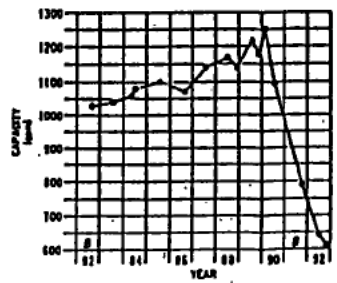
COMMENTS: 74.6 TONS OF GRAVEL INSTALLED IN WELL

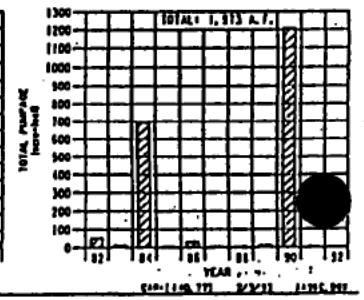
* LAB ANALYSIS WAS FOR DISSOLVED METALS (OTHER METALS DATA WAS COLLECTED BY TOTAL METALS PROCEDURES.)

WATER QUANTITY DATA









OCI 04400

NB10

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4931

City of Phoenix

To: Lori Landrith
Water and Wastewater Project Coordinator

Date: October 12, 1993

From: John E. Watson
Water Quality Supervisor

Subject: Aquifer Dewatering Proposal at One Camelback

The purpose of this memo is to summarize my review of various technical reports and letters prepared for the One Camelback office building which discuss the problem of groundwater seepage into the facility's underground parking garage. The reports were assembled by the property manager, Ms. Allene Pierce-Avey, which I reviewed on September 30, 1993 at her office.

The underground parking structure at the One Camelback office building is a five level structure, the basement floor approximately 60 feet below street level. The groundwater depth under the structure according to installed piezometers is five feet above the basement floor in some areas, and the floor itself is apparently under a 6 to 8 inch hydrostatic pressure.

Reports reviewed indicate that there had been knowledge prior to construction of free groundwater at depths in the range of 62 feet below the surface, although the geotechnical report (S B & H, 02/15/83) concludes that the encountered groundwater was isolated and not representative of the general groundwater depth in the area. An addendum (S B & H, 04/27/83) states that the use of an underdrain tile system beneath the basement slab was not necessary, the likelihood of percolating waters from the perched groundwater several feet below the basement being remote.

S B & H states in the same report that the general groundwater table according to a 1978 U.S. Geological Survey report was at 110 feet in 1977. However, a review of published information by Water Resource Associates (WRA) (08/18/92) notes that between 1976 and 1983 groundwater had risen 25 - 50 feet in the region. There were no reports that I found to suggest that the 1977 groundwater level was stable in 1983.

A geotechnical engineering firm, Speedie and Associates report dated 03/28/90 discusses leakage into the underground parking garage on level 4 as well as level 5 although the concern at the time appears to be the "water spraying from a crack" midway up the west wall on level 4 on 10/25/89. Speedie and Associates recommends that property management repair the leaking sprinkler irrigation system and suggests that irrigation in general be curtailed. The irrigation system was turned off on October 31, 1989 and the water spray ceased on November 1, 1989.

Apparently due to a suggestion by Speedie and Associates that the source of water on the basement level of the garage was not entirely due to the leaking irrigation system, test drillings were made between February 6, 1990 and March 6, 1990 encountered groundwater at 58.0 feet. Laboratory tests were conducted on samples of the withdrawn water and indicated the presence of petroleum fuel contamination.

A report prepared by Ellison and Tanner, Inc. dated June 29, 1990 states that water levels higher than 5 feet above the level 5 floor were potentially very serious. Although there was no discussion as to why this would be a serious situation, the report recommended that holes be drilled in the walls of the garage to relieve stress. I could not find any other direct reference that suggests a structural integrity problem.

\global\wp\jwatson\onecmlbk

4931

City of Phoenix

To: Lori Landrith
W. Q. Project Coordinator

Date: Sept. 23, 1993

From: Michael Rose
Chief Water Quality Inspector

Subject: ONE EAST CAMELBACK - GROUNDWATER DISCHARGE -AREA INVESTIGATION

A short summary for this project is listed below:

* July 8, 1992 - Georgia Waters of Water Resources Associates Inc. (WRA) sent in a request to Mike Loffa to discharge pumped ground water from the above site. Her report states that (WRA) is in the process of developing a dewatering system to prevent shallow ground water from entering the underground parking garage at this location. A test well will be installed to obtain data concerning hydrologic characteristics of the shallow aquifer.

  Laboratory analyses for 601/602 methods were included in her report. No volatile organic compounds were detected.

  Notes from Loffa state that an old gas station was at this location years ago. No mention as to where he received this info.

* July 18-19, 1992 - Well is drilled and the proposed date for development is July 25-26, 1992.

* July 27, 1992 - Mike Loffa received a Fax from Georgia Waters. Her Fax included additional analyses for 601/602 methods. No volatile organic compounds were detected.

  Georgia also requested to discharge 4,800 gals. of this groundwater which was stored in tanks at this site.

* July 27, 1992 - Manhole Entry Permit issued to Water Resources Associates for disposal of the 4,800 gals of ground water.

* July 21, 1993 - Jeff Menke received an Industrial Waste Permit Application from Mr. David Yoblick, Agent for One Camelback, and a letter from Mr. Allene Pierce-Avery, Project Manager for One Camelback Inc. Also included were additional test results which indicated a manganese concentration of 2.04 mg/l.

  Mr. Pierce Avery's letter outlines his concerns for structural damage, the rising ground water problem in this area, and a request to tie the dewatering system into the sewer line inside the garage for disposal into the sewer via a sump pump.

He also requests a variance for treating the manganese before discharge.

Consultant for One Camelback recommends to test for oil/grease, pH, benzene, toluene, ethyl benzene, xylene (BTEX) and for the heavy metals on a quarterly basis.

An estimated discharge of 22,000 gals. is noted on their permit application.

* August 12, 1993 - Water Quality responded with a letter from Jeff Menke. Letter requests a detailed report on alternative methods of disposal, amount of time it will take to dewater the aquifier based on a 22,000 gpd discharge, and an in-depth explanation of where the BTEX contaminants are originating from since earlier test results indicated no contamination.

* September 10, 1993 - Mr. Pierce-Avery responded that discharging to sewer is the most cost effective method of disposal, there is no estimated length of time it will take to dewater the aquifier, and the contamination is entering the area from the south as well as from the north and west of One Camelback.

Our last communication was September 11, 1993 when W.Q. received Mr. Pierce-Avery's response. As instructed, all correspondence was submitted to supervision for review, evaluation, and a decision whether to allow this discharge and/or issue a Wastewater Discharge Permit.

c:John Watson

4931

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull Jacqueline E. Schafer, Director

CERTIFIED MAIL
Return Receipt Requested
UST Ref. No. 99-0013416
July 16, 1999

Mr. Gene Ortega
Exxon Company U.S.A.
Environmental Engineering & Marketing Department
P.O. Box 4032
Concord, California 94524-4032

RE: Corrective Action Plan Addendum

LUST File #4366.01-.02	Former Humble Oil/Exxon
Facility ID #0-008848	One East Camelback Road
Maricopa County	Phoenix, Arizona 85012

Dear Mr. Ortega:

The ADEQ has reviewed the July 6, 1999 letter from Patrick J. Paul of Snell & Wilmer to the Arizona Office of Attorney General. In this letter, Mr. Paul states that *". . . on April 9, 1999, Exxon submitted its required Corrective Action Plan Addendum. It is my understanding that ADEQ is in the process of reviewing this submittal and has not yet provided any responsive comments. As such, Exxon does not believe it is required to submit any additional documents today."*

Pursuant to Section IV(1)(A) of the Stipulation to Comply with Section IV of Amended Compliance Order L-6-98 (the "Stipulation"), Exxon was required to submit a Corrective Action Plan (CAP) Addendum that included the results of pilot testing to the ADEQ by July 6, 1999. Since pilot test results were not included in the April 9, 1999 Exxon submittal, it is unclear as to how Exxon could be under the impression that they have submitted their *"required Corrective Action Plan Addendum."* Regarding the implication that Exxon is awaiting *"responsive comments"* from the ADEQ prior to submitting additional documentation, during the April 9, 1999 facility meeting attended by representatives from Exxon and One Camelback Incorporated, the ADEQ communicated to Exxon that a CAP Addendum, documenting the results of pilot

testing, must be submitted to the ADEQ prior to the ADEQ granting approval of the CAP. The ADEQ documented this communication in the enclosed *Facility Meeting Summary* letter to Exxon, dated April 15, 1999.

Please contact Tom Di Domizio at (602) 207-4287, if you have any questions regarding this correspondence.

Sincerely,

Thomas Di Domizio, Hydrologist
LUST Enforcement Unit
UST Corrective Action Section

Timothy A. Erwin, Manager
LUST Enforcement Unit
UST Corrective Action Section

TJD/ald

cc: Joan Card, Office of Attorney General (without enclosure)
Mitch Klein, Office of Attorney General (without enclosure)
Patrick J. Paul, Snell & Wilmer LLP (without enclosure)
Christopher Thomas, Squire, Sanders & Dempsey LLP (without enclosure)
Michael Cannon, AREEA Investment Advisory & Management Services, Inc. (without enclosure)

g/adl/enf.unit/respons.wpd/tjd

4931

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull Jacqueline E. Schafer, Director

CERTIFIED MAIL
Return Receipt Requested
UST Ref. No. 99-0012494
June 29, 1999

Mr. Gene Ortega
Exxon Company U.S.A.
Environmental Engineering & Marketing Department
P.O. Box 4032
Concord, California 94524-4032

RE: Corrective Action Plan Addendum
LUST File #4366.01-.02
Facility ID #0-008848
Maricopa County

Former Humble Oil/Exxon
One East Camelback Road
Phoenix, Arizona 85012

Dear Mr. Ortega:

It has come to the attention of the Arizona Department of Environmental Quality (ADEQ), via a facsimile from Squire, Sanders & Dempsey to the Arizona Office of Attorney General, that Exxon plans to conduct a soil vapor extraction (SVE) pilot test at One Camelback during the weekend of July 10 and 11, 1999. While the ADEQ is pleased that Exxon plans to proceed with SVE pilot test, required pursuant to Section IV(1)(A) of the Stipulation to Comply with Section IV of Amended Compliance Order L-6-98 (Stipulation), it should be noted that Exxon is required to submit a CAP Addendum, incorporating the results of said pilot testing, to the ADEQ by **July 6, 1999**. The CAP Addendum submittal due date was proposed by Exxon and agreed to by both Exxon and the ADEQ in the referenced Stipulation.

In accordance with Arizona Revised Statutes §49-1013(B), if Exxon fails to comply with the time frame specified in the Stipulation, Exxon may be subject to a civil penalty of not to exceed twenty-five thousand dollars for each day of continued noncompliance.

Please contact Tom Di Domizio at (602) 207-4287, if you have any questions regarding this correspondence.

Sincerely,

Thomas Di Domizio, Hydrologist
LUST Enforcement Unit
UST Corrective Action Section

Timothy A. Erwin, Manager
LUST Enforcement Unit
UST Corrective Action Section

TJD/ald

cc: Joan Card, Office of Attorney General
Patrick J. Paul, Snell & Wilmer LLP
Christopher Thomas, Squire, Sanders & Dempsey LLP
Michael Cannon, AREEA Investment Advisory & Management Services, Inc.
John Patton, Asset Environmental Services, Inc.

4931

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull

John F. Hagen, Acting Director

FPU:99-0137

Inventory No. 102894

March 24, 1999

Ms. Allene Pierce-Avey, Property Manager
1 E. Camelback Rd., Suite 660
Phoenix, AZ 85012

RE: Watershed Planning
NPDES Permit No. AZ0023868 One E. Camelback Treatment Site

Dear Ms. Pierce-Avey

The Environmental Protection Agency (EPA) is revising its NPDES permitting schedule to allow all permits within a specific river basin or watershed to be reissued during the same calendar year. This change reflects EPA's cooperation with the efforts of the Arizona Department of Environmental Quality (ADEQ) to implement water quality management on a watershed-by-watershed basis.

The One E. Camelback Treatment Site is located in the Middle Gila (Granite Reef-Painted Rock Dam) Watershed. The NPDES permits issuance schedule calls for your permit to be re-issued in the 1999/2000 fiscal year. Your facility's NPDES permit expires on 12/26/99 and renewal applications should be received at least 180 days prior to the permit's expiration date or by 06/26/99.

If the One E. Camelback Treatment Site wishes to continue operating under this NPDES permit, please submit the enclosed renewal applications to ADEQ as soon as possible. Be aware that discharges to "waters of the U.S.", without a current and valid NPDES Permit, are unlawful and subject to enforcement by USEPA and ADEQ. If One Camelback Treatment Site no longer wishes to hold a NPDES permit, please send a brief letter to ADEQ noting the date when discharges ceased and requesting that the permit be closed.

ADEQ and EPA would like to work cooperatively with all stakeholders of the Middle Gila (Granite Reef-Painted Rock) Watershed as we move forward in addressing water quality issues. We would greatly appreciate your input in this matter, especially any concerns you may have for your facility. Questions or concerns can be directed to me at (602) 207-4665 (email:taunt.linda@ev.state.az.us) or Astrid Larsen with EPA at (415) 744-1880.

Sincerely,

Linda C. Taunt

Linda C. Taunt, Manager
Federal Permits & Policy Development
Water Quality Division

/lct
Enclosures

cc: U.S. Environmental Protection Agency, Region IX (WTR-5)

4931

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull John F. Hagen, Acting Director

CERTIFIED MAIL
Return Receipt Requested
UST Ref. No. 99-0007123
April 15, 1999

Mr. Gene Ortega
Exxon Company U.S.A.
Environmental Engineering & Marketing Department
P.O. Box 4032
Concord, California 94524-4032

FACILITY MEETING SUMMARY - APRIL 9, 1999

RE: LUST File #4366.01-.02
Facility ID #0-008848
Maricopa County

Former Humble Oil/Exxon
One East Camelback Road
Phoenix, Arizona 85012

Dear Mr. Ortega:

On April 9, 1999, representatives of the Arizona Department of Environmental Quality (ADEQ) Underground Storage Tank Corrective Action Section (USTCA) and the Arizona Attorney General's Office (AGO) met with you and representatives from Snell & Wilmer, Asset Environmental, HSI Geotrans, and One Camelback Incorporated (OCI). Attending this meeting were Gene Ortega (Exxon), John Patten (Asset), Stephen Smith (HSI Geotrans), Patrick Paul (Snell & Wilmer), Chris Thomas (OCI), Joan Card and Mitch Klein (AGO), and Phil McNeely, Mike Latin, Tim Erwin, and Tom Di Domizio (ADEQ USTCA). The purpose of the meeting was to discuss the status of the dewatering system design, property access agreement, pilot testing, and subsequent CAP implementation. The following is a summary of the referenced meeting:

Status of Dewatering System

- OCI asserted that they need four weeks to design and evaluate a perimeter well dewatering system. The perimeter well system will be evaluated against the french drain system to determine which system will achieve the most effective balance in meeting the following objectives: 1) dewatering the basement; 2) minimizing vapor concentrations in the basement; and 3) preventing or minimizing the capturing of groundwater contamination emanating from other properties. Exxon stated that the proposed groundwater remediation system design is dependent on the utilization of the french drain

system, and if a perimeter well system is chosen, the proposed groundwater remediation system may need to be modified.

- Exxon stated that if the french drain system is chosen, it will take approximately 4-6 weeks to construct.

Property Access

- OCI assured Exxon and the ADEQ that Exxon has been granted access to the property to conduct the pilot test and subsequent CAP implementation activities.

- OCI and Exxon confirmed that an aboveground location has been agreed upon for placement of the proposed remediation system.

Pilot Test Implementation

- Exxon confirmed that the eventual dewatering system, whether french drain or perimeter well, will not affect the design of the vadose zone vapor extraction system. The ADEQ stated that the pilot test should be conducted using two extraction wells installed in the 4th level basement slab and that a perimeter extraction well was not needed for the conductance of the test. Exxon stated that, for the pilot test, two vapor extraction wells (VE-4E and VE-4W) will be installed in the 4th level basement slab. OCI agreed to the proposed locations of these extraction wells. OCI committed to honoring their access agreement with Exxon and will allow Exxon to conduct the pilot test as long as it is on a Sunday. Exxon agreed to this and stated that the testing should take a maximum of 8 hours. Exxon agreed to notify the ADEQ in advance of the scheduled date of these activities and OCI stated that representatives from the ADEQ were welcome to observe the activities. OCI stated that they would send a letter to Exxon confirming the granting of access to conduct the pilot test. Well permits are not required to conduct the pilot test.

CAP Implementation

- The ADEQ stated that the CAP will not be granted final approval until the pilot testing is completed and a CAP Addendum is submitted that adequately addresses the ADEQ's concerns. Therefore, Exxon is not currently under a compliance time frame to implement the CAP.

- OCI committed to signing the required well permits as soon as possible to prevent delays in the installation of the proposed remediation system.

Future Meetings

- OCI and/or Exxon will contact Phil Whitmore of the ADEQ Superfund Programs Section to discuss the proposed groundwater extraction/reinjection system for the west side of Camelback Road.

- OCI may schedule another meeting with Exxon and the ADEQ in thirty (30) days to discuss the chosen dewatering system following their analysis of the two proposed methods. In any case, Exxon and OCI agreed to inform the ADEQ of the status of discussions regarding the system and to consider the ADEQ's comments and concerns.

Please contact Tom Di Domizio at (602) 207-4287, if you have any questions regarding this correspondence or if further clarification is needed.

Sincerely,

Thomas Di Domizio, Hydrologist
LUST Enforcement Unit
USTCorrective Action Section

Timothy A. Erwin, Manager
LUST Enforcement Unit
USTCorrective Action Section

TJD/ald

cc: Christopher Thomas, Squire, Sanders & Dempsey LLP
Michael Cannon, AREEA Investment Advisory & Management Services, Inc.
Patrick J. Paul, Snell & Wilmer LLP
John Patton, Asset Environmental Services, Inc.
Stephen Smith, HSI Geotrans
Joan Card, Office of Attorney General
Phil McNeely, ADEQ USTCA Section
Tim Erwin, ADEQ USTCA/LUST Enforcement Unit
Mike Latin, ADEQ USTCA/State Lead Unit

g:/ad1/enf.unit/meet99.wpd/tjd

4931

Snell & Wilmer
L.L.P.
LAW OFFICES

One Arizona Center
Phoenix, Arizona 85004-0001
(602) 382-6000
Fax: (602) 382-6070

Patrick J. Paul (602) 382-6359
Internet: ppaul@swlaw.com

MAR 1999
RECEIVED
Administrative
Hearings

PHOENIX, ARIZONA
TUCSON, ARIZONA
IRVINE, CALIFORNIA
SALT LAKE CITY, UTAH

For SWAT Ranking
Tracking 99-0005817
Fac. 8848 Region TJD
LUST # 4366.01, 02

March 15, 1999

HAND-DELIVERED

Ms. Lavonne Watkins
Case Administrator
Office of Administrative Counsel
Arizona Department of Environmental Quality
3033 N. Central Avenue, 8th Floor
Phoenix, Arizona 85012

Re: Exxon Company USA
LUST File 4366.01, 4366.02
Facility I.D. No. 0-008848
Request for Hearing Re: Amended Compliance Order No. L-6-98

Dear Ms. Watkins:

On February 16, 1999, Exxon Company USA ("Exxon") received the above-referenced Amended Compliance Order directing Exxon to take certain actions in accordance with a specified compliance schedule. This letter constitutes Exxon's formal appeal and request for hearing on this amended order. This hearing is being requested pursuant to A.R.S. § 49-1013(A).

Without waiving any other objections to the Amended Compliance Order, Exxon specifically contests Articles I, II, III, and IV of the Amended Compliance Order.

In particular, Exxon disputes the following:

III.A.7. Exxon specifically disputes that it ever owned and/or operated any USTs at the subject facility.

III.A.8. Exxon specifically disputes that it, or its predecessor, Humble Oil, ever was responsible for day-to-day operations of the USTs at the facility.

III.A.13 & 14. Exxon does not dispute that some ambient air sampling occurred in the basement of the facility. However, Exxon specifically disputes that vapor concentrations

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detected may pose a vapor hazard to the occupants of the building. Furthermore, Exxon installed an air handling system to remove odors from the lower levels of the underground parking garage after the air samples were taken. In addition, the owner intends to install a new french drain system to de-water the building. This new system, along with Exxon's proposed remediation for groundwater, will prevent contact between groundwater and air in the parking areas.

III.A.15. Exxon specifically disputes that John Patton of Asset Environmental Services, Inc. or any other representative of Exxon ever reported to ADEQ that "confirmed releases of petroleum products had been detected at the former facility." In addition, although Exxon recognizes that there may be groundwater contamination beneath the former facility, it specifically contests that it is responsible for that contamination. Contamination from upgradient sources unrelated to the former service station is migrating onto the property.

III.A.19. Exxon specifically disputes that the Corrective Action Plan Addendum did not contain all the information and modifications as requested by ADEQ.

III.B.1&2. Exxon specifically disputes that it ever owned and/or operated any of the USTs on the subject property. Exxon specifically contests the remainder of Section III to the extent it purports to impose requirements upon Exxon as a former owner or operator of UST systems at the subject facility.

If you have questions on any of the foregoing or request additional clarification, please call me. Thank you for your attention to this matter and to your anticipated assistance in facilitating Exxon's request for hearing.

Sincerely,

SNELL & WILMER

Patrick Paul

Patrick J. Paul

PJP:lm

cc: Ronald Palmer
Gene Ortega
David Bates
John Patton

4931

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull John F. Hagen, Acting Director

CERTIFIED LETTER
Return Receipt Requested
UST Ref. No. 98-0021837
January 8, 1999

Mr. Gene Ortega
EXXON Company, USA
Environmental Engineering & Marketing Department
2300 Clayton Road, Suite 640
P.O. Box 4032
Concord, California 94524-4032

RE: Review of Corrective Action Plan, Supplement 1

LUST File #4366.01-.02
Fac. ID #0-008848

Former Service Station No. 7-7846
One East Camelback Road
Phoenix, Arizona 85012

Dear Mr. Ortega:

The Arizona Department of Environmental Quality (ADEQ), Underground Storage Tank (UST) Corrective Action Section, State Lead Unit (SLU), has reviewed the submittal entitled Corrective Action Plan Supplement 1, dated November 17,1998, which was received by the ADEQ on November 20, 1998. This submittal was prepared for Exxon Company by ASSET Environmental Services, Inc.

Based upon the review of the above referenced document, and information contained within the LUST file, an addendum to the above referenced corrective action plan (CAP) is necessary prior to preliminary approval. This CAP Addendum should provide additional information, and any modifications to the CAP, and will supplement the CAP, for the public notice/public comment process. The ADEQ requires the following information or modifications to be submitted in a CAP Addendum:

(1) Section 3.0, Remedial Alternative Evaluation - Pilot test results must be included in the CAP Addendum. The results of the pilot testing are necessary prior to CAP approval to evaluate the effectiveness of the chosen remediation method. This request is due to the unique site constraints and added public investment. All anticipated remedial design modifications should be completed prior to public comment period.

(2) Section 4,4 Permitting Requirements - The CAP Addendum must include a signed copy of the access agreement between Exxon and AREEA (One East Camelback). The agreement must outline the location of the treatment systems, pilot testing and O & M of the systems.

Please submit the CAP Addendum to the UST Corrective Action Section, SLU within 90 days from receipt of this letter.

Thank you for your continuing efforts to remediate this site. If you have any questions, please contact me at 1-800-234-5677, extension 4308.

Sincerely,

Michael Latin

Michael Latin, Manager
UST Corrective Action Section
State Lead Unit

MRL/sya

cc: Michael Cannon, President
c/o AREEA Investment Advisory & Management Services, Inc.
9400 South Dadeland Boulevard, Penthouse One
Miami, FL 33156-2817

4931

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull Russell F. Rhoades, Director

CERTIFIED LETTER
Return Receipt Requested
UST Ref. No. 98-0014278
August 18, 1998

Mr. Gene Ortega
EXXON Company, USA
Environmental Engineering & Marketing Department
2300 Clayton Road, Suite 640
P.O. Box 4032
Concord, California 94524-4032

RE: Review of Corrective Action Plan

LUST File # 4366.01-.02
Fac. ID # 0-008848

Former Service Station No.7-7846
One East Camelback Road
Phoenix, Arizona 85012

Dear Mr. Ortega:

The Arizona Department of Environmental Quality (ADEQ), Underground Storage Tank (UST) Corrective Action Section, State Lead Unit (SLU), has reviewed the submittal entitled *Report On Corrective Action Plan*, dated July 31 1998, which was received by the ADEQ on July 31, 1998. This submittal was prepared for Exxon Company by ASSET Environmental Services, Inc.

Based upon the review of the above referenced document, and information contained within the LUST file, an addendum to the above referenced corrective action plan (CAP) is necessary prior to preliminary approval. This CAP Addendum should provide additional information, and any necessary modifications to the CAP, and will supplement the CAP, for the public notice/public comment process. The proposed remediation method of air sparging/vapor extraction may be a reasonable method for this site, however, the ADEQ requires the following information or modifications to be submitted in a CAP Addendum:

(1) Section 3.0, Remedial Alternative Evaluation - Pilot test results must be included in the CAP Addendum. The results of the pilot testing are necessary prior to CAP approval to evaluate the effectiveness of the chosen remediation method.

(2) Section 3.2, Remedial Action Objectives - The current ADEQ cleanup goals for groundwater are below Aquifer Water Quality Standards (benzene 5 ug/l...).

(3) Section 3.3.3, Pump and Treat Alternative - The CAP Addendum must address the design and implementation of a treatment system for the extracted groundwater. The

system should incorporate the anticipated pumping rates as well as the concentration of petroleum hydrocarbons from the de-watering system.

(4) Section 4.0, Process Description - The CAP Addendum should address the source removal from MW-N.

(5) Section 4.0, Process Description - The CAP Addendum must include the conceptual design of the system, using the results of the pilot test(s). Please indicate the spacing of the air sparging/vapor extraction wells, and construction details for the nested system. A description of the equipment to be utilized (e.g. - compressors, blowers, etc.), including the operating parameters, is also necessary.

(6) Section 4.2, Air Sparging Process Description and Operating Principles - The CAP Addendum must address the issue of vapor control into the sub-basement level 4 and 5. The vapor extraction wells are screened within 12 inches from the sub-basement slab.

(7) Section 4.3, Air Emission Control System - The CAP Addendum shall include a location for the air treatment system and compressor.

(8) Section 4.4, Permitting Requirements - The CAP Addendum must include a signed copy of the access agreement between Exxon and AREEA (One East Camelback). The agreement must outline the location of the treatment systems, pilot testing and O & M of the systems.

Please submit the CAP Addendum to the UST Corrective Action Section, SLU within 90 days from receipt of this letter.

Thank you for your continuing efforts to remediate this site. If you have any questions, please contact me at 1-800-234-5677, extension 4308.

Sincerely,

Michael Latin

Michael Latin, Manager
UST/Corrective Action Section
State Lead Unit

MRL/alr

cc: Michael Cannon, President
c/o AREEA Investment Advisory & Management Services, Inc.
9400 South Dadeland Boulevard, Penthouse One
Miami, FL 33156-2817

4931

STREICH LANG

PROFESSIONAL ASSOCIATION
ATTORNEYS

ROGER K. FERLAND
(602) 229-5607
rferland@sllaw.com

RENAISSANCE ONE
WO N. CENTRAL AVENUE
PHOENIX, ARIZONA
85004-2391

PHONE (602) 229-5200
FAX (602) 229-5690

PHOENIX
TUCSON

June 24, 1998

By Hand-Delivery

Arizona Dept. Of Environmental Quality
Betty Mybeck, Legal Assistant
Superfund Program Section
3033 N. Central Avenue
Phoenix, Arizona 85012

Re: **Issuance of Consent Decree Camelback and Central Avenue Property**

Dear Ms. Mybeck:

As you requested, this letter constitutes formal confirmation of my client, Outdoor Systems, Inc's ("Outdoor Systems') desire to obtain a judicially approved consent decree under the provision of A.R.S. Sections 49-285.01(a) and 49-292(c); CERCLA Section 113(f)(2) [42 U.S.C. 961 3(f)(2)] and Section 40 of Outdoor System's Prospective Purchase Agreement dated April 15, 1998, (attached). You have specifically asked for Outdoor System's confirmation of three points:

1. Outdoor Systems will agree to a judicially approved consent decree containing the obligations that Outdoor Systems undertook as a condition of obtaining the above-referenced Prospective Purchase Agreement;

2. Outdoor Systems will pay the reasonable and necessary costs of obtaining the assistance of the attorneys and staff of the Arizona Attorney General's Office int he preparation of the requested consent decree; and

3. Outdoor Systems hereby agrees to reimburse Arizona Department of Environmental Quality ("ADEQ") up to $5,000.00 for any reasonable and necessary costs, including the costs of obtaining the assistance of the Attorney General as authorized by Paragraph 2., to be incurred by ADEQ in obtaining the consent decree Outdoor Systems has requested.

The foregoing should provide the prerequisite confirmation you asked for to allow ADEQ to proceed with preparation of the consent decree. Outdoor Systems is

eager to have the consent decree lodged with the Court as soon as possible and will cooperate in any manner necessary to achieve that end. Thank you for your assistance.

Sincerely,

Roger Ferland

Roger K. Ferland

RKF:tr

Enclosure

cc: John Clements (w/o encl.)
Mark Santana (w/o encl.)
Jean Calhoun (w/o encl.)
Tamara Huddleston (w/o encl.)

When recorded, return to:

Streich Lang, P.A.
Renaissance One
2 N. Central Avenue
Phoenix, Arizona 85004-2391
Attn: Roger Ferland, Esq.

PROSPECTIVE PURCHASER AGREEMENT

PROSPECTIVE PURCHASER AGREEMENT

I. INTRODUCTION.

This Prospective Purchaser Agreement ("Agreement") is made and entered into by and between the Arizona Department of Environmental Quality ("ADEQ" or "the Department") on behalf of the State of Arizona and Outdoor Systems, Inc. (the "Purchaser") (collectively, the "Parties").

The Purchaser is a Delaware corporation that is licensed to do business in this state and that is located at 2502 North Black Canyon Highway; Phoenix, Arizona 85009.

ADEQ enters into this Agreement pursuant to A.R.S. § 49-285.01 and A.R.S. § 49-292.

The property that is subject of this Agreement is located at the southwest corner of Camelback Road and Central Avenue in Phoenix, Arizona and is more specifically described in the attached Exhibit 1 to this Agreement and portrayed on the map attached as Exhibit 2 to this Agreement (the "Property").

The Parties agree to undertake all actions required by the terms and conditions of this Agreement and A.R.S. § 49-285.01 and A.R.S. § 49-292. The purpose of this Agreement is to settle and resolve, subject to reservations and limitations contained in Section VIII (Reservation of Rights by State of Arizona), the potential liability of the Purchaser for the Existing Contamination at the Property which could otherwise result from Purchaser becoming the owner of the property.

The Parties agree that the Purchaser's entry into this Agreement, and the actions undertaken by the Purchaser in accordance with the Agreement, do not constitute an admission of any liability by the Purchaser.

The resolution of this potential liability, in exchange for provision by the Purchaser to the State of Arizona of a substantial public benefit, is in the public interest.

II. DEFINITIONS.

1. Unless otherwise expressly provided herein, terms used in this Agreement which are defined in Water Quality Assurance Revolving Fund ("WQARF"), Arizona Revised Statutes Title 49, Chapter 2, Article 5, or the Comprehensive Environmental Response Compensation and Liability Act; 42 U.S.C. § 9601 et seq.("CERCLA") or in regulations promulgated under WQARF or CERCLA shall have the meaning assigned to them in WQARF or CERCLA respectively or in such regulations, including any amendments thereto. In the event of a conflict, definitions under WQARF shall apply.

2. "ADEQ" shall mean the Arizona Department of Environmental Quality and any successor departments or agencies of the State of Arizona.

3. "Existing Contamination" shall mean any hazardous substances as defined by A.R.S. § 49-201(17) present or existing on or under the Property as of the effective date of this Agreement.

4. "Facility" as defined by A.R.S. §49-201(15), shall include the " Property" described in this agreement.

5. "Parties" shall mean ADEQ and the Purchaser.

6. "Property" shall mean that portion of the Site which fits the legal description in Exhibit 1 of this Agreement. The term "Property" shall have the same meaning as "Facility."

7. "Purchaser" shall mean Outdoor Systems, Inc.

8. "Site" as defined by A.A.C. R18-7-102, shall include the Property and all areas to which hazardous substances have come to be located.

III. STATEMENT OF FACTS.

9. Additional pertinent information about the Property is contained in a Phase I Environmental Site Assessment dated April 15, 1996 and performed by Scott Allard & Bohannan, Inc.; a Report on Environmental Investigations dated September 19, 1997 and performed by Environmental Research Associates; and the various reports generated as a result of leaking underground petroleum storage tanks ("USTs") at the Weiss Guys Carwash (Facility ID #0-0005589) and Chevron Service Station (Facility ID #0-008367) sites, copies of each of the referenced documents are contained in ADEQ files (for the UST-related documents) or are attached as Exhibit 3. As a result of the information contained or referenced in Exhibit 3 and other information that is contained in the public record for this Agreement, the Department finds that it has been provided sufficient information to reasonably identify the extent of the contamination of the Property.

IV. RESPONSIBILITIES OF PURCHASER.

10. The Purchaser represents that the Purchaser did not cause or contribute to the Existing Contamination or otherwise cause or contribute to a Release or Threatened Release of a hazardous substance at the site before the Purchaser acquired title to the Property.

11. Purchaser represents that it is not affiliated with any other person who is a party responsible for the release or threatened release of a hazardous substance on or from the Property under A.R.S. Title 49, Chapter 2, through any familial relationship, any corporate or contractual relationship, other than a contract to protect a security interest or to purchase the Property.

12. The Purchaser represents that Purchaser's involvement with the Property and the Site has been limited to the following: Prior to the closing of the Property, the Purchaser sub-let a portion of the Property for the purpose of displaying a billboard sign. Purchaser gained access to the property for the purpose of the September 19, 1997 environmental investigation described in Paragraph 9.

13. The Purchaser bears the burden of proving that any hazardous substance existed on the facility as a result of releases of the hazardous substance before the date of acquisition of ownership or operation of the Property.

14. The Purchaser shall exercise due care at the Property with respect to Existing Contamination and shall comply with all applicable local, state, and federal statutes and regulations. The Purchaser agrees to cooperate fully with ADEQ in the implementation of response actions at the Site and further agrees not to interfere with response actions. ADEQ agrees, consistent with responsibilities under applicable law, to use reasonable efforts to minimize any interference with the Purchaser's operations by such entry and response.

15. The Purchaser understands and acknowledges that should it exacerbate or contribute to Existing Contamination, create additional contamination by an act or omission, it may be liable under the provisions of A.R.S. §49-283 and other applicable law. In the event the Purchaser becomes aware of any action or occurrence which causes or threatens a release of hazardous substances at or from the Site that constitutes an emergency situation or may present an immediate threat to public health or the environment, Purchaser shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify ADEQ of such release or threatened release.

16. The Purchaser agrees to perform or have performed those activities set forth in Section V (Description of Substantial Public Benefit/Work to be Performed).

17. For the purposes of this Agreement, ADEQ relies on the representations of Purchaser.

V. DESCRIPTION OF SUBSTANTIAL PUBLIC BENEFIT/WORK TO BE PERFORMED.

18. Under the provisions of A.R.S. §49-285.01.A.4(c), the "Productive reuse of a vacant or abandoned industrial or commercial facility" constitutes a substantial public benefit. As is apparent from Exhibit 2, a large portion of the Property is made up of a vacant lot, the currently unused site of a former service station and the currently unused site of a former carwash. The Purchaser has a long-term plan for integrated commercial development of the Property that will provide significant employment opportunities and enhanced property values for the neighborhood. Moreover, as a condition of this Agreement, Purchaser agrees to allow access to the Property so that entities not parties to this Agreement may construct and operate a groundwater remediation system to clean up contaminated groundwater in the general area of the Site (the "Operating Entities"). Such access will be granted pursuant to an agreement between Purchaser and Operating Entities which will specify a nominal monthly payment to Purchaser for access, a specified location for operation of the groundwater remediation system, a fixed period of at least three years from the effective date of this Agreement during which access is granted, indemnification of Purchaser for any liability that might result from operation of the remediation system and other appropriate provisions. Access to the Property under these conditions and for the purpose of constructing and operating a groundwater remediation system also constitutes a

substantial public benefit. Purchaser agrees to perform the environmental investigation work as outlined in the following statement of work:

A. SUMMARY.

At such time as the building presently occupied by Maroneys is demolished and removed, additional investigations shall be performed to assess historical waste and wastewater management and disposal practices and potential soil contamination in the area beneath the footprint of the existing structure.

B. SCOPE OF WORK.

A site-specific safety and health plan (SHP) shall be prepared prior to the start of the work to summarize the hazards associated with the investigation work, monitoring methods, and worker personal protective equipment. Personnel participating in the investigation work will read and sign a copy of the SHP, and a copy of the SHP will be retained at the site during the performance of the work.

An underground utility survey will be conducted to assess the location and orientation of utilities prior to the subsurface investigation work. Utility locations will be marked on the ground surface and boring locations will be offset from the marked areas by a minimum of four feet in a lateral direction.

Outdoor Systems shall investigate historical building records which are readily available from the City of Phoenix regarding the construction date(s) of the primary structure, location and type of associated wastewater management facilities of the original structure, and the date(s) which public sewer connections were made to the building.

A soil gas investigation shall be performed to assess concentrations of trichloroethylene (TCE) and tetrachloroethylene (PCE) in soils at the site within the footprint of the site building. Emphasis will be placed on the investigation of those locations where historical wastewater management activities occurred. Up to twelve soil gas probes shall be advanced to a target depth of eight feet below grade, or drive point refusal. Soil gas samples will be collected from the drive points and analyzed for TCE and PCE, as well as other compounds that are detectible by the analytical method used for analysis. Collected samples will be shipped under chain of custody control to an Arizona Department of Health Services licensed laboratory. An interpretive contour map of the soil gas data shall be prepared using commercial software.

Following the soil gas survey, a CME-75, or equivalent, hollow-stem auger drilling rig shall be mobilized to the site to advance soil borings. A total of five (5) soil borings will be advanced at the site, within the footprint of the site building, to a depth of approximately 30 feet below ground surface (or auger refusal), subject to offset requirements to avoid underground utilities or aboveground access impediments. Emphasis will be placed on the investigation of those locations where historical waste and wastewater management activities occurred and/or volatile halocarbon compounds are detected in the soil gas analyses.

Soil sampling locations shall be approved in advance by the Arizona Department of Environmental Quality. As currently envisioned, soil samples will be collected at approximate depths of five, 10, 20 and 30 feet below land surface (bls). However, ADEQ may request that sampling be conducted at different soil depths, not exceeding four samples per boring and 50 feet bls in depth. Soil samples shall be collected by driving a decontaminated modified split spoon sampler, lined with three brass sample collection sleeves, into undisturbed soils ahead of the lead

auger using a rig-mounted hammer. Blow counts required to drive the sampler over six inch intervals will be recorded. Boring logs will be prepared in accordance with the Unified Soil Classification System and Munsell Color Charts. Collection of soil samples shall be in accordance with the methods contained in the relevant portions of the ADEQ Quality Assurance Project Plan which is current as of the date(s) of the sampling work.

Following retrieval of the sampler from the boring, the sampler will be opened and the soil sample will be removed. A portion of the soil sample will be used for geolithic logging of the boring and field analysis of volatile organic content using a portable organic vapor meter and the "baggie headspace" method. The center brass soil sleeve from the sampler will be capped, sealed with a custody seal, labeled with the sample number, requested analysis, sample date, time and sampler's initials, logged on a chain of custody form, and placed on ice in a sample cooler. Recovered soil samples will be analyzed for concentrations of volatile halocarbons by EPA Method 8010, or alternative method which, at the time the work is performed, is applicable for analysis of volatile halocarbon compounds. Analytical work will be performed by a laboratory that is licensed by the Arizona Department of Health Services for the method used for sample analysis. An anticipated total of twenty (20) soil samples will be analyzed by this method, subject to limitations on sample collection completeness.

Upon receipt, the analytical data will be reviewed for quality assurance/quality control parameters including completeness, accuracy, and precision. Data meeting QA/QC criteria will be utilized to assess the lateral and vertical extent of volatile halocarbon impacted soils. Data will be compared to the residential and non-residential Soil Remediation Levels as contained in the latest rules promulgated by the Arizona Department of Environmental Quality.

Outdoor Systems shall prepare a report and submit that report to the Arizona Department of Environmental Quality to document subsurface investigation work. The report shall include documentation of boring locations and depths, sample recoveries, analytical data and boring logs.

19. Amounts due and owing pursuant to the terms of this Agreement but not paid in accordance with the terms of this Agreement shall accrue interest at the rate established pursuant to A.R.S. §44-1201.

20. The Purchaser agrees to perform all remedial measures in compliance with the WQARF program statutes and rules, and other applicable provisions of A.R.S. Title 49, including, but not limited to, A.R.S. § 49-151 and § 49-152, and if pursuant to a consent judgment, under the Department's supervision. The work to be performed is described in Paragraph 18.

VI. EASEMENT/NOTICE TO ADEQ AND SUCCESSORS IN INTEREST.

21. The Purchaser shall grant ADEQ and its authorized representatives easements to provide access to the Property for purposes of ensuring compliance with this Agreement, or for remedial measures authorized pursuant to A.R.S. Title 49, Article 2 in connection with contamination at the Property as of the date of acquisition of ownership or operation of the Property. ADEQ agrees to provide reasonable notice to the Purchaser of the timing of remedial measures to be undertaken at the Property.

22. Within 30 days from the effective date of this Agreement, the Purchaser shall record a certified copy of this Agreement with the County Recorder's Office in the county in which the Property is located. Thereafter, each deed, title, or other instrument conveying an interest in the Property shall contain a notice stating that the Property is subject to this Agreement.

A copy of these documents should be sent to the persons listed in Section XIII (Notices and Submissions).

23. The Purchaser and any subsequent purchaser of the Property shall provide written notice to ADEQ of any sale, assignment or other transfer of the Property at least fifteen (15) business days before the date of the transfer.

24. The Purchaser shall ensure that assignees, successors in interest, lessees, and sublessees, of the Property shall provide the same access and cooperation. The Purchaser shall ensure that a copy of this Agreement is provided to any current lessee or sublessee on the Property as of the effective date of this Agreement and shall ensure that any subsequent leases, subleases, assignments or transfers of the Property or an interest in the Property are consistent with this Section.

25. On Assignment, the Assignee assumes the obligations and the benefits of the Agreement. All Assignees must meet the requirements of A.R.S. § 49-285.01(A) and (B). Unless the Assignor has breached the Agreement, the Assignor retains the benefits of the Agreement.

VII. STATE OF ARIZONA'S COVENANT NOT TO SUE.

26. Subject to the Reservation of Rights in Section VIII of this Agreement and upon completion of the work specified in Section V (Description of Substantial Public Benefit) to the satisfaction of ADEQ, the State of Arizona covenants not to sue or take any other civil or administrative action against Purchaser for any and all civil liability for injunctive relief or reimbursement of remedial action costs pursuant to WQARF or pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), with respect to the Existing Contamination.

VIII. RESERVATION OF RIGHTS BY STATE OF ARIZONA.

27. The covenant not to sue set forth in Section VII above does not pertain to any matters other than those expressly specified in that Section. The State of Arizona reserves and the Agreement is without prejudice to all rights against Purchaser with respect to all other matters, including but not limited to, the following:

(a) claims based on a failure by the Purchaser to meet a requirement of this Agreement;

(b) any liability resulting from future releases of hazardous substances, pollutants or contaminants at or from the Property caused or contributed to by the Purchaser, its successors, assignees, lessees or sublessees;

(c) any liability resulting from exacerbation by the Purchaser, its successors, assignees, lessees or sublessees, of Existing Contamination;

(d) any liability resulting from the release or threat of release of hazardous substances, pollutants or contaminants, at the Property after the effective date of this Agreement, not within the definition of Existing Contamination;

(e) civil or criminal liability for past or future violations of local, State or federal statutes or regulations.

28. Nothing in this Agreement is intended as a release or covenant not to sue for any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or in equity, which the State of Arizona may have against any person, firm, corporation or other entity not a party to this Agreement.

29. Nothing in this Agreement is intended to limit the right of the State of Arizona to undertake future remedial actions at the Property or to seek to compel parties other than the Purchaser to perform or pay for remedial actions at the Property. Nothing in this Agreement shall in any way restrict or limit the nature or scope of remedial actions which may be taken or be required by the State in exercising its authority under State or federal law. Purchaser acknowledges that it is purchasing property where remedial actions may be required.

IX. PURCHASER'S COVENANT NOT TO SUE AND RESERVATION OF RIGHTS.

30. Except for claims arising out of the State of Arizona's status as a responsible party under WQARF, A.R.S. § 49-283, if applicable, and CERCLA Section 107, 42 U.S.C. §9607, the Purchaser hereby covenants not to sue and not to assert any claims or causes of action against the State of Arizona, its authorized officers, employees, or representatives with respect to Existing Contamination on the Site or under this Agreement, including but not limited to, any direct or indirect claims for reimbursement from the WQARF pursuant to A.R.S. §49-282 or from the Hazardous Substance Superfund established pursuant to the Internal Revenue Code, 26 U.S.C. §9507, through CERCLA Section 107, 42 U.S.C. § 9607, or Section 113, 42 U.S.C. § 9613, or any other provision of law, any claim against the State of Arizona including any department, agency, or instrumentality of the State of Arizona or the United States including any department, agency, or instrumentality of the United States, under WQARF, A.R.S. §49-285, or CERCLA Section 107, 42 U.S.C. § 9607, or Section 113, 42 U.S.C. § 9613, related to the Property, or any claims arising out of remedial actions at the Property related to Existing Contamination, including claims based on ADEQ's oversight or implementation of such activities or approval of plans for such activities.

X. PARTIES BOUND/ASSIGNMENT OF COVENANT.

31. This Agreement shall apply to and be binding upon the State of Arizona, and shall apply to and be binding on the Purchaser, its officers, directors, employees, and agents. successors, or assignees. Each signatory of a Party to this Agreement represents that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party.

32. Notwithstanding any other provisions of this Agreement, all of the rights, benefits and obligations conferred upon Purchaser under this Agreement may be assigned or transferred to any person with prior written notice to ADEQ as prescribed by A.R.S. §§49-285.01(E) and (F) and Paragraph 23 of this Agreement.

33. In the event of an assignment or transfer of the Property or an assignment or transfer of an interest in the Property, the assignor or transferor shall continue to be bound by all the terms and conditions, and subject to all the benefits, of this Agreement except as the State of Arizona and the assignor agree otherwise and modify this Agreement, in writing, accordingly. Moreover, prior to or simultaneous with any transfer of the Property, the transferee as a part of the notice required by Section V (Description of Substantial Public Benefit/Work to be Performed), must consent in writing to be bound by the terms of this Agreement.

XI. DOCUMENT RETENTION.

34. The Purchaser agrees to retain and make available to ADEQ for inspection and copying all non-privileged business and operating records, contracts, site studies and investigations, and documents relating to operations at the Property, for at least ten years, following the effective date of this Agreement.

XII. DISCLAIMER.

35. This Agreement in no way constitutes a finding by the State of Arizona as to the risks to human health and the environment which may be posed by contamination at the Property or the Site nor constitutes any representation by the State of Arizona that the Property or the Site is fit for any particular purpose.

XIII. PAYMENT OF COSTS.

36. Upon request by ADEQ and prior to the execution of this Agreement, the Purchaser shall pay to ADEQ an initial fee of $900.00 in partial payment of ADEQ's costs for the preparation and execution of this Agreement pursuant to A.R.S. § 49-285.01(H). ADEQ shall provide the Purchaser with a billing for payment of ADEQ's remaining costs for the preparation and execution of this Agreement, which shall include, but not be limited to, the cost of publishing the mandatory public notice for this Agreement. All fees shall be paid to ADEQ in full prior to the execution of this Agreement.

37. If the Purchaser fails to comply with the terms of this Agreement, it shall be liable for all litigation and other enforcement costs incurred by the State of Arizona to enforce this Agreement or otherwise obtain compliance.

XV. EFFECTIVE DATE.

38. The effective date of this Agreement shall be the date upon which ADEQ executes this Agreement.

XVI. TERMINATION.

39. If Purchaser or successors in interest believe that the easements granted under Section VI (Easement/Notice to ADEQ and Successors in Interest) are no longer necessary to

ensure compliance with this Agreement or A.R.S. Title 49, the Purchaser or successors in interest may request in writing that ADEQ agree to terminate the easements granted, provided, however, that the easements shall continue in force unless and until the party requesting such termination receives written agreement from ADEQ to terminate such provisions.

XVII. CONTRIBUTION PROTECTION.

40. With regard to claims for contribution against Purchaser, the Parties hereto agree that, upon successful completion of the terms of this Agreement, the Purchaser is eligible for protection from contribution actions or claims as provided by WQARF A.R.S. §49-292(C) and CERCLA Section 113(f)(2), 42 U.S.C. 9613(f)(2), for matters addressed in this Agreement at such time as such matters are described in a separate, judicially approved consent decree.

41. The Purchaser agrees that with respect to any suit or claim for contribution brought by it for matters related to this Agreement it will notify the ADEQ in writing no later than 60 days prior to the initiation of such suit or claim.

XVIII. EXHIBITS.

42. Exhibit 1 shall mean the legal description of the Property which is the subject of this Agreement.

43. Exhibit 2 shall mean the map depicting the Site.

44. Exhibit 3 shall mean the Phase I Environmental Site Assessment dated April 15, 1996 and performed by Scott Allard & Bohannan, Inc. And a Report on Environmental Investigations dated September 19, 1997 and performed by Environmental Research Associates.

XIII. NOTICE.

45. Whenever, under the terms of this Agreement, notice must be provided by one party to the other, such notice shall be sent by regular mail or hand-delivered to the following addresses:

State of Arizona:
Director, Waste Programs Division
ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
3033 North Central Avenue
Phoenix, Arizona 85012-0600

Outdoor Systems Inc.:
John R. (J.C.) Clements
Director of Facilities
OUTDOOR SYSTEMS, Inc.
2502 North Black Canyon Highway
Phoenix, Arizona 85009

XIX. PUBLIC COMMENT.

46. This Agreement shall be subject to a fifteen-day public comment period, after which ADEQ may modify or withdraw its consent to this Agreement if comments received disclose facts or considerations which indicate that this Agreement is inappropriate, improper or inadequate. However, if ADEQ modifies this Agreement in a manner that is unacceptable to the Purchaser, the Purchaser may decline to enter into a final Agreement, within thirty days of receipt of the modifications, without penalty or prejudice.

47. Subject to satisfactory performance of the obligations under the Agreement, the prospective purchaser is not liable to this State under this article for any release of a hazardous substance at the Facility that exists on the date of acquisition of ownership or operation of the Facility.

It is So Agreed:

ARIZONA DEPARTMENT OF
ENVIRONMENTAL QUALITY

[illegible] ed.
[illegible] acknowledged before me this 15th day of
April 1998 by Peggy J. Guichard-Watters
In witness I hereunto set my hand and official seal.
Carolyn W. Poole NOTARY PUBLIC

CAROLYN W. POOLE
Notary Public - Arizona
Maricopa County
My Comm. Expires Apr 1, 2002

By: Peggy J. Guichard-Watters
Deputy Director, Waste Programs Division

Date: April 15, 1998

It is So Agreed:

OUTDOOR SYSTEMS, INC.

By: [signature]
John R. Clements

Date: 3-16-98

SUBSCRIBED AND SWORN to before me this 16 day of March, 1998.

Notary: Heidi Deacon

OFFICIAL SEAL
HEIDI DEACON
NOTARY PUBLIC-ARIZONA
MARICOPA COUNTY
My Comm. Expires July 10, 2000

My Commission Expires:
July 10, 2000

290154-2

EXHIBIT "1"

LEGAL DESCRIPTION OF THE PROPERTY

LEGAL DESCRIPTION

PARCEL 1:

Lots 12 and 13, of STANLEY PLACE, according to the plat of record in the office of the County Recorder of Maricopa County, Arizona, recorded in Book 18 of Maps, page 21;

EXCEPT the North 7 feet of Lot 12 of said Stanley Place.

PARCEL 2:

Lots 14 and 15, of STANLEY PLACE, according to the plat of record in the office of the County Recorder of Maricopa County, Arizona, recorded in Book 18 of Maps, page 21.

PARCEL 3:

Lots 16 and 17, of STANLEY PLACE, according to the plat of record in the office of the County Recorder of Maricopa County, Arizona, recorded in Book 18 of Maps, page 21;

EXCEPT that portion of Lot 16, described as follows:

BEGINNING at the Southeast corner of the North 26 feet of said Lot;

thence Northwesterly to the intersection of the South line of the North 9 feet of said Lot with the West line of the East 17 feet thereof;

thence Westerly along said South line, a distance of 100 feet to an angle point;

thence Westerly to the intersection of the South line of the North 7 feet of Lot 13, in STANLEY PLACE with the West line of the East 11 feet of said Lot 13, and there terminating.

PARCEL 4:

Lot 18 and the North 1 1/2 feet of Lot 13, of STANLEY PLACE, according to the plat of record in the office of the County Recorder of Maricopa County, Arizona, recorded in Book 18 of Maps, page 21.

PARCEL 5:

Lot 19, of STANLEY PLACE, according to the plat of record in the office of the County Recorder of Maricopa County, Arizona, recorded in Book 18 of Maps, page 21;

EXCEPT the North 1 1/2 feet.

PARCEL 6:

Lots 20 and 21, of STANLEY PLACE, according to the plat of record in the office of the County Recorder of Maricopa County, Arizona, recorded in Book 18 of Maps, page 21.

PARCEL 7:

Lots 22 and 23, of STANLEY PLACE, according to the plat of record in the office of the County Recorder of Maricopa County, Arizona, recorded in Book 18 of Maps, page 21.

PARCEL 8:

Lot 24, of STANLEY PLACE, according to the plat of record in the office of the County Recorder of Maricopa County, Arizona, recorded in Book 18 of Maps, page 21.

EXHIBIT "2"

MAP OF SITE
[On file at the offices of the Arizona Department of Environmental Quality 3033 North Central Avenue, Phoenix, Arizona 85012]

EXHIBIT "3"

PHASE I ENVIRONMENTAL SITE ASSESSMENT
April 15, 1996
Scott Allard & Bohannan, Inc.

and

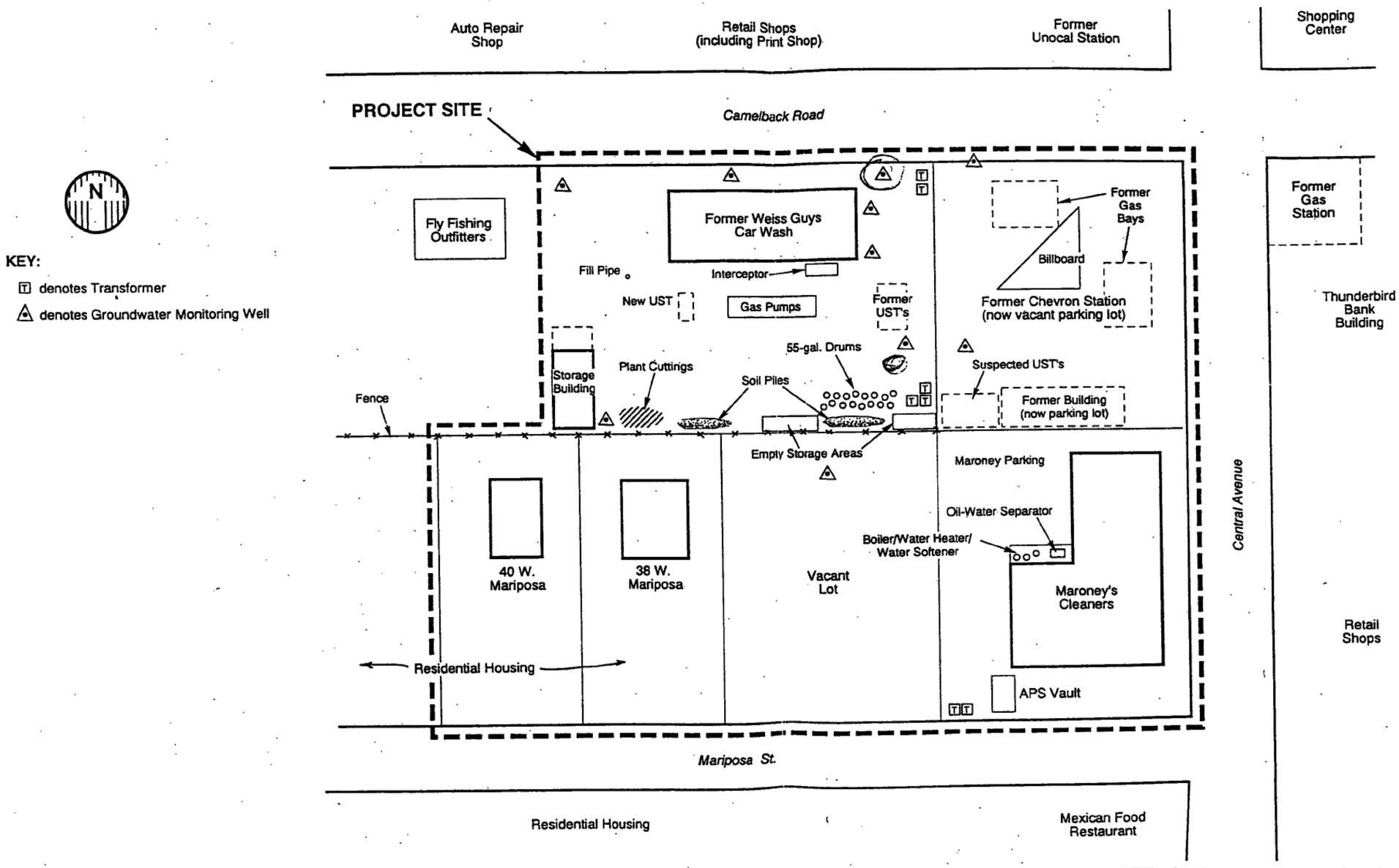
REPORT ON ENVIRONMENTAL INVESTIGATIONS
MORONEY'S DRY CLEANING FACILITY
September 19, 1997
Environmental Research Associates
[On file at the offices of the Arizona Department of Environmental Quality
3033 North Central Avenue, Phoenix, Arizona 85012]

Job No. 92382SJ

Figure 2

Site Plan

NOT TO SCALE



Prepared By SHEARON VAUGHN Date 1/10/96 Checked By Thor Anderson Date 1-17-96

SA&B Environmental & Chemical Consultants
Providing Practical Environmental Solutions
3001 W. Indian School Rd., Ste. 312
Phoenix, Arizona 85017
(602) 263-0045

4931-00001

Snell & Wilmer
L.L.P.
LAW OFFICES

One Arizona Center
Phoenix, Arizona 85004-0001
(602) 382-6000
Fax: (602) 382-6070

PHOENIX, ARIZONA
TUCSON, ARIZONA
IRVINE, CALIFORNIA
SALT LAKE CITY, UTAH

Patrick J. Paul (602) 382-6359
Internet: paulp@swlaw.com

March 9, 1998

VIA FEDERAL EXPRESS

Arthur Haubenstock, Esq.
U.S. Environmental Protection Agency
Office of Regional Counsel, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Re: One East Camelback Status Report

Dear Arthur:

Enclosed are the attachments to a status letter that will be forwarded to you via facsimile on Tuesday March 10. These attachments will be explained in more detail in a subsequent letter.

In the interim, if you have any questions on the enclosed please call me.

Sincerely,

SNELL & WILMER

Patrick

Patrick J. Paul

PJP:lm
Enclosures

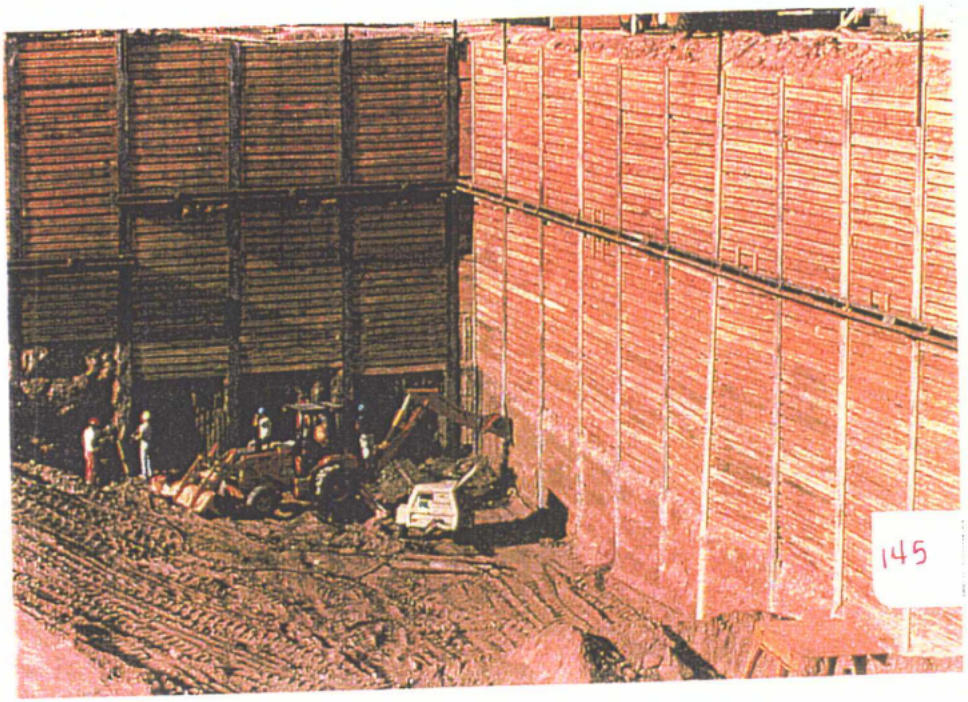
cc (via FedEx w/enclosures): Jennifer Bravender
Matt Small

Member: LEX MUNDI, a global association of independent law firms with members in the United States and 60 countries throughout the world.

7/26/83

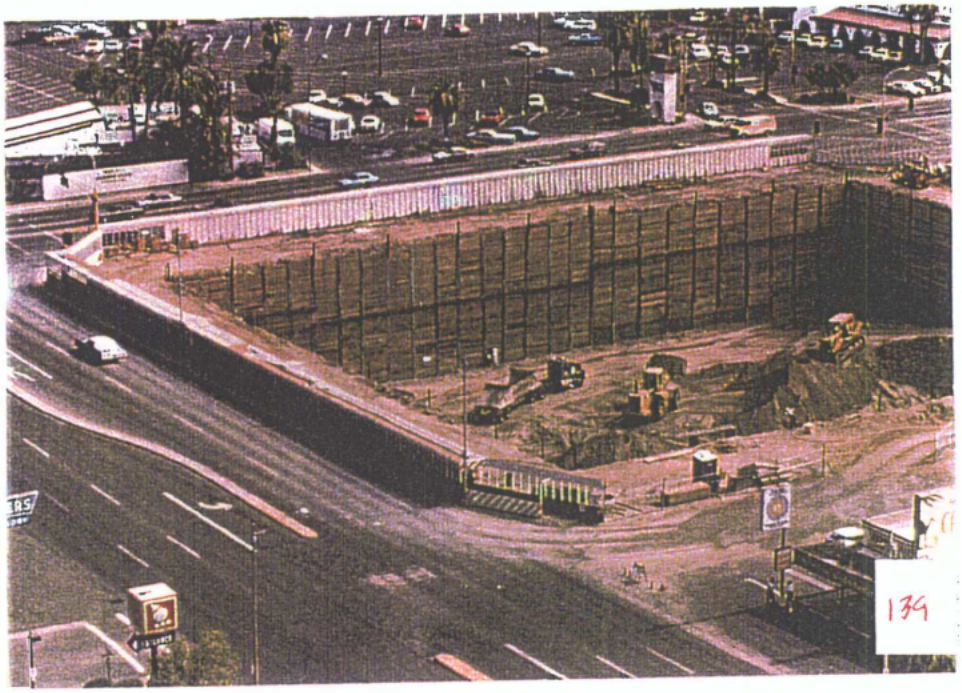
Trimming the West wall for logging installation
@ 55' level

131



JOB #1234
ONE CAMELBACK PROJECT
DATE: 7/29/83
REMARKS:
South west corner down to about 37 ft

145

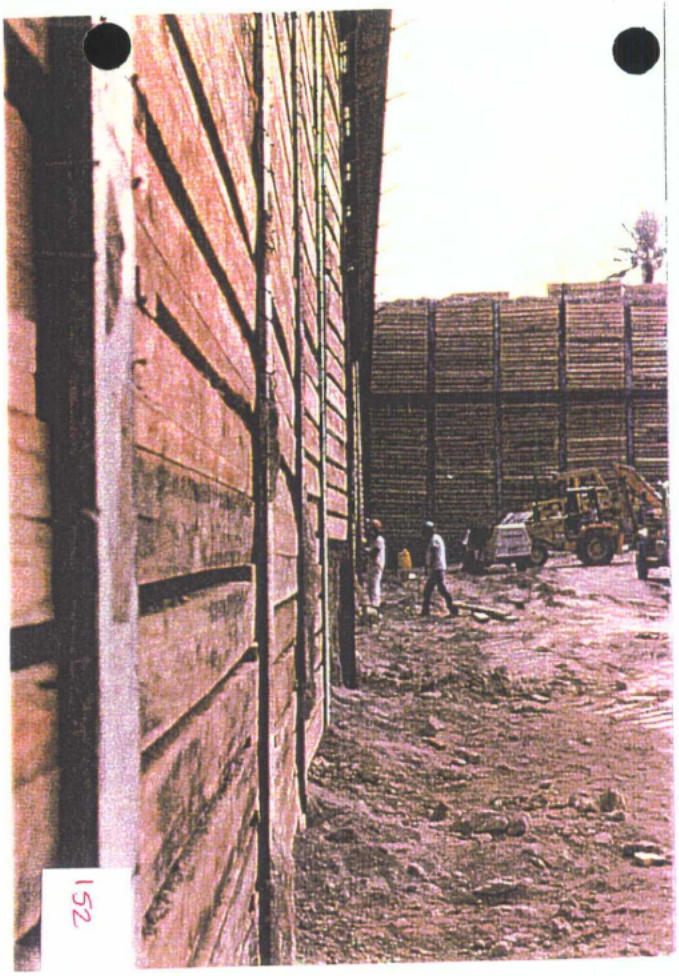


8/2/83 (148)

shot from CB Towers

depth of 38'-

139



152

8/2/83
(1CB)

Shot of North wall
Pile kick out

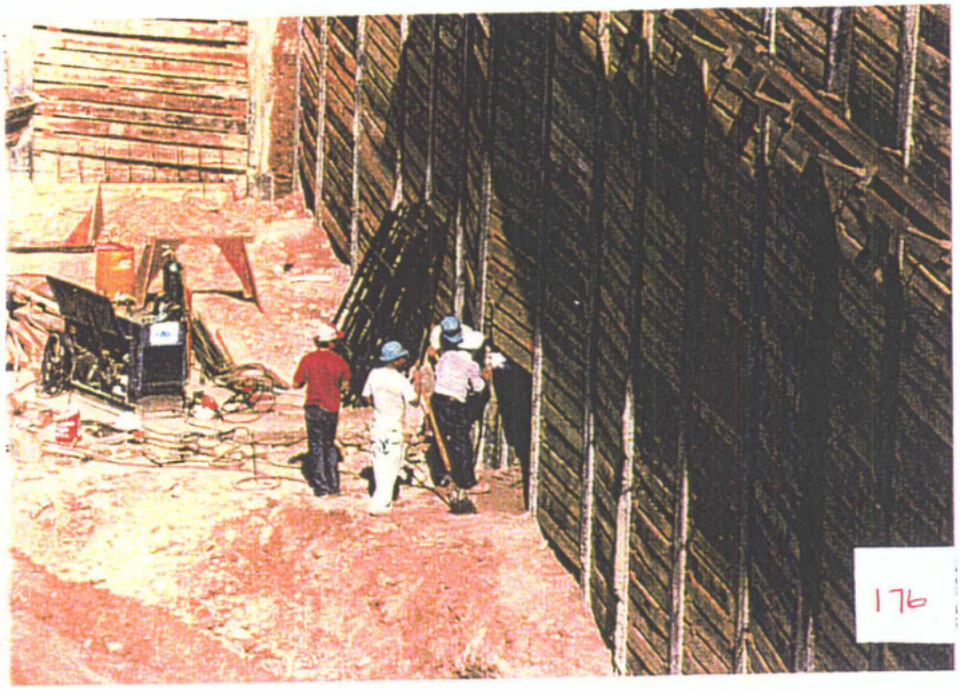
152

8/2/83

(1CA)

Shot of NW corner

170



8-8-83

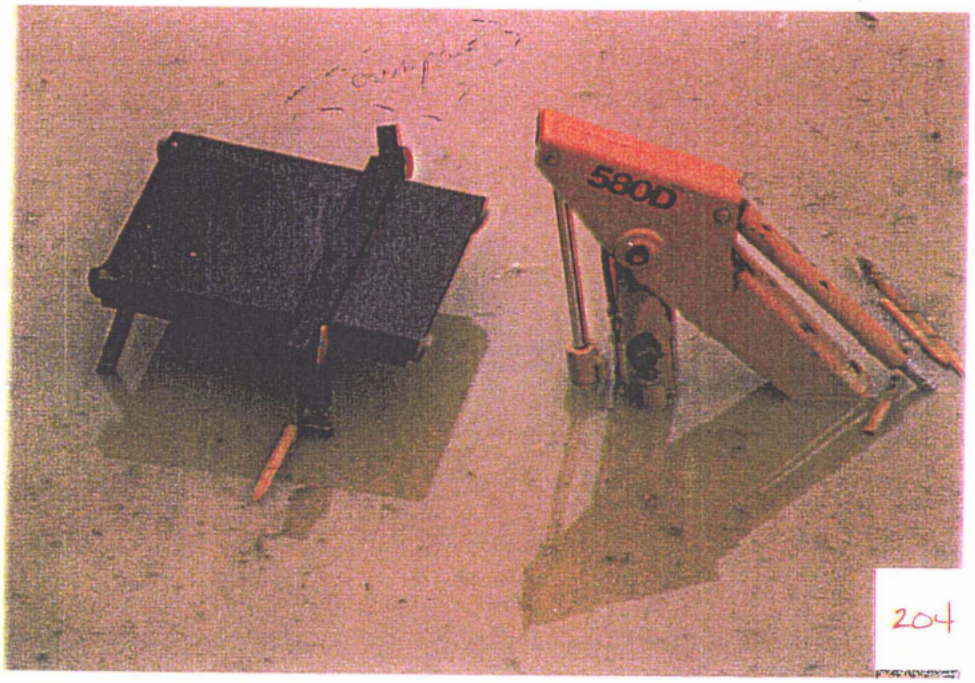
Angie & crew and just day some piling

176

8-9-83

Bench on south wall - B-5

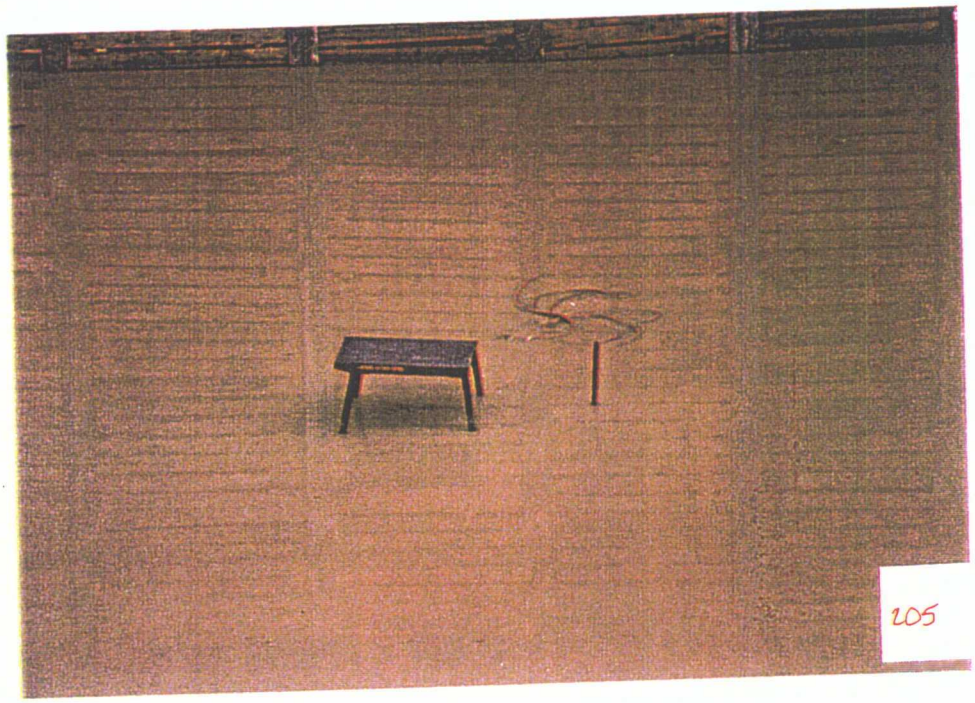
157



8-17-83

Backhoe (Bencor) under water
Note water level at one time was up
to the roof

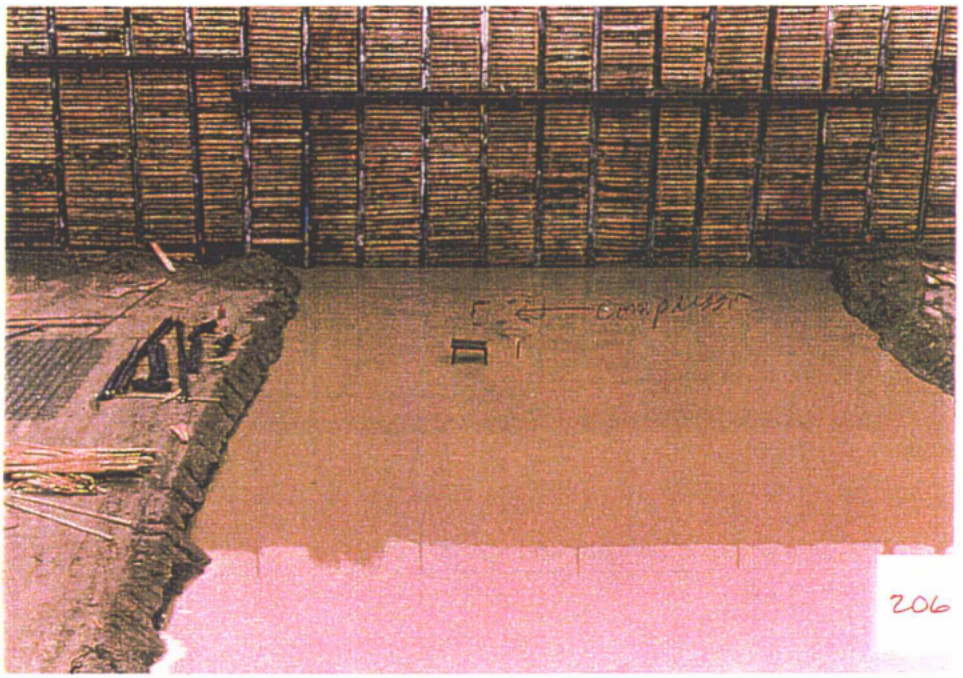
204



3-17-83

1¼" rain in 30-40 minute last nite
resulted in 8' of water in B-5 level
2 Back hoes, 2 air compressors + a welder
were in the Bottom.

205



8-17-83

Backhoe + compressor on north end of B-5
cut in flood

206

OCI 12463

DATE 9-1-83

Using jack hammer to trim up side of fly along North Wall.
Very densely packed material.

234

238

[illegible]

[illegible]

[illegible] 9-1-83

REMARKS:

Shot of E5 level + North Wall level
Pupping for setting of gang forms at B-4
level

238

OCI 12512

City of Phoenix
Development Services Department
200 W. Washington, Phx., Az 85003

IMPORTANT INFORMATION ABOUT YOUR BUILDING SAFETY PLAN REVIEW

Project Name Basement Ventilation

Log Number LPRM 9800496 Date Submitted 05-Mar-98

Plan review times vary based on the size and complexity of each project and the number of projects currently under review. Estimated review times are updated regularly and are available at the plan log-in counter.

You will be notified when your plan review is completed. If you have questions about the status of the review, call 262-7855 for commercial and 262-7884 for residential projects.

☒ **1. FIRST REVIEW**

The goal of the Development Services Department is to issue a building permit with a single review. To achieve this goal, Development Services encourages applicants to provide complete, code compliant plan submittals. Plans should not be submitted until they are 100% complete and ready for construction.

☐ **2. SECOND REVIEW (First Corrections)**

If a permit cannot be issued after the first review due to unresolved code deficiencies, the architect/engineer will receive a list of the code deficiencies and must resubmit corrected plans for review. If corrections are required, the owner will also be notified. Corrected plans should not contain other changes in the project, except those needed to address the required corrections.

- **The architect/engineer will be required to provide a list of all changes and corrections made to the plans. All changes must be clearly marked (clouded).**
- **If changes have been made to the plans other than those needed to address corrections, those changes will require an additional plan review fee equal to 20% of the original fee, minimum of $85.**

☐ **3. THIRD REVIEW (Second Corrections)**

If the project still has code deficiencies after the corrected plans have been reviewed, a third submittal will be required.

- **If a third review is required, an additional 20% fee, minimum $85, will be assessed.**

ALL PROJECTS WHICH ARE NOT APPROVABLE AFTER THE THIRD REVIEW WILL BE REJECTED AND THE APPLICATION WILL BE VOID. Any resubmittal after the third review will be considered a new project with a new log number, full (100%) new plan review fees, and a full new plan review timeline.

ASSET
ENVIRONMENTAL SERVICES, INC.
2055 East Rio Salado Parkway
Suite 101
Tempe, Arizona 85281
(602) 966-8705
(602) 966-9422 Fax

5 March 1998

Development Services Department
Construction Permit Section
200 West Washington, 2nd Floor
Phoenix, Arizona 85003-1611

Subject: Building Permit Plan Submittal

Dear Sir or Madam:

Enclosed is the Asset Environmental Service, Inc. (Asset) submittal for a permit to build and construct an auxiliary ventilation system. Asset will construct the ventilation system in Basement Level 5 of the One Camelback Office Building underground parking garage. The purpose of the ventilation system is to provide additional air mixing in the basement level of the garage. The following is information required by the Development Services Department:

Project Description: Installation of Auxiliary Ventilation System

Project Location: Basement Level 5 of Underground Parking Garage
One Camelback Office Building
1 East Camelback Road
Phoenix, Arizona

Contractor Information: Asset Environmental Services, Inc
2055 East Rio Salado Parkway, Suite 101
Tempe, Arizona 85281
Voice: (602) 966-8705
FAX: (602) 966-9422
Contractor License No. 106484
City of Phoenix Privilege License No. 96008330

Subcontractor: Goettl Air Conditioning, Inc.
3830 East Weir Avenue
Phoenix, Arizona 85040
Voice: (602) 275-1515
FAX: (602) 470-4280
L-79 Contractor License No. 090604

For this project, Asset will make no changes to the existing buildings or structures, except the attachment of ventilation ducting to the garage ceiling; the existing parking spaces for regular and disabled; the existing fire alarms or sprinkler systems; the current occupancy, number or floors, number or type of exits or the type of construction.

The attached figures are as follows:

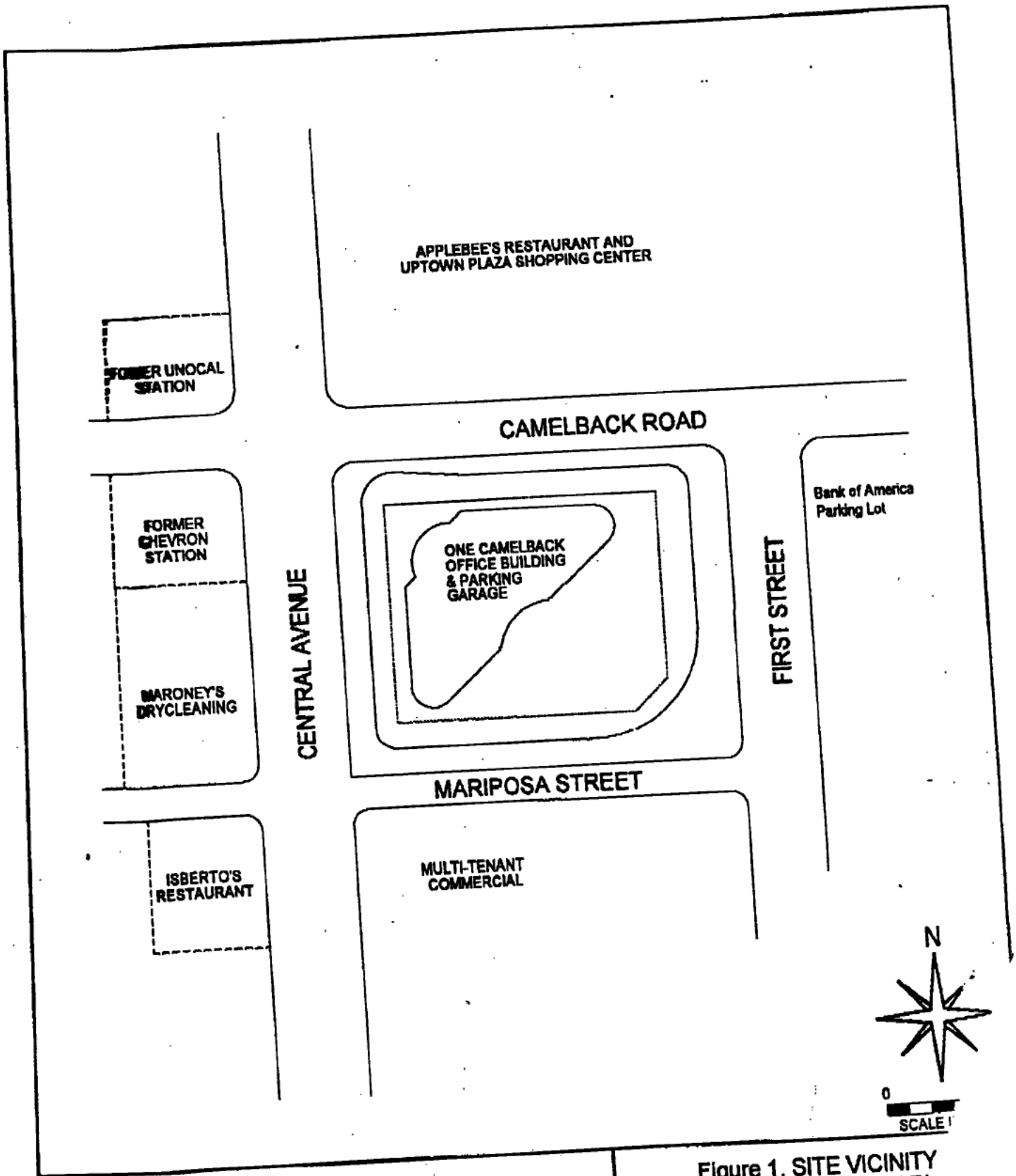
Figure 1.	Site Vicinity - One Camelback Office Building
Figure 2.	Electrical - Elevation View - Service Panel Box to Blower Motor
Figure 3.	Mechanical - Plan View - Additional Ventilation System - 5th Floor Basement Garage
Figure 4.	Mechanical Detail - Ventilator Ducts and Blower Motor
Figure 5.	Mechanical Detail - Backward Incline Blower

Questions concerning this submittal or the project should be directed either to Mr. John C. Patton or Mr. Frank P. Mendola at (602) 966-8705.

Sincerely,

Frank P. Mendola
Manager, Air Quality Services

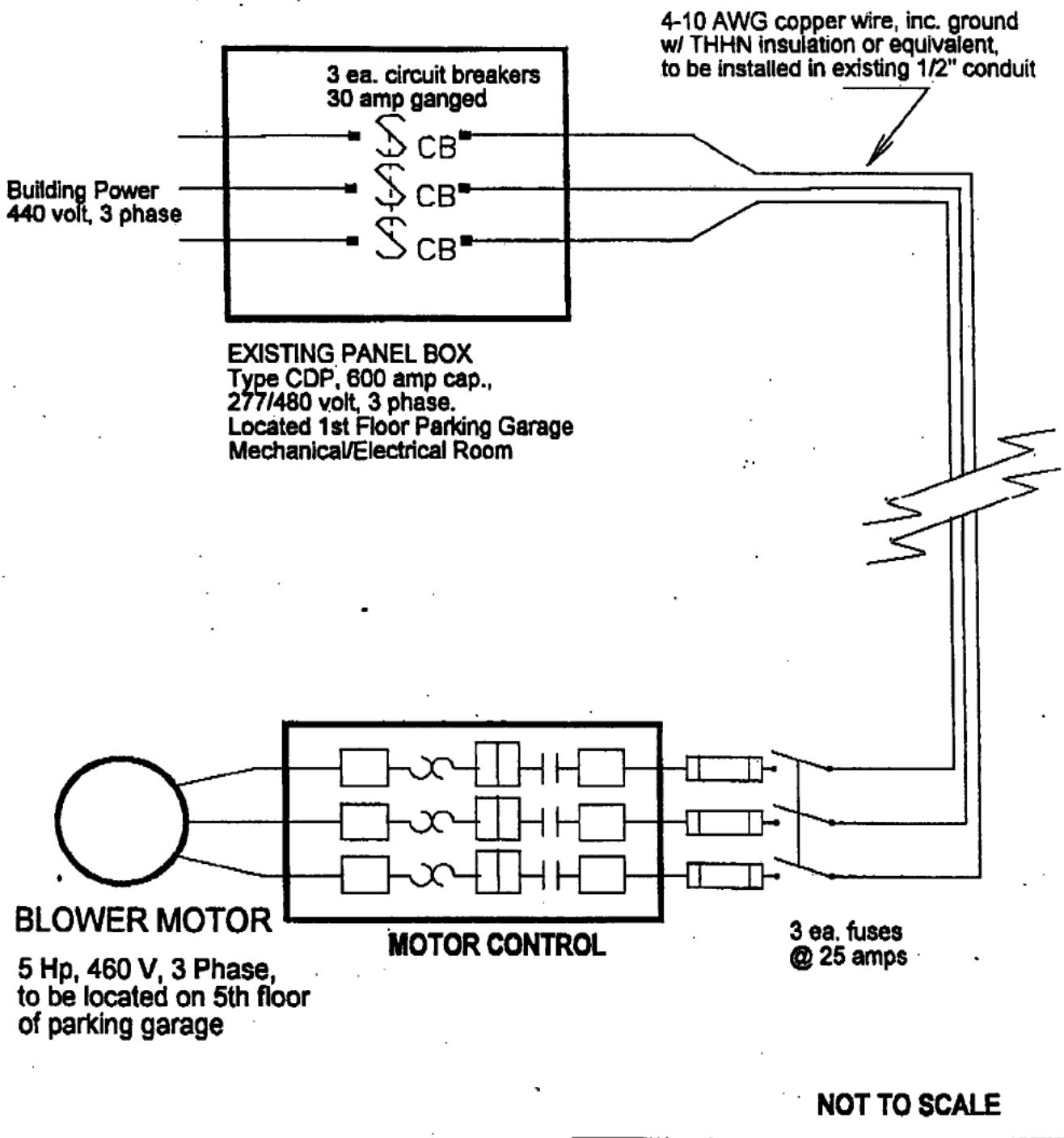
Enclosures (5)



ASSET
ENVIRONMENTAL SERVICES, INC.

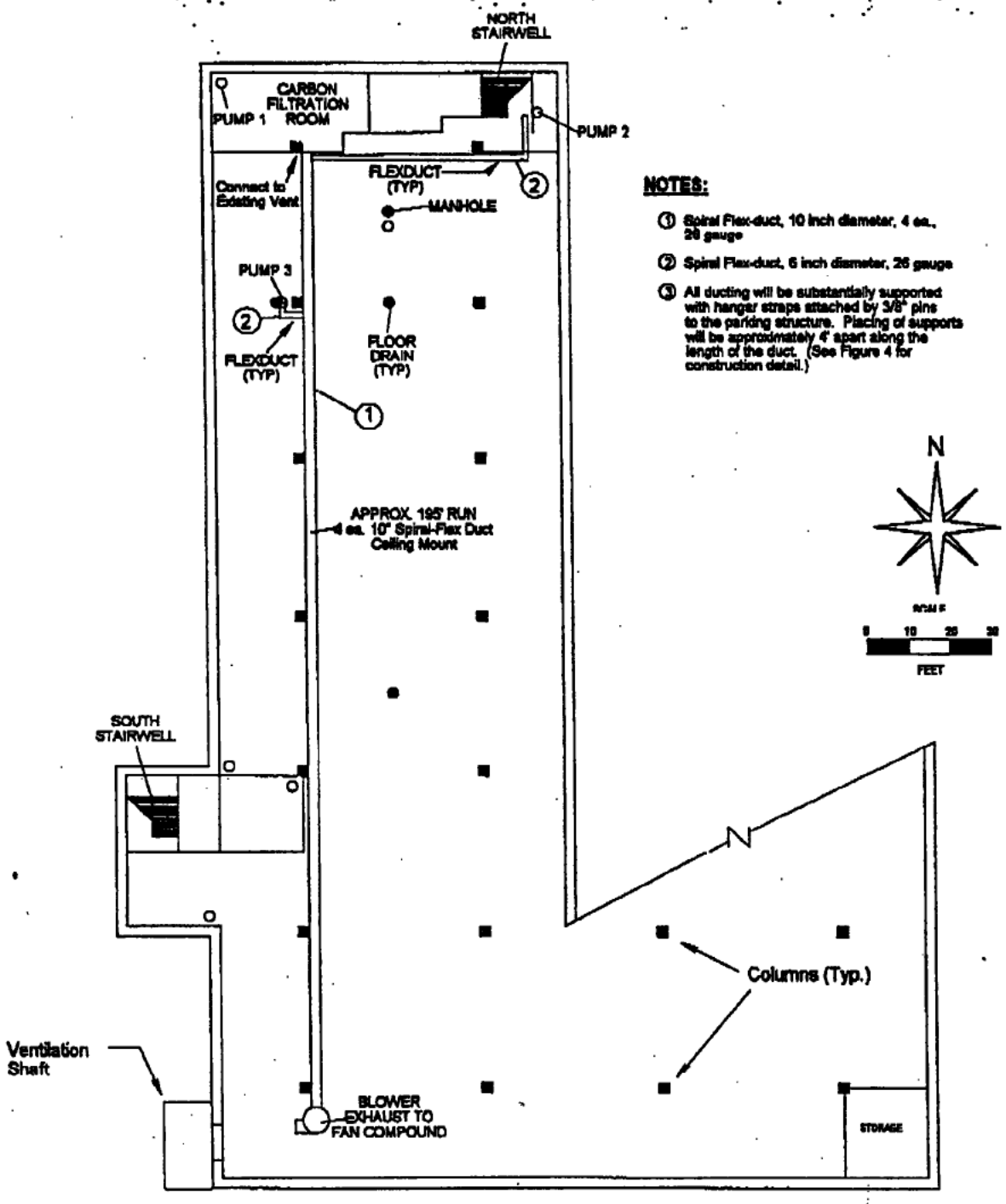
Figure 1. SITE VICINITY
ONE CAMELBACK OFFICE B
One East Camelback Road, P

PROJECT NO. A9



NOT TO SCALE

ASSET Environmental Services	One Camelback Office Building One East Camelback Road Phoenix, Arizona Project: A96-651 February 1998
ELECTRICAL - ELEV VIEW SERVICE PANEL BOX TO BLOWER MOTOR	FIGURE 2



NOTES:

1. Spiral Flex-duct, 10 inch diameter, 4 ea., 26 gauge
2. Spiral Flex-duct, 6 inch diameter, 26 gauge
3. All ducting will be substantially supported with hanger straps attached by 3/8" pins to the parking structure. Placing of supports will be approximately 4' apart along the length of the duct. (See Figure 4 for construction detail.)

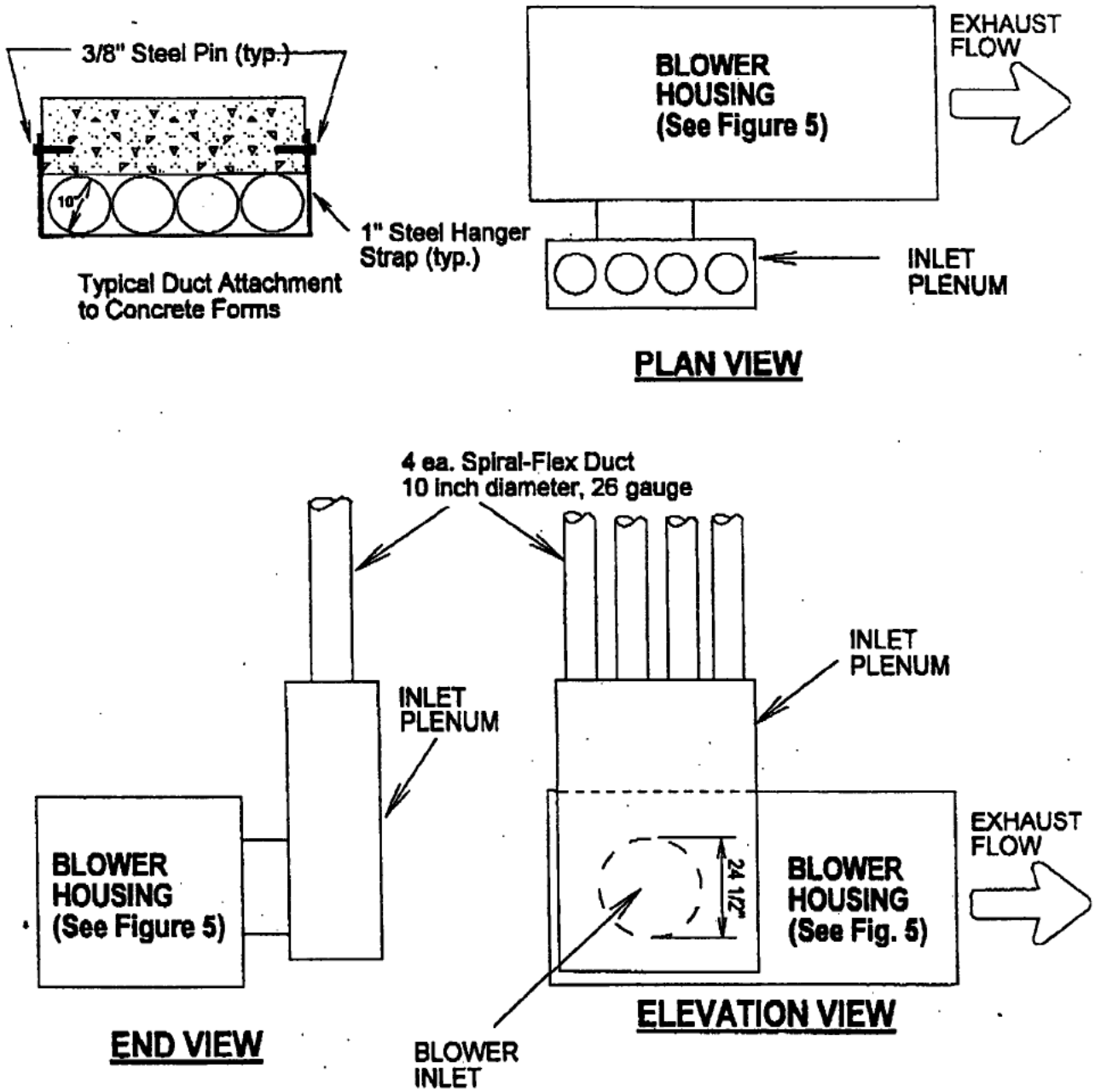
ASSET Environmental Services

One Camelback Office Building
One East Camelback Road
Phoenix, Arizona

Project: A96-841 March 1996

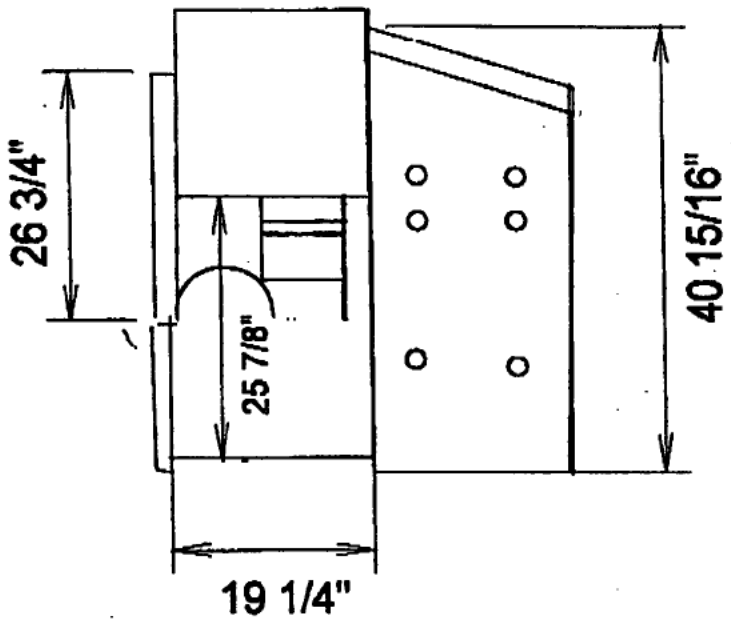
MECHANICAL - PLAN VIEW
ADDITIONAL VENTILATION SYSTEM
5th FLOOR BASEMENT GARAGE

FIGURE 3

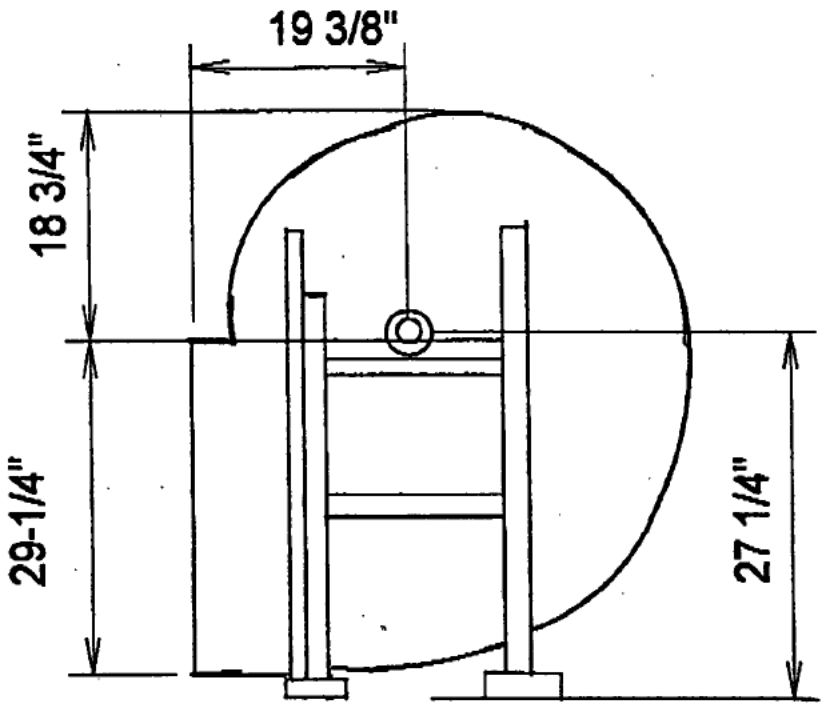


NOT TO SCALE

ASSET Environmental Services	One Camelback Office Building One East Camelback Road Phoenix, Arizona Project: A96-651 February 1998
MECHANICAL DETAIL VENTILATION & BLOWER MOTOR	FIGURE 4



FRONT VIEW



SIDE VIEW

NOT TO SCALE

ASSET Environmental Services	One Camelback Office Building One East Camelback Road Phoenix, Arizona Project: A96-661 February 1998
MECHANICAL DETAIL BACKWARD INCLINE BLOWER	FIGURE 5

Richard W. Shapiro, #005949
Patrick J. Paul, #014591
SNELL & WILMER, L.L.P.
One Arizona Center
Phoenix, AZ 85004-0001
Telephone: (602) 382-6359
Attorneys for Exxon Corporation

SUPERIOR COURT OF ARIZONA

MARICOPA COUNTY

One Camelback Inc., an Arizona corporation, Plaintiff, vs. Exxon Corporation, et al., Defendants.	NO. CV-96-01586 **ORDER TO STAY PROCEEDINGS** (Assigned to the Honorable Donald F. Daughton)

IT IS HEREBY ORDERED AS FOLLOWS:

1. All discovery and litigation in this matter is stayed for a period of ninety days from the date of this order, except as necessary to advance the prospect of settlement or for emergency reasons.

2. All statutes of limitations which may be applicable are tolled for a period of ninety days from the date of this order, effective as of the date of said order.

3. The parties' technical experts shall meet in an effort to arrive at an agreed-upon technical solution to the problems at One Camelback, the offsite issues, and the Maroney's issue. In order to facilitate these meetings, the mediator shall attend as necessary to assist in the progress towards an agreed-upon technical solution.

4. Notwithstanding any claim of privilege and without waiver of same, the parties shall share all prepared reports and any raw data with each other so that the material can be utilized at the technical meetings.

5. In the event any party wishes to lift the stay, they shall apply to the mediator, and may appeal the mediator's decision to the Superior Court. The standard to lift the stay shall be that the sought-for matter will advance the prospect of settlement or that an emergency requires the lifting. An example of an emergency would be that a witness is terminally ill and must be deposed in order to preserve testimony. The mediator and the Superior Court retain the right to impose sanctions if it appears that a party is abusing the right to lift stay.

6. Each party shall provide the mediator with a brief memo outlining the reasons why it feels the party is or is not responsible for the problems on-site, off-site and at Maroney's; and the percentage of liability, if any, the party feels it should share. The memo will be held in confidence by the mediator and will not be shared unless and until the parties authorize the mediator to do so.

7. The parties shall share with the mediator and each other whether or not they have exhausted SAF fund limits, and the amount, if any, currently remaining.

8. If a technical solution is reached, the parties will participate in non-binding mediation regarding how they will pay for the fix. If necessary, the stay will be extended upon unanimous agreement of the parties or order of the Court. If a technical solution is not reached, the parties can decide how to proceed. The parties' participation in mediation shall not be construed as an admission of liability or an agreement to pay.

DONE IN OPEN COURT this _____ day of _____, 1998.

_____
JUDGE OF THE SUPERIOR COURT

Paulp\PHX\458689.02

Distribution

COPY

SUPERIOR COURT OF ARIZONA
MARICOPA COUNTY

CLERK OF THE COURT
FORM V000

February 27, 1998 HONORABLE DONALD DAUGHTON

A. Duffy
Deputy

Nº CV 96-01586

FILED: MAR 05 1998

SNELL & WILMER, LLP

ONE CAMELBACK, INC.

v.

EXXON CORPORATION, et al.

Rolf R. Von Oppenfeld

Patrick J. Paul

Mark A. Fuller

G. Van Velsor

Richard A. Friendlander

Charles J. Muchmore

John J. Verber
Larson & Burnham
1901 Harrison St. 11th Floor
P.O. Box 119
Oakland, CA 94604

Chris M. Amantea
McDermott, Will & Emery
2049 Century Park East
Suite 3400
Los Angeles, CA 90067

Christopher C. Wooten

Richard W. Shapiro

Office Distribution

COPY

SUPERIOR COURT OF ARIZONA
MARICOPA COUNTY

CLERK OF THE COURT
FORM V000

February 27, 1998 HONORABLE DONALD DAUGHTON A. Duffy
Deputy

Nº CV 96-01586

ONE CAMELBACK v. EXXON CORP. Continued

IT IS ORDERED approving and settling formal written Order to Stay Proceedings signed by the Court on February 24, 1998.

16 February 1998

Exxon Company, U.S.A.
2300 Clayton Road, Suite 640
P.O. Box 4032
Concord, California 94524-4032

Attention: Mr. Gene Ortega

Reference: **Groundwater Monitoring Well Installation** **Project No. A96-651**
Former Service Station 7-7846
UST ID. No. 0-008848
LUST File No. 4366.01
One East Camelback Road
Phoenix, Arizona

At the request of Exxon Company, U.S.A. (Exxon), Asset Environmental Services, Inc., (Asset) has provided drilling, monitoring, testing, and well installation services to evaluate groundwater north of former Service Station 7-7846 located at One East Camelback Road in Phoenix, Arizona, for the presence of petroleum hydrocarbons (Figure 1, Attachment A). The objective of this work was to characterize the extent of affected groundwater north and northeast of the former service station. The work consisted of the installation of two groundwater monitoring wells pursuant to the contingency plan in the Site Characterization Workplan prepared for this site dated 15 January 1997. This letter report presents well installation activities and initial groundwater sampling results for the two additional groundwater monitoring wells.

Currently there are nine groundwater monitoring wells associated with the subject site installed on or near the subject site. Three of the wells (MW-A1, MW-A2, and MWA-4) were installed by Asset in July 1997. The remaining six wells were previously installed for One Camelback, Inc., around the existing structure. Since their installation, groundwater flow directions have

primarily been in a northerly direction. Total recoverable petroleum hydrocarbons (TRPH) and select benzene, toluene, ethylbenzene, and total xylene (BTEX) constituents have been detected in MW-A4 and MW-A2 as well as MW-SW, MW-W, and MW-N.

Field Activities:

Between 12 and 14 January 1998, Asset performed a subsurface investigation at the Uptown Plaza located north and northeast of the subject site across Camelback Road at the locations shown on Figure 2. The work consisted of drilling and installing two two-inch diameter groundwater monitoring wells (MW-A5 and MW-A6) to 60 feet bgs. Drilling services were performed by Drillcon, Inc., using a BK-81 hollow-stem auger drill rig.

Asset personnel were on-site during drilling activities to log the soil borings, collect soil samples, and submit the soil samples to the analytical laboratory. The first eight feet of each boring were probed/excavated using a vacuum extraction system according to Exxon's scope of work.

Soil sample collection and equipment decontamination were performed according to Asset's soil sampling protocol included in Attachment B. Once collected, the ends of the brass-lined soil samples were sealed with Teflon® patches, aluminum foil patches, and tight fitting plastic caps, labeled, and immediately placed in a chilled cooler for submittal to an Arizona state-licensed analytical laboratory. The soil samples were delivered to Del Mar Analytical (Del Mar) of Tempe, Arizona, along with chain-of-custody documentation.

Soil samples were collected from native materials above and immediately below the groundwater interface at 40 and 45 feet below ground surface (bgs) using a two-inch outer diameter split-spoon sampler with decontaminated brass liners. A portion of each soil sample was field screened for volatile organic compounds (VOCs) using a portable photoionization detector (PID). Field observations and PID readings of drill cuttings and soil samples indicated the presence of petroleum affected soils below the groundwater interface in MW-A5 at 50 to 60 feet bgs. Soil boring logs and well completion diagrams are included as Attachment C.

Drill cuttings were contained in 55-gallon drums and stockpile samples collected on 13 January 1998. The stockpiled soil was transported to Sonas Soil Resource Recovery (Sonas) in Vicksburg, Arizona, pending profile analyses results. Upon laboratory confirmation, the soil was thermally treated at Sonas' Vicksburg facility. Copies of laboratory results, chain-of-custody documentation, and soil disposal documentation will be forwarded upon receipt from Sonas.

Groundwater was encountered at approximately 42 feet bgs during drilling of both wells. The wells were completed as shown in Attachment C. The wells were developed on 27 January 1998 by Layne Christensen Company, Inc., and surveyed by Superior Surveying Services, Inc., an Arizona licensed surveyor, on 30 January 1998.

MW-A5 and MW-A6 were initially sampled on 29 January 1998 according to Asset's groundwater sampling protocol included in Attachment B. Three well volumes were purged using a bailer, and the groundwater sample was collected using a new, disposable, polyethylene bailer. Once collected, the groundwater samples were placed in containers with the required preservative provided by the laboratory and then placed in a chilled cooler for submittal to an Arizona state-licensed analytical laboratory. The samples were delivered to Del Mar along with chain-of-custody documentation.

Laboratory Analyses:

A total of six soil samples were delivered to Del Mar for analyses. The soil samples were analyzed for TRPH using Arizona Department of Health Services (ADHS) Test Method 418.1AZ and BTEX using Environmental Protection Agency (EPA) Test Method 8021A. The stockpile soil samples (Profile 1 and 2) were also analyzed for flashpoint, pH, and total lead using EPA Test Methods 1010, 9045, and 6010A, respectively. Copies of the laboratory report and chain-of-custody documentation are included as Attachment D. Laboratory analytical results for the soil are shown in Table 1.

TABLE 1. Laboratory Analytical Results - Soil							
Sample ID	Date	Depth (ft bgs)	TRPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)
MWA5-40	1/12/98	40	<20	<0.050	<0.10	<0.10	<0.15
MWA5-45		45	<20	<0.050	<0.10	<0.10	<0.15
MWA6-40	1/13/98	40	<20	<0.050	<0.10	<0.10	<0.15
MWA6-45		45	<20	<0.050	<0.10	<0.10	<0.15
Profile 1		—	55	<0.050	<0.10	<0.10	<0.15
Profile 2		—	210	<0.050	<0.10	<0.10	<0.15
GPL	–	–	none	0.71	400	120	2,100

TRPH = Total recoverable petroleum hydrocarbons analyzed using ADHS Test Method 418.1AZ
BTEX analyzed using EPA Test Method 8021A
GPL = Arizona Department of Health Services Groundwater Protection Level (March 1996)

The groundwater samples collected from MW-A5 and MW-A6 were delivered to Del Mar for analyses. The groundwater samples were analyzed for TRPH using ADHS Test Method 418.1AZ, VOCs using EPA Test Method 502.2, and MTBE using EPA Test Method 8021AModified. Copies of the laboratory report and chain-of-custody documentation are included as Attachment D. Laboratory analytical results for the groundwater sample are shown in Table 2. Additional VOC concentrations were detected in the groundwater samples collected from MW-A5 and MW-A6 as shown in Table 3.

TABLE 2. Laboratory Analytical Results - Groundwater							
Sample ID	Date	TRPH (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylene (µg/L)	MTBE (µg/L)
MW-A5	1/29/98	<1.0	<0.50	<0.50	<0.50	0.71	<10
MW-A6		<1.0	1.1	<0.50	<0.50	0.78	110
ADEQ AWQS	–	NE	5	1,000	700	10,000	

TRPH = Total recoverable petroleum hydrocarbons analyzed using ADHS Test Method 418.1AZ
BTEX analyzed using EPA Test Method 502.2
MTBE analyzed using EPA Test Method 8021A Modified
ADEQ AWQS = Arizona Department of Environmental Quality Aquifer Water Quality Standard
NE= Not Established

TABLE 3. Additional Detected Compounds - Groundwater			
Sample ID	Date	Compound	Concentration (µg/L)
MW-A5	1/29/98	Chloroform	3.1
MW-A6		Chloroform 1,2-Dichloroethane Napthalene 1,2,4-Trimethylbenzene	0.55 15 1.3 1.3
Analyzed using EPA Test Method 502.2			

Based on these results, it appears the downgradient extent of affected groundwater has been characterized below ADEQ AWQSs by MW-A6. MTBE was detected in the sample collected from the furthest downgradient well (MW-A6). MTBE was not used in gasoline at the time the former service station was in operation at the subject site; therefore, it appears that at least a portion of the VOC constituents detected in MW-A6 is contributed by another source other than the subject site.

Conclusions:

Based on the information summarized in this report, Asset Environmental Services, Inc., has made the following conclusions regarding former station 7-7846 located at One East Camelback Road in Phoenix, Arizona.

1. Two additional groundwater monitoring wells were installed north and northeast of the former on-site service station in order to characterize the downgradient extent of affected groundwater. Each well was installed to 60 feet bgs and screened from 34 to 59 feet bgs.

2. TRPH and BTEX concentrations were not detected above laboratory detection levels in the soil samples collected from MW-A5 and MW-A6.

3. Benzene and xylene concentrations were detected at levels below the ADEQ AWQS in the groundwater sample collected from MW-A6. Xylene concentrations were also detected

below the ADEQ AWQS in the groundwater sample collected from MW-A5. Other BTEX constituents were not detected in the groundwater samples collected. MTBE was detected in the sample collected from MW-A6. TRPH was not detected in the groundwater samples collected.

4. Based on laboratory results, the downgradient extent of affected groundwater appears characterized below ADEQ AWQSs. MTBE was detected in the sample collected from the furthest downgradient well (MW-A6). MTBE was not used in gasoline at the time the service station was in operation at the subject site; therefore, it appears that at least a portion of the VOC constituents detected in MW-A6 is contributed by another source other than the subject site.

5. A copy of this report should be sent to the Arizona Department of Environmental Quality located at 3033 North Central Avenue, Phoenix, Arizona.

If you have any questions or require additional information, please call our office at (602) 966-8705.

Respectfully Submitted,

ASSET ENVIRONMENTAL SERVICES, INC.

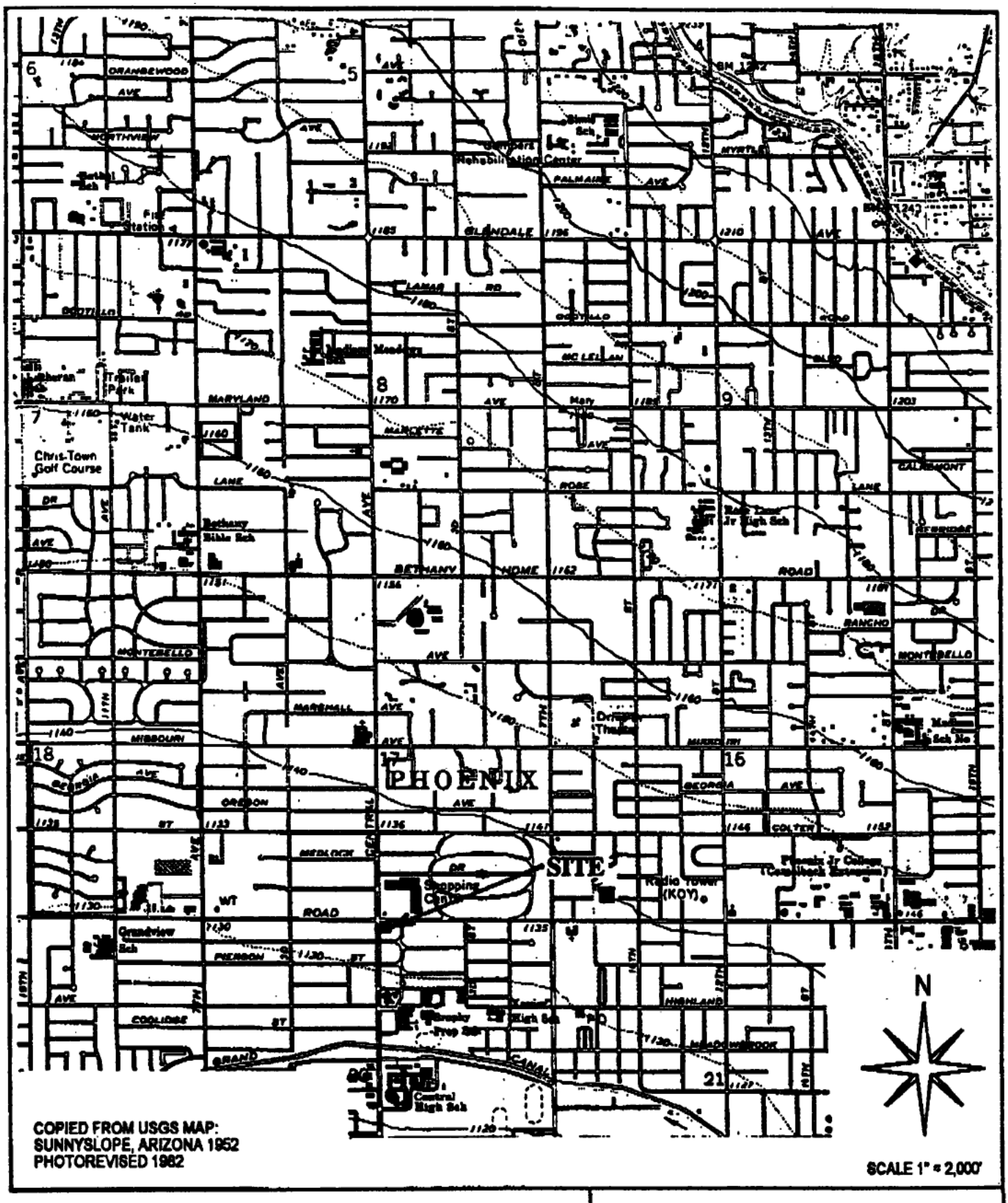
By: _____
Elizabeth Ann Schwartz, R.E.P.
Manager, Geological Services

Reviewed By: _____
John C. Patton, R.H.S.P.
Principal

copies (3)

Attachments:

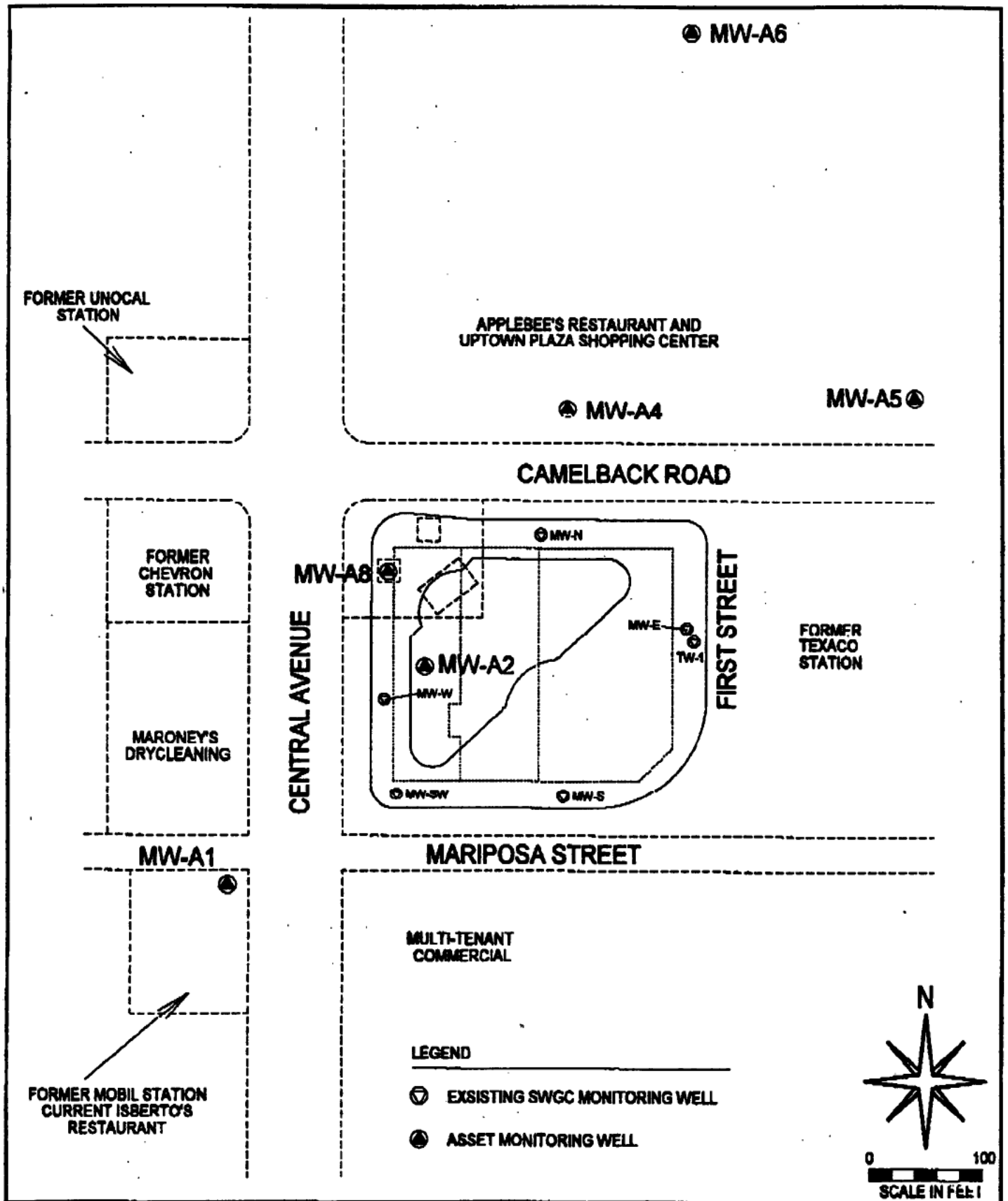
Attachment A	Figures
	Figure 1. Site Vicinity Map
	Figure 2. Site Plan
Attachment B	Soil and Groundwater Sampling Protocols
Attachment C	Boring Log and Well Completion Diagrams
Attachment D	Analytical Laboratory Reports and Chain-of-Custody Documentation



ASSET
ENVIRONMENTAL SERVICES, INC.

Figure 1. Site Vicinity Map
RAS 7-7846

PROJECT NO. A96-651



ASSET ENVIRONMENTAL SERVICES, INC.

Figure 2. Site Plan
RAS 7-7846

PROJECT NO. A96-651

Snell & Wilmer
L.L.P.
LAW OFFICES

One Arizona Center
Phoenix, Arizona 85004-0001
(602) 382-6000
Fax: (602) 382-6070

PHOENIX, ARIZONA
TUCSON, ARIZONA
IRVINE, CALIFORNIA
SALT LAKE CITY, UTAH

Patrick J. Paul (602) 382-6359
Internet: paulp@swlaw.com

March 4, 1998

HAND-DELIVERED

Ms. Lavonne Watkins
Case Administrator
Office of Administrative Counsel
Arizona Department of Environmental Quality
3033 N. Central Avenue, 8th Floor
Phoenix, Arizona 85012

Re: Exxon Company USA
Appeal of Compliance Order No. L-6-98
LUST File 4366.01, 4366.02
Facility I.D. No. 0-008848
Request for Hearing

Dear Ms. Watkins:

On February 2, 1998, Exxon Company USA ("Exxon") received the above-referenced Compliance Order directing Exxon to take certain actions in accordance with a specified compliance schedule. This letter constitutes Exxon's formal appeal and request for hearing on this order. This hearing is being requested pursuant to A.R.S. § 49-1013(A).

Without waiving any other objections to the Compliance Order, Exxon specifically contests Articles I, III and IV of the Compliance Order.

If you have questions on any of the foregoing or request additional clarification, please call me. Thank you for your attention to this matter and to your anticipated assistance in facilitating Exxon's appeal.

Sincerely,

SNELL & WILMER

Patrick Paul

Patrick J. Paul

PJP:lm

Member: LEX MUNDI, a global association of independent law firms with members in the United States and 60 countries throughout the world.

Snell & Wilmer
L.L.P.

cc: Joan Card, Assistant Attorney General
Ronald A. Kern, Manager
Thomas J. Di Domizio
Jean A. Calhoun

Snell & Wilmer
L.L.P.
LAW OFFICES

One Arizona Center
Phoenix, Arizona 85004-0001
(602) 382-6000
Fax: (602) 382-6070

PHOENIX, ARIZONA
TUCSON, ARIZONA
IRVINE, CALIFORNIA
SALT LAKE CITY, UTAH

Patrick J. Paul (602) 382-6359
Internet: paulp@swlaw.com

February 20, 1998

VIA FACSIMILE

Joan Card
Assistant Attorney General
Environmental Enforcement Section
Office of the Attorney General
1275 W. Washington
Phoenix, Arizona 85007

Re: In The Matter of One Camelback, Inc.
DEQ Docket No. 0-123-96
OAH No. 96A-0-123-DEQ

Dear Joan:

Enclosed for your review are copies of raw data from recent well sampling activities on the One East Camelback property, as well as ambient air sampling results taken from the fifth floor basement level.

This letter also will confirm that Exxon intends to implement an abatement plan similar to that described in our letter dated December 10, 1997, a copy of which is attached hereto. Please also be advised that we have confirmed that Exxon received the Compliance Order numbered L-6-98 on February 2, 1998. Therefore, it is our understanding that the last day for appeal is March 4, 1998. Exxon intends to appeal the Compliance Order, assuming it is not withdrawn on or before that date. Any and all abatement work conducted by Exxon will be conducted voluntarily and not pursuant to the subject Compliance Order.

If you have any questions on the attached or the foregoing, please call me.

Sincerely,

SNELL & WILMER

Patrick

Patrick J. Paul

PJP:lm
Enclosures

Member: LEX MUNDI, a global association of independent law firms with members in the United States and 60 countries throughout the world.

cc: Jean A. Calhoun (w/o encls.)
Lavonne Watkins (w/o encls.)
Gene Ortega (w/o encls.)
Ronald A. Kern (w/o encls.)
Thomas J. Di Domizio (w/o encls.)

TABLE 3. Cumulative Groundwater Laboratory Analytical Results
EXXON 7-7846

Well No.	Date Sampled	TRPH (mg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)
MW-A1	7/26/97	<1.0	<0.50	<0.50	<0.50	<0.50
	7/30/97	<1.0	<0.50	<0.50	<0.50	<0.50
	11/13/97	<1.0	<1.3	<1.3	<1.3	<1.3
	12/6/97	<1.0	<0.50	<0.50	<0.50	<1.0
MW-A2	7/26/97	2.5	<25	29	340	1770
	7/30/97	3.0	87	95	1000	4800
	11/13/97	3.3	44	17	600	700
	12/6/97	3.4	57	<50	1200	3830
MW-A4	7/26/97	11	92	210	1500	4000
	7/30/97	8.7	230	99	1500	4300
	11/13/97	8.9	160	<50	2400	5300
	12/6/97	8.3	150	<50	2000	4500
MW-A5	1/29/98	<1.0	<0.50	<0.50	<0.50	0.71
MW-A6	1/29/98	<1.0	1.1	<0.50	<0.50	0.78
MW-A8	7/26/97	7.9	<50	73	260	410
	7/30/97	4.3	<25	<25	140	107
	11/13/97	4.3	15	<13	110	59
	12/6/97	4.1	55	<25	150	38
Duplicate ---- (----)						
ADEQ AWQS		---	**5.0**	**1,000**	**700**	**10,000**

One Camelback Office Building
1 East Camelback
Job No. A96-651

AMBIENT AIR SAMPLING, 5th Floor Basement

Sample Date:	29-Jan-98	29-Jan-98	29-Jan-98	29-Jan-98
Sample Time (24hr):	0600	0800	1000	1200
Sample Method/Analysis		Tedlar/EPA 8260A Mod.		
Sampling Parameter				
Barometric Pressure (mb):	971	972	970	970
Barometric Pressure (in. Hg.):	28.67	28.70	28.64	28.64
Ambient Temperature (deg F):	72	77	—	—
Sample Site:				
Carbon Remediation Room				
CO (%)	ND	ND	ND	ND
Benzene (ppm)	ND	ND	ND	ND
Toluene (ppm)	ND	ND	ND	ND
Ethylbenzene (ppm)	ND	ND	ND	ND
Total Xylenes (ppm)	ND	ND	ND	ND
Well No. 9 Area				
CO (%)	ND	ND	ND	ND
Benzene (ppm)	ND	ND	ND	ND
Toluene (ppm)	ND	ND	ND	ND
Ethylbenzene (ppm)	ND	ND	ND	ND
Total Xylenes (ppm)	ND	ND	ND	ND
Well No. 7A Area				
CO (%)	ND	ND	ND	ND
Benzene (ppm)	ND	ND	ND	ND
Toluene (ppm)	ND	ND	ND	ND
Ethylbenzene (ppm)	ND	ND	ND	ND
Total Xylenes (ppm)	ND	ND	ND	ND

ONE TIME SAMPLES:

Well No. 1 Head Space	
CO (%)	ND
Benzene (ppm)	15.0
Toluene (ppm)	15.0
Ethylbenzene (ppm)	1.4
Total Xylenes (ppm)	8.2
Well No. 3 Head Space	
CO (%)	ND
Benzene (ppm)	19.0
Toluene (ppm)	14.0
Ethylbenzene (ppm)	17.0
Total Xylenes (ppm)	25.0
Well No. 8 Head Space	
CO (%)	ND
Benzene (ppm)	ND
Toluene (ppm)	ND
Ethylbenzene (ppm)	ND
Total Xylenes (ppm)	1.9

ROUTING AND TRANSMITTAL SLIP

Date 1/23/98 1931

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. Jerl		
2.		
3.		
4.		
5.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

1. Signed ATDEQ order
2. Info. on adjacent sites
3. Risk evaluation for Tuba City TOOB order.

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
Jennie	Phone No.

5041-102

☆ U.S.G.P.O.: 1993 300-891/80018

OPTIONAL FORM 41 (Rev. 7-76)
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Jere
1931-00

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
3033 North Central Ave.
4th Floor Tower
Phoenix, Az 85012

DATE: 1/20/98

TO: Jenny Brewster, Arthur Haubenstock

PHONE:

FAX:

FROM: Michael Latin

PHONE: 207-4308

FAX: 207-4346

NUMBER OF PAGES (INCLUDING COVER PAGE):

IF YOU HAVE ANY PROBLEMS WITH THE FAX, PLEASE CALL THE PERSON WHO SENT THE INFORMATION

COMMENTS:

Jan 20 '98 14:31 P.01

Tom Di Domizio
LUST Enforcement Unit

BEFORE THE DIRECTOR OF THE
ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

In the matter of: Former ENCO/Humble Oil facility located at One East Camelback (formerly 4995 North Central), Phoenix, Maricopa County, Arizona LUST File #4366.01, 4366.02 Facility ID #0-008848	)))))))	COMPLIANCE ORDER No. L-6-98

TO: Ms./Mr. Ortega ~~Roger Hicks, P.E.~~ JAC
Environmental Engineering & Marketing Department
Exxon Company U.S.A.
P.O. Box 4032
Concord, California 94524-4032

I. YOU ARE HEREBY NOTIFIED that the Director (the "Director") of the Arizona Department of Environmental Quality ("ADEQ") has reasonable cause to believe that Exxon Company U.S.A. ("Exxon") is violating provisions of the Arizona Revised Statutes ("A.R.S.") Title 49, Chapter 6, Article 1.

II. JURISDICTION

A. The Director has jurisdiction over the subject matter of the action and is authorized to issue this order pursuant to A.R.S. § 49-1013.

B. The Director has personal jurisdiction over Exxon.

III. THE DIRECTOR HEREBY MAKES THE FOLLOWING FINDINGS OF FACT AND CONCLUSIONS OF LAW:

A. FINDINGS OF FACT

1. In a lease agreement dated December 29, 1947, and modified November 14, 1949, James A. and Sallie M. Berridge owners of the property located at One East Camelback Road (formerly 4995 North Central Avenue), Phoenix, Arizona, leased the property to Sahuaro Petroleum Products Company ("Sahuaro"), an Arizona corporation. The lease was to expire February 1, 1958.

2. In a lease agreement dated March 29, 1957, James A. and Sallie M. Berridge (Lessor) and Sahuaro (Lessee), extended the lease of the property commencing on February 1, 1958 and terminating on February 1, 1973.

3. In a document entitled "Agreement Extending, Amending and Modifying Lease" entered into January 24, 1973, it is stated that Sahuaro assigned all of its right, title and interest in said lease and the leasehold estate created thereby to Humble Oil & Refining Company ("Humble Oil"), a Delaware Corporation, by assignment dated July 6, 1959.

Jan 20 '98 14:31 P.03

4. On September 14, 1959, the City of Phoenix Fire Department issued a permit to Duriscoe Humble Service to store and handle Class I flammable liquids in three (3) 5,000-gallon and one (1) 300-gallon waste oil Underground Storage Tanks ("UST") at the facility located at One East Camelback Road (formerly 4995 North Central Avenue), Phoenix, Arizona ("the Facility").

5. On January 2, 1973, Humble Oil merged into Exxon Corporation ("Exxon").

6. In a lease agreement dated January 8, 1973, signed by James A. Berridge Jr., Attorney in Fact for Sallie M. Berridge (Lessor) and F.M. Schneider, Real Estate Manager, Exxon Corporation (Lessee), the lease for the Facility was extended commencing on February 1, 1973 and terminating on February 1, 1974.

7. During the time period from July 6, 1959 to February 1, 1974, Humble Oil or its corporate successor in interest Exxon owned and operated the USTs at the Facility.

8. The Facility included three (3) 5,000-gallon USTs used to contain petroleum products, and two (2) 550-gallon USTs used to contain waste oil.

9. During the time period from July 6, 1959 to February 1, 1974, Humble Oil or its corporate successor in interest Exxon was responsible for the day-to-day operation of the USTs at the Facility.

10. On January 31, 1974, the City of Phoenix Fire Department issued a permit to remove three (3) 5,000-gallon and one (1) 300-gallon USTs from the Facility.

11. In 1984, construction of an eleven (11) story office building, hereinafter referred to as the One East Camelback ("OEC") building, was completed on the site of the former Facility. The OEC building also contains a five (5) level underground parking structure.

12. In 1989, OEC building's management documented that groundwater began seeping into the OEC building's underground parking structure.

13. Analytical results dating back to 1990, indicate that the groundwater, seeping into the OEC building's underground parking structure, contains elevated levels of petroleum hydrocarbons, identified as gasoline.

14. On May 16, 1997, the ADEQ Hazardous Waste Section, Emergency Response Unit, conducted air quality testing of the OEC building's underground parking structure to assess the potential for explosion, fire or inhalation hazard due to the volatile organic compounds ("VOC") entering the fifth floor basement of the parking structure. Based on the

results of this investigation, the ADEQ determined that VOC vapor concentrations, present in the fifth floor basement of the OEC parking structure, may pose fire and safety hazards to the occupants of the OEC building.

15. On June 6, 1997, Ecology and Environment, Inc., contractor for the United States Environmental Protection Agency ("U.S. EPA"), conducted air quality testing of the OEC building's underground parking structure. Based on the results of this investigation, the U.S. EPA determined that VOC vapor concentrations, present in the fifth floor basement of the OEC parking structure, may pose fire and safety hazards to the occupants of the OEC building.

16. On September 3, 1997, John Patton of Asset Environmental Services, Inc., contractor for Exxon, reported to the ADEQ that confirmed releases of petroleum products ("the Release") had been detected at the former Facility. These releases occurred during the time period that Humble Oil or its corporate successor in interest Exxon, owned and operated the Facility. These releases have impacted groundwater beneath the former Facility.

17. On November 28, 1997, the State of Arizona Office of Attorney General, on behalf of the ADEQ, requested that Exxon submit a written proposal to the ADEQ by December 10, 1997, that adequately addresses corrective actions to be taken by Exxon to mitigate the vapor hazard present in the OEC building's underground parking structure. In addition, the written proposal was to include a schedule for designing, constructing and bringing on-line, an above ground groundwater treatment system for the OEC building.

Jan 20 '98 14:32 P.06

18. On December 11, 1997, the ADEQ received a two-page response prepared by Snell & Wilmer, L.L.P. on behalf of Exxon, dated December 10, 1997. Based on a review of this response, the ADEQ determined that Exxon had not adequately addressed corrective actions to be taken to mitigate the vapor hazard present in the OEC building's underground parking structure.

B. CONCLUSIONS OF LAW

1. Exxon owned the USTs formerly located at the Facility within the meaning of A.R.S. § 49-1001.01(A)(2).

2. Exxon was in control of and had responsibility for the day-to-day operations of the USTs, and is the "operator," within the meaning of A.R.S. § 49-1001(9).

3. The petroleum product released at the Facility is "petroleum," as defined in A.R.S. § 49-1001(12), and is, therefore, a "regulated substance" within the meaning of A.R.S. § 49-1001(14).

4. The petroleum contamination detected at the Facility constitutes a "release," as defined by A.R.S. § 49-1001(15).

5. A.R.S. § 49-1005(B) requires the owner and operator of an underground storage tank to take corrective action in response to the release of a regulated substance from a tank.

6. A.R.S. § 49-1005(G) provides that corrective actions shall be accomplished in a manner consistent with Title 40, Code of Federal Regulations ("C.F.R."), §§ 280.60 through 280.67.

7. 40 C.F.R. § 280.62(3) requires the owner and operator to continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the UST excavation zone and entered into subsurface structures (such as sewers or basements). By failing to adequately mitigate any fire or safety hazards posed by the vapors that have entered into the OEC underground parking structure consistent with 40 C.F.R. § 280.62 (3), Exxon violated A.R.S. § 49-1005(G).

IV. IT IS THEREFORE ORDERED, pursuant to A.R.S. § 49-1013, that Exxon shall comply with the provisions of A.R.S. Title 49, Chapter 6, Article 1, by taking the specific actions set forth in the COMPLIANCE SCHEDULE below:

A. TEMPORARY VAPOR ABATEMENT SYSTEM IMPLEMENTATION - Within Two (2) calendar days of the effective date of this Order, Exxon shall complete installation and

begin implementation of a temporary vapor abatement system in the OEC building's underground parking structure.

B. ABOVE GROUND TREATMENT SYSTEM IMPLEMENTATION - Within twenty-one (21) calendar days of the effective date of this Order, Exxon shall remove the current groundwater treatment system, located in the OEC underground structure, and complete installation and begin implementation of an above ground groundwater treatment system.

C. ABOVE GROUND TREATMENT SYSTEM REPORT SUBMITTAL - Within thirty-five (35) calendar days (GAC) of the effective date of the Order, Exxon shall submit to the ADEQ, a written final report detailing specifications and design for the new groundwater treatment system as-built.

D. PERMANENT VAPOR ABATEMENT SYSTEM IMPLEMENTATION - Within thirty-five (35) calendar days of the effective date of this Order, Exxon shall complete installation and begin implementation of a permanent vapor abatement system in the OEC building's underground parking structure.

E. PERMANENT VAPOR ABATEMENT SYSTEM REPORT SUBMITTAL - Within fifty (50) calendar days of the effective date of this Order, Exxon shall submit to the ADEQ, a written final report detailing specifications and design for the permanent vapor abatement system as-built.

Jan 20 '98 14:33 P.09

F. WEEKLY PROJECT REPORT SUBMITTALS - Commencing with the effective date of this Order and concluding with the submittal of the final report submitted to comply with Section IV.D of this Order, Exxon shall submit weekly project reports to the ADEQ each Friday, via a facsimile, detailing work performed during that week and projected activities for the following week.

V. YOU ARE NOTIFIED OF THE FOLLOWING:

A. You may request a hearing, provided such request is made within thirty (30) calendar days of receipt of this Compliance Order. A request for a hearing must be in writing, must specifically cite those portions of this Compliance Order which are contested, and must state that the hearing is requested pursuant to A.R.S. § 49-1013(A). A request for hearing must be filed with:

Lavonne Watkins, Case Administrator
Office of Administrative Counsel
Arizona Department of Environmental Quality
3033 North Central Avenue, 8th Floor
Phoenix, Arizona 85012

This Compliance Order becomes final and enforceable in the Superior Court unless a hearing is requested within thirty (30) calendar days from the date this Compliance Order was received. The effective date of this Order is thirty (30) calendar days from the date of receipt or, if this Order

right to seek appropriate penalties or injunctive relief in Superior Court for violations of A.R.S. Title 49, or any rule, permit or order ---- .

is appealed as set forth above, the date that Exxon receives the Director's final decision on such appeal.

B. All correspondence to ADEQ, including submittals, plans, and other additional required items, other than a request for a hearing, arising as a result of this Compliance Order shall be mailed to the following address:

Arizona Department of Environmental Quality
Waste Programs Division
UST Section/LUST Enforcement Unit
3033 North Central Avenue, T-4066
Phoenix, Arizona 85012

Each correspondence shall reference the following:

LUST File #4366.01, 4366.02
Facility ID #0-008848

Such correspondence may also be hand-delivered to the following office:

Arizona Department of Environmental Quality
Waste Programs Division
UST Section/LUST Enforcement Unit
3003 North Central Avenue, 4th Floor
Phoenix, Arizona 85012

Any such correspondence shall be deemed submitted when received by the ADEQ at either of the above addresses.

C. Failure to comply with this Order may subject Exxon to further administrative or judicial sanctions including civil penalties. By issuing this Compliance Order, neither the Arizona Department of Environmental Quality nor the Office of the Arizona Attorney General waives its

ORIGINAL of the foregoing Compliance Order was filed this 15 day of January, 1998, with:

Lavonne Watkins, Case Administrator
Office of Administrative Counsel
Arizona Department of Environmental Quality
3033 North Central Avenue, 8th Floor
Phoenix, Arizona 85012

Copies of the foregoing Compliance Order were sent by Certified Mail, Return Receipt Requested this 15 day of January, 1998, to:

Ms/Mr. Ortega ~~Roger Hicks~~ GAC
Environmental Engineering & Marketing Department
Exxon Company U.S.A.
P.O. Box 4032
Concord, California 94524-4032

Copies of the foregoing Compliance Order were sent by regular/interdepartmental mail this date to:

Joan Card, Assistant Attorney General
Environmental Enforcement Section
Office of the Attorney General
1275 West Washington Street
Phoenix, Arizona 85007

Ronald A. Kern, Manager
Underground Storage Tank Section
Waste Programs Division
3033 North Central Avenue, T-4026
Phoenix, Arizona 85012

Thomas J. Di Domizio, Case Manager
UST Section/LUST Enforcement Unit
Waste Programs Division
3033 North Central Avenue, T-4066
Phoenix, Arizona 85012

Patrick Paul, Esq. (GAC)
Snell + Wilmer
One Arizona Center
Phoenix, AZ 85004

right to seek appropriate penalties or injunctive relief in Superior Court for violations of A.R.S. Title 49, or any rule, permit or order promulgated or issued thereunder, or any other applicable environmental statute or legal authority. In addition, if Exxon fails to comply with this Order, the Director may take corrective action with respect to the release pursuant to A.R.S. § 49-1017, and recover from Exxon the costs of such corrective action.

ISSUED this 15th day of January, 1998.

Jean A. Calhoun
Director of Waste Programs Division
Arizona Department of Environmental Quality

Jere

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
3033 North Central Ave.
4th Floor Tower
Phoenix, Az 85012

DATE: 1/13/98

TO: Jennifer Brownder

PHONE:

FAX:

FROM: Michael Latin

PHONE: 207-4308

FAX: 207-4346

NUMBER OF PAGES (INCLUDING COVER PAGE): 5

IF YOU HAVE ANY PROBLEMS WITH THE FAX, PLEASE CALL THE PERSON WHO SENT THE INFORMATION

COMMENTS:

Jan 13 '98 9:57 P.01

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull Russell F. Rhoades, Director

CERTIFIED MAIL
Return Receipt Requested
UST Ref. No. 97-0020533
December 23, 1997

Mr. Jerrold Weiss
Weico Corporation
644 W. Hazelwood
Phoenix, AZ 85013

Re: Request for Revisions to a Corrective Action Plan

Lust # 1604.01	Weiss Guys Car Wash #2
Facility ID # 0-005589	15 West Camelback
Maricopa County	Phoenix, AZ

Dear Mr. Weiss:

The Arizona Department of Environmental Quality (ADEQ), Underground Storage Tank (UST) Section, Remedial Actions Unit (RAU) appreciates your continuing efforts to clean up our environment, and we apologize for the delay in responding to your submission of the Corrective Action Plan (CAP) on March 11, 1996. However, changes in site conditions (specifically, high concentrations of benzene, toluene, ethylbenzene, and xylenes in water samples from MW-2) over the last year have led the RAU to the conclusion that modifications to the CAP should be requested.

Since high levels of dissolved contaminants remain in MW-2, the ADEQ is suggesting an active remediation plan be proposed and implemented for the immediate vicinity of the well. This was also initially proposed by Verde Company on March 11, 1996. The ADEQ suggests that soil vapor extraction system and/or sparging system may be applicable for the zone around MW-2. It is our understanding that vapor extraction wells have already been installed. After these high contaminant levels have been substantially reduced by active remediation methods, natural attenuation could be utilized as the primary remediation method, as described in your CAP.

The CAP should be resubmitted with modified schedule, estimated time of contaminant removal and any design considerations for vapor extraction/sparging system. The modified CAP is due to the RAU within 90 days of receipt of this letter. If you have any questions regarding this letter, please call me at 1-800-234-5677, ext., 4587, or 602-207-4587.

3033 North Central Avenue, Phoenix, Arizona 85012, (602) 207-2300

Sincerely,

Bhatt

Kailash Bhatt
Hydrologist
UST Remedial Actions Unit

cc: Jean Calhoun, Director, Waste Programs Division
Ronald Kern, Manager, UST Section
Michael Latin, Unit Manager, State Lead Unit
Peterson Consulting L.L.C.

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ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Governor Jane Dee Hull Russell F. Rhoades, Director

CERTIFIED MAIL
Return Receipt Requested
UST Ref. No. 98-0000269
January 8, 1998

Mr. Brian J. Kelly, P.E.
Asset Management Group
Unocal Corporation
376 South Valencia Avenue
Brea, California 92823

RE: Request for Corrective Action Plan

LUST File No. 1170.01
Facility ID #0-005271

Unocal Station #3166
4 West Camelback Road, Phoenix, AZ

Dear Mr. Kelly:

In January 1995, the Arizona Department of Environmental Quality (ADEQ) received a Corrective Action Plan (CAP) prepared for the referenced site on behalf of Unocal Corporation (Unocal) by Harding Lawson Associates. The CAP, dated December 28, 1994, described Unocal's plans to remediate the site using active soil and groundwater remediation technologies. In June 1995, after completing the required public review and comment period in accordance with Title 40 of the Code of Federal Regulations (40 CFR) § 280.67, the CAP was given final approval by the ADEQ. Unocal's February 11, 1996, revised schedule for the implementation of the CAP was subsequently approved by the ADEQ in March 1996.

In June 1996, Unocal requested ADEQ approval for proposed modifications to the groundwater remediation approach under the approved CAP. In the request, Unocal proposed to terminate the active groundwater remediation tasks and implement new tasks needed to evaluate natural attenuation of the groundwater contamination at the site. Unocal proposed to complete the remaining tasks, including the soil remediation, according to the approved CAP. To implement the natural attenuation approach, Unocal proposed the following modifications to the approved CAP: 1) Discontinue the remediation efforts related to Sections 3.2 (*Groundwater Remediation Tasks*), 3.4 (*Remedial System Permitting*), 3.5 (*Remedial System Monitoring*), 3.6 (*Remedial System Reporting*) and 3.7 (*Tentative Remediation Schedule*) under the approved CAP; 2) Modify the groundwater monitoring program to include testing for indirect indicators of natural attenuation; 3) Evaluate past and future water quality data to determine if trends attributable to natural attenuation exist at the site; and 4) install an additional monitor well to assess water quality at the downgradient "edge" of the dissolved phase plume.

On July 1, 1996, the ADEQ approved Unocal's proposed CAP modifications to further evaluate natural attenuation of the groundwater contamination at the site. However, a new CAP was not requested as required.

As you know from the March 21, 1997, facility meeting between the ADEQ and Unocal, the ADEQ requires submittal of a new CAP for the referenced site if Unocal intends to use natural attenuation to remediate the groundwater contamination, as proposed. Unocal's proposal to use natural attenuation was not described in the approved CAP, nor has the public been notified, in accordance with 40 CFR § 280.67, of Unocal's plans to remediate the groundwater contamination at the site using natural attenuation. Therefore, a new CAP, describing Unocal's plans for natural attenuation, is required in order to fulfill the public participation requirements under 40 CFR § 280.67 and to complete the ADEQ's CAP approval process for Unocal's proposed CAP modifications.

Please submit the new CAP within 45 days of receipt of this letter. The new CAP should also include a status report that documents: 1) the monitoring, sampling and performance data collected to date for the soil remediation system, as required under the approved CAP; and 2) the results of work activities related to CAP modifications #3 and #4 that were proposed by Unocal in the June 19, 1996, correspondence to the ADEQ. Otherwise, if Unocal does not wish to submit a new CAP for public comment and the ADEQ's final approval, then the ADEQ requires that Unocal implement the provisions of the December 28, 1994, CAP according to the approved schedule submitted by Unocal on February 11, 1996.

If you have any questions concerning this letter, please contact me at (602) 207-4270.

Sincerely,

Jeff Kettering, Hydrologist
LUST Enforcement Unit

JAK:ald

cc: Jean Calhoun, ADEQ
Ron Kern, ADEQ

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Preliminary Risk Evaluation Report

Sunshine Western, Inc. and Thriftway Marketing Co.
Intersection of Highways 160 and 264,
Tuba City, Navajo Nation

Affecting Navajo and Hopi Land

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Matthew Small, M.Eng, R.G., Hydrogeologist, Office of Underground Storage Tanks
Patrick Wilson, Ph.D., M.P.H., Toxicologist, Corrective Action Section

May 2, 1996

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EXECUTIVE SUMMARY

This preliminary risk evaluation is being prepared to provide an analysis of the magnitude and probability of risk to public health and the environment from the release of petroleum hydrocarbon contamination from the Sunshine Western Inc. (Sunshine Western) and Thriftway Marketing Co. (Thriftway) facilities located at the intersection of highways 160 and 264, in Tuba City, Arizona. Because site assessment data is not complete, this document provides a semi-quantitative appraisal of risk at the subject sites considering specific exposure routes and critical pollutants.

Both Sunshine Western and Thriftway have released petroleum products into the environment from their previously and/or currently operated underground storage tank (UST) systems at the facilities identified above. Releases of petroleum hydrocarbons from these UST systems have contaminated soil, ground water, and surface water on the Navajo Nation and Hopi Tribal lands. These releases have created a commingled plume of petroleum contamination which has migrated downgradient through the shallow alluvium over 500 feet beyond the boundary of the Sunshine Western facility and onto Hopi Tribal lands. Though the vertical and horizontal extent of the plume of petroleum hydrocarbon contamination has not been fully defined, total contaminant plume length is known to exceed 1000 feet as of October, 1995. Benzene concentrations within the ground water plume have been measured as high as 58,154 parts per billion (ppb) within the last year.

Geology at the site consists of variable thicknesses of shallow alluvium overlying sandstone bedrock. Shallow ground water is encountered in the alluvium at depths ranging from 2 to 9 feet below site grade. The depth and direction of shallow ground water flow appears to be controlled by the southward sloping erosional surface of the bedrock. The ground water gradient and subsequent flow direction within the shallow alluvium is to the south-southwest toward Moenkopi Wash. A flow rate of between 10 and 1,000 feet per year is estimated for the shallow ground water.

Periodic surface seepage of petroleum hydrocarbons has been observed by Hopi Tribe, Bureau of Indian Affairs (BIA), and Environmental Protection Agency (EPA) personnel on several occasions in the vicinity of the downstream end of a downgradient culvert which conducts an unnamed wash under U.S. Highway 160 on Hopi lands (the Culvert). In addition, seepage in the vicinity of the Culvert was observed by Hopi Tribal personnel in sufficient concentrations to be ignited in May of 1988. In March 1995, benzene contamination was found in surface soils in the vicinity of the Culvert, again threatening impacts to the Moenkopi Wash (a water of the United States) further downstream.

Though other sources of petroleum contamination are present in the Tuba city area, contaminant distributions on and around the site clearly indicate that Thriftway and Sunshine Western are the sources for the commingled plume of petroleum hydrocarbons in soil and ground water at, and downgradient of the site.

In an effort to remediate contamination, in 1989 Thriftway installed a soil vapor extraction system (SVE), consisting of a series of perforated pipes in the vicinity of its original tank location and extending south across highway 160. Due to high ground water levels, the southern section of the SVE system was converted to a passive ground water collection system, feeding two evaporation ponds. In spite of these efforts, petroleum products continue to seep to the surface downgradient of the site at the Culvert and ground water concentrations remain high.

Underlying the shallow alluvium is the N aquifer, consisting of the Navajo Sandstone, Kayenta Formation, and Lukachukai Member of the Wingate Sandstone, which are hydraulically connected and function as a single aquifer. The unconfined N aquifer is the major source of water for municipal and industrial users in the Tuba City area. Ground water flow in the N aquifer is generally to the south, discharging from springs and seeps near the top of the bluffs that border Moenkopi Wash, downgradient and cross-gradient from the site. Recharge to the N aquifer in the Tuba City area is a result of local infiltration of precipitation and runoff through the shallow sediments.

Hydraulic pressure in the N aquifer has historically been sufficient to cause many wells to flow at the surface in the Tuba City area. However, withdrawals have increased significantly in the last 26 years, and declining water levels have been observed in the Tuba City area. Water level declines on the order of 17 to 32 feet were reported in the Upper Moenkopi Village supply wells in 1996.

Declining water levels in the N aquifer significantly increase the likelihood that contaminants could migrate vertically from the overlying alluvial sediments into the bedrock aquifer below. This vertical contaminant migration could result in significant impacts to local springs and wells.

The contaminants of concern identified at the site are those found in petroleum products (chiefly gasoline and diesel). Of these compounds, benzene, toluene, ethylbenezene, xylene (BTEX collectively), and methyl-tertiary-butyl-ether (MTBE) are considered to be of principal concern in gasoline, with benzo(a)pyrene, acenaphthene, fluoranthene, and naphthalene (polynuclear aromatic hydrocarbons or PAHs collectively) of principal concern in diesel, due to their solubility, volatility, toxicity, and mobility. The compounds of concern, BTEX, MTBE and PAHs demonstrate both acute health effects and more chronic, systemic toxicity and carcinogenicity.

This report is limited to a discussion of the impacts from BTEX and MTBE because these are the compounds for which the most complete set of chemical analytical data is currently available. Concentrations of BTEX detected in soil, ground water, and surface water at the site currently exceed some or all of the following EPA Region IX preliminary remediation goals (PRGs) for soil, EPA Ecotox Thresholds for sediment, EPA maximum contaminant levels (MCLs) for drinking water, and EPA Ecotox Thresholds for surface water. Current concentrations of the contaminants of concern represent a significant threat to both the public

health and the local ecology.

In order for a contaminant at a site to constitute a health risk, a complete exposure pathway must exist which links the contaminant source to either a human or ecological receptor. Complete exposure pathways exist at this site. Exposure pathways exist for contaminants moving from the source through the subsurface to surface soils, surface water, and the N aquifer for possible ingestion by humans, livestock, and wildlife. The magnitude of exposures is potentially significant given that free product has been observed in monitoring wells; that high levels of ground water contamination have been detected; that petroleum contamination has seeped to the surface contaminating surface soils and surface water; and that the potential exists for contaminants to migrate into the deeper N aquifer, which could affect local springs and drinking water wells. Additional data is needed to determine the potential for vapor migration at the site. In addition, contamination appears to be continuing to migrate downgradient, which may result in additional surface seepage or vertical migration with increased potential for exposure.

The potential exposures of immediate concern remain the ingestion of contaminated surface and ground water. Water of all types is extremely precious in this arid environment and the local population is dependent on water from local surface water sources, wells, and springs. As a result of the characteristics of water use by the local population, there is either current exposure or the potential for exposure in the near future. Estimated carcinogenic and acute risks are substantial. Carcinogenic risk levels are estimated to exceed one in one hundred (10^{-2}) well above the EPA range of one in one hundred thousand (10^{-4}) to one in one million (10^{-6}). In addition, hazard quotients (HQ) for non-carcinogenic compounds at the site are estimated to be over seventy three thousand (73,000) clearly exceeding the EPA guideline of HQ less than one.

Based on available data, this site may pose an imminent and substantial threat to human health and the environment in the Tuba City and Moenkopi area. Immediate action is required to halt surface seepage and contamination of surface soils, surface water, and the shallow aquifer to prevent possible contamination of the underlying N aquifer, and to prevent any potential vapor impacts.

1.0 INTRODUCTION

This preliminary risk evaluation is being prepared to provide a determination of the magnitude and probability of risk to public health and the environment from the threatened or actual release of petroleum hydrocarbon contamination from the Sunshine Western and Thriftway facilities. Because site assessment data is not complete, and resources are limited, this document provides a semi-quantitative appraisal of risk at the subject sites considering specific exposure routes and critical pollutants. Standard EPA risk assessment guidelines were followed in preparing this appraisal (EPA 1989a, 1989b). Data gaps, uncertainties, and recommendations for additional studies are incorporated into the document where appropriate (EPA 1995a, 1995b).

1.1 Site Description and History

The site considered in this report consists of the Sunshine Western and Thriftway Marketing Co., Facility #701 (Thriftway) leaseholds located on the western and northern corners, respectively, of the intersection of Arizona State Highway 264 and U.S. Highway 160, in Tuba City, on lands leased from the Navajo Nation adjacent to the border between the Navajo Nation and the Hopi Reservation (Figure 1-1) as well as the aerial and vertical extent of contamination. Both facilities at the site are currently operated as gasoline stations and convenience stores.

Releases of petroleum hydrocarbons from underground storage tank (UST) systems operated at the Thriftway and Sunshine Western facilities in Tuba City, Arizona have contaminated soil, ground water, and surface water on the Navajo Nation and Hopi Indian Reservations. The potential exists for contaminants to impact both human and ecological receptors threatening both human health and the environment.

The U.S. Environmental Protection Agency (EPA) initiated an enforcement action against Sunshine Western to obtain penalties and compliance. By Partial Consent Agreement and Final Order issued May 30, 1995, Sunshine Western settled the civil penalty portion of the complaint. By uncontested motion dated March 31, 1995, EPA requested and was granted a stay of the Compliance Order portion of the Complaint in order to bring Thriftway before EPA simultaneously with Sunshine Western in order to protect human health and the environment by facilitating a comprehensive remediation of the existing commingled plume of petroleum contamination.

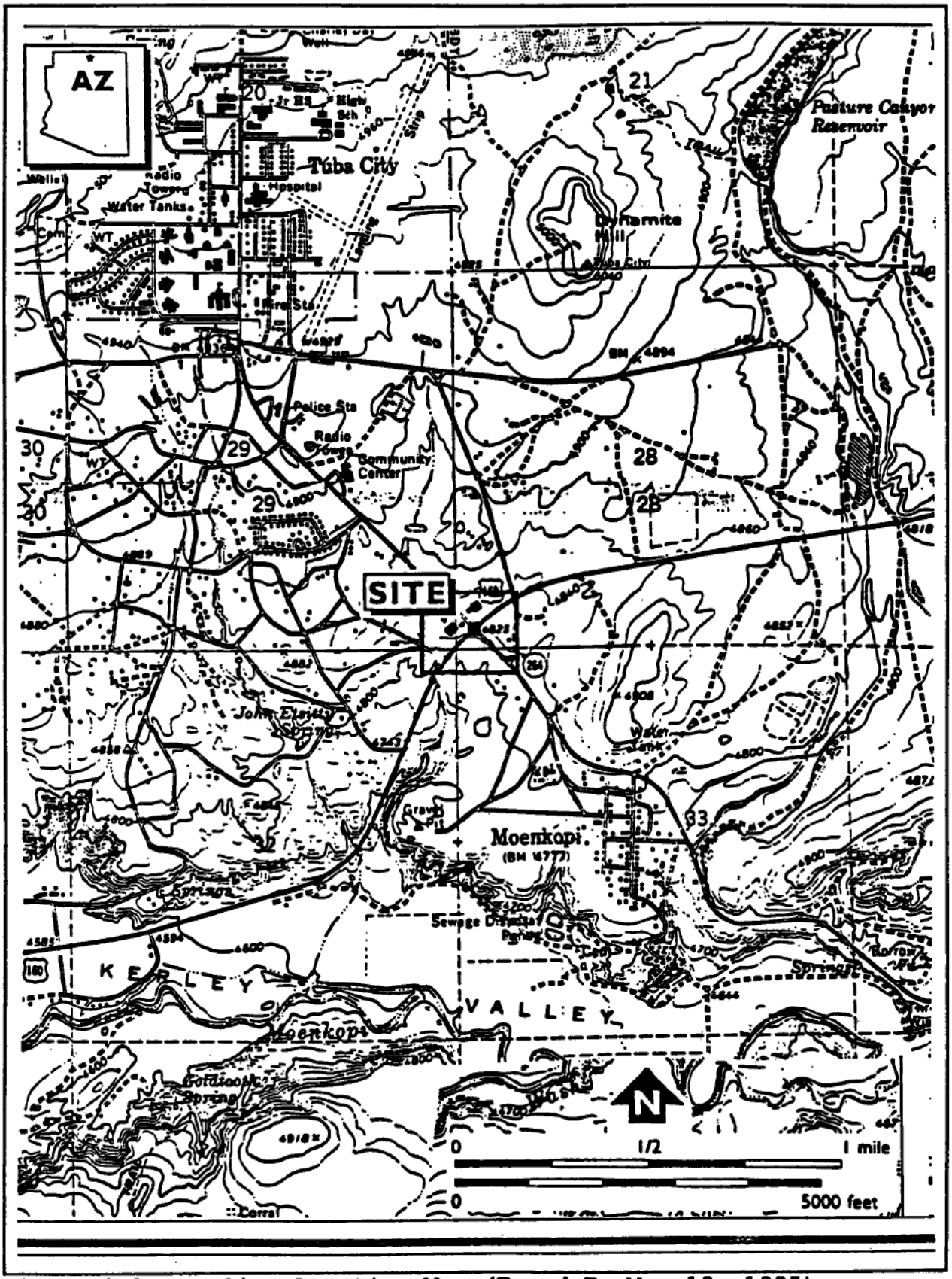

Figure 1-1. Site Location Map (E and E, May 18, 1995).

2.0 UST SYSTEMS AND RELEASES

Sunshine Western and Thriftway have operated, removed and replaced multiple UST systems at each of their facilities. The UST system installation and removal dates for each facility are detailed in Table 2-1. Locations of all known current and former USTs at the Thriftway and Sunshine Western facilities are shown in Figures 2-1 and 2-2, respectively.

Both Sunshine Western and Thriftway have released petroleum products into the environment from their previously and/or currently operated UST systems. Petroleum contaminant occurrence and concentration distributions indicate that the petroleum product that was released from Thriftway's UST systems has, over the course of time, migrated downgradient (south) through soil and groundwater and become commingled with petroleum product that was released from Sunshine Western's UST systems. Contamination has continued to migrate downgradient under Highway 160 onto lands of the Hopi Tribe in the vicinity of the Villages of Upper and Lower Moenkopi (Figure 2-3).

2.1 Thriftway Release

Gasoline fumes were noted emanating from the excavation when Thriftway's former UST system, which consisted of four (4) USTs and associated piping, was closed by removal during the week of April 1, 1988 (see Figure 2-1). Removal of the UST system at the Site uncovered soil contamination in the vicinity of the system piping. Subsequent ground water monitoring at well MW-25, located on the Thriftway facility, has yielded maximum benzene, toluene, ethylbenzene, xylene and MTBE concentrations of 10,412; 2,279; 662; 2,065 and 34,402 parts per billion (ppb), respectively (Biotech Remediation Inc., October 18, 1995).

Weekly gasoline inventory records submitted by Thriftway for the period between April 1987 and October 1988 indicate a release of gasoline product from the UST system at the Thriftway facility. These records show a clear losing trend between August 1987 and April 1988. The losing trend was immediately reversed upon replacement of the UST system in April 1988. Records indicate a loss of at least 13,000 gallons of product (the "Thriftway release", Appendix A). The reversal of the losing trend in April 1988 (following UST system replacement) also indicates that the dispensers may have been incorrectly calibrated, thereby reporting erroneously high gasoline sales (Figure 2-4). As a result, the actual volume of product released from the UST system may be significantly greater than 13,000 gallons.

Contaminant occurrence and concentration trends clearly indicate a release of petroleum products and an associated plume of contamination in soil and ground water which emanates from the Thriftway facility.

2.2 Sunshine Western Release

Table 2-1 and Figure 2-2 indicate that three (3) 1000 gallon USTs were installed in 1963 at the Sunshine Western facility, and that these same USTs were closed in place in 1973. These

Table 2-1. Tank Installation and Removal Summary (Figures 2-1 and 2-2 show locations).

Thriftway

Date	Action	Comments
1976?	5 USTs installed	4 Gasoline and 1 Diesel
4/1/88	Four USTs removed consisting of three 8,000 gallon Gasoline, and one 6,000 gallon Gasoline.	Inventory records and contamination discovered during excavation indicate a release of petroleum products.
4/88	Three (3) 10,000 gallon gasoline USTs installed.	Currently in use.
1/24/95	One (1) 8,000 gallon Diesel UST removed.	Localized hydrocarbon contamination may be present.

Sunshine Western

Date	Action	Comments
1963	Three (3) 1,000 gallon USTs installed in Area A.	
1973	Three (3) 1,000 gallon USTs closed in place in Area A.	
1973	One (1) UST installed Area B	
1973	Two (2) USTs installed Area C	
1989	One (1) UST closed in place in Area B	
1989	Two (2) USTs removed from Area C	Noticeable free product seen as a thick black oily substance visible in the excavation.
1989	Four (4) USTs installed Area D	Currently in use
1993	New piping installed	Installation overseen by Navajo EPA.

USTs are located in Area A. Three (3) additional USTs were installed in 1973 (areas B and C). Of these USTs, two (2) were removed in 1989 (Area C) and one (1) was closed in place in 1989 (Area B). Four new USTs were installed by Sunshine Western on its Leasehold in 1989 and are currently in use (Area D). A total of four tanks installed prior to 1974 remain in the ground (Areas A and B). The method of closure of the tanks in Area A and condition

of the tanks in Areas A and B at the time of closure is not known.

On or about May 11, 1989, in connection with the removal of two (2) USTs from Area C (Figure 2-2), free product, having a thick black oily appearance (Dunn, May 11, 1989), was visible in the excavated tank area (the "Sunshine release"). Soil samples taken from around the excavation showed concentrations of up to 924.4 parts per million (ppm) for light hydrocarbons, 11,287.6 ppm for heavy hydrocarbons and 12,212 ppm for total petroleum hydrocarbons. No information is currently available on the volume of product released.

No data is currently available to determine the extent of a release, if any, in areas A and B, where UST systems were closed in place in 1973 and 1989, respectively. A proposal for site assessment and characterization was submitted on August 10, 1994 by Sunshine Western's consultant, Hydro-Search, and thereafter approved by EPA, but has not been implemented.

Contaminant occurrence and concentration trends clearly indicate a release of petroleum products and an associated plume of contamination in soil and ground water which emanates from the Sunshine Western facility.

2.3 Corrective Action

Thriftway has investigated contamination at the site by conducting soil and ground water sampling, and by using an explosimeter to conduct a soil vapor survey (Thriftway November 29, 1988, see Figure 2-5). This information was used to develop a corrective action plan (Thriftway, 1989). Based on this plan, a soil vapor extraction system (SVE) was installed, consisting of a series of perforated pipes in the vicinity of the original tank location and extending south across highway 160 (Figure 2-5).

Highway construction in 1993 at the intersection of Highways 160 and 264, carried out by the Arizona Department of Transportation, destroyed the underground link of the SVE system between the northern and southern sections. As a result, the northern and southern sections of the SVE system now function independently.

Due to high ground water levels and shallow depths to bedrock, the southern section of the SVE system failed to function as planned and was converted to a passive ground water collection system, feeding two lined evaporation ponds specifically constructed to prevent contaminated water from entering the Moenkopi Wash (Figure 2-5). The northern part of the SVE system covering the Thriftway facility continues to operate. Through 1995, it removed approximately 24,000 pounds of hydrocarbons, which is equivalent to approximately 4,200 gallons of gasoline. This quantity is approximately 30 percent of the 13,000 gallons of gasoline estimated to have been released between 1987 and 1988.

In spite of these efforts, petroleum products continue to seep to the surface downgradient of the site (see Section 3.2). In addition, ground water concentrations remain high (Figure 2-3 and Appendix B).

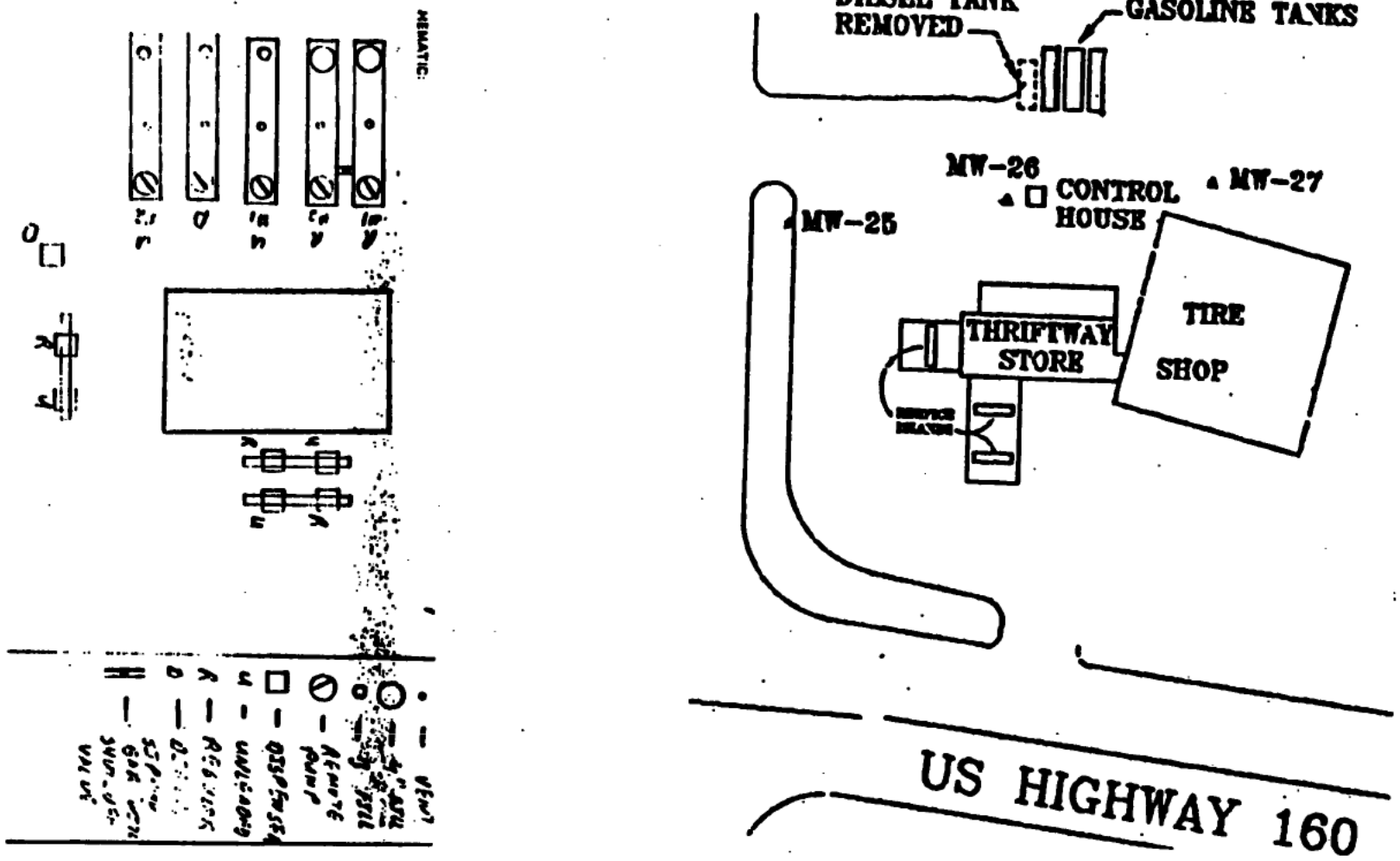

Figure 2-1. Left side: locations of UST system removed from Thriftway #701 April, 1988 (Hunter, July, 1986). Right side: locations of current UST system and recently removed Diesel UST (Biotech March, 1995)

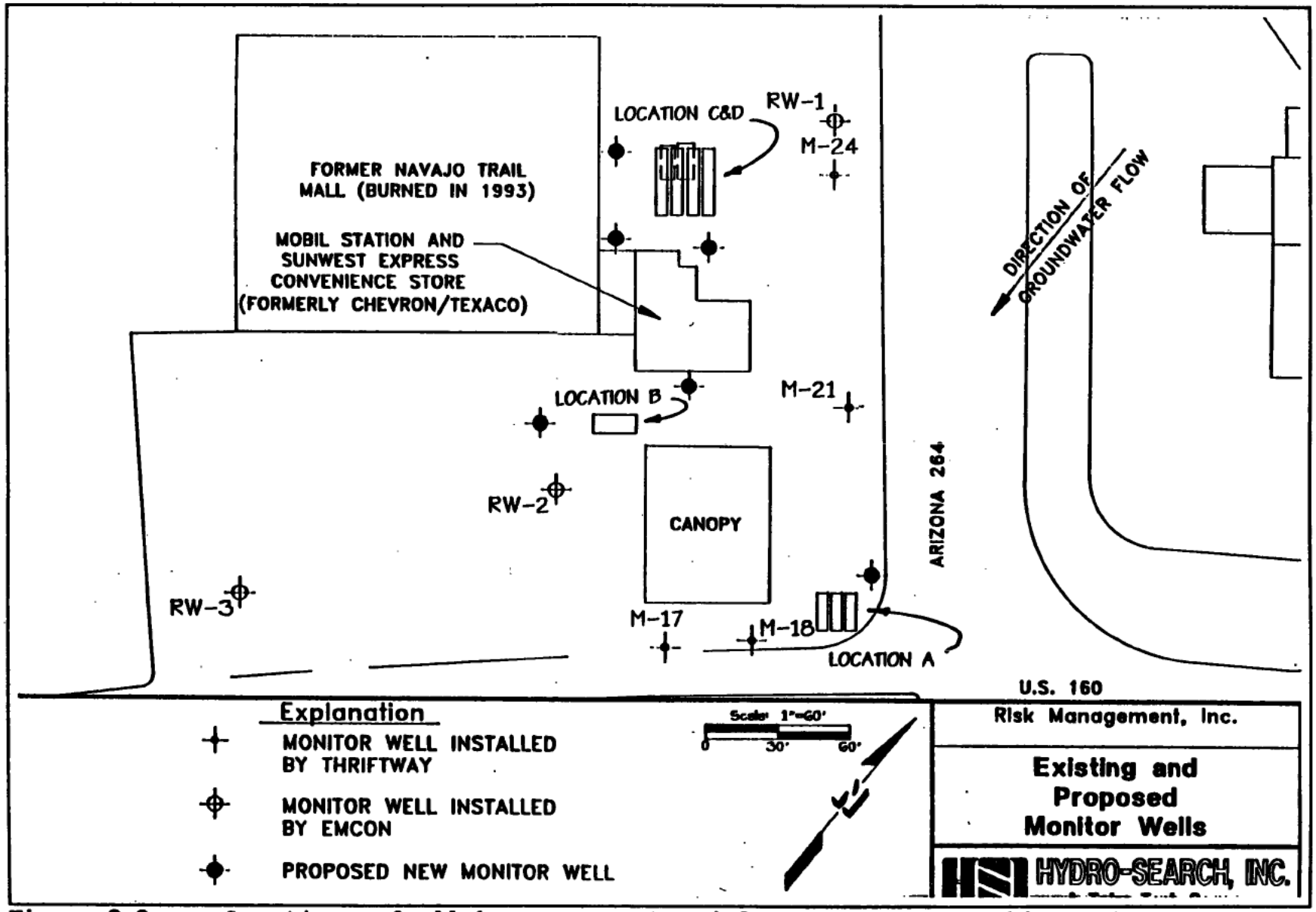

Figure 2-2. Locations of all known current and former USTs at Sunshine Western (Hydrosearch, Inc, August 10, 1994)

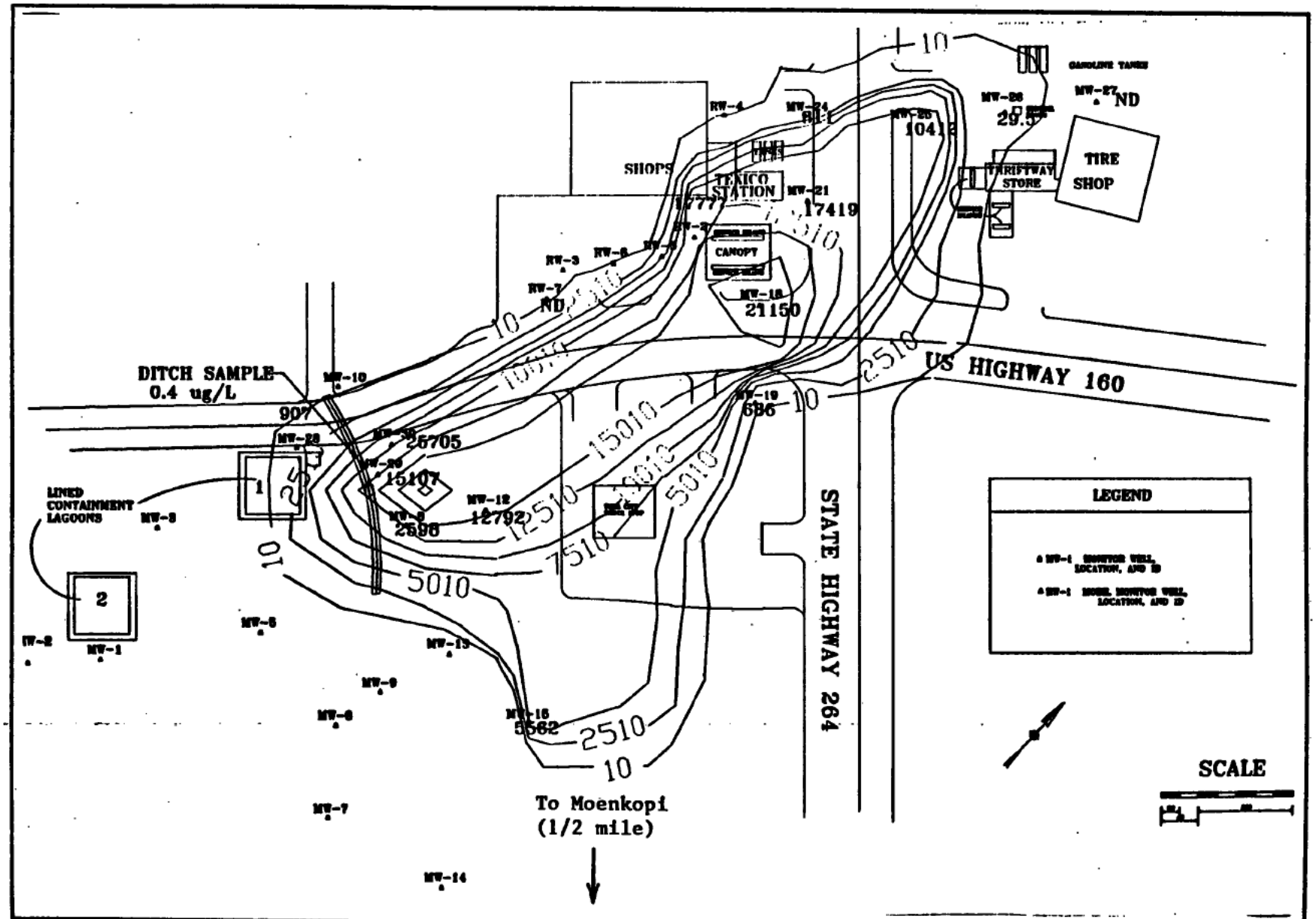

Figure 2-3. Benzene Contour Map, October 18, 1995 (BioTech, October 18, 1995)

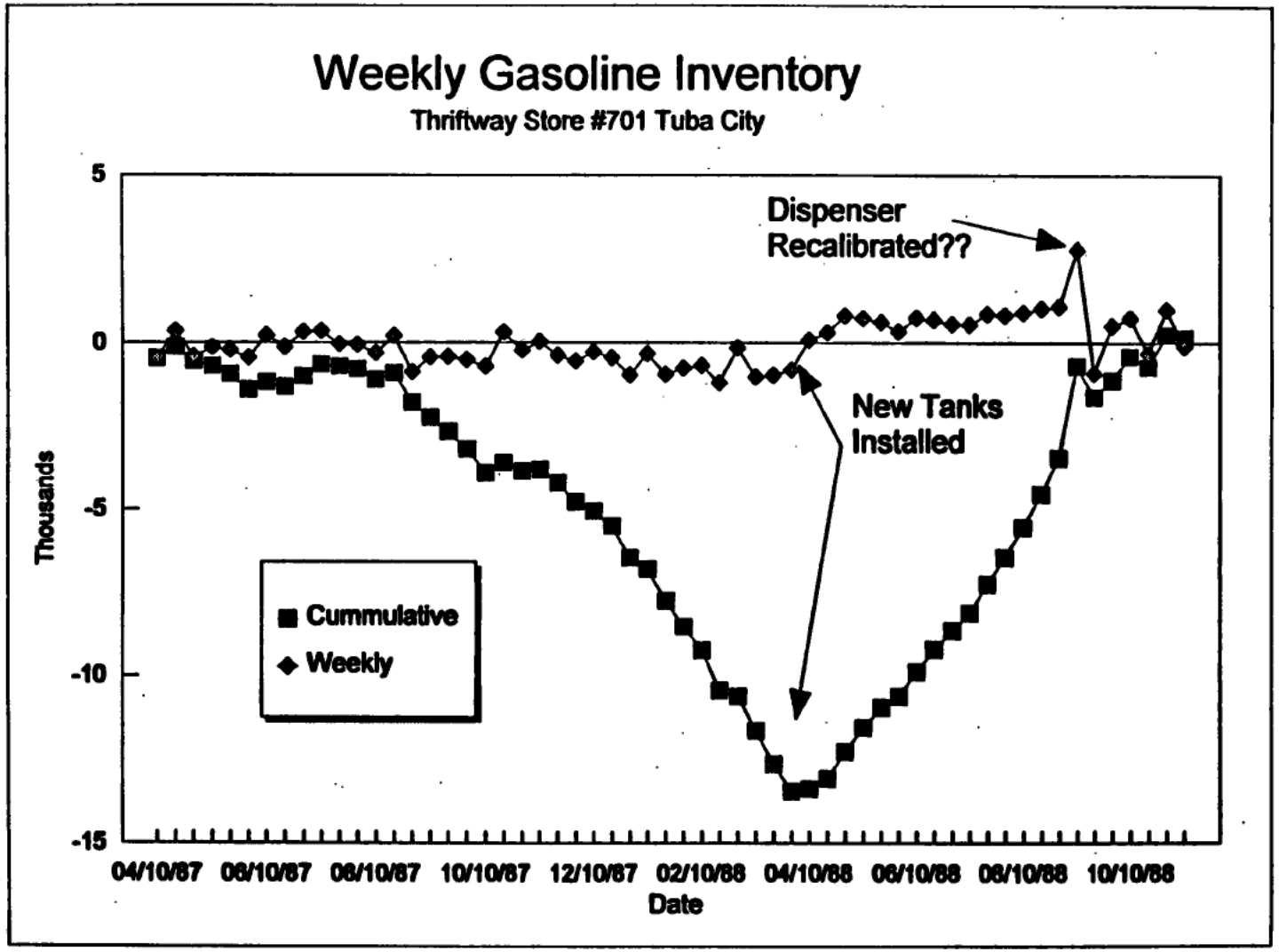

Figure 2-4. Weekly Gasoline Inventory, Thriftway Store #701, Tuba City, 4/87 - 11/88 (see also Appendix A)

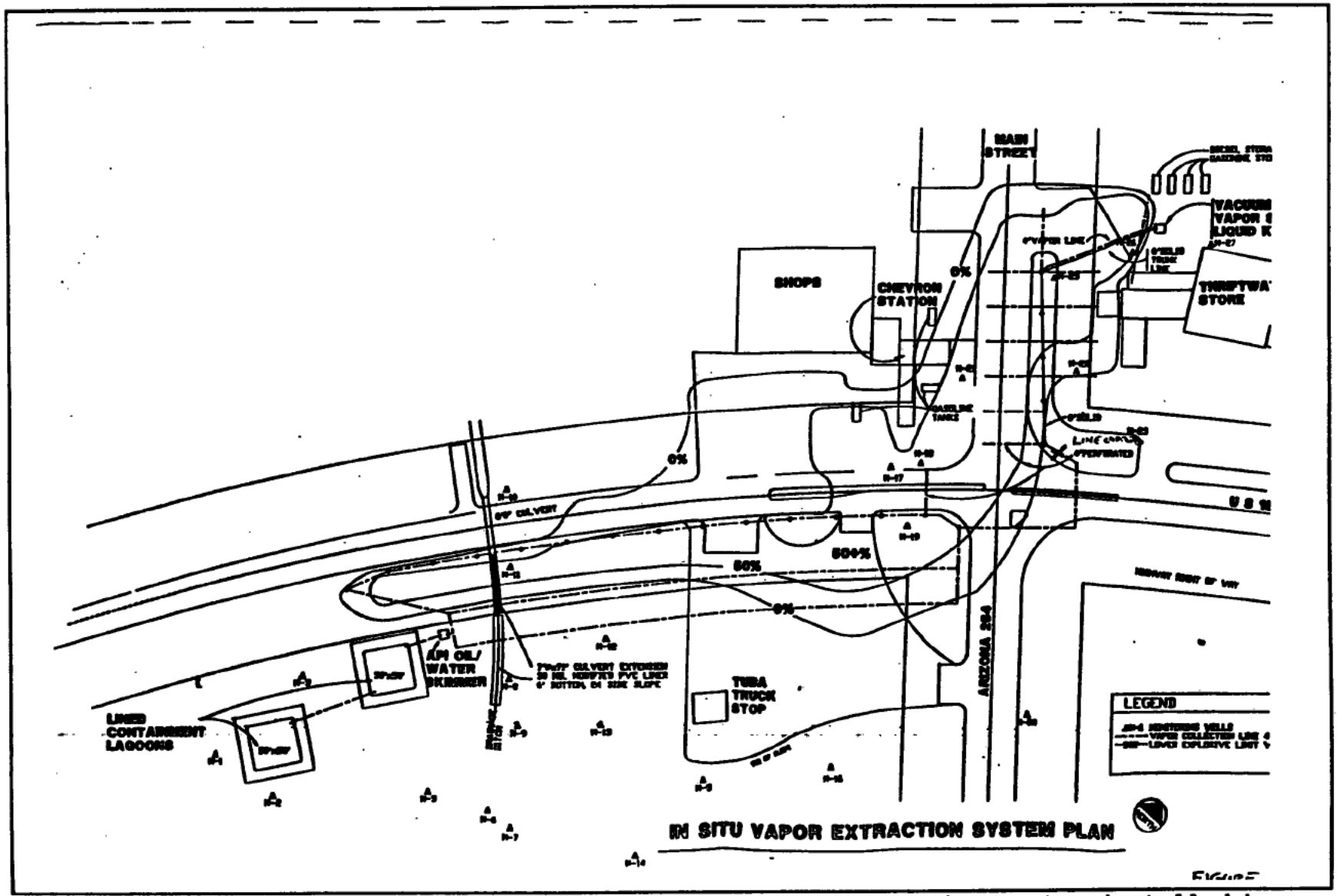

Figure 2-5. Soil vapor survey results and soil vapor extraction system installed by Thriftway, later converted to passive ground water collection system (Biotech, July 28, 1993)

3.0 HAZARD IDENTIFICATION

3.1 On-Site and Off-Site Contamination

Petroleum hydrocarbons released from the UST system at the Thriftway facility have migrated downgradient (south-southwest) in soil and ground water across the Sunshine Western facility, commingling with petroleum products released from the Sunshine Western UST system. The data demonstrate that, to date, this commingled plume of petroleum contamination has migrated downgradient through the shallow alluvium over 500 feet beyond the boundary of the Sunshine Western facility and onto Hopi Indian lands (Figure 2-3). The presence of elevated hydrocarbon contamination in the most downgradient ground water monitoring wells indicates that the downgradient extent of the plume has not been defined.

Periodic surface seepage of petroleum hydrocarbons has been observed by Hopi Tribal personnel on several occasions in the vicinity of the downstream end of the downgradient Culvert which conducts an unnamed wash under U.S. Highway 160 on Hopi lands. In May of 1988, the hydrocarbon concentration was high enough to be ignited (Gary Norton, March 12, 1996). As recently as March 1995 (Welch, 1995), benzene contamination was found in surface soils in the vicinity of the Culvert, threatening impacts to the Moenkopi Wash (a water of the United States) further downstream. Surface water samples obtained from the unnamed wash and analyzed by Ecology and Environment Inc. (E and E, May 18, 1995) in April, 1995, yielded 10-40 ppm petroleum hydrocarbon contamination (Appendix C) and the presence of a visible oily sheen. A second surface water sample taken approximately 600 feet downstream did not show any detectable levels of petroleum hydrocarbons. Soil samples taken by E and E during this sampling event yielded petroleum hydrocarbon concentrations in soils near the wash in the range of 50-200 ppm, and 2,000-5,000 ppm in soils approximately 30 feet downgradient of the wash (Figure 3-1). Soil samples obtained in the dry wash of the Culvert by E and E did not indicate the presence of petroleum hydrocarbons upstream of the Culvert, but did indicate petroleum hydrocarbon contamination downstream of the Culvert.

Soil and surface water in the Culvert area was also sampled by Bureau of Indian Affairs personnel on May 27, 1988 and on November 3, 1994 as shown in Figure 3-2. On both occasions, BTEX were detected in soil. Benzene concentrations in surface water at the Culvert were as high as 1,100,000 ppb in 1988 (Appendix B).

Well MW-30 immediately adjacent to the Culvert area has exhibited some of the highest contaminant levels in ground water on site, with free product observed in the well as recently as March 1995. Surface seepage of petroleum contamination in the Culvert area may be associated with seasonal ground water fluctuations and the resultant discharge of "floating" petroleum product at the ground surface. The surface seepage may also be the result of product migrating through piping and backfill associated with Thriftway's passive ground water collection system.

Currently available data is insufficient to determine the total volume of petroleum

contamination present in the subsurface at this site. However, total contaminant plume length is known to exceed 1000 feet as of October, 1995 (Figure 2-3). Benzene concentrations within the ground water plume have been measured as high as 58,154 ppb within the past year (Appendix C).

The vertical and horizontal extent of the plume of petroleum hydrocarbon contamination has not been fully defined. Some of the highest concentrations on site are found in wells MW-15, MW-29, and MW-30 adjacent to the margin of the plume as currently interpreted by concentration contours in Figure 2-3. The alluvium, through which the ground water and associated plume of contamination is migrating, becomes thinner to the south and west of the plume, eventually disappearing due to erosion, leaving only bedrock. As a result, the shallow monitoring wells downgradient of the plume are dry and cannot be sampled. The contaminated ground water must either discharge to the surface, move elsewhere through the alluvium, or migrate vertically downward into the bedrock of the underlying N aquifer. Although it is clear that some ground water and contamination is seeping to the surface in the vicinity of the Culvert, additional data is needed to determine where the rest of the ground water and associated plume of contamination are moving downgradient of the site.

Though other sources of petroleum contamination are present in the Tuba city area (Matthew Small, May 2, 1996), contaminant distributions on and around the site (Figures 2-3 and 2-5) clearly indicate that Thriftway and Sunshine Western are the sources of the commingled plume of petroleum hydrocarbons in soil and ground water at and downgradient of the Site. This data, along with repeated observations of surface seepage and analytical results of soil samples obtained by BIA, make it unlikely that there is any other source of contamination at the site and in the Culvert area, other than the subject facilities.

3.2 Contaminants Found at the Site

The contaminants of concern are those found in petroleum products (chiefly gasoline and diesel). In order to evaluate the impacts of these petroleum products on human health and the environment, individual indicator compounds have been selected for analytical purposes and plume tracking. These indicator compounds are selected based on specific criteria of exposure routes, concentrations, mobilities, toxicological properties, and aesthetic characteristics (taste, odor, etc.).

In general, the lighter fraction of petroleum (those with fewer carbon atoms and lower molecular weight) have lower boiling and melting points, higher vapor pressure or volatility, lower density, greater water solubility, and weaker adsorption to soils with resulting higher subsurface mobility. Of these compounds, benzene, toluene, ethylbenezene, xylene (BTEX collectively), and methyl-tertiary-butyl-ether (MTBE) are considered to be of principal concern in gasoline, with benzo(a)pyrene, acenaphthene, fluoranthene, and naphthalene (polynuclear aromatic hydrocarbons or PAHs collectively) of principal concern in diesel, due to their solubility, volatility, toxicity, and mobility.

This report will be limited to a discussion of the impacts from BTEX and MTBE because these are the compounds for which the most complete set of chemical analytical data is currently available. As is evident from Table 3-1, the maximum benzene, toluene, ethylbenzene and xylene concentrations in soil at the Site exceed the corresponding EPA sediment ecotox thresholds for these compounds (in one case, by three orders of magnitude). Moreover, the maximum benzene concentration in soil at the Site exceeds EPA Region IX's preliminary remediation goal (PRG) for this compound. The data in Table 3-1 also indicate that the maximum benzene, toluene, ethylbenzene and xylene concentrations in ground water at the Site exceed the corresponding EPA maximum contaminant levels (MCLs) for these compounds. Similarly, the maximum benzene, toluene, ethylbenzene and xylene concentrations in surface water exceed the corresponding EPA surface water ecotox thresholds for these compounds. Only limited soil concentration data is available for the constituents of BTEX. The maximum soil concentrations are for soil samples collected by the Bureau of Indian Affairs on November 3, 1994. The maximum ground water concentrations are for ground water samples collected by Biotech Remediation, Inc. between July 19, 1995 and October 18, 1995. Though standards for MTBE are currently under review, it is worthwhile to note that MTBE concentrations in surface and ground water are higher than any other compounds at the site. The maximum surface water concentrations are for surface water samples collected by Biotech Remediation, Inc. between May 3, 1994 and March 7, 1995.

3.3 Analytical Methods and Quality Assurance/Quality Control

Analytical methods and the level of quality assurance and quality control (QA/QC) have varied at the site. For the most part, EPA gas chromatography methods have been used for quantitative analysis of ground water samples. Other methods employed at the site include: a hand-held photo ionization detector (PID) used for screening of vapor concentrations at well heads prior to sampling; an explosimeter used to perform a rudimentary soil vapor survey by Thriftway; and field screening kits used for analysis of soil and ground water by Ecology and Environment (May 18, 1995). The analytical methods employed by Thriftway's consultant, BioTech, for the most recent water sample chemical concentration data are EPA 5030 purge and trap with EPA 8020 purgeable aromatics (Biotech Remediation Inc., October 18, 1995).

The QA/QC program, based on the data contained in the administrative record and in this report, has been variable throughout the history of the site, ranging from none to adequate. However, concentration trends and distributions appear to be relatively consistent throughout the period of investigation. QA/QC measures for the more recent quarterly sampling events by Thriftway, under the direction of Biotech, have typically included chain of custody, trip blanks, laboratory surrogate spikes and laboratory blanks. The results of these recent analytical results do not deviate significantly from the trends and spatial distributions observed in previous sampling events (Appendix B).

Table 3-1. Maximum recent site concentrations (since May 1994) compared to EPA preliminary remediation goals (PRGs), maximum contaminant levels (MCLs), and EPA Ecotox Thresholds for compounds of concern. Concentrations which exceed one or more of these standards are shown in bold.

Compound	Max. Soil Conc. on Site (ppb)	EPA Region IX PRG for Soil (ppb)[1]	EPA Sediment Ecotox Thresholds (ppb)[2]	Max. Ground Water Conc. on Site (ppb)	Max. Surface Water Conc. on Site (ppb)	MCL (ppb)[3]	EPA Surface Water Ecotox Thresholds (ppb)[2]
Benzene	**2,500**	1,400	57	**58,154**	**1,238**	5	46
Toluene	**21,000**	1,900,000	670	**24,906**	**3,575**	1,000	130
Ethyl benzene	**12,000**	690,000	3,600	**3,568**	219	700	290
Xylenes	**36,000**	990,000	25	**18,731**	**2,422**	10,000	1.8
Methyl-tertiary-butyl-ether	**<600**	33,000	Currently under review	101,475	5,472	Currently under review	Currently under review

[1] The Region IX PRGs combine current EPA toxicity values with "standard" exposure factors to estimate concentrations in environmental media that are protective of humans, including sensitive groups, over a lifetime (EPA, September 1995c).

[2] Ecotox thresholds are media-specific contaminant concentrations above which there is sufficient concern regarding adverse ecological effects to warrant further site investigation (EPA, January 1996).

[3] An MCL is the "maximum permissible level of a contaminant in water which is delivered to any user of a public water system" 40 CFR §141.2 (EPA 1995d, EPA IRIS).

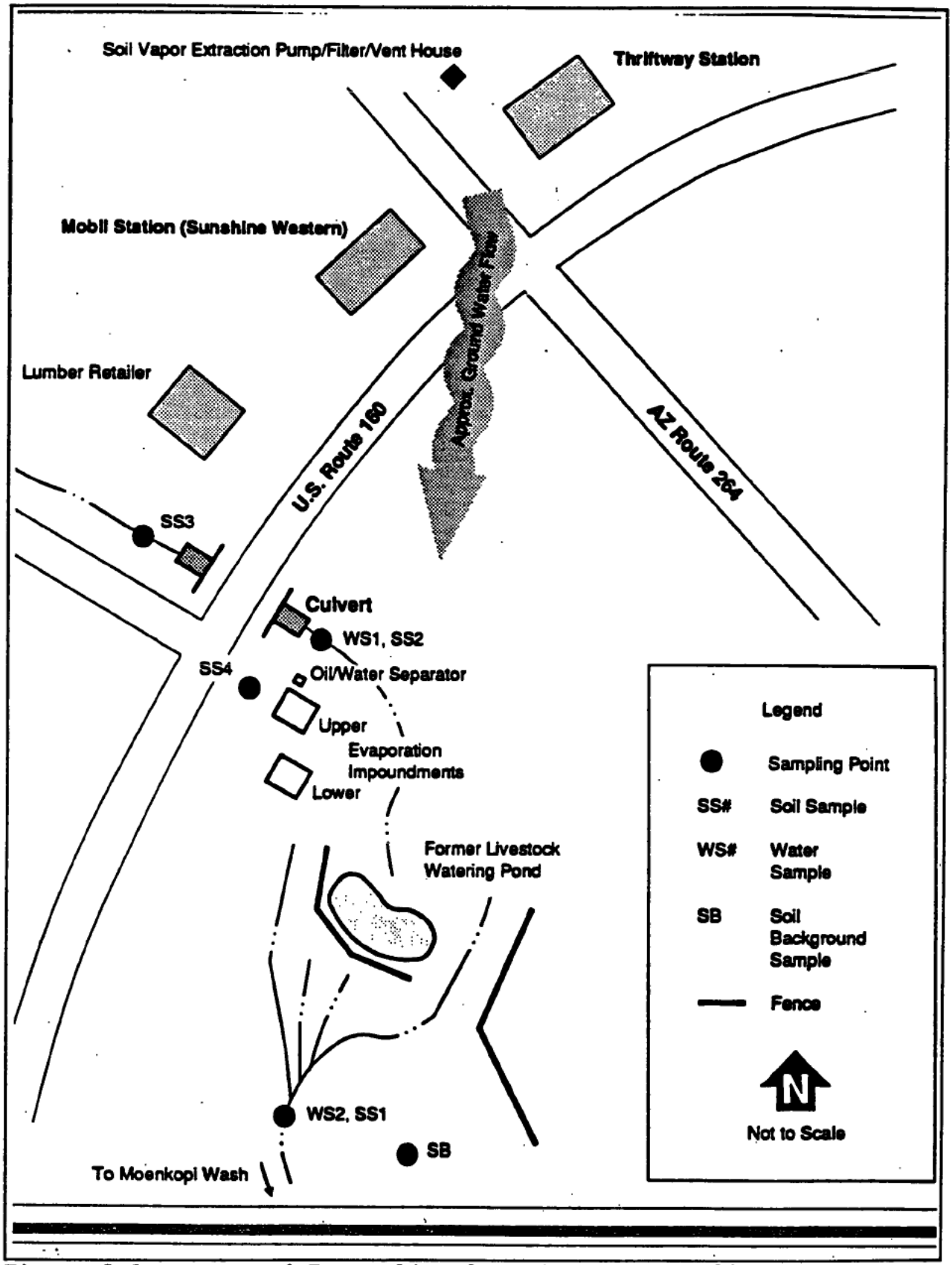

Figure 3-1. E and E sampling locations (E&E, 1995)

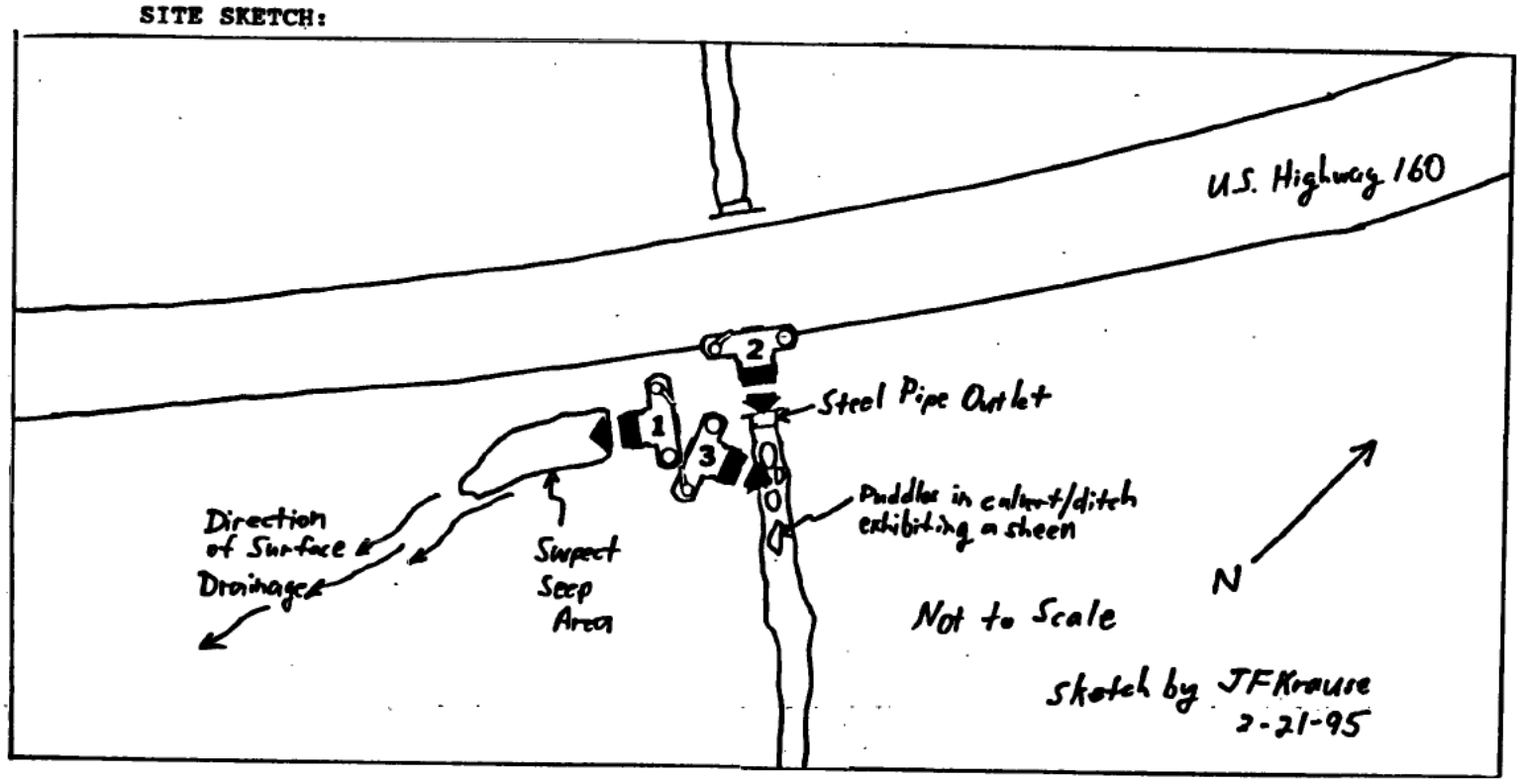

Figure 3-2. BIA map showing area sampled (Welch, 1995).

4.0 ENVIRONMENTAL FATE AND TRANSPORT

At petroleum release sites, petroleum migrates outward from a source area through the environment creating a plume of contamination in soil, air, and water. Depending upon the nature and contribution of the source area and the properties of the subsurface, the plume at any given site will continue to grow until it reaches a state of equilibrium where the amount of petroleum contributed from the source area and migrating through the environment achieves a steady-state with the amount of petroleum being naturally attenuated (degraded, dispersed, diluted, and adsorbed). At equilibrium, the plume migration stabilizes. Removal or reduction (active or passive) of the source area may result in a net decrease in plume magnitude over time. The time and distance scale over which this equilibrium condition is reached varies considerably depending on specific site conditions (e.g., climate, hydrology, geology, etc.).

Though concentrations have decreased or leveled off in some wells over the last year, concentrations in other wells continue to rise (Appendix B), and contamination continues to surface near the Culvert downgradient of well MW-30. As discussed previously in Section 3, the full extent of migration and ultimate fate of contamination at the site has not yet been adequately defined. Current data is insufficient to determine whether this plume has reached equilibrium.

4.1 Factors Affecting Migration

4.1.1 Geology

Geology at the site consists of variable thicknesses of alluvium overlying sandstone bedrock. The alluvium generally consists of sand, silty sand, sandy clay and clayey sands (CDM, June 1989). The alluvium thins to the south and southwest pinching out exposing the bedrock along the bluffs which border the Moenkopi Wash.

Bedrock topography derived from boring logs and excavation trench investigations is shown in Figure 4-1. The bedrock surface appears to dip generally to the south with a notable depression in the vicinity of the intersection of Highways 264 and 160, as well as a notable mound in the vicinity of MW-12 approximately 200 ft. southeast of the Sunshine Western facility. Contaminant migration in the overlying alluvium appears to be influenced by the bedrock topography. According to Baylor (1996):

> This figure [Figure 4-1] indicates that dissolved benzene has been detected downgradient of the spill site(s), and that migration of the contaminant plume may be influenced by the surface topography of the bedrock. Although data is limited, it appears that both [emphasis in original] subparallel drainages south of the site may be preferential pathways for migration. The primary plume may be directed toward the erosion channel located south of MW-15. An additional branch of the plume may be directed toward the erosional channel

located south of MW-8).

4.1.2 Hydrology

Natural surface water drainage patterns in the vicinity of the site are generally to the south or southwest, eventually draining into the Moenkopi Wash which flows south. There are numerous springs in the Tuba City area near the site which feed various washes or flow directly into Moenkopi Wash (Figure 4-2), as discussed below. Total outflow for the Moenkopi Wash was measured at 1,410 acre-ft, for calendar year 1994. The mean flow in Moenkopi Wash was measured at 1.95 feet per second (ft/s) with a maximum of 40 ft/s and a minimum of 0.0 ft/s (Littin, 1995).

A drainage ditch/small unnamed wash located approximately 400 ft. south of the Sunshine Western facility drains southeast flowing through the Culvert under Highway 160 terminating at a former livestock watering pond approximately 800 ft. south of the Sunshine Western facility (Figure 3-1). The livestock watering pond was originally built as a catchment pond to prevent flooding of farmer's fields downstream by the wash which flows through the Culvert (Norton, March 12, 1996). Upon overflow, this livestock watering pond flows to the Moenkopi Wash. This pond is currently fenced, though the author has observed the fencing to be incomplete and in poor repair. According to Norton (March 12, 1996), this pond has overflowed during heavy rains.

In addition, two surface evaporation impoundments constructed by Thriftway to receive contaminated ground waters are located between the former livestock watering pond and Highway 160. These evaporation ponds are designed to evaporate all ground water received with no outflow. No overflow or outflow has ever been recorded from these evaporation ponds.

4.1.3 Hydrogeology

Ground water is encountered at depths ranging from 2 to 9 feet below site grade in the thin layer of alluvium overlying bedrock (Figure 4-3 and Appendix C). The depth and direction of shallow ground water flow appears to be controlled by the southward oriented erosional surface of the bedrock (Baylor, April 22, 1996). The ground water gradient and subsequent flow direction within the shallow alluvium is to the south-southwest at approximately 0.03 ft/ft toward Moenkopi Wash (Figure 4-3). A ground water seepage velocity between 10 and 1,000 feet per year was estimated using the equation (Fetter, 1980):

$$v_s = -\frac{Ki}{n_e}$$

where:
v_s = Seepage velocity.
K = Hydraulic conductivity.
i = Ground water gradient.
n_e = Effective porosity.

Gradient was measured from ground water contour maps. An estimated effective porosity of 30% and an estimated range of hydraulic conductivity between $1x10^{-4}$ cm/s and $1x10^{-2}$ cm/s for silt to sand (Freeze and Cherry, 1979) were used. A resulting estimated horizontal travel distance through the shallow sediments for a release of product in 1988 (8 years) would be in the range of 83 to 8,300 feet. The current plume of contamination has migrated at least 1,000 feet from the release point at Thriftway, and some lesser distance from release point(s) at Sunshine Western (Figure 2-3), which is within the estimated range of travel. Ground water (along with hydrocarbons) also discharges from these shallow sediments as a seep into the Culvert/small unnamed wash that crosses U.S. Highway 160 about 400 feet southwest of the Sunshine Western site (Hydrosearch, June 1994).

Underlying the shallow alluvium is the N aquifer consisting of the Navajo Sandstone, Kayenta Formation, and Lukachukai Member of the Wingate Sandstone, which are hydraulically connected and function as a single aquifer (Littin, 1995). Aquifer thickness ranges from a few feet to more than 1,300 feet, yielding more than 100 gallons per minute to wells in the Tuba City area (Farrar, 1979). "The N aquifer is the major source of water for industrial and municipal users in the Black Mesa [and Tuba City] area" (Littin, 1995). The N aquifer is unconfined in the Tuba City area, and ground water flow is generally to the south (Farrar, 1979), discharging from springs and seeps near the top of the bluffs that border Moenkopi Wash, downgradient and cross-gradient from the site. Recharge to the N aquifer in the Tuba City area is a result of local infiltration of precipitation and runoff through the shallow sediments (Hart, 1996).

Hydraulic pressure in the N aquifer has historically been sufficient to cause many wells and springs to flow at the surface in the Tuba City area (Farrar, 1979). However, withdrawals have increased significantly in the last 26 years, and declining water levels have been observed in the Tuba City area (Littin, 1995). Water level declines on the order of 17 to 32 feet were reported in the Upper Moenkopi Village supply wells by Hamilton (March 19, 1996). In addition, ground water flow modeling by Littin (1995) indicates a potential cone of depression ranging from 0.32 to 32 feet in the Tuba City area based on estimated withdrawals. Declining water levels in the N aquifer could result in reduced hydraulic pressures and increased vertical flow from the overlying alluvium.

4.1.4 Climatology

The Tuba City area is relatively arid with annual precipitation of 6.57 inches and annual snowfall of 7.17 inches in 1995. Average daily temperatures ranged between 32.1 degrees F in January 1995 and 77.5 degrees F in July 1995 (Appendix D).

Rainfall and other seasonal factors may contribute to increased ground water contamination concentrations during certain times of the year (Figure 4-4). According to Baylor (1996):

> Although the data is not conclusive, there appears to be some indication of a seasonal and/or temporal component to contaminant migration at this site. Groundwater contamination appears to generally worsen in the winter months. This seasonal aspect of contamination may be a reflection of several factors, including increased mobilization of residual phase contamination, and lower rates of both volatilization and intrinsic biodegradation during cooler weather. A combination of these and/or other factors may be responsible for the apparent seasonal fluctuation of contaminant concentrations.

4.1.5 Local Wells and Springs

Water well data supplied by the Navajo Nation Department of Water Resources indicates there are 18 wells within a 4 mile square area centered on the intersection of U.S. Highway 160 and Arizona Highway 264 (Figure 4-5 and Appendix E). Seven of these wells are within 1 mile of the site: 03GS-77-5, 03T-507, Well 1 ST1, Well 1 ST2, and Upper Moenkopi wells #1, #2, and #3. These wells are screened from 100 to 200 ft, 77 to 395 ft, unknown, 68 to 129 ft, 30 to 140 ft, approximately 45 to 135 ft, and unknown respectively. The three wells supplying water to the Village of Upper Moenkopi are shown in Figure 4-6. Of these wells, only the Upper Moenkopi wells #1 and #2 have screened intervals which extend above the depths at which bedrock was encountered below the site. However, it is unknown whether these deeper wells are constructed with seals to prevent entry of water from the shallow sediments or not. A composite water sample from the Upper Moenkopi wells that was obtained in July, 1995 did not indicate detectable levels of BTEX, but MTBE was not analyzed (Appendix B).

The N aquifer supplies numerous springs in the area (Figure 4-2). Most notably, the village of Lower Moenkopi, with a population of approximately 250, obtains all of their domestic drinking water from a spring located approximately 3/4 mile south and east from the site (Tuwaletstiwa, 1996). Both Upper and Lower Moenkopi Villages share water obtained from another more easterly situated spring located between the two villages for irrigation purposes (Tuwaletstiwa, 1996). In addition, surface seepage has been observed from the shallow sediments in the vicinity of the Culvert.

4.1.6 Utility Trenches

A water supply line for the Tuba City Truck Stop Cafe runs through the area of the plume (Figure 4-7). The trench and backfill associated with this water line have the potential to act as a preferred pathway for contaminant migration (most likely vapors) to the Cafe. In addition, the passive ground water collection system installed by Thriftway may behave as a pathway for migration of contaminated ground water and product along the piping trench to

the Culvert area south of the subject sites.

4.2 Environmental Fate and Transport of Compounds of Concern

4.2.1 Environmental Fate

Petroleum hydrocarbons such as BTEX are generally readily biodegraded in the subsurface environment. Though field data is currently limited, MTBE is believed to be more persistent in the environment. Data is not currently available to determine the extent of biodegradation at this site. According to Prokop (April 16, 1996),

> Although the hydrocarbon concentration trends at wells MW-15, 28, 29, and 30 appear to show some leveling-off ... there are many contradictory trends... This ambiguity points to the need for additional groundwater monitoring at these and other wells. The potential transport of contaminants by means of fracture flow through bedrock should also be evaluated.

Hydrocarbons at this site are discharging to the surface at the seep in the vicinity of the Culvert prior to degradation. Once at the surface, the more volatile petroleum compounds may dissolve into surface waters or evaporate. The less volatile petroleum compounds may alternately adhere to surface soils or partially dissolve into surface waters. These compounds may also float on the surface of waters, imparting a film or sheen to the water body. These compounds will also continue to degrade at the surface.

4.2.2 Environmental Transport

The majority of contaminant transport observed at the site has resulted from dissolved petroleum compounds transported in ground water. However, migration of free product along the water table, or potentially through the passive ground water collection system, is also indicated by free product observed in downgradient well MW-30 (Appendix B), high contaminant concentrations downgradient, and downgradient surface seepage of petroleum hydrocarbons. Surface seepage of petroleum contamination in the area of the Culvert has resulted in limited surface water transport of dissolved compounds, as well as petroleum sheens and films on surface waters.

Site data on vapor migration is currently limited to a soil vapor survey which indicated vapors over the dissolved plume (Figure 2-5). The potential exists for petroleum hydrocarbon vapors released from contaminated soil and ground water to migrate to the surface and potentially into buildings located nearby.

Although no site data is currently available regarding possible vertical migration of petroleum compounds from the shallow sediments into the N aquifer below, declining water levels in the N aquifer significantly increase the likelihood that contaminants could migrate vertically into the bedrock aquifer below. In addition, the author has observed the bedrock to be fractured

in local outcrops which could also increase the potential for vertical migration. This vertical migration could result in significant impacts to local springs and wells.

4.3 Contaminant Movement On-Site and Off-Site

Based on available data, contaminant migration appears to be controlled by ground water flow in the overlying alluvium, controlled to some extent by the topography of the underlying bedrock. As Figure 2-3 shows the highest concentrations of contaminants have been observed in four areas: (1) near MW-25 in the vicinity of the release from Thriftway's piping system; (2) near MW-18, MW-21, and RW-2 in the vicinity of the Sunshine Western dispensers and former tank installation; (3) near MW-30 and MW-29 near the presumed southwestern edge of the plume near the Culvert where surface seepage has been observed; and (4) in the vicinity of MW-15 at the presumed southeastern edge of the plume. Based on data shown in Figure 4-1, the three latter areas correspond to topographic low points in the bedrock surface with an apparent splitting of the downgradient edge of the plume around a topographic high in the vicinity of well MW-16.

Though difficult to directly correlate with current data, contaminant migration to the surface may be controlled by seasonal ground water level fluctuations. During periods of high ground water, product present in the subsurface, which is less dense than water, would be lifted up by the rising ground water and released in areas of shallowest ground water depths. The area of seepage has been historically observed to be near the Culvert near well MW-30.

There is also the potential for vapors to move from contaminated soil and ground water in the subsurface through soil and other subsurface pathways (e.g. utility corridors or trenches) to indoor and outdoor air. Movement of vapors to indoor air is of greater concern, as vapors in outdoor air would quickly disperse and dissipate. Of particular concern are the potential for vapors to migrate into the convenience stores at the Thriftway and Sunshine Western facilities, and to the Tuba City Truck Stop.

Contamination continues to surface downgradient, and the potential exists for contaminants to migrate from the shallow aquifer vertically to the underlying N aquifer, the primary drinking water source in the Tuba City area.

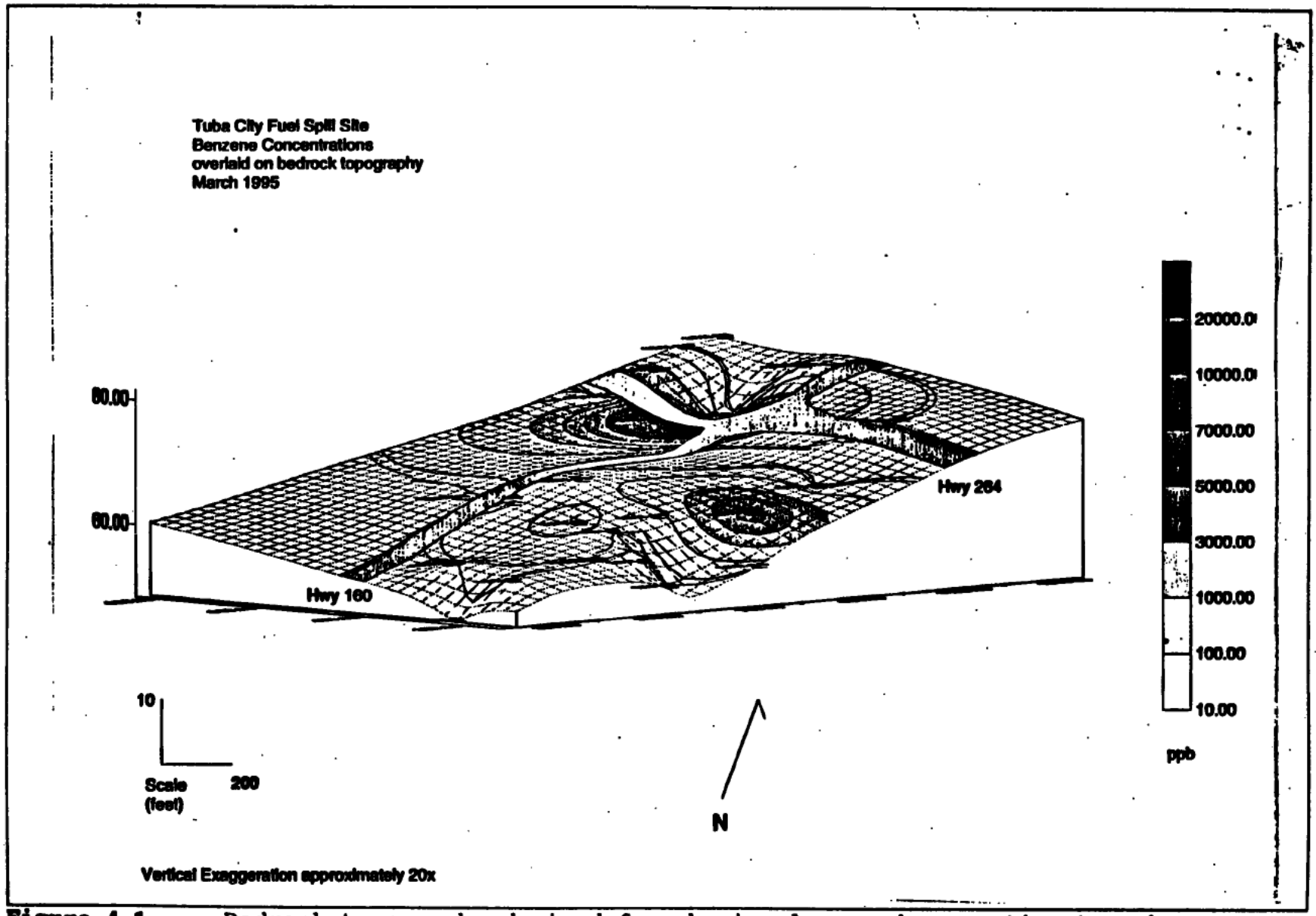

Figure 4-1. Bedrock topography derived from boring logs and excavation trench investigations (Baylor, 1996)

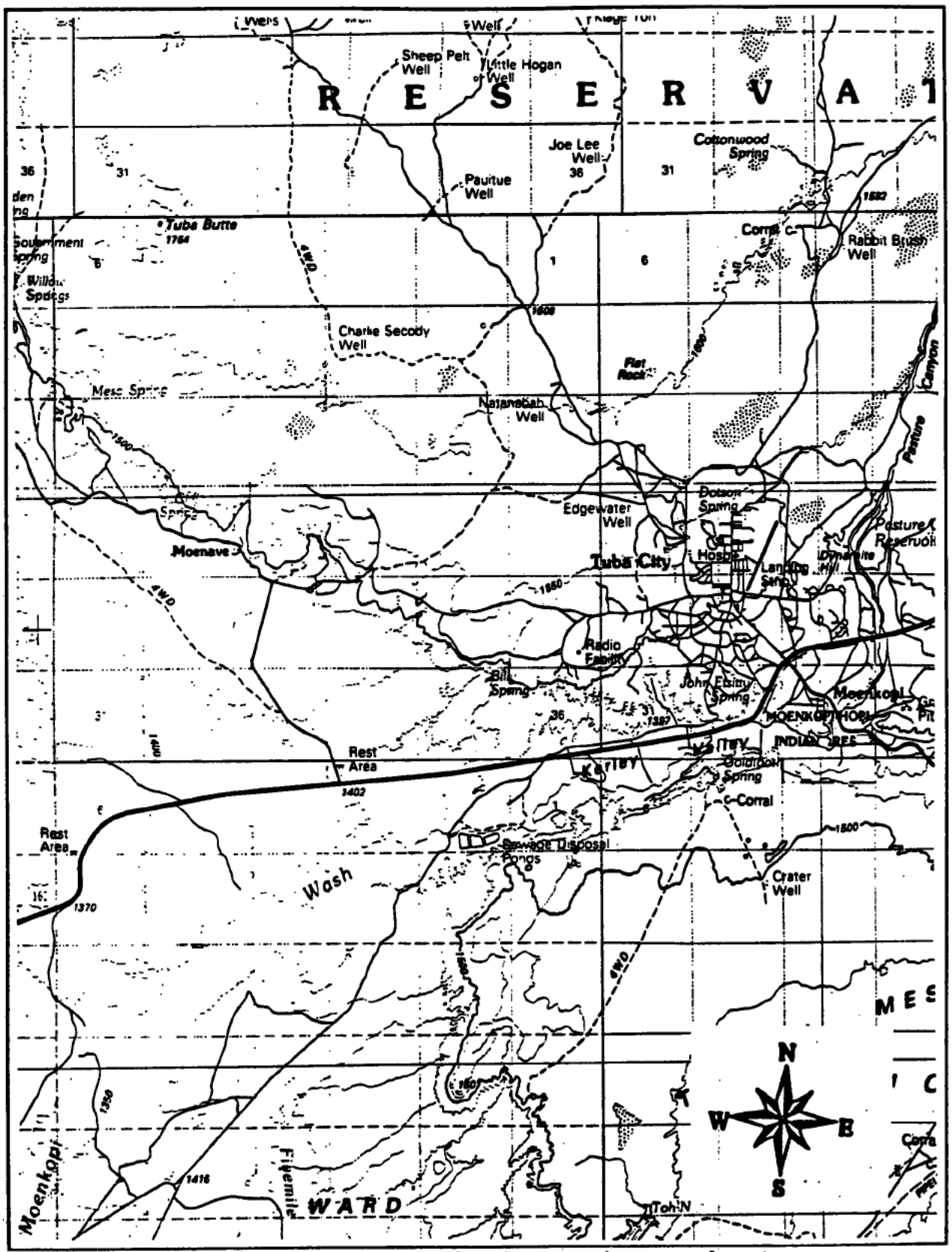

Figure 4-2. Tuba City area showing springs and waterways (USGS, 1983)

Scale 1:100,000 **= Spring**

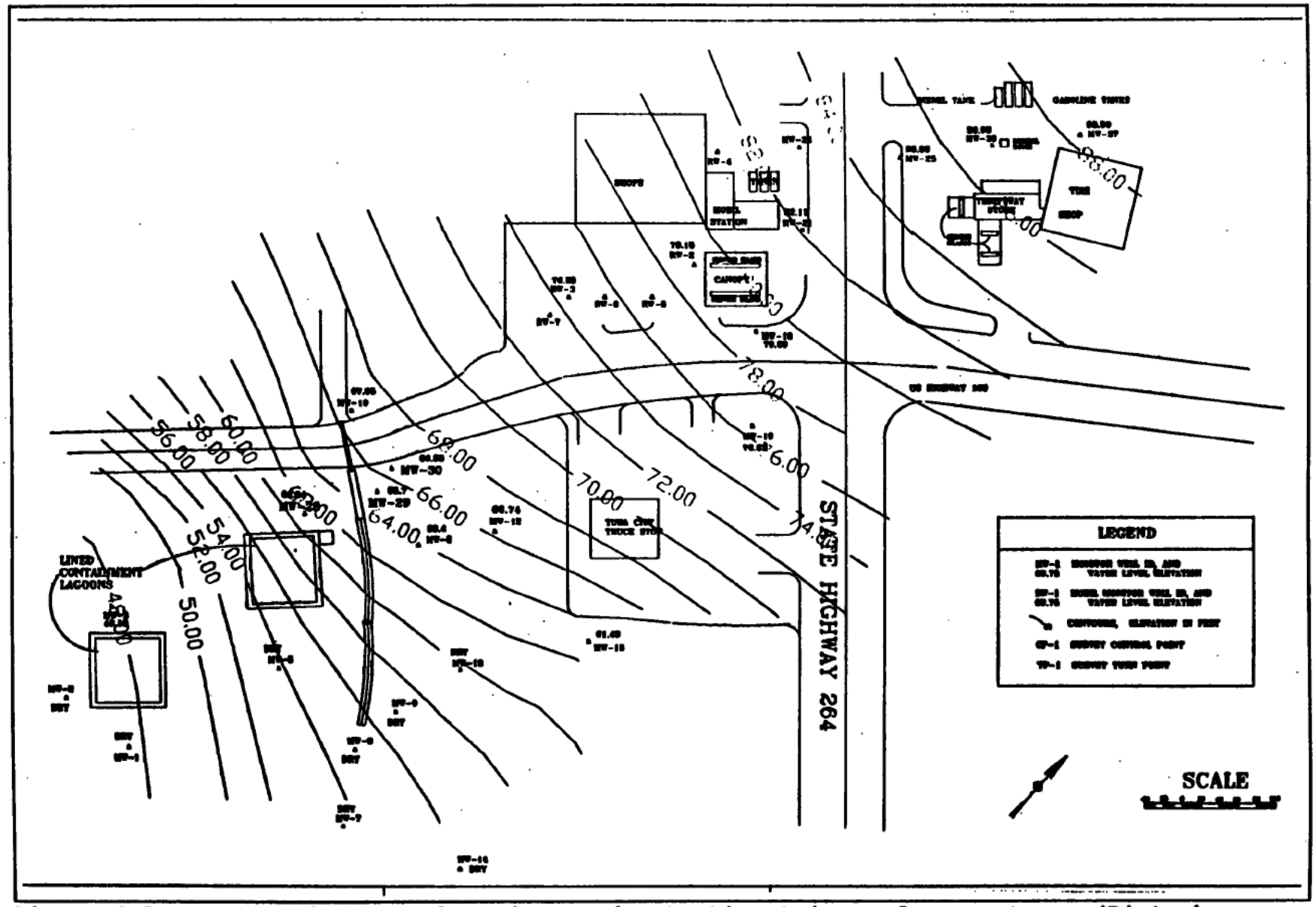

Figure 4-3. Ground water elevations and potentiometric surface contours (Biotech, October, 1995)

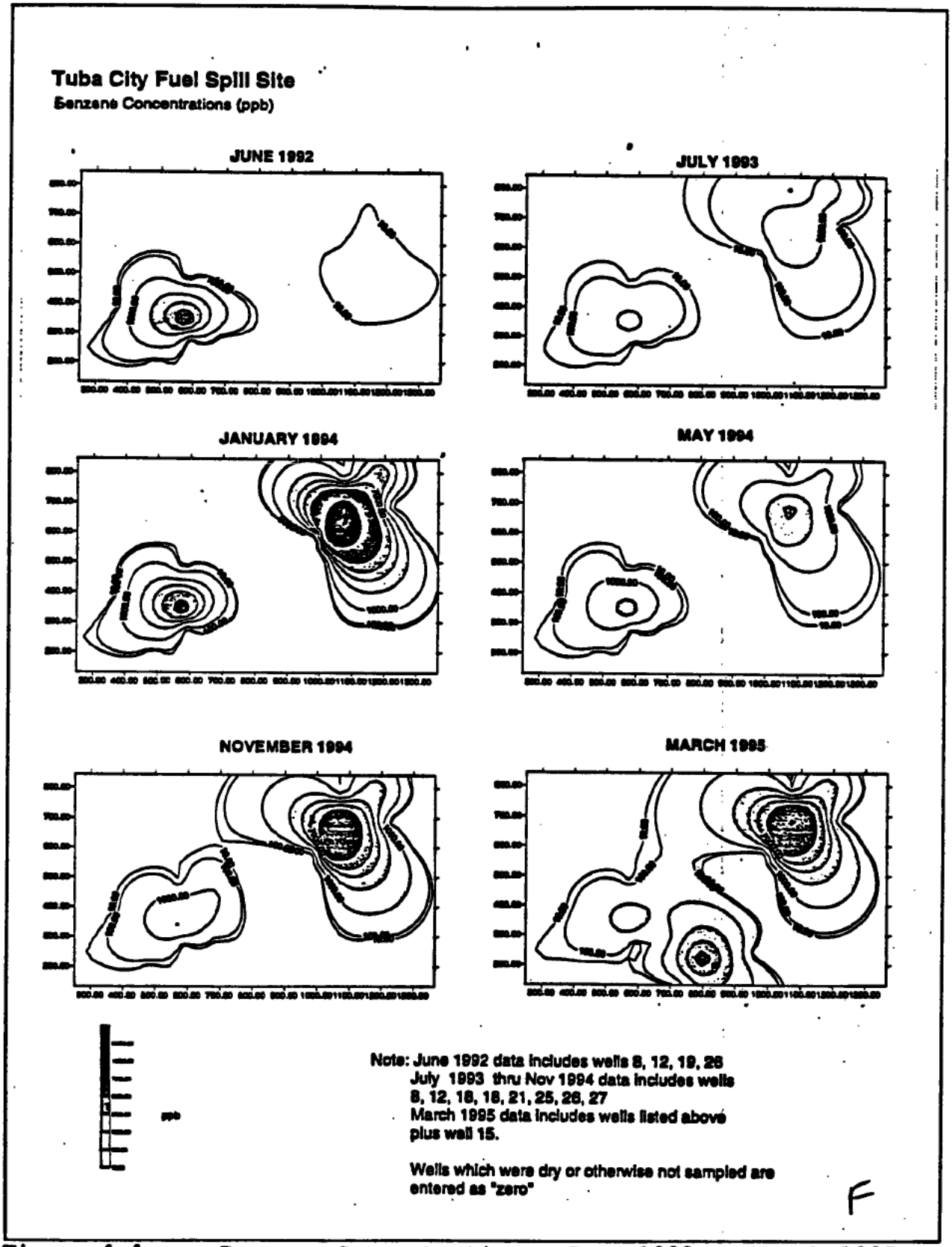

Figure 4-4. Benzene Concentrations, June 1992 to March 1995 (Baylor, 1996).

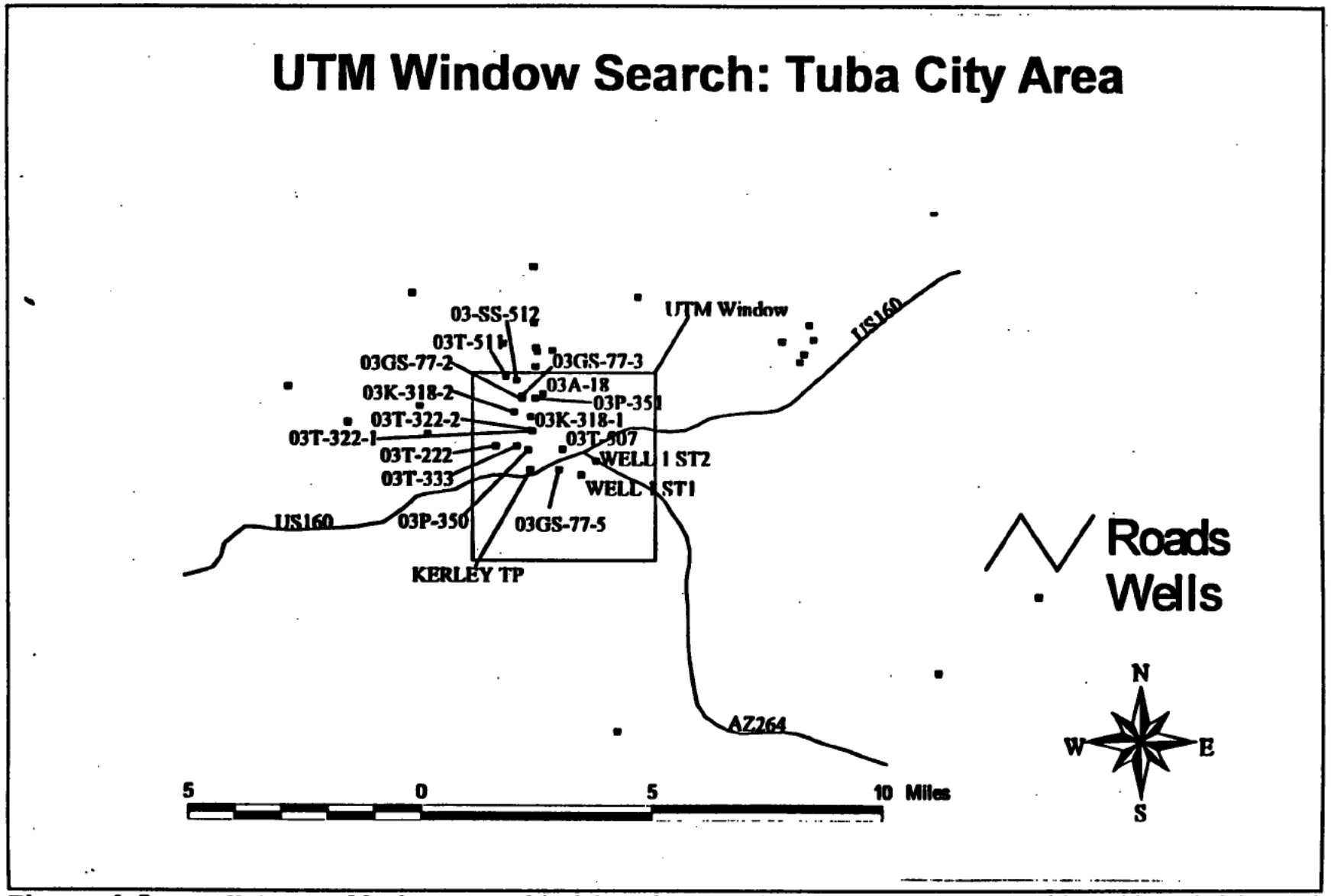

Figure 4-5. Water well data supplied by the Navajo Nation indicates 18 wells within a 4 mile square area centered on the intersection of U.S. Highway 160 and Arizona 264 (Appendix E)

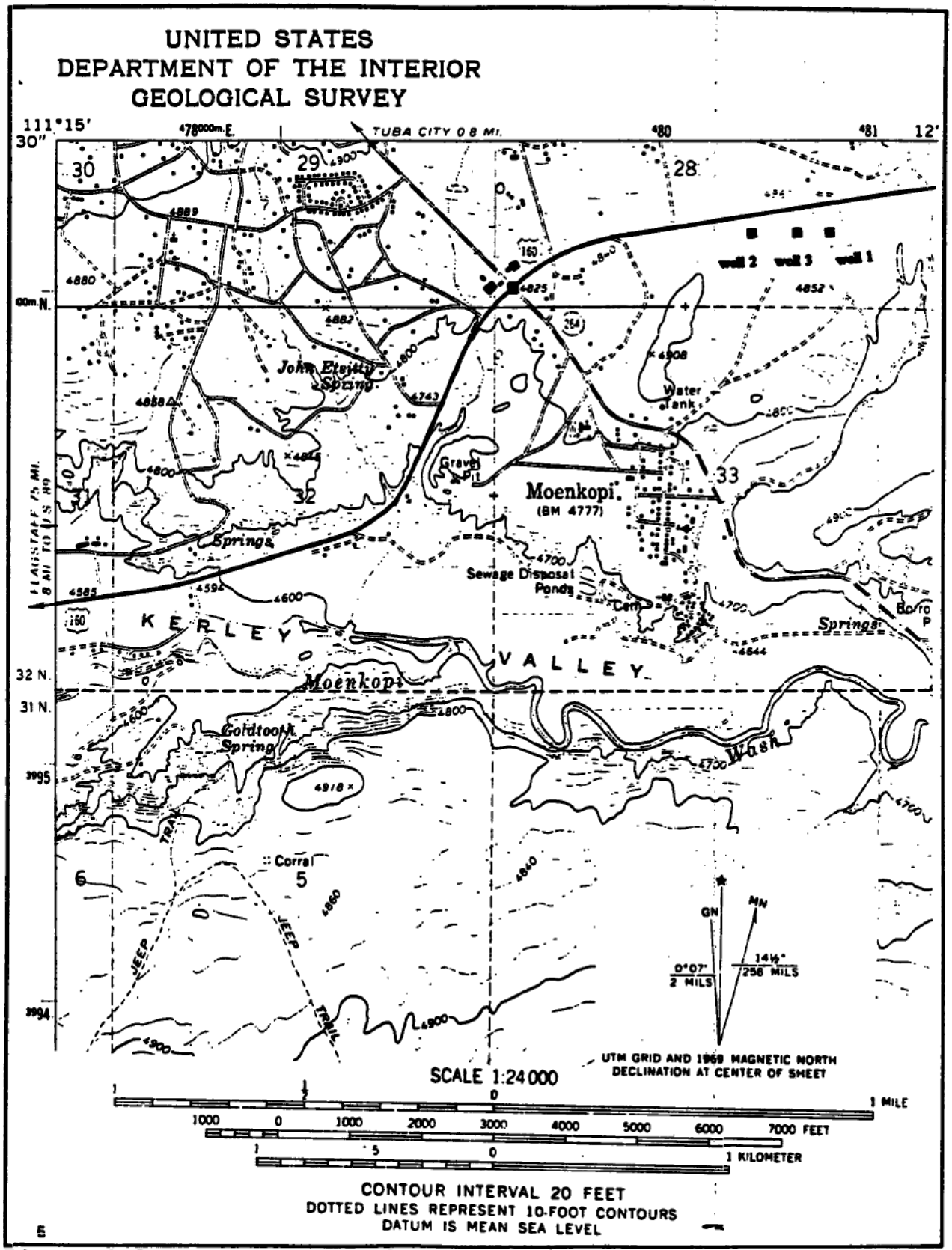

Figure 4-6. Locations of Upper Moenkopi Village water supply wells (Roy, 1996)

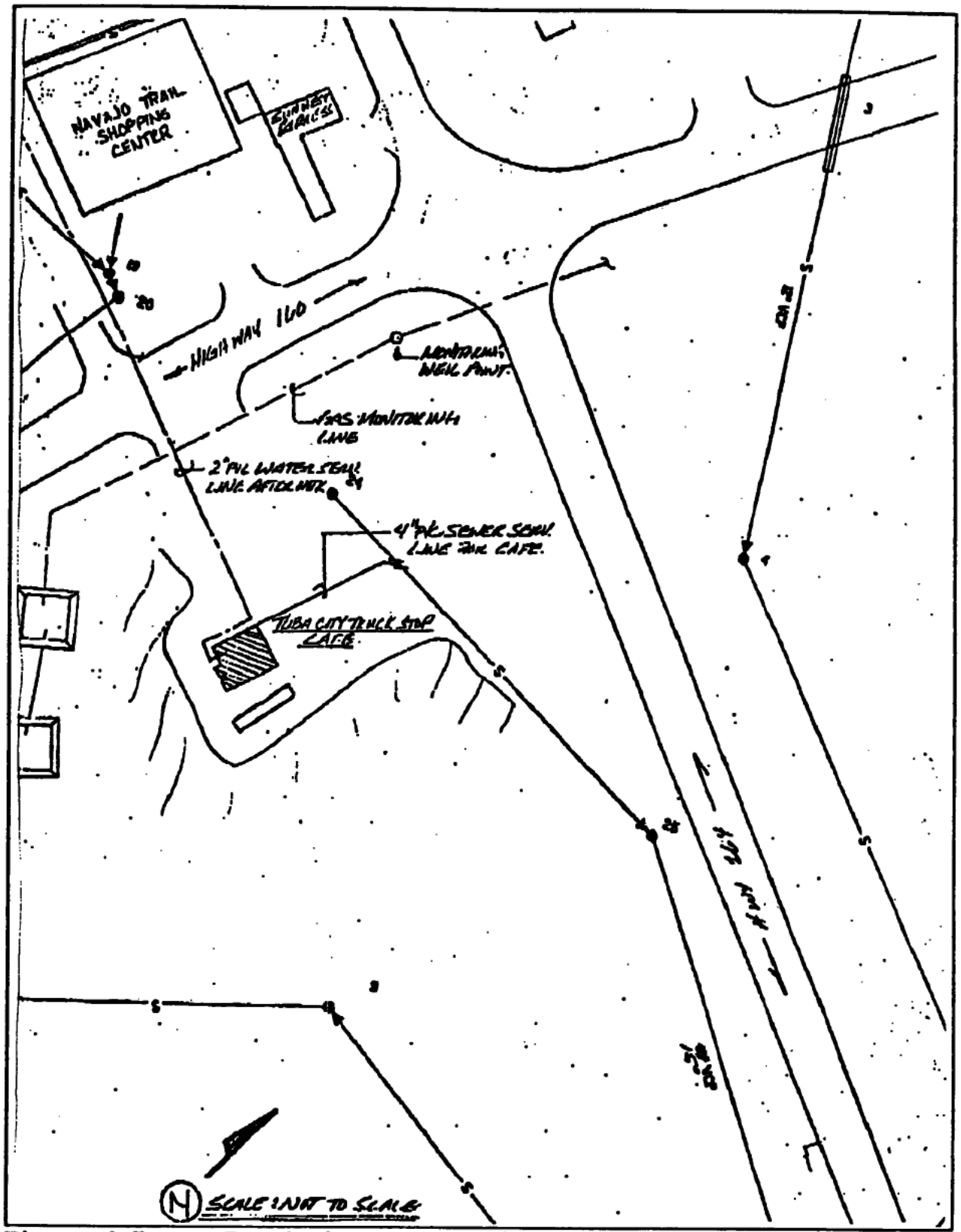

Figure 4-7. Two inch water supply pipe line and passive ground water collection line passing through area of known contamination (Owen, NTUA, 1996)

5.0 EXPOSURE EVALUATION

This section will identify actual and potential exposure pathways, characterize the populations exposed and determine the extent of the exposure to compounds of concern. Exposures result when a source of contamination (the petroleum contamination) travels along a migration pathway (ground water, surface water, air, soil vapor, utility trenches, etc.) coming into contact with a receptor (human and/or ecological receptors).

5.1 Exposure Pathways and Population Potentially Exposed

Potential exposure pathways are as follows:

1. Ingestion of or direct contact with ground water containing dissolved contaminants.
2. Ingestion of or direct contact with surface waters containing dissolved or floating contaminants.
3. Direct contact with soils/sediments in the areas of surface seepage.
4. Inhalation of vapors from contaminated soils, ground water, or surface water.
5. Ingestion of contaminated surface water by wildlife or livestock.
6. Human consumption of wildlife or livestock which has ingested contaminated surface water or agricultural products.
7. Ingestion of agricultural products irrigated with contaminated water.

Consumption of aquatic species and fish is not considered as an exposure route because water flow in the Culvert is seasonal and does not appear to support significant aquatic life.

5.1.1 Ground Water Ingestion and Contact

As discussed in Section 3, concentrations of benzene ranging from non detect (ND at 0.2 ppb) at the presumed margins of the plume to over 58,000 ppb in the body of the plume (well MW-30) have been detected in shallow ground water monitoring wells (Appendix B). The majority of the population in the Tuba City area is supplied from deep wells in the N aquifer connected to a central distribution system, and springs flowing from the N aquifer. No existing domestic or industrial supply wells are known to be located within the known limits of the plume. However, the potential does exist for vertical migration of the contaminated shallow ground water into deeper bedrock N aquifer. Should the contamination move vertically downward into the N aquifer it could contaminate drinking water wells and springs in the area used to supply domestic water to the general population.

The N aquifer supplies numerous springs in the area (Figure 4-2). Native American populations in this area routinely obtain water from springs, seeps, and streams. The village of Lower Moenkopi, with a population of approximately 250, obtains all of its domestic drinking water from a spring located approximately 3/4 mile south and east from the site (Figure 4-2). Of these 250 people, approximately half are children or elders (Tuwaletstiwa,

1996). The more traditional Hopi population of Lower Moenkopi adhere to a belief that the drilling of wells into the earth would harm the land. Consequently they only use spring water that naturally comes to the surface without artificial pumping or drilling, and do not access a public water supply system. The entire population of Lower Moenkopi relies upon water obtained from a local spring situated adjacent to the village for all drinking, cooking, washing, and bathing needs. Water is collected daily from this spring in a variety of vessels including a tank truck. As a result, contaminant impacts to springs and surface seeps is a major concern. Upper Moenkopi Village (Figure 4-2), with a population of approximately 600 to 700 people (Tuwaletstiwa, 1996) is supplied through 3 deep wells drawing water mainly from the N aquifer (Wadsworth, 1996, Figure 4-7).

Contamination of springs is of greater concern than contamination of wells for several reasons, including: 1) springs are irreplaceable and cannot be re-drilled and re-located if they become contaminated; 2) water from springs cannot be controlled and/or treated as easily as a well if contamination is detected; 3) springs flow under natural gradient conditions, often issuing forth from a single fracture supplied by a preferential flow path within the aquifer and could thus be more easily contaminated than a well, which draws water in from a much larger portion of the aquifer (radius of influence) under a pumped gradient creating more potential for dilution of any contamination within the aquifer. In addition, as demonstrated by the seepage in the vicinity of the Culvert, some springs may be fed either partially or wholly by ground water from the shallow sediments and thus be more susceptible to contamination.

Potential ingestion of contaminated ground water and spring water may result in exposures to components of petroleum products. As discussed in Section 3, the major compounds of concern, BTEX and MTBE, are some of the more soluble and volatile components of petroleum. Use of ground water for washing or bathing may result in exposures to volatile components released from the water and dermal absorption of dissolved contaminants.

5.1.2 Surface Water Ingestion and Contact

As discussed in the previous section, some of the Native American population in this area routinely obtains water for domestic use from springs, seeps, and streams. Limited surface water sampling has detected Benzene at levels up to 1,238 ppb, as recently as 1994, in the Culvert/unnamed wash area (near well MW-30); a sheen has also been observed on several occasions (Biotech, July 19, 1995, Welch March 23, 1995, and E and E, May 18, 1995). Earlier sampling in the Culvert by the BIA in May, 1988 detected 1,100,000 ppb benzene in surface water. In addition, free product has been observed in well MW-30 adjacent to the Culvert as recently as March, 1995. In addition, if the livestock watering pond shown in Figure 3-2 is breached or overflows, contaminated water from the Culvert area could drain into the Moenkopi Wash which is accessed by many individuals for a variety of water supply uses.

Potential ingestion of or dermal contact with contaminated surface water may result in exposures to dissolved components of petroleum products. As discussed in Section 3.3, the

major compounds of concern, BTEX and MTBE, are some of the more soluble and volatile components of petroleum. Use of surface water for washing or bathing may result in exposures to volatile components released from the water and dermal absorption of dissolved contaminants.

5.1.3 Direct Contact with Contaminated Soils and Sediment

Soil samples obtained from an area of surface seepage adjacent to the Culvert by the BIA (Welch, March 23, 1995) indicated total petroleum hydrocarbon concentrations (TPH) of 35,300 ppm as well as BTEX and MTBE concentrations of 2,500 ppb, 21,000 ppb, 12,000 ppb, 36,000 ppb, and non-detect at less than 600 ppb respectively. Gary Norton (March, 1996) of the Hopi Tribe and others have observed and documented this area of seepage over the last several years. This area of seepage of petroleum contamination is in an unfenced area adjacent to Route 160, easily accessible to the general population.

Potential contact with contaminated soils and sediments may result in exposures to volatile components released from the petroleum and dermal absorption of petroleum products. Additional exposures may be of concern should excavation or construction be conducted in the area.

5.1.4 Inhalation of Vapors

The potential exists for inhalation exposure to vapors emanating from petroleum contaminated soils and ground water at the site. The only data currently available to determine the level of vapor impact resulting from soil and ground water contamination at the site is a soil vapor study undertaken by Thriftway on November 14 - 19, 1988 (Figure 2-5) and the organic vapor meter readings taken at ground water monitoring wells prior to sampling (Appendix B). Though somewhat qualitative, this data indicates that vapors are present in detectable concentrations above the dissolved contaminant plume.

The areas with the highest potential for exposure to vapors are the Thriftway and Sunshine Western gas stations and convenience stores and the Truck Stop Cafe. Vapors at the gas stations and convenience stores would be difficult to differentiate from the ambient background vapors emitted as a result of fueling operations at these locations. The potential for vapor exposure at the Truck Stop Cafe (Figure 2-3) is unknown, however, the water supply line trench for the cafe runs directly through the plume, and could act as a preferred flow path for vapors to migrate from the plume to the cafe (Figure 4-11). In addition, the cafe is downwind (west) of the contamination (Tuwaletstiwa, 1996).

In addition, traditional Navajo sweat houses are interspersed throughout the area south of the culvert toward Lower Moenkopi Village. If contaminated water were used for the creation of steam for traditional sweat baths, petroleum vapors could be released into the enclosed environment of the sweat house creating an inhalation exposure (Wadsworth, March, 1996).

Potential inhalation of vapors would result in exposure to the more volatile components of petroleum products. As discussed in Section 3, the major compounds of concern, BTEX and MTBE are some of the more soluble and volatile components of petroleum.

5.1.5 Ingestion of Contaminated Surface Water by Wildlife or Livestock

In this arid country, water for livestock remains a valuable commodity. Even though the pond in Figure 3-2 is listed as a "former" livestock watering pond, livestock, and certainly wildlife may still be drinking from either the Culvert area or the pond. According to Grey Farrel, the whole area to the east and south east of Highway 160 beyond the culvert is used for open grazing (March 8, 1996). Livestock grazing in this area include sheep, cattle, and horses. There are scattered fences but many of them are not kept in good condition and therefore the animals roam and feed without significant restrictions.

Potential ingestion of contaminated surface water by wildlife or livestock may result in exposures to dissolved components of petroleum products.

5.1.6 Wildlife or Livestock Consumption

There is some potential for exposure to petroleum contamination through consumption of animals that may have been drinking from contaminated surface water supplies or springs. As previously stated, a variety of livestock such as sheep, horses, cattle, and occasionally goats may graze in the vicinity southeast of Highway 160. There are scattered fences, but many of them are not kept in good condition and the animals roam and feed where they can without restriction. The sheep are consumed locally and the beef is consumed both locally and marketed.

Consumption of wildlife or livestock which consumed contaminated surface waters may result in exposure to dissolved components of petroleum products which had been absorbed by the animals.

5.1.7 Irrigation

Both Upper and Lower Moenkopi Villages share water obtained from another more easterly situated spring located between the two villages for irrigation purposes (Tuwaletstiwa, 1996). Should the contamination move vertically downward into the N aquifer from the shallow sediments this spring could become contaminated. The water supplied by this spring is built up in storage twice a year and distributed for irrigation when needed. There are approximately 30 to 40 acres of corn, beans, and melons under cultivation (Tuwaletstiwa, 1996).

The livestock watering pond shown in Figure 3-2 was originally built as a catchment pond to prevent flooding of farmer's fields downstream by the wash which flows through the Culvert where surface contamination has been observed (Norton, March, 1996). Surface water

contamination in the wash could potentially reach and escape from the catchment pond if it is breached or overflows, and impact irrigated crops in the Kerley Valley downstream (Hopi Tribe, 1991). The Kerley Valley is the primary agricultural area of the Hopi Tribe (Wadsworth, March, 1996).

Consumption of crops irrigated with contaminated surface waters may result in exposure to dissolved components of petroleum products which had been absorbed by the plants.

5.2 Extent of Exposure

In order for a substance from a site to constitute a health risk, a complete exposure pathway must exist which links the contaminant to either a human or ecological receptor. A complete exposure pathway consists of four essential elements (EPA, 1989a): (1) a source and mechanism of contaminant release; (2) a receiving or transport mechanism (air, ground or surface water, sediment or soil); (3) a point of potential receptor contact (exposure point); (4) a route of exposure such as eating and drinking (ingestion), breathing (inhalation), or dermal contact.

Complete exposure pathways do exist at this site. The magnitude of exposure is potentially significant given the free product observed in monitoring wells, the high levels of groundwater contamination, the surface seepage of petroleum contamination, and the known impacts to surface water. Quantified levels of actual exposure to compounds of concern for individual human and ecological receptors is not comprehensively available, and represents a gap in site data. However, based on the discussion above, the potential exposures of immediate concern are potential exposures to vapors as well as the ingestion of contaminated surface and ground water. In addition, the plume of contamination appears to be continuing to migrate downgradient, which may result in continued surface seepage and increased potential for exposure.

6.0 TOXICOLOGICAL PROPERTIES

6.1 Contaminant Toxicity

The compounds of concern identified at the site, BTEX, MTBE and PAHs, demonstrate both acute health effects and more chronic, systemic toxicity and carcinogenicity. At the current concentrations, the compounds represent an acute inhalation, ingestion and dermal risk upon exposure, and their broad range of polarity will variably influence their propensity for dermal uptake. Irrespective of the route of exposure, in general, this class of compounds elicit acute hepatotoxic (liver toxicity), neurotoxic (nervous system toxicity), and reproductive health effects (Casarett and Doull, 1993).

Benzene, toluene, and xylene are acute central nervous system (CNS) depressants, inducing both reversible toxic manifestations such as narcosis, and irreversible changes in cerebellar morphology. Their reproductive effects are consistent with a decrease in sperm count, abnormal sperm morphology, and varying degrees of infertility at concentrations well below those encountered at the site.

Benzene, ethylbenzene, and toluene exposure has been associated with immune suppression and acute myeloid episodes (aplastic anemia).

BTEX and MTBE are associated with some form of neuropathy, either central (BTEX) or peripheral axonopathies (MTBE). In addition, all of the compounds elicit changes in hepatic function because of their ability to reversibly induce hepatic microsomal enzymes.

The carcinogenic and leukemogenic risk from the current concentrations of benzene identified in underground water bodies is significant. While the other compounds have demonstrated varying degrees of carcinogenicity, they have all exhibited evidence of genotoxicity in vitro, hence their ability to irreversibly alter the fidelity of the genome cannot be diminished.

Polycyclic aromatic hydrocarbons (PAHs) encompass a ubiquitous class of compounds with characteristic toxicity and the ability to reversibly induce hepatic microsomal enzymes. Many PAHs, similar to the classic compound benzo(a)pyrene, behave as activation dependent carcinogens in both human and animal subjects. They represent a carcinogenic risk upon chronic exposure via either inhalation or dermal contact. As a class, PAHs also induce immunotoxic responses. Both humoral and cellular immune responses have been suppressed as a result of exposure. Carcinogenic PAH congeners suppress T-cell proliferative responses to mitogenic stimuli as well as the generation of cytotoxic T-lymphocytes.

In total, the current levels of contamination from the constituents under review represents a significant threat to both the public health and the local ecology.

U.S. EPA's Integrated Risk Information System (IRIS) provides the following fundamental toxicity information for BTEX and MTBE exposures.

6.2 Benzene

Benzene is a class A carcinogen; known human carcinogen. The one-day health advisory (HA) for a child is 0.235 mg/L and the ten-day NOAEL is 2.35 mg/kg-day. The Safe Drinking Water Act (SDWA) maximum contaminant level goal (MCLG) for Benzene is 0 mg/L, the maximum contaminant level (MCL) is 0.005 mg/L based on detection limits. The Clean Water Act (CWA) ambient water quality criteria for human health is 0.66 ug/L for water and fish, and 40 ug/L for fish only. Groundwater benzene concentrations encountered at the site are orders of magnitude above the health based standards listed above.

6.3 Toluene

Toluene is a class D carcinogen; not classifiable as to human carcinogenicity. The one-day health advisory (HA) for a child is 20 mg/L and the one-day NOAEL is 21.5 mg/kg-day. The Safe Drinking Water Act (SDWA) maximum contaminant level goal (MCLG) for Toluene is 1 mg/L, the maximum contaminant level (MCL) is 1 mg/L. The Clean Water Act (CWA) ambient water quality criteria for human health is 1,430 ug/L for water and fish, and 424,000 ug/L for fish only. Groundwater toluene concentrations exceed one or more of these health based standards.

6.4 Ethylbenzene

Ethylbenzene is a class D carcinogen; not classifiable as to human carcinogenicity. The one-day health advisory (HA) for a child is 32 mg/L and the one-day NOAEL is 31.8 mg/kg-day. The Safe Drinking Water Act (SDWA) maximum contaminant level goal (MCLG) for Ethylbenzene is 0.7 mg/L, the maximum contaminant level (MCL) is 0.7 mg/L. The Clean Water Act (CWA) ambient water quality criteria for human health is 1,400 ug/L for water and fish, and 3,280 ug/L for fish only. Groundwater ethylbenzene concentrations at the site exceed one or more of the aforementioned ethylbenzene water standards.

6.5 Xylene

Xylene is a class D carcinogen; not classifiable as to human carcinogenicity. The one-day health advisory (HA) for a child and the one-day NOAEL are not currently available. The Safe Drinking Water Act (SDWA) maximum contaminant level goal (MCLG) for Ethylbenzene is 10.0 mg/L, the maximum contaminant level (MCL) is 10.0 mg/L. The Clean Water Act (CWA) ambient water quality criteria for human health are not available. Groundwater xylene concentrations exceed one or more of the aforementioned health based water standards.

6.6 Methyl Tertiary-Butyl Ether

A carcinogenicity assessment for lifetime exposure to MTBE is not currently available. There are no current drinking water health advisories or EPA regulatory actions for this

compound. Though standards for MTBE are currently under review, it is worthwhile to note that MTBE concentrations in surface and ground water are higher than any other compounds at the site.

7.0 RISK AND IMPACT CHARACTERIZATION

As discussed in Section 5.2 above, exposure to contaminants requires: 1) a source of contamination, 2) a pathway of migration from the source to the receptor, and 3) a receptor exposed to the contamination. If all of these components are present, the resulting risk can then be calculated for the receptor based on the amount and duration of exposures to contaminants. Because compound and media specific data are limited at the site, estimates of health risks are confined to the following four exposure pathways. Risks are calculated for exposure by: 1) ingestion of water used for drinking from both surface water and ground water sources; 2) inhalation of vapors from water used for drinking; 3) inhalation of vapors in indoor and outdoor air in the vicinity of the plume; and 4) direct dermal exposure to contaminated water used for drinking from both surface water and ground water sources. Estimated risk levels are calculated for the compounds of concern detected at the site for which concentration data exists. For this initial level of investigation average risks are calculated using the maximum concentrations encountered at the site within the last year.

7.1 Vapor Concentration Estimates

Due to a lack of compound-specific vapor concentration data, estimated risk levels for exposure to vapors are calculated using estimated soil vapor concentrations expected to be emitted from known ground water concentrations. Ground water concentrations used for this calculation are the average of maximum concentrations detected on site in the last year, and in the last quarter. The following relationship employing Henry's Law was used to calculate estimated soil vapor concentrations (EPA, 1991):

Equation 7-1: Concentration in soil vapor derived from concentration in water

$$c_{sv} = K_H \, c_w$$

where:

c_{sv} = Concentration in soil vapor (ug/L)
K_H = Henry's Law constant (dimensionless)
c_w = Concentration in water (ug/L)

An attenuation factor of 10,000 is applied to the calculated soil vapor concentration to derive estimated indoor air concentrations (Johnson and Ettinger, 1991). The magnitude of the attenuation factor is based on a range of variables. The principal variables influencing the selection of the most appropriate attenuation factor are soil permeability (cm^2) and the depth to soil vapor (α). The factor of 10,000 was selected for the present site because it incorporated the broadest intersection between a realistic estimate of soil permeability and depth to soil vapor.Calculation of ambient air concentrations derived from soil vapor levels is a two step process (Karimi, et al, 1987). The initial step involves the calculation of a soil vapor emission rate (E). The second step derives an estimation of ambient airborne

concentrations using chemical and site specific parameters applied to a dispersion model. The traditional box model (EPA, 1992) was used as an initial screening model.

To calculate emission rates from an area of soil, the estimated flux rates were factored by an area equal to 0.5 acres. The equation for converting flux rate to emission rate is given by:

$$E=J*A$$

Emission rates (grams per second) were calculated for each substance of concern.

The box dispersion model is then applied to emission rates to estimate ambient concentrations. The box model is a fundamental dispersion model which assumes steady and uniform dispersion in air such that emissions from an area source are uniformly distributed throughout a box defined by the area of the source and the mixing height. The model requires steady state emission rates, a constant wind vector, and that the crosswind distance of the area is large relative to the downwind distance of the receptor. The box model equation is given by:

$$C=\frac{E}{LS*V*DH}$$

Table 7-1 summarizes estimated indoor and outdoor air concentrations in the vicinity of the plume for BTEX and MTBE.

Table 7-1. Concentrations in indoor and outdoor air estimated from ground water concentrations using Henry's Law.

Compound	Concentration in Indoor Air (ug/L)	Concentration in Outdoor Air (ug/L)	Henry's Law Constant @ STP	Concentration in Water (ug/L)
Benzene	0.90	8.93×10^{-5}	0.215	41930
Ethylbenzene	0.11	6.2×10^{-6}	0.324	3407
Toluene	0.65	4.7×10^{-5}	0.262	24906
Xylene	0.40	3.9×10^{-6}	0.219	18484
MTBE	0.24	2.2×10^{-4}	0.024	101475

7.2 Risk Estimate Calculations

The approach for calculating estimated risks was taken from the Risk Assessment Guidance for Superfund, Volume 1, Human Health Evaluation Manual (EPA, 1989a); exposure parameters were taken from Region IX Preliminary Remediation Goals, (EPA, September, 1995) using the linear low-dose cancer risk equation and noncancer hazard quotient as expressed in the following equations:

Equation 7-2: Carcinogenic risks due to ingestion exposures to contaminants in water.

$$R = \frac{C(ug/L) \ x \ EF_r \ x \ (IFW_{adj} \ x \ CSF_o)}{AT_c \ x \ 1000ug/mg}$$

Equation 7-3: Carcinogenic risks due to inhalation exposures from water use.

$$R = \frac{C(ug/L) \ x \ EF_r \ x \ (VF_w \ x \ InhF_{adj} \ x \ CSF_i)}{AT_c \ x \ 1000ug/mg}$$

Equation 7-4: Carcinogenic risks due to inhalation exposures to contaminants in air.

$$R = \frac{C(ug/L) \ x \ EF_r \ x \ (InhF_{adj} \ x \ CSF_i)}{AT_c \ x \ 1000ug/mg}$$

Equation 7-5: Risks due to dermal contact with contaminants in water.

$$Abs.dose = \frac{CW*SA*K_p*ET*EF*ED*CF}{BW*AT}$$

Equation 7-6: Noncarcinogenic risks due to ingestion exposures to contaminants in water.

$$HQ = \frac{C(ug/L) \ x \ EF_r \ x \ ED \ (\frac{IRW}{RfD_o})}{BW \ x \ AT_n \ x \ 1000ug/mg}$$

Equation 7-7: Noncarcinogenic risks due to inhalation exposures from water use.

$$HQ = \frac{C(ug/L) \ x \ EF_r \ x \ ED \ (\frac{VF_w \ x \ IRA}{RfD_i})}{BW \ x \ AT_n \ x \ 1000ug/mg}$$

Equation 7-8: Noncarcinogenic risks due to inhalation exposures to contaminants in air.

$$HQ = \frac{C(ug/L) \ x \ EF_r \ x \ ED \ (\frac{IRA}{RfD_i})}{BW \ x \ AT_n \ x \ 1000ug/mg}$$

where:

AT_c = Averaging time - carcinogens 25550 d
AT_n = Averaging time - noncarcinogens 365 d
BW_a = Body weight, adult 70 kg
BW_c = Body weight, child 15 kg
C = Contaminant concentration in water ug/L
CSF_i = Cancer slope factor inhaled $(mg/kg\text{-}d)^{-1}$
CSF_o = Cancer slope factor oral $(mg/kg\text{-}d)^{-1}$
ED_r = Exposure duration - residential 30 yr
ED_c = Exposure duration - child 6 yr
EF_r = Exposure frequency - residential, 350 d/yr
HQ = Hazard quotient for noncarcinogens
IFW_{adj} = Ingestion factor, water 1.1 [Lyr]/[kgd]
$InhF_{adj}$ = Inhalation factor 11 [m^3yr]/[kgd]
IRW_a = Drinking water ingestion - adult 2 L/d
IRW_c = Drinking water ingestion - child 1 L/d
IRA_a = Inhalation rate - adult 20 m^3/d
IRA_c = Inhalation rate - child 10 m^3/d
R = Cancer risk
RfD_i = Reference dose inhaled (mg/kg-d)
RfD_o = Reference dose oral (mg/kg-d)
VF_w = Volatilization factor for water 0.5 L/m^3

Risks are calculated for a range of concentrations for each compound including: 1) the highest concentration detected in ground water within the last year; 2) the highest concentration detected in ground water during the October 1995 Quarterly sampling; and 3) the highest concentration detected in surface water in the Culvert. It is important to note that data for the Culvert is very limited and these concentrations may underestimate or overestimate actual levels of contaminants present during certain times during the year, with an associated underestimate or overestimate of risk.

7.3 Estimated Risks

Table 7-2 summarizes estimated risk levels calculated for BTEX and MTBE for the pathways of exposure discussed above (Appendix F). The risk levels indicated in Table 7-2 are substantial for both carcinogenic and acute effects. Carcinogenic risks may actually be underestimated due to the high concentrations of benzene present at the site. According to EPA (1989a), the linear low-dose cancer equation is valid only at low risk levels (i.e., below estimated risks of 0.01). For sites where chemical intakes might be high (i.e., risk above 0.01), the one-hit equation for high carcinogenic risk levels should be used:

Equation 7-10: One-hit equation for high carcinogenic risk levels.

$$R = 1 - \exp(-CDI \times SF)$$

where:

R = Cancer risk
exp = the exponential
CDI = Chronic daily intake averaged over 70 years (mg/kg-day)
SF = Slope factor $(mg/kg\text{-}day)^{-1}$

Risk levels calculated for the site exceed 0.01 from benzene exposure through water ingestion and inhalation due to water use. However, the calculated one-hit carcinogenic risk levels of 1.23×10^{-2} from water ingestion and 6.0×10^{-2} from inhalation of vapors are not statistically significantly different from the linear low-dose risk estimates of 1.24×10^{-2} and 6.20×10^{-2} respectively.

The risk of adverse health effects to populations in contact with the site is substantial. Estimated carcinogenic risks are orders of magnitude greater at this site. Carcinogenic risk levels are estimated to exceed one in one hundred (10^{-2}), well above the EPA range of one in one hundred thousand (10^{-4}) to one in one million (10^{-6}) typically deemed acceptable at either RCRA or CERCLA (Superfund) sites. In addition, hazard quotients (HQ) for non-carcinogenic compounds at the site are estimated to be over seventy three thousand (73,000) clearly exceeding the EPA guideline of HQ less than one.

Similarly, EPA considers a hazard index above unity to be in excess of the threshold of acceptable adverse health effects associated with exposure to acute, non-carcinogenic substances. The hazard index at the site clearly exceeds this value. Therefore, adverse acute effects can be expected upon either direct human exposure, or exposure to contaminated media encountered at the site.

Table 7-2. Estimated risk levels for compounds of concern detected at the Sunshine Western and Thriftway site.

Compound	Median Maximum Concentration (ug/L)	Carcinogenic Risk	Hazard Quotient Adult	Hazard Quotient Child
Exposure Pathway = Water Ingestion				
Benzene	41930	1.24×10^{-2}	13714	6400
Ethylbenzene	3407		19	9
Toluene	24906		73	34
Xylene	18484		5	3
MTBE	101475		816	381
	Totals	1.24×10^{-2}	14,627.00	6,827.00
Exposure Pathway = Inhalation Due to Water Use				
Benzene	41930	6.20×10^{-2}	68571	32000
Ethylbenzene	3407		33	16
Toluene	24906		665	310
Xylene	18484		270	126
MTBE	101475		4079	1903
	Totals	6.20×10^{-2}	73,618.00	34,355.00
Exposure Pathway = Inhalation of Indoor Air				
Benzene	41930	3.94×10^{-6}	4.35	2.03
Ethylbenzene	3407		0.00	0.00
Toluene	24906		0.05	0.02
Xylene	18484		0.02	0.01
MTBE	101475		0.03	0.01
	Totals	3.94×10^{-6}	4.45	2.07
Exposure Pathway = Inhalation of Outdoor Air				
Benzene	41930	0	0	0
Ethylbenzene	3407		0	0
Toluene	24906		0	0
Xylene	18484		0	0
MTBE	101475		0	0
	Totals	0	0.00	0.00

Table 7-2. Estimated risk levels for compounds of concern detected at the Sunshine Western and Thriftway site (continued).

Compound	Median Maximum Concentration (ug/L)	Carcinogenic Risk	Hazard Quotient Adult	Hazard Quotient Child
Exposure Pathway = Dermal Contact With Water				
Benzene	41930	7.3×10^{-8}		
Ethylbenzene	3407		3.35×10^{-6}	3.38×10^{-6}
Toluene	24906		7.45×10^{-5}	7.5×10^{-6}
Xylene	18484		9.82×10^{-6}	9.93×10^{-4}
MTBE	101475		4.24×10^{-5}	2.14×10^{-6}
	Totals	7.3×10^{-8}	1.3×10^{-4}	1.01×10^{-3}

8.0 CONCLUSIONS

Both the Sunshine Western and Thriftway facilities have released petroleum hydrocarbons which have contributed to a commingled plume of contamination in soil, surface water and ground water at this site. There is continued downgradient and off-site migration of product and dissolved contamination. Surface seepage of product and contaminated ground water has impacted surface water and soils, and the contamination has the potential to impact the underlying N aquifer which supplies numerous local wells and springs used for domestic supply.

Water of all types is extremely precious in this arid environment. The local population is dependent on local surface water, wells, and springs for all domestic and municipal supply. Complete exposure pathways exist for contaminants moving from the source through the subsurface to surface soils and water for possible ingestion by humans, livestock, and wildlife. As a result of the characteristics of water use by the local population there is either current exposure or the potential for exposure in the near future. Additional data is needed to determine the potential for vapor migration at the site.

Concentrations of BTEX detected in soil and water at the site currently exceed some or all of the following: EPA Region IX preliminary remediation goals (PRGs) for soil, EPA sediment Ecotox Thresholds, EPA maximum contaminant levels (MCLs) for drinking water, and EPA surface water Ecotox Thresholds for surface water. Estimated carcinogenic and acute risks are substantial. Carcinogenic risk levels are estimated to exceed one in one hundred (10^{-2}) well above the EPA range of one in one hundred thousand (10^{-4}) to one in one million (10^{-6}). In addition, hazard quotients (HQ) for non-carcinogenic compounds at the site are estimated to be over seventy three thousand (73,000) clearly exceeding the EPA guideline of HQ less than one.

Based on the data available, this site may pose an imminent and substantial endangerment to both human health and the environment in the Tuba City and Moenkopi area. Immediate action is required to halt surface seepage and contamination of surface soils, surface water, and ground water, to prevent possible contamination of the underlying N aquifer, and prevent any potential vapor impacts.

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4931-00

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MICHAEL J. LESSLER
DAVID R. NELSON
JOHN C. MCELWAINE†
ALEXANDRA ARBOLEDA
SEAN M. SABO

January 15, 1998

VIA OVERNIGHT DELIVERY

Mr. Arthur L. Haubenstock
Assistant Regional Counsel
Office of Regional Counsel
U.S. E.P.A., Region 9
75 Hawthorne Street (RC-3-3)
San Francisco, California 94105-3901

Re: One East Camelback, Phoenix, Arizona; ADEQ Inaction, and the Need for EPA Action

Dear Arthur:

Thank you for taking time earlier today to discuss EPA's position on the groundwater contamination problem in the Central Avenue and Camelback Road area of Central Phoenix. We also appreciate your forwarding to us a copy of Exxon's response to ADEQ's request for a specific proposal by which Exxon would take responsibility for cleaning up groundwater at One East Camelback (OEC). Unfortunately, we agree with you that Exxon's most recent response to ADEQ's informal request for cooperation has been woefully inadequate, but we are encouraged by learning from you today that EPA is giving serious consideration to taking enforcement action against Exxon. I write to again encourage EPA to issue an order requiring Exxon to assume responsibility for groundwater remediation at OEC.

ADEQ, of course, has long since resolved the question of Exxon's responsibility as an owner or operator of an Underground Storage Tank (UST). You will recall that based on data Exxon itself developed in July, 1997, ADEQ issued a letter on September 9, 1997 reaffirming the agency's position (first stated in March, 1996 and reiterated in October, 1996) that Exxon is an owner/operator of an UST(s), and is therefore responsible for taking corrective action at the OEC property. The problem is that ADEQ has not enforced the law, a problem that has afflicted the agency for years, as explained by the enclosed reports of the Auditor General. ADEQ's failure to act, we believe, also

constitutes a violation of the Memorandum of Agreement (MOA) between EPA and ADEQ, which requires the ADEQ to take enforcement action within thirty (30) days of discovering a violation.

ADEQ's ineffectiveness is underscored most recently by a letter of November 28, 1997, issued by the State of Arizona in lieu of an Administrative Order, and by the obvious deficiencies in Exxon's December 11 response. The November 28 letter effectively cedes control of the compliance process to Exxon, by expressly declining to issue an administrative order, and, instead, opting for "motivated, voluntary actions." The December 11 response goes so far as to make the ridiculous suggestion that the groundwater contamination problem can be solved by sealing off the B-5 level of the garage!

To put it bluntly, the problem with the "motivated, voluntary" approach is that it has not worked; it has failed to produce results after more than a year and a half. (ADEQ issued its initial determination that Exxon is responsible for corrective action at the OEC property in March, 1996.) In light of Exxon's refusal to take responsibility for groundwater remediation deferral to the state policy of a "motivated, voluntary" approach, in effect, would amount to deferral to the polluter. I do not think it is an overstatement to say that such an enforcement policy would, literally, be absurd.

If ADEQ will not act, EPA must act in order *to eliminate the cause as well as the symptoms* of the potential threats to public health and the environment identified by Keith Takata in his letter of July 2, 1997, and by you in correspondence dated September 18, 1997, and again at the October 23, 1997 meeting held at OEC. We reiterate our request that EPA take an enforcement lead, requiring Exxon to assume responsibility for corrective action at the OEC property. EPA has ample authority to issue such a compliance order under Section 7003 or Section 9006 of the Resource Conservation and Recovery Act. 42 U.S.C. §§ 6972 and 6991.

To facilitate issuance of the order, I have enclosed as promised, a compendium of documents showing that Exxon is an owner or operator of one or more underground storage tanks (USTs) at the OEC property. Releases of petroleum product from the USTs are shown by the data Exxon itself collected in July, 1997, and the data developed by OCI, all of which was forwarded to you some time ago. Please call me at your earliest convenience to discuss the evidence, the issuance of an order to Exxon and a timetable for issuance. Thank you.

Very truly yours,

Michael J. Lessler

Enclosures

VIA FIRST CLASS MAIL

cc: Mr. Timothy Fields, with correspondence enclosures only
Ms. Felicia Marcus, with correspondence enclosures only
Ms. Julie Anderson, with correspondence enclosures only
Mr. Keith Takata, with correspondence enclosures only
Mr. Robert Martin, with correspondence enclosures only
Mr. Michael Y. Cannon, without enclosures
Mr. Paul Berkowitz, without enclosures

INDEX OF ATTACHMENTS

1)	06/15/81	Agreement for Mutual Termination of Lease;
2)	01/31/74	Permit No. 10267 issued to Exxon for removal of USTs;
3)	12/26/73	Permit No. 10072 issued to Exxon for 90 day closure of service station;
4)	10/18/73	Assignment, Docket #15312;
5)	04/07/73	Lease Agreement;
6)	01/24/73	Agreement Extending, Amending and Modifying Lease; (one copy certified by Maricopa County Recorder, the other provided by counsel for Exxon);
7)	07/06/59	Assignment [of lease]; (certified by Maricopa County Recorder);
8)	02/15/57	Lease Agreement; (one copy certified by Maricopa County Recorder, the other provided by counsel for Exxon);
9)	10/04/46	Quitclaim Deed; (three different copies of the same document; one copy certified by Maricopa County Recorder, one provided by counsel for Exxon);
10)	05/02/39	Assignment of Lease; (provided by counsel for Exxon);
11)	01/17/38	Memorandum of Lease; (provided by counsel for Exxon);
12)	02/21/73	Exxon Corporation Affidavit and Claim for Tax Exemption on Merchandise Inventory and Statement of Taxes Due by Exxon Corporation; (selected pages reflecting S.S. No. 7846, Parcel No. 155-27-3);
13)	02/24/72	Humble Oil & Refining Co. Affidavit and Claim for Tax Exemption on Merchandise Inventory and Statement of Taxes Due by Humble Oil & Refining Company; (selected pages reflecting S.S. No. 7846, Parcel No. 155-27-3);
14)	Various	City Directory pages reflecting presence of service station;
15)	07/02/97	Correspondence Keith A. Takata to Allene M. Pierce-Avey;
16)	09/18/97	Facsimile correspondence Arthur L. Haubenstock to Michael J. Lessler;

17)	10/28/97	Correspondence Michael J. Lessler to Arthur L. Haubenstock;
18)	11/11/97	Correspondence Michael J. Lessler to Arthur L. Haubenstock;
19)	11/20/97	Correspondence Michael J. Lessler to Arthur L. Haubenstock;
20)	12/01/97	Facsimile Matt Millea to Michael J. Lessler transmitting 11/28/97 correspondence Matthew P. Millea to Patrick J. Paul;
21)	12/11/97	Facsimile Arthur L. Haubenstock to Michael J. Lessler transmitting Patrick J. Paul correspondence to Matthew P. Millea dated 12/10/97;
22)	09/30/93	Performance Audit, Department of Environmental Quality, Office of Water Quality, Report to the Arizona Legislature, By the Auditor General, September 1993;
	10/26/97	Performance Audit, Department of Environmental Quality, Office of Waste Programs, Report to the Arizona Legislature, By the Auditor General, October, 1993;
23)	12/03/97	Facsimile John Alspach to C. C. Churchill transmitting Memorandum of Agreement Regarding the Underground Storage Tank Compliance Program Between the State of Arizona, Department of Environmental Quality and the U.S. Environmental Protection Agency dated 09/07/88.

1/21/98

Superfund Routing Slip

Immediate Office

SFD - 1

- [x] ~~Keith Takata~~
- [ ] Michael ~~Feeley~~
- [ ] Nancy Lindsay
- [ ] Gwen Brown
- [ ] Linda Moore
- [ ] Tom Mix
- [ ] Kathleen Shimmin

Program Mgmt

SFD - 1 - 2

- [ ] Fran Schultz

Community Involvement

SFD - 3

- [ ] Hedy Ficklin

Contracts

SFD - 4

- [ ] Caroline Ireson

Brownfields

SFD - 1 - 1

- [ ] Jim Hanson

Federal Facilities

SFD - 8

- [ ] Dan Opalski
- [ ] Bobbye Smith
- [ ] Tom Huetteman
- [ ] Rich Seraydarian
- [ ] Tech Support
- [ ] Base Closure

States

SFD - 5

- [x] Betsy Curnow

Jere Johnson

Site Cleanup

SFD - 7

- [ ] John Kemmerer
- [ ] Kathi Moore
- [ ] Elizabeth Adams
- [ ] Dave Seter
- [ ] Kevin Mayer
- [ ] Mike Montgomery
- [ ] CR Team
- [ ] Tom Kremer

Emerg. Response

SFD - 6

- [ ] Terry Brubaker

Oil Team

SFD - 1-4

- [ ] Bill Robberson

Notes: _____ ***Date:*** _____

4931

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

December 15, 1997

Mr. David R. Nelson
Kane Jorden von Oppenfeld
Bischoff & Biskind
4201 North 24th Street
Suite 300
Phoenix, AZ 85016

RE: Freedom of Information Act Request RIN 531-98

Dear Mr. Nelson:

This is in response to your Freedom of Information Act request of November 4, 1997 regarding the One East Camelback office building.

Enclosed you will find copies of some of the documents responsive to your request. I am unable to provide you with certain documents, or portions of documents, which have been determined to be exempt from mandatory disclosure by virtue of 5 U.S.C. 552(b), Exemption 5, privileged intra-agency memoranda related to the deliberative process and to investigative reports. An itemized list of withheld material is provided with the enclosures to this letter.

You may appeal this partial denial by submitting a written appeal to the Freedom of Information Officer, Mail Code 1105, United States Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460, within 30 days of receipt of this partial denial. Your appeal should refer to the RIN number listed above, the date of this determination, and my name, title,

and mail code, which is 5204-G.

Please contact Bruce Engelbert at 703-603-8711 if you have

any questions concerning this matter.

Sincerely,

Suzanne E. Wells, Director
Community Involvement and Outreach Center

Enclosures

Freedom Of Information Act Request RIN 531-98

Index of Documents Withheld

All of these documents are being withheld under Exemption 5--Privileged Agency Memoranda. All of them fall under the deliberative process privilege. Some of them fall under the investigative report privilege as well.

1. E-mail from Jere Johnson to Karen Bankert, 7/14/97, Subject: One Camelback Letter from Superfund (deliberative process privilege)

2. Memorandum from Bruce Engelbert to Bob Martin, 7/22/97, Subject: Arizona Case (certain passages in this memo are withhld under the deliberative process privilege)

3. Bruce Engelbert notes from 9/5/97 discussion with Matthew Milea, Arizona Attorney General's Office (deliberative process and investigative report privileges)

4. Bruce Engelbert notes from 10/1/97 discussion with Matthew Milea, Arizona Attorney General's Office (deliberative process and investigative report privileges)

5. Bruce Engelbert notes from 10/3/97 discussion with Patricia Novak, Arizona UST Program (deliberative process and investigative report privileges)

6. Fact-Finding Report on the Arizona Case, 10/8/97 Draft Document (certain passages in this report are withheld under the deliberative process and the investigative report privileges)

7. Memorandum from Robert Martin to Timothy Fields, 10/9/97, Subject: One Camelback (deliberative process privilege)

8. E-mail from Michael Feeley to Tim Fields, 10/21/97, Subject: One Camelback (deliberative process privilege)

9. E-mail from Michael Feeley to Tim Fields and Murray Newton, 10/23/97, Subject: One Camelback (deliberative process privilege)

10. E-mail from Jennifer Bravender to Michael Feeley, 10/30/97, Subject: Letter for Time Fields About OCI (deliberative process privilege)

11. E-mail from Jere Johnson to Karen Bankert, 11/19/97, Subject: Revised One Camelback Letter for Tim Fields (deliberative process privilege)

4931

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Patrick J. Paul (602) 382-6359
Internet: paulp@swlaw.com

December 10, 1997

HAND-DELIVERED

Matthew P. Millea
Assistant Attorney General
1275 W. Washington
Phoenix, Arizona 85007

Re: In The Matter of One Camelback, Inc.
DEQ Docket No. 0-123-96
OAH No. 96A-0-123-DEQ

Dear Matt:

This letter responds to your letter of November 28, 1997, in which you expressed ADEQ's concerns regarding the apparent vapor hazard in the basement of the One East Camelback building and the agency's request that Exxon assist in hazard abatement.

We appreciate ADEQ's agreement to delay issuance of an Administrative Order to allow Exxon time to further voluntarily evaluate the property. We have conducted and continue to conduct further voluntary site evaluation. The remainder of this letter responds to the three requests in your letter.

I. Mitigation of Vapor Hazards.

Exxon has prepared a preliminary design and cost estimate for the installation of a temporary exhaust system to mitigate any explosive hazards that may exist in basement level 5 ("B-5"). The system will exhaust air and vapors collected and detected along the north side of the B-5 level through the existing exhaust system using a blower and duct system. We believe this temporary system should allow continued use of the existing groundwater pumping system until additional site characterization and the design of an alternative remediation system can be completed. We believe that installation of the temporary system can be started immediately upon approval of the building owner and upon submittal of electrical and mechanical permits to the City of Phoenix. Once permits are issued, which we anticipate will be 30-60 days after submittal, installation of the temporary system can be completed within approximately one week.

Member: LEX MUNDI, a global association of independent law firms with members in the United States and 60 countries throughout the world.

II. Additional Site Characterization.

Based upon Exxon's prior drilling and sampling results, we propose two additional groundwater wells for installation on the Uptown Plaza property so that the extent of any affected groundwater can be characterized. We intend to drill these wells during nighttime hours on December 15, and 16, 1997. The initial sampling event will be completed approximately one week later. However, please be advised that these dates are contingent upon prompt receipt of permits from ADWR. If these permits are not issued during the week of December 8, drilling and sampling activities will need to be postponed until the first week of January.

Also, please be advised that synchronous groundwater sampling of all wells at the intersection of Camelback and Central was conducted by consultants for One Camelback, Inc. Chevron, Exxon and Unocal on Saturday, December 6, 1997. Laboratory results are expected within three weeks. We believe this activity marked the first time a coordinated sampling event has been conducted. We are hopeful that these results will help further characterize the site and assist in the development of an alternative remediation system.

III. Design of Remediation System.

Exxon has selected Gervasio & Associates, a structural engineering firm, to assist with the design of an alternative remediation system. As you may know, one option we are considering is sealing and flooding the B-5 level. Obviously, one issue in such a proposal is the structural integrity of the building. Dennis Wipf will be the principal engineer from Gervasio assigned to this project. We anticipate that his work will commence early in 1998 which should coincide with the collection of additional site characterization data.

Assuming we do not experience unanticipated delays, we believe that our current schedule will allow for the completion of a remedial design during the first quarter of 1998. We further would anticipate that a system could be installed during the second quarter of 1998.

If you have any questions on any of the foregoing or need additional information, please do not hesitate to call me. Again, we appreciate the forbearance of ADEQ in this matter.

Sincerely,

SNELL & WILMER

Patrick J. Paul

PJP:lm

cc: Arthur Haubenstock
Russell Rhoades
Jean Calhoun
Ron Kern
Mike Latin
Tom DiDomizio
David M. Bates

Paulp\PHX\247474.02

Jere
4931

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
3033 North Central Ave.
4th Floor Tower
Phoenix, Az 85012

DATE: 12/2/97

TO: Jennifer Brauecker EPA Region IX

PHONE:

FAX:

FROM: Michael Latin

PHONE:

FAX: 207-4346

NUMBER OF PAGES (INCLUDING COVER PAGE):

IF YOU HAVE ANY PROBLEMS WITH THE FAX, PLEASE CALL THE PERSON WHO SENT THE INFORMATION

COMMENTS:

Jenny Just an update on the letter sent to Exxon.

Call me if you have any questions

Mike

Dec 2 '97 13:06 P.01

STATE OF ARIZONA

OFFICE OF THE ATTORNEY GENERAL

GRANT WOODS
ATTORNEY GENERAL

1275 WEST WASHINGTON, PHOENIX 85007-2926

MAIN PHONE: 542-5025
TELECOPIER: 542-4085

November 28, 1997

Patrick J. Paul
Snell & Wilmer LLP
One Arizona Center
400 East Van Buren
Phoenix, Arizona 85004-001

Re: One East Camelback/Exxon

Dear Patrick:

I am writing to summarize the telephone conversations we have had this week concerning ADEQ concerns about the vapor hazard in the basement of the One East Camelback building. As you know, ADEQ wants Exxon to abate the vapor hazard in the building as required by 40 CFR § 280.62. ADEQ has prepared (but not issued) an administrative compliance order directed to Exxon to require it to abate the hazard by, among other things, moving to the surface groundwater treatment operations currently being performed by the building managers. On behalf of Exxon, you have indicated a desire to voluntarily mitigate the vapor hazard by some means which would not include moving the treatment operations immediately. Exxon prefers to complete the site assessment work scheduled for December, 1997, before designing an alternative groundwater treatment system. You do not believe an administrative order will resolve the vapor situation more quickly than voluntary cooperation, nor do you believe such an order is appropriate or necessary.

We have agreed that ADEQ will not immediately issue an administrative order to Exxon. Rather, ADEQ will allow Exxon until December 10, 1997, to make a written proposal concerning the following: 1) a schedule and description of actions to be taken to mitigate the vapor hazard in the basement of the One East Camelback structure; 2) confirmation of when the site assessment work will be completed; 3) a schedule for designing, constructing and bringing online a groundwater treatment system for the structure which will not be located inside the structure. Please send the proposal to Mike Latin of ADEQ with a copy to me so that I can distribute it as necessary within the Department. ADEQ will not take formal enforcement against Exxon if the proposal is delivered to ADEQ by December 10 and the proposal is

acceptable to ADEQ. ADEQ will notify Exxon if any elements of the proposal are unacceptable prior to initiating any formal enforcement.

ADEQ has agreed to this brief delay because the fastest solution to the vapor hazard in the building will involve cooperation of the parties. The Department could certainly force a resolution of the matter, but we do not believe that an enforcement proceeding will resolve the problem as rapidly as the parties can through motivated, voluntary actions. We want to solve the environmental contamination problems at the building as quickly and efficiently as possible. ADEQ expects that the proposal it receives from Exxon will address those concerns.

I am available to discuss the contents of the Exxon proposal, and I can probably arrange for discussions with ADEQ staff if Exxon or its consultants wish. We look forward to receiving the proposal by December 10. Thanks for your anticipated cooperation.

Very truly yours,

Matt

Matthew P. Millea
Assistant Attorney General

cc: Russell Rhoades
Jean Calhoun
Ron Kern
Mike Latin
Tom DiDomizio

R MJL/DRN/CCC/KWM
Original SDO 1250-003

4931

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JOHN C. MCELWAINE†
ALEXANDRA ARBOLEDA
SEAN M. SABO

November 20, 1997

Mr. Arthur L. Haubenstock
Assistant Regional Counsel
U.S. E.P.A., Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: One Camelback Inc.

Dear Arthur:

I appreciated your phone call Monday and I am writing to follow up and to bring you up to date with our latest correspondence from Patrick Paul for Exxon. First, you inquired whether Exxon had stated in writing its position on taking responsibility for the problem. I confirmed with Mike Lessler that during a phone conversation on October 31, Patrick Paul stated unequivocally that Exxon was not going to take corrective action as a responsible party at One East Camelback.

Next, you mentioned that you and Patrick Paul discussed Exxon's intention to conduct further site characterization work, and that EPA would find such a proposal unacceptable, save for a serious technical concern that you requested they communicate to EPA post haste. Having received no such communication, you indicated that EPA would not be receptive to such a proposal.

Yesterday we received the attached letter from Patrick Paul setting forth a plan to do more work outside the One East Camelback property. While we do not oppose this additional investigation by Exxon, it will not change the fact that an on-site release has been confirmed requiring corrective action by Exxon as a responsible party. Consequently, the plan for further investigation affords no basis to delay any further Exxon's on-site response.

You indicated that Exxon is aware that ADEQ is preparing to issue an administrative order. I want to confirm that we are also aware that ADEQ is in the process of taking formal

action. EPA, on the other hand, has the authority to issue an order that cannot be tied up by administrative review. Given EPA's position that Exxon must now take corrective action, it would appear that the optimum course would be for EPA to take the enforcement lead, and thus expedite the implementation of a solution to the groundwater contamination problem in the Central and Camelback area.

We understand that Matt Millea does not anticipate that Exxon will contest ADEQ's order. But, based on Exxon's history of delay and its failure to assume responsibility, we, unfortunately, are not so optimistic. Given EPA's view that the situation demands quick action, we would urge EPA to move quickly.

We will keep you apprised of further developments and thank you for doing the same.

Sincerely,

Kimberly W. MacEachern

Revised letter to update results of 10.23 mtg.
JHS 11.19.97

4/93/

Congressman John Shadegg
401 West Baseline Road
Suite 209
Tempe, Arizona 85283

Attention: Ms. Mary Baumbach

Dear Ms. Baumbach:

This letter is in response to the correspondence Congressman Shadegg received from Michael Y. Cannon, President of One Camelback Inc. (OCI) c/o AREEA Investment Advisory & Management Services Inc., concerning the groundwater contamination problem affecting the One Camelback office building in Phoenix. The EPA Region 9 Superfund and Underground Storage Tank (UST) offices, and their counterparts at the Arizona Department of Environmental Quality (ADEQ), have been working with Mr. Cannon, his organization, and the responsible parties to address the problems caused by the infiltration of gasoline constituents and other hazardous materials into the subterranean parking structure at One Camelback. The Region's activities and the current status of the situation is summarized in this letter.

When Region 9 met with OCI and their attorneys and consultants last spring, Mr. Cannon had two major concerns: 1) that the owners of the former gasoline stations and the existing dry cleaners in the area of the building were not cooperating, or being compelled to cooperate, in any effort to address the contamination entering the One Camelback structure, and 2) that the groundwater interception and contaminant treatment system that OCI had assembled over time in the basement of the parking structure would soon be overwhelmed by the increasing volume and concentration of hazardous materials. To address the first concern, the Region 9 UST program contacted the program at ADEQ and began a review of the technical information and investigative progress of the UST cases surrounding One Camelback. The Region also worked with ADEQ, One Camelback, and Exxon Inc., the owners of the former gasoline station that was present at the One Camelback site before the building was constructed, to resolve access issues that had delayed Exxon's investigation of on-site UST releases.

To address Mr. Cannon's second concern, the Region 9 Superfund program investigated potential hazards resulting from the underground groundwater interception and treatment system, and requested that the ADEQ Emergency Response Unit take appropriate measurements to determine whether the conditions in the parking garage presented an explosive, fire, or inhalation hazard. A Region 9 Emergency Response On-Scene-Coordinator (OSC) also visited the One Camelback building and took measurements of potential vapor hazards in the surrounding area. In early July, based on the OSC's observations of conditions in the underground parking structure, and state's findings that levels of organic vapors in some of the basement sumps reached 8% to 12% of the Lower Explosive Limits, Region 9 wrote One Camelback Inc. and advised the building to take specific, immediate actions to reduce the potential for fire, explosion, and visitor and worker exposure. The Region also urged OCI to move the treatment system to an aboveground location.

In early September, Exxon formally notified ADEQ that investigations at the One Camelback property had confirmed an UST release of gasoline through the soil column to groundwater and the state opened a formal UST case file for the site. Region 9, in response to correspondence from counsel for One Camelback and the technical information submitted by Exxon, again advised OCI to take prompt action to remove the existing treatment system and establish an appropriate system aboveground. The Region also discussed our concerns with counsel for Exxon, to try to bring the parties together to achieve the relocation of the system.

On October 23, the ADEQ and Region 9 Superfund and UST programs convened a meeting with OCI and Exxon and presented a schedule to move the treatment system aboveground and abate the vapor hazards in the underground parking structure. Mr. Cannon attended the meeting by conference call. The agencies' schedule gave the parties three weeks to move the treatment system and an additional two weeks to address the vapors. As the lead program, the ADEQ UST program requested that Exxon take action voluntarily and stated that if Exxon failed to do so, ADEQ would issue an order pursuant to UST authorities to compel action. The attorney representing Exxon requested a week to confer with his clients; the region and the state never received a formal response. ADEQ is following up with Exxon and is currently reviewing its enforcement options. EPA will continue to support ADEQ in its role as lead oversight agency and will provide additional enforcement authorities if necessary to ensure the cooperation of the involved parties.

At the October 23 meeting, Mr. Cannon indicated that, if necessary, OCI would be willing to finance relocation of the treatment system. OCI has already filed civil action against Exxon and the other companies in the area with UST releases. A point of continuing negotiation is the actual location of the aboveground system. The state and the region believe that there is adequate and appropriate space on the OCI property to construct and operate a treatment system, but OCI wants to pipe the contaminated groundwater to a treatment system constructed at a former gasoline station across the street from the building. Regardless of location, EPA expects that the hazards currently posed by the underground groundwater interception and treatment system will be addressed in the very near future. The longer-term UST remediations in the area will continue under ADEQ and EPA authorities.

I hope that this summary of EPA activities will provide Congressman Shadegg with sufficient information to respond to the concerns expressed by Mr. Cannon. If you have questions, or need further information, please contact _____ at _____.

Sincerely,

Timothy Fields, Jr.
Acting Assistant Administrator
Office of Solid Waste and Emergency Response

SFD-5

4931

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

November 14, 1997

OFFICE OF THE
REGIONAL ADMINISTRATOR

Honorable John McCain
1839 South Alma School Road
Suite 375
Mesa, AZ 85210

Dear Senator McCain:

Thank you for your letter of September 22, 1997, inquiring on behalf of your constituent, Michael Y. Cannon, concerning the rising groundwater and contamination problems at the One East Camelback building and property owned by One Camelback Inc. c/o AREEA Investment Advisory & Management Services, Inc. (OCI). In response to your letter, my staff have advised me of the following:

This property was formerly occupied by a gasoline station, at which a leak or leaks from an underground storage tank (UST) system occurred prior to the construction of the One East Camelback office building and a multi-level subterranean parking garage. The gasoline station had been owned by Exxon and predecessor companies. The petroleum contamination in the subsurface remained undetected until the rising groundwater began seeping into the lowest level of the garage. OCI installed pumps to dewater the garage and maintain the structural integrity of the building, and also installed a temporary treatment system in the garage to remove the gasoline constituents and other hazardous materials from the pumped water prior to discharging the water to a sewer outfall.

The EPA, Region 9 Superfund and Underground Storage Tanks (UST) offices and their counterparts at the Arizona Department of Environmental Quality (ADEQ) have been working with Mr. Cannon, his organization, and the responsible parties to address the contamination problem. When we met with OCI and its attorneys and consultants last spring, Mr. Cannon had two major concerns: (1) that former gasoline stations and the existing dry cleaner in the vicinity of the building had contributed to the contamination underlying the One East Camelback property, and that their owners were not cooperating, or being compelled to cooperate, in any effort to address the contamination entering the One East Camelback structure; and (2) that the groundwater interception and contaminant treatment system that OCI had assembled over time in the basement of the parking structure would soon be overwhelmed by the increasing volume of ground water and concentration of hazardous materials.

To address Mr. Cannon's first concern, ADEQ is reviewing the technical information on the UST sites surrounding One East Camelback where leaks have been reported. To date, the information submitted to ADEQ does not indicate that contaminant plumes from adjacent and nearby properties have moved toward and impacted the One East Camelback property. ADEQ is

working with the responsible parties of the surrounding UST sites to address necessary corrective actions, including any further site characterization and remediation.

Earlier this year, EPA assisted ADEQ in working with OCI and Exxon to resolve access issues that had delayed Exxon's investigation of on-site UST leaks at One East Camelback. In July, Exxon began a site investigation at One East Camelback, and in early September ADEQ confirmed a release of gasoline through the soil column to groundwater. The State opened a formal case file for corrective action at the One East Camelback property. ADEQ will use its authorities as the lead oversight agency to oversee and monitor the longer-term UST remediations in the area to ensure protection of human health and the environment. If necessary, EPA may utilize its authorities to support implementation of corrective actions required by ADEQ.

To address Mr. Cannon's second concern, the Region 9 Superfund program investigated potential hazards resulting from the groundwater interception and treatment system, and requested that the ADEQ Emergency Response Unit take appropriate measurements to determine whether the conditions in the parking garage presented an explosive, fire, or inhalation hazard. An EPA Emergency Response On-Scene-Coordinator (OSC) also visited the One East Camelback building and took measurements of potential vapor hazards in the surrounding area. Based on the OSC's observations of conditions in the underground parking structure, and ADEQ's findings that levels of organic vapors in some of the basement sumps reached 8% to 12% of the lower explosive limits, EPA wrote OCI on July 2, 1997, advising the building management to take specific, immediate actions to reduce the potential for fire, explosion, and visitor and worker exposure, and urging OCI to move the treatment system outside the office building structure.

In response to correspondence from counsel for OCI and the technical information communicated by Exxon to ADEQ following the initial site investigation, EPA again advised OCI in a letter dated September 18, 1997, to take prompt action to remove the existing treatment system and establish an appropriate system above ground. We also discussed our concerns with counsel for Exxon, to try to bring the parties together to achieve the relocation of the system.

On October 23, the ADEQ and Region 9 Superfund and UST programs convened a meeting with OCI and Exxon and presented a schedule to move the treatment system above ground and abate the vapor hazards in the underground parking structure. Mr. Cannon attended the meeting by conference call. The agencies' schedule gave the parties three weeks to move the treatment system and an additional two weeks to address the vapors. As the lead agency for implementation of the UST program, ADEQ requested Exxon to take action voluntarily. The attorney representing Exxon requested a week to confer with his client. However, to date Exxon has not informed ADEQ or EPA of its intent to take action within the requested period of time. ADEQ is planning to follow up with Exxon and is currently reviewing its enforcement options with respect to Exxon. EPA will continue to support ADEQ in its role as lead oversight agency, and will provide additional enforcement authorities if necessary to ensure the cooperation of the necessary parties.

Mr. Cannon indicated that, if necessary, OCI would be willing to finance relocation of the treatment system. OCI has already filed civil action against Exxon and the other companies in the area with UST leaks. A point of continuing negotiation is the actual location proposed for the above-ground system. The ADEQ and EPA believe that there is adequate and appropriate space on the One East Camelback property to construct and operate a treatment system, but OCI would like to pipe the contaminated groundwater to a proposed treatment system to be located at a former gasoline station across the street from the building. Regardless of location, ADEQ and EPA expect that the hazards currently posed by the underground groundwater interception and treatment system will be addressed in the very near future.

We trust this information will be helpful in responding to your constituent's concerns. If we can be of further assistance, please call my Congressional Liaison Officer, Catherine Roberts, at (415) 744-1560.

Yours,

for Felicia Marcus
Regional Administrator

cc: Representative Matt Salmon

SFD-5 —Jo

4931

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

November 14, 1997

OFFICE OF THE
REGIONAL ADMINISTRATOR

Honorable Jon Kyl
2200 East Camelback Road
Suite 120
Phoenix, AZ 85016

Dear Senator Kyl:

Thank you for your letter of September 11, 1997, inquiring on behalf of your constituent, Michael Y. Cannon, concerning the rising groundwater and contamination problems at the One East Camelback building and property owned by One Camelback Inc. c/o AREEA Investment Advisory & Management Services, Inc. (OCI). In response to your letter, my staff have advised me of the following:

This property was formerly occupied by a gasoline station, at which a leak or leaks from an underground storage tank (UST) system occurred prior to the construction of the One East Camelback office building and a multi-level subterranean parking garage. The gasoline station had been owned by Exxon and predecessor companies. The petroleum contamination in the subsurface remained undetected until the rising groundwater began seeping into the lowest level of the garage. OCI installed pumps to dewater the garage and maintain the structural integrity of the building, and also installed a temporary treatment system in the garage to remove the gasoline constituents and other hazardous materials from the pumped water prior to discharging the water to a sewer outfall.

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We trust this information will be helpful in responding to your constituent's concerns. If we can be of further assistance, please call my Congressional Liaison Officer, Catherine Roberts, at (415) 744-1560.

Yours,

for Felicia Marcus
Regional Administrator

cc: Representative Matt Salmon

Feeley

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FACSIMILE COVER SHEET

	RECEIVING PARTY	FIRM NAME	FACSIMILE NUMBER
TO:	Felicia Marcus, Region IV		415-744-1041
	Robert Martin, EPA		202-260-3527
	Julie Anderson, Waste Management Division		415-744-1044
	~~Keith Takata, Superfund Division~~		~~415-744-1235~~

FROM: Michael J. Lessler

DATE: 11/11/97 **FILE NO.** 1250-004

~~Michael~~ - Let's do something!

We are transmitting 5 page(s), including this cover page. Please call (602) 955-9200 to ~~ack~~ acknowledge receipt of this facsimile or to report transmission failure.

COMMENTS: Ladies and Gentlemen:

Attached please find a letter that was inadvertently faxed to you this morning without my signature. Michael

Betsy/Vera
What is RCRA doing?

Original (x) will not follow.

Original will follow by () regular mail () overnight mail () messenger.

Unless otherwise indicated or obvious from the nature of the transmittal, the information contained in this facsimile message is attorney privileged and confidential information intended for the use of the individual or entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error or are not sure whether it is privileged, please immediately notify us by telephone and return the original message to us at the above address via the U. S. Postal Service. Thank you.

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DAVID R. NELSON
JOHN C. MCELWAINE†
ALEXANDRA M. ARBOLEDA
†ADMITTED ONLY IN SOUTH CAROLINA

November 11, 1997

VIA Facsimile and U.S. Mail

Mr. Arthur L. Haubenstock
Assistant Regional Counsel
U.S.E.P.A., Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

RE: One Camelback Inc., Phoenix, Arizona; Exxon Responsibility for Corrective Action, and EPA Action

Dear Arthur:

I write to follow up on our meeting of October 23, 1997, now having heard back from Exxon that it has no intention of assuming responsibility for corrective action at One East Camelback (OEC).

At the October 23 meeting -- attended by representatives from EPA, ADEQ, Exxon and One Camelback Inc. (OCI) -- you gave Exxon one (1) week to inform EPA whether it would assume corrective action responsibility. The answer was a resounding "no". Yet, the data clearly support your view (and that of Ron Kern of ADEQ and Matt Millea of the Arizona Attorney General's Office) that Exxon is, indeed, responsible. Among other things, the data indicate very high concentrations of BTEX in the soil on the north end of the property where Exxon's USTs were located. Groundwater samples taken from the new well in that area also contain substantial levels of BTEX. Comparing the sample results to the Preliminary Remediation Goals (PRGs) and Soil Screening Levels (SSLs), the potential for leaching of more contaminants into the groundwater and presenting an imminent threat to human health is obvious:

Constituent	AGRA Sample*	Industrial Soil PRG**	SSL DAF 1***
Benzene	**130,000**	**1,400**	**30**
Ethylbenzene	260,000	230,000	13,000
Toluene	760,000	880,000	12,000
Xylenes	1,300,000	320,000	200,000

*In ppb, from Sample Name: AEE-A1-1.5.
**In ppb.
*** In ppb.

Constituent	AGRA Sample µg/l	Tap Water PRG µg/l
Benzene	110.00	.39
Ethylbenzene	1300.00	1300.00
Toluene	120.00	720.00
Xylenes	4400.00	1400.00

In addition, you will recall from the data we sent you well in advance of the October meeting that OCI has also encountered TCE, PCE and 1,2 DCA, all "hazardous substances" as defined by CERCLA and 40 CFR §302.4, in the water collecting in the basement. Both PCE and TCE have been detected in the thousands of parts per billion in groundwater across Central Avenue from OEC, just fifty yards away, at the "Chevron site" and the "Unocal site". At our October 23 meeting, Steve Speyer, of AGRA Earth & Environmental, explained that as OEC extracts greater amounts of contaminated water, which it will be forced to do as contaminated groundwater continues to rise, those hazardous substances will be pulled to the OEC property. Dr. Speyer also pointed out that in the near future the capacity of OCI's treatment system will be outstripped by the volume of contaminated groundwater. If the capacity of the treatment system is overwhelmed, then the contaminated groundwater will flow into the basement, and the offgassing of the volatile compounds will present a serious threat to people in the building. Due to the additional complications posed by rising levels of contaminated groundwater, therefore, the magnitude of the hazardous substance problem is much greater than the current readings of PCE, TCE and 1,2 DCA in groundwater at OEC by themselves might suggest (although even current readings exceed maximum contaminant levels established under the Safe Drinking Water Act).

Region IX has already concluded that the situation demands immediate action. *See July 2, 1997 Keith Takata letter to OCI.* You and Ron Kern reiterated the point at the October 23 meeting.

Given Exxon's refusal to cooperate, we see essentially three alternatives. One, recognizing that the problem here is not limited to the OEC property and involves hazardous substances as well as petroleum product, EPA could undertake an emergency removal action under the federal Superfund law. But, if I understood you correctly in a telephone conversation we had just before we met with ADEQ and Exxon on October 23, Region IX has decided against a removal action. We certainly hope that in the wake of Exxon's response, Region IX would reconsider a removal action, but if not, EPA should, at a minimum, consider an interim corrective action under Section 9003(h)(2) of the Solid Waste Disposal Act. As you know, that law allows EPA to take corrective action to protect human health and the environment where prompt action is required.

The current circumstances, especially with Exxon's refusal to assume responsibility, warrant an EPA fund lead interim corrective action. In 1986 Congress amended RCRA specifically to establish a separate response program for petroleum leaking from USTs, using LUST Trust funds. Pub.L. 99-499, 100 Stat. 1613 amending Subtitle I of SWDA, adding §9003(h). *Wilshire Westwood Assoc. v. Atlantic Richfield Corp.*, 881 F.2d 801 (9th Cir. 1989). Those provisions supplemented the existing remedies. See, *Zands v. Nelson*, 779 F. Supp. 1254 (S.D.Cal. 1991). The Ninth Circuit Court also recognizes that tort remedies are often an inadequate means for protecting human health and the environment because of court delays and the difficulties of proof. *KFC Western, Inc. v. Meghrig*, 49 F.3d 518, 523 fn.6 (1995), *reversed on other grounds* 116 S.Ct. 1251 (1996). These are the precise barriers that OCI is trying to overcome with its civil lawsuit.

The third option, if EPA is not prepared to take a fund lead, is to make Exxon, as a responsible party, do what the law requires it to do. EPA is in a far better position to accomplish this than is ADEQ. Exxon has made clear that it will appeal any determination or order issued by ADEQ, and will seek to delay any attempt by ADEQ to force Exxon to assume responsibility. ADEQ is already tied up with a stay of Exxon's appeal of the agency's "Final Determination", on October 16, 1996, that Exxon was responsible for taking corrective action at OEC. EPA, however, under Section 7003 of the Solid Waste Disposal Act, can issue an order compelling Exxon, as a responsible party, to take corrective action to alleviate an "imminent and substantial danger to human health or the environment," and not be saddled with ADEQ's procedural dilemma.

Issuing such an order to Exxon is not only justified and fair, it makes sense financially and technically. OCI is a property management company with little or no technical expertise in environmental remediation and the innocent victim of the contamination. Exxon is in the petroleum business. It has expertise in cleaning up petroleum contamination, and, at this point it is indisputably a responsible party. You have already said so yourself.

Regardless of which option EPA pursues, OCI feels strongly that pumping must be undertaken at several locations (including continued pumping from the sumps at OEC) to avoid a risk of subsidence and to contain the groundwater contamination, including substantial hazardous substance contamination, emanating from the various sites. And, as long as pump and treat operations must be maintained on several of the properties at the Central and Camelback

intersection, locating the treatment system on one of the other properties, three of which are currently vacant, adds virtually no additional burden. On the other hand, locating the treatment system on the OEC property itself is fraught with health risk, as OCI's indoor air quality consultant, Charles Wiles, explained, or is simply not feasible, as the property manager on site, Allene Pierce-Avey, pointed out when we toured the property together on October 23. Furthermore, it is not necessary. The City of Phoenix, in the September 23 meeting, expressed support for the idea of running pipes under the intersection, so that the contaminated water could be treated by one system.

For the past few years, OCI has taken the lead by proposing a remedy and by attempting to bring the parties together to discuss and settle upon a solution, but the private parties have refused to cooperate and the problem, as you have pointed out, is getting worse. The environmental laws give EPA power and resources that OCI and even ADEQ lack, so that environmental problems that harm the community can be effectively solved. EPA has the power and resources to solve a serious environmental problem in Central Phoenix. It is time for EPA to assume the lead.

Sincerely,

Michael J. Lessler

cc: Felicia Marcus, Region IX Administrator (without enclosures)
Robert Martin, EPA Ombudsman
Julie Anderson, Director, Waste Management Division
Keith Takata, Director, Superfund Division
Michael Y. Cannon
Paul Berkowitz

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November 11, 1997

VIA Facsimile and U.S. Mail

Mr. Arthur L. Haubenstock
Assistant Regional Counsel
U.S.E.P.A., Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

RE: One Camelback Inc., Phoenix, Arizona; Exxon Responsibility for Corrective Action, and EPA Action

Dear Arthur:

I write to follow up on our meeting of October 23, 1997, now having heard back from Exxon that it has no intention of assuming responsibility for corrective action at One East Camelback (OEC).

At the October 23 meeting -- attended by representatives from EPA, ADEQ, Exxon and One Camelback Inc. (OCI) -- you gave Exxon one (1) week to inform EPA whether it would assume corrective action responsibility. The answer was a resounding "no". Yet, the data clearly support your view (and that of Ron Kern of ADEQ and Matt Millea of the Arizona Attorney General's Office) that Exxon is, indeed, responsible. Among other things, the data indicate very high concentrations of BTEX in the soil on the north end of the property where Exxon's USTs were located. Groundwater samples taken from the new well in that area also contain substantial levels of BTEX. Comparing the sample results to the Preliminary Remediation Goals (PRGs) and Soil Screening Levels (SSLs), the potential for leaching of more contaminants into the groundwater and presenting an imminent threat to human health is obvious:

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Given Exxon's refusal to cooperate, we see essentially three alternatives. One, recognizing that the problem here is not limited to the OEC property and involves hazardous substances as well as petroleum product, EPA could undertake an emergency removal action under the federal Superfund law. But, if I understood you correctly in a telephone conversation we had just before we met with ADEQ and Exxon on October 23, Region IX has decided against a removal action. We certainly hope that in the wake of Exxon's response, Region IX would reconsider a removal action, but if not, EPA should, at a minimum, consider an interim corrective action under Section 9003(h)(2) of the Solid Waste Disposal Act. As you know, that law allows EPA to take corrective action to protect human health and the environment where prompt action is required.

The current circumstances, especially with Exxon's refusal to assume responsibility, warrant an EPA fund lead interim corrective action. In 1986 Congress amended RCRA specifically to establish a separate response program for petroleum leaking from USTs, using LUST Trust funds. Pub.L. 99-499, 100 Stat. 1613 amending Subtitle I of SWDA, adding §9003(h). *Wilshire Westwood Assoc. v. Atlantic Richfield Corp.*, 881 F.2d 801 (9th Cir. 1989). Those provisions supplemented the existing remedies. See, *Zands v. Nelson*, 779 F. Supp. 1254 (S.D.Cal. 1991). The Ninth Circuit Court also recognizes that tort remedies are often an inadequate means for protecting human health and the environment because of court delays and the difficulties of proof. *KFC Western, Inc. v. Meghrig*, 49 F.3d 518, 523 fn.6 (1995), *reversed on other grounds* 116 S.Ct. 1251 (1996). These are the precise barriers that OCI is trying to overcome with its civil lawsuit.

The third option, if EPA is not prepared to take a fund lead, is to make Exxon, as a responsible party, do what the law requires it to do. EPA is in a far better position to accomplish this than is ADEQ. Exxon has made clear that it will appeal any determination or order issued by ADEQ, and will seek to delay any attempt by ADEQ to force Exxon to assume responsibility. ADEQ is already tied up with a stay of Exxon's appeal of the agency's "Final Determination", on October 16, 1996, that Exxon was responsible for taking corrective action at OEC. EPA, however, under Section 7003 of the Solid Waste Disposal Act, can issue an order compelling Exxon, as a responsible party, to take corrective action to alleviate an "imminent and substantial danger to human health or the environment," and not be saddled with ADEQ's procedural dilemma.

Issuing such an order to Exxon is not only justified and fair, it makes sense financially and technically. OCI is a property management company with little or no technical expertise in environmental remediation and the innocent victim of the contamination. Exxon is in the petroleum business. It has expertise in cleaning up petroleum contamination, and, at this point it is indisputably a responsible party. You have already said so yourself.

Regardless of which option EPA pursues, OCI feels strongly that pumping must be undertaken at several locations (including continued pumping from the sumps at OEC) to avoid a risk of subsidence and to contain the groundwater contamination, including substantial hazardous substance contamination, emanating from the various sites. And, as long as pump and treat operations must be maintained on several of the properties at the Central and Camelback

intersection, locating the treatment system on one of the other properties, three of which are currently vacant, adds virtually no additional burden. On the other hand, locating the treatment system on the OEC property itself is fraught with health risk, as OCI's indoor air quality consultant, Charles Wiles, explained, or is simply not feasible, as the property manager on site, Allene Pierce-Avey, pointed out when we toured the property together on October 23. Furthermore, it is not necessary. The City of Phoenix, in the September 23 meeting, expressed support for the idea of running pipes under the intersection, so that the contaminated water could be treated by one system.

For the past few years, OCI has taken the lead by proposing a remedy and by attempting to bring the parties together to discuss and settle upon a solution, but the private parties have refused to cooperate and the problem, as you have pointed out, is getting worse. The environmental laws give EPA power and resources that OCI and even ADEQ lack, so that environmental problems that harm the community can be effectively solved. EPA has the power and resources to solve a serious environmental problem in Central Phoenix. It is time for EPA to assume the lead.

Sincerely,

Michael J. Lessler

cc: Felicia Marcus, Region IX Administrator (without enclosures)
Robert Martin, EPA Ombudsman
Julie Anderson, Director, Waste Management Division
Keith Takata, Director, Superfund Division
Michael Y. Cannon
Paul Berkowitz

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*** ACTIVITY REPORT ***
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TRANSMISSION OK

TX/RX NO.	3383
CONNECTION TEL	14157441041
CONNECTION ID	EPA REG 9 (ORC)
START TIME	11/11 15:01
USAGE TIME	02'45
PAGES	5
RESULT	OK

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*** MULTI TRANSACTION REPORT ***
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TX/RX NO. 3384

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ERROR

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*** MULTI TRANSACTION REPORT ***
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TX/RX NO. 3385

INCOMPLETE TX/RX

TRANSACTION OK 13056702180

13055790717

ERROR

4931

Karen Bankert
10/29/97 10:14 AM

To: Michael Feeley@EPA
cc: Murray Newton/DC/USEPA/US@EPA
Subject: Written Response for One Camelback Status

Michael:

Murray has asked me to coordinate this with you, for you to determine who in Region 9 would be best at responding. Per my voicemail, here is the LAN mail note, also sent with the FAX earlier today.

We received a fax this morning from the OSWER front office requesting that we coordinate a response with Region 9. Upon clarification, we learned that Tim wants to respond toMary Baumbach, in Cong. Soloman's district office with a status of the actions EPA has taken regarding the One Camelback Inc. problem --what will be done based on last week's meeting. Please also confirm that Mr, Cannon participated by phone. It is not necessary to respond on the involvement of the Ombudsman.

The letter for Tim's signature should be addressed to: Ms. Mary Baumbach
401 W. Baseline Rd. Suite 209
Tempe, AZ 85283

They have asked us to prepare this response by Friday, October 31. If you have questions, please contact me at (703) 603-9046 or by Lan. Thanks very much.

1250-003
RW/MJL/DRN/KWM
CC - orig LC
4931

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ALEXANDRA ARBOLEDA
†ADMITTED ONLY IN SOUTH CAROLINA

October 28, 1997

VIA FACSIMILE

Mr. Arthur L. Haubenstock
Assistant Regional Counsel
Office of the Regional Counsel
U.S. E.P.A., Region IX
75 Hawthorne Street (RC-3-3)
San Francisco, California 94105-3901

Re: One East Camelback, Phoenix, Arizona; Meeting of October 23, 1997

Dear Arthur:

On behalf of One Camelback Inc. (OCI), I thank you for taking last Thursday to travel to Phoenix to discuss the need for corrective action at One East Camelback (OEC) and Exxon's responsibility for taking the lead. I reiterate OCI's continued commitment to facilitate relocation of the treatment system and willingness to work with Exxon. At the same time, however I underscore the key point that both you and Ron Kern made: Exxon is responsible for *all* corrective action at OEC, including the removal of the treatment system from the basement and addressing any associated air quality issues.

The three week time frame proposed by Ron Kern, although "tight", as Steve Speyer pointed out, is possible, but only if Exxon is willing to immediately assume lead responsibility. We are concerned that Exxon will continue to refuse to accept such responsibility. Even with the data developed over several years, including Exxon's own data obtained in July of this year, Exxon refuses to accept responsibility for taking corrective action. You will recall that after you and Ron Kern made it quite clear that both agencies view Exxon as a responsible party, Exxon's counsel, Patrick Paul, simply referenced the position outlined in its September 17, 1997 letter to ADEQ: an abject refusal to take a corrective action lead the agency had requested by its letter of September 9.

The September 9, 1997 letter is the *third* time ADEQ has determined that Exxon is an owner/operator responsible for corrective action. The same determination was first made more than a year and half ago, in March of 1996, and then again in October of 1996. Unfortunately, ADEQ agreed to stay the hearing of Exxon's appeal, pending a determination in a matter between ADEQ and Texaco, which has absolutely no relation to the One East matter. Pending that determination, which may go on indefinitely, the Director of ADEQ has refused to even consider OCI's petition to intervene in the Exxon proceeding. The result is that the state administrative enforcement mechanism is frozen.

At this point, if Exxon does not make a written commitment to assume lead responsibility for all corrective action at OEC, including the removal of the treatment system from the basement, the demand made by you and Mr. Kern -- that the treatment system be removed from the B-5 level within three (3) weeks -- simply cannot be met. Exxon has been critical of past steps taken by OCI to remedy its situation, claiming that OCI's remedial measures were more expensive than what Exxon might have proposed. Exxon claims to have special expertise and industry knowledge of innovative methods that can address the One East groundwater contamination. The EPA recently rejected OCI's request for a fund lead removal action on the grounds that an enforcement lead was more appropriate. Under these circumstances, without Exxon's full cooperation in taking the corrective action lead, the only way to ensure expeditious corrective action is for EPA to issue to Exxon an order, under Section 7003 of the Resource Conservation and Recovery Act, to take all corrective action necessary to eliminate the groundwater contamination problem at OEC.

OCI understands that EPA and ADEQ consider the relocation of the treatment system to be the first corrective action priority, and OCI is committed to assisting Exxon to make sure that the first item of corrective action is the removal of the treatment system from the basement to a suitable location above ground. But, you must understand that OCI expects Exxon to be held fully accountable as a party responsible for all corrective action at OEC, either by voluntarily stepping forward or by complying with an EPA order. We look forward, as I am sure you do, to Patrick Paul's response by October 30.

Sincerely,

Michael J. Lessler

MJL/sdo

cc: Michael Y. Cannon
Paul Berkowitz

H:\WPDOCS\1250-004\LETTERS\OCTMTG.LTR

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FACSIMILE COVER SHEET

TO: RECEIVING PARTY	FIRM NAME	FACSIMILE NUMBER
Arthur Haubenstock	U.S. EPA Region IX	(415) 744-1041

FROM: Mike Lessler

TIME: 3:30 p.m.

DATE: October 28, 1997

FILE NO: 1250-004

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Original will follow by (x) regular mail ( ) overnight mail ( ) messenger.

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CONNECTION ID	EPA REG 9 (ORC)
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USAGE T	01'42
PGS.	3
RESULT	OK

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DARRIEN O. SHUQUEM
ALEXANDRA ARBOLEDA
†ADMITTED ONLY IN SOUTH CAROLINA

4931

October 15, 1997

VIA FACSIMILE AND REGULAR MAIL

Mr. Ronald Kern
Manager, UST Section
Arizona Department of Environmental Quality
3033 North Central Avenue
Phoenix, Arizona 85012

Re: One East Camelback; Agenda of Meeting to Discuss Technical Issues and Remedy

Dear Ron:

Thank you very much for taking time to speak with me about the need to get an effective long term remedy in place to clean up contaminated groundwater in the Central and Camelback area. As you requested, I write you to put on paper the proposal I outlined over the phone about the purpose and scope of a meeting of ADEQ management and staff, and One Camelback Inc. (OCI) consultants.

The purpose of the meeting, specifically, would be to work through any remaining questions or concerns ADEQ has about the remedy OCI has proposed and/or consider any specific proposals or modifications of the OCI proposal ADEQ has to offer; to have ADEQ delineate specifically what additional testing in the Central and Camelback area, if any, needs to be done in ADEQ's view; and, finally, to reach agreement on the remedy to be implemented and on a time frame for implementation. We contemplate that the meeting would also include discussion of the comingled contamination in the area and ADEQ's position on "natural attenuation." Specifically, what is ADEQ's policy on "natural attenuation?" Under what circumstances is reliance upon "natural attenuation" an appropriate corrective action approach? What policy guidelines and criteria is ADEQ following? Because an analyis of the problem will obviously affect considerations of the remedy, we propose an agenda that focuses first on the nature and extent of the problem, and then on the solution.

AGENDA

1. DISCUSSION OF MULTIPLE COMINGLED GROUNDWATER CONTAMINATION PLUMES IN THE CENTRAL AND CAMELBACK AREA

This discussion would include the presentation and explanation of data accumulated in the Central and Camelback area over the last six years by OCI's consultants, and an explanation of the groundwater conditions and effect of pumping in the Central and Camelback area by one of the world's leading groundwater hydrologists, Dr. Herman Bouwer.

It appears at this point that ADEQ apparently agrees with OCI that groundwater contamination from various sources in the Central and Camelback area has been or will be comingled, having expressed the view at the September 23 meeting that pumping at the Unocal, Chevron, Weico and Maroney's sites without sustained pumping at the One East Camelback (OEC) property would cause "cross contamination." At a meeting in February of this year, ADEQ representatives indicated that the agency would have a "Hydrologist V" examine the contamination in the Central and Camelback area. At this point, OCI anticipates that the ADEQ has completed this evaluation and would be in a position, if it still has questions concerning the comingling of contamination in the Central and Camelback area, to identify specifically the data the agency believes should be developed, and which of the documented owner/operators of leaking underground storage tanks the agency will direct to obtain such data.

2. DISCUSSION OF ADEQ'S POSITION ON "NATURAL ATTENUATION"

This discussion would include an identification and analysis of the criteria ADEQ uses to determine when the agency will approve "natural attenuation" in any given situation, and whether those criteria apply to the groundwater contamination problem in the Central and Camelback area. We hope that at the conclusion of this discussion, ADEQ and OCI will reach a common understanding that "natural attenuation" is inappropriate and ineffective in addressing the groundwater contamination problem in the Central and Camelback area.

3. DISCUSSION OF OCI'S PROPOSED "COOPERATIVE PUMP AND TREAT" REMEDY

This discussion would focus on any questions or concerns that the ADEQ has about the "cooperative pump and treat" remedy OCI has proposed. OCI contemplates that the discussion would include consideration of any modifications of or proactive alternatives to the proposed remedy. Now that OCI has put a specific proposal on the table, OCI believes strongly that the discussion of remedy should focus on specific technical concerns and alternatives, and the relative costs of various alternatives. OCI is hopeful that this part of the meeting can conclude with agreement about the specific remedy that the ADEQ will endorse.

* *

With respect to all segments of the meeting, we envision that the discussion would involve a continuing dialog, continuing questions, answers and comments, by all participants. We very much hope and expect that each part of the discussion will continue until a common understanding is reached.

PARTICIPANTS

We also provide, as you requested, a list of requested participants. To ensure that substantial progress is made we believe that ADEQ people with decision making authority should attend and participate actively in the meeting. I was pleased to learn from you that ADEQ believes that people from the agency's Water Quality Assurance Revolving Fund (WQARF) group should participate in the meeting. OCI has maintained for a long time that the groundwater contamination problem in the Central and Camelback area is not merely a UST problem at the OEC property itself, but an area-wide problem that involves a mixture of regulated and hazardous wastes and substances in the groundwater. For these reasons, OCI requests that section managers and staff from the WQARF Section as well as from the UST and Hazardous Waste Sections attend.

For OCI, we would have Dr. Stephen Speyer, P.G., Dr. Herman Bouwer, P.E., and Ms. Georgia Waters, P.G. attend. It may be advisable to have legal counsel for ADEQ as well as for OCI attend, although we expect that their participation would be quite limited. This is a meeting, as we see it, of the technical people, for the purposes of working through any differences of opinion about the problem and solution, so that consensus can be reached and a solution quickly put in place. OCI and the community have already waited too long.

Thank you very much for your consideration. I look forward to hearing from you soon with input about the agenda and participants, and the date for a meeting.

Sincerely,

Michael J. Lessler

MJL/sdo

cc: Michael Y. Cannon, President
Paul Berkowitz, Corporate Counsel

H:\WPDOCS\1250-004\KERN.LTR

INVESTMENT ADVISORY & MANAGEMENT SERVICES, INC.

4931

Please reply to Ext. 212

October 9, 1997

Mrs. Natalie Metlock Sewell
Mr. Doug Sewell
P.O. Box 9386
Phoenix, AZ 85068-9386

Russell F. Rhoades, Director
Patricia Nowack, Acting SAF Admin.
Wayne Pudney, Hydrologist
Ronald Kern, UST Case Manager
Arizona Dept. of Environmental Quality
3033 North Central Avenue
Phoenix, AZ 85012

Marc H. Steer, Esq.
Steer Midwest Inc./Steer West Enterprises
102 Wilmot Road, Suite 190
Deerfield, IL 60015

Matthew P. Millea, Esq.
Assistant Attorney General
Office of the Attorney General
1275 West Washington
Phoenix, AZ 85007

Walter E. Rusinek, Esq.
Gallagher & Kennedy, P.A.
2600 North Central Avenue
Phoenix, AZ 85004-3020

Wayne Janis, Water Services Director
Karen O'Regan, Environ. Programs Manager
George Leon, City Managers Office
City of Phoenix
200 West Washington Street
Phoenix, AZ

Ladies and Gentlemen:

Thank you for taking the time from your busy schedules to meet with us on September 23rd at the One East Camelback office building. I trust that the information we provided and the interchange was beneficial to develop a clearer picture of the common groundwater problem existing at the One Camelback/Central Avenue neighborhood.

The basic point that I would like to re-emphasize is that each property that has contamination must take on the responsibility of remediating its soil. We believe that all the properties are linked together due to the same rising contaminated groundwater with which One Camelback Inc. is faced, and the only way the neighborhood problem can be resolved is for each property to accept responsibility of the contamination and use the most efficient available remediation method.

It is also our belief that the most cost effective way to treat the rising contaminated groundwater is by putting in one or more wells on each contaminated site and treating the groundwater collectively with a single air stripper system (whichever property upon which it is located). We hope that once an agreement is made between the property owners and the responsible parties, the city, state and federal agencies would concur and approve the foregoing process.

9400 S. Dadeland Boulevard, Penthouse One
Miami, Florida 33156-2817
Telephone (305) 670-0001 / Fax (305) 670-2180

We look forward to working with you and the responsible parties in coming to a most cost effective resolution to the neighborhood problem and look forward to your thoughts on this matter.

Sincerely,

ONE CAMELBACK INC.
c/o AREEA Investment Advisory
& Management Services, Inc.

Michael Y. Cannon, President

MYC/ljt

cc: The Honorable Craig Tribken, Vice Mayor/City of Phoenix
Arthur Haubenstock, Asst. Regional Counsel/U.S. EPA - Region 9
Bruce Englebert/U.S. EPA - Washington
R. R. Palmer, West Zone Supervisor/Exxon Company U.S.A.
R. D. Hicks, Sr. Marketing Engineer/Exxon Company U.S.A.
David Bates/Exxon Company U.S.A.
Carl Down/Chevron USA Products Company
Charlotte Walton/Maroney's Cleaners and Laundry, Inc.
Walter Crim/Unocal Corporation
Jerrold Weiss/WEICO Corporation

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4931

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

October 2, 1997

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

The Honorable Jon Kyl
United States Senator
State Office, Suite 120
2200 East Camelback Road
Phoenix, AZ 85016

Atten: Ms. E. J. Jamsgard

Dear Senator Kyl:

Thank you for your letter of September 11, 1997, in connection with the contaminated groundwater problem that is affecting your constituent, Mr. Michael Y. Cannon, of One Camelback Inc.

In my capacity as Director of the Office of Ombudsman, I have discussed this problem with counsel for One Camelback Inc., during the course of this year. I have also requested the preparation of a report on this matter for my review. The report is being prepared by Mr. Bruce Engelbert of the Office of Emergency & Remedial Response.

I anticipate receiving the analysis this month. I will then discuss the findings and share my thoughts on how to address the contamination problem with One East Camelback and EPA Region IX officials.

If you should have any questions, then please do not hesitate to call me at 1-800-260-9361.

Sincerely,

Robert J. Martin

Robert J. Martin, Director
Office of the Ombudsman

cc: Ms. Felicia Marcus, Regional Administrator
Mr. Tim Fields, Acting Assistant Administrator
Mr. Michael Shapiro, Acting Deputy Assistant Administrator
Mr. Rolf von Oppenfeld, Esquire

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JON KYL
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INTELLIGENCE
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United States Senate

WASHINGTON, DC 20510-0304

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PHOENIX, AZ 85016
(602) 840-1891

7315 NORTH ORACLE ROAD
SUITE 220
TUCSON, AZ 85704
(520) 575-8633

September 11, 1997

Ms. Felecia Marcus
Regional Administrator
Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105

Dear Ms. Marcus:

The enclosed information is sent for your consideration. Please forward to me the necessary information for response to my constituent, Mr. Michael Y. Cannon, One Camelback Inc.,.

I expect no action to be taken on this matter which would be inconsistent with existing rules and regulations, or that could be construed as inappropriate or unfair.

Please reply to the attention of Ms. EJ Jamsgard of my staff in Phoenix. Thank you for your assistance in this matter.

Sincerely,

JON KYL
United States Senator

JK:ejj
enclosures
c: Robert J. Martin, EPA Ombudsmen (DC)

PRINTED ON RECYCLED PAPER

AREEA INVESTMENT ADVISORY & MANAGEMENT SERVICES, INC.

Please reply to Ext. 212

August 27, 1997

97 SEP -8 PM 12: 08

Senator Jon Kyl
702 Hart Office Building
Washington, D.C. 20510

Dear Senator Kyl:

We are writing to you to seek your assistance in requesting that the U.S. Environmental Protection Agency ("EPA") provide a solution to a contaminated groundwater problem that is affecting our property and its occupants in Phoenix, Arizona.

One Camelback Inc. ("OCI") owns an eleven story office building at the intersection of Central Avenue and Camelback Road in Phoenix, which includes a five level underground parking facility. Daily occupancy exceeds 500 persons. Since the building was constructed in the mid 1980's, the groundwater table in central Phoenix has been rising, and with it, releases of petroleum and other contaminants from historic gas station operations and a nearby dry cleaning operation have migrated onto our property. Over the past five years, the mobilized contaminants have been seeping into the lower level of the parking garage at our office building. The problem has become so serious that a treatment system that OCI installed is rapidly becoming outmoded as the levels of contaminated groundwater continue to increase.

To remedy this serious problem, we have proposed to EPA that the contaminated groundwater be treated at those locations and by those parties who are contributing to the problem, rather than by OCI, an innocent party being forced to deal with the contamination. We have presented a proposal to EPA Region IX, who recently agreed that we are enduring substantial risks from the pollution at our property. EPA Region IX has even confirmed that our situation is serious, and that an alternative solution to the treatment system currently in place should be pursued.

Most recently, we have contacted Superfund Ombudsman, Mr. Robert J. Martin, at EPA headquarters in Washington, D.C., whose office was established to assist persons, like ourselves, in facilitating EPA intervention in removing threats associated with contamination from hazardous substances. Mr. Martin, who is now familiar with our problem, informed us that before he can become officially involved, his office needs to receive a request from a member of Congress.

To that end, OCI would appreciate a letter from your office to Mr. Martin requesting that EPA take appropriate action to provide a meaningful resolution to this dilemma, before more serious harm occurs.

Thank you for any assistance that you may be able to provide. Should you have any questions or need further information, please contact me at the above number, ext. 212 or our corporate counsel, Paul Berkowitz, Esq., of Greenberg, Traurig et al. at (305) 579-0685.

Sincerely,

One Camelback, Inc.
c/o AREEA Investment Advisory &
Management Services, Inc.

Michael Y. Cannon, President

cc: Mr. Robert J. Martin, Director, Office of Ombudsmen, U.S. E.P.A., 401 M. Street SW, Washington, D.C. 20460
Paul Berkowitz, Esq./Greenberg Traurig et al., 1221 Brickell Avenue, Miami, FL 33131
Rolf R. von Oppenfeld, Esq./Kane Jorden von Oppenfeld & Bischoff, 4201 North 24 St., Suite 105, Phoenix, AZ 85016

9400 S. Dadeland Boulevard, Penthouse One
Miami, Florida 33156-2817
Telephone (305) 670-0001 / Fax (305) 670-2180

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4931

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

October 9, 1997

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: Imminent and Substantial Hazard in Arizona (One Camelback) - Action Recommendation

FROM: Robert J. Martin, Director RJM
Office of Ombudsman

TO: Timothy Fields, Jr., Acting Assistant Administrator
OSWER

BACKGROUND: On February 19, 1997, I asked Steve Luftig, the Director of OERR, to have Bruce Engelbert, of his staff, perform a fact-finding analysis of an Arizona case, at your request. Mr. Engelbert initially performed this assignment and submitted a report "FACT FINDING REPORT ON THE ARIZONA CASE" (One Camelback) to me late yesterday afternoon, October 8, 1997. He also provided me supporting documents, including some Region IX memoranda related to this Ombudsman Case.

Mr. Engelbert documented a long-standing dispute, among all the financially viable parties, on who should pay for remediation (State, EXXON, OEC, etc.). In his list of facts, Mr. Engelbert's report, among other things, concluded that "the threat is not imminent".

However, one of the supporting documents Mr. Engelbert handed me with his report, was a September 18, 1997, memorandum from Arthur L. Haubenstock, Region IX Assistant Regional Counsel. In that memorandum Assistant Regional Counsel Haubenstock supplanted the Region's previous conclusion of July 2 by unequivocally concluding that the One Camelback facility "poses threats of explosion and off-gassing which should be mitigated as soon as possible to avoid injury to the health and well-being of the building occupants" (emphasis supplied). I have seen no subsequent documents refuting Mr. Haubenstock's conclusion.

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ISSUE: Emergency removal actions require clean-up first and enforcement later.

The Office of Ombudsman makes recommendations to the Assistant Administrator and other senior EPA officials based on facts and the creditability of it's sources. In this case, I have determined that Region IX Assistant Regional Counsel Haubenstock's unequivocal conclusion that the One Camelback facility poses an imminent and substantial hazard (via "explosion" and "off-gassing") is credible.

When the Office of Ombudsman, in the course of business is made aware of an imminent and substantial hazard, it is the policy of the Office to immediately notify the AA/OSWER and other appropriate senior management officials (e.g., Apollo, PA case).

RECOMMENDATION: Therefore, I recommend that we take appropriate emergency action. This could include an emergency removal action by the Region and/or use of the ERT. (If you need any of the supporting documentation for any deliberation, please let me know.)

cc: Michael Shaprio
Steve Luftig
Bruce Engelbert
Arthur Haubenstock
Keith Takata

4931

UPDATE FROM ADEQ: ONE EAST CAMELBACK

October 17, 1997

On October 15, 1997, the Arizona Department of Environmental Quality held a meeting in preparation for its next meeting with the owners of One East Camelback. Present for the meeting were Ron Kern, UST Section Manager; several staff members from the UST Section; representatives from the Attorney General's office; and representatives from the WQARF and RCRA programs. Several decisions were made:

(1) ADEQ will work with the AG's office to issue a strong letter or an order to Exxon to make the treatment system safe and to prevent the possibility of any receptors. This could mean "fixing it the basement...removing it from the basement...or whatever it takes to prevent contact with any receptors," i.e., people in the building.

(2) ADEQ is currently addressing the site characterization and corrective action needs, including a cost/benefit analysis and appropriate time frames. The State may need guidance from Matt Small on remediation by natural attenuation and whether it would be appropriate at any point at the OEC site.

(3) PCE, TCE, and other chlorinated solvents are probably not present at high enough levels to rank high enough on federal or state hazard ranking system. ADEQ will address the PCE, TCE etc. through the State RCRA C program.

4231

Schedule for One Camelback Incorporated and Exxon Response Action

Activity	Schedule
1. Move treatment system above ground.	3 weeks Nov 17, 1997
Weekly project reports to be faxed each Friday detailing work performed during that week and projected activities for the following week.	Weekly Oct 31, Nov 7, and Nov 14, 1997
Final report detailing specifications and design for new treatment system as built.	5 weeks Dec 1, 1997
2. Abate vapor hazards in all areas of subterranean parking structure.	5 weeks Dec 1, 1997
Weekly project reports to be faxed each Friday detailing work performed during that week and projected activities for the following week (may be combined with weekly reports for treatment system).	Weekly Oct 31, Nov 7, Nov 14, Nov 21, and Nov 28, 1997
Final report detailing specifications and design for vapor abatement system as built.	7 weeks Dec 15, 1997

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Schedule for One Camelback Incorporated and Exxon Response Action

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Final report detailing specifications and design for vapor abatement system as built.	7 weeks Dec 15, 1997

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4931-00001

EPA Presentation Outline

I. History and Scope of Problem

A. Combination of Hazardous Substances and Petroleum Constituents in Infiltrating Groundwater

B. Diminution in Central Phoenix Withdrawals from Aquifers Due to Contamination

C. Concerns over Potential Tenant Exposures to VOCs

D. Interim Actions

E. Next Phase of Required Interim Action (Limited "Pump & Treat" Across the Street)

II. The Need for EPA Leadership in Arizona on Groundwater Contamination and Why EPA Fund Lead Interim Action is the Only Realistic Option

III. Request for EPA Fund Lead Interim Response on Next Phase

A. Purposes of Remediation Statutes and the Fund Lead Option

B. Meeting the Legal Requirements for Interim Fund Lead Removal Action under CERCLA

C. Meeting the Legal Requirements for Interim Fund Lead Corrective Action Under RCRA

IV. Request for Commitment for EPA Fund Lead Interim Response

V. Schedule for Follow-up Discussions

4931.

Region IX OEC. Meeting

NAME	Phone	DEPT. / CO.
Michael Y Cannon		PRES. OEC AIAMS
Rolf von Oppenfeld	602 955 9200	Kane Jordan von Opp.
Stephen E. Speyer	602/272-6848	AGRA EART & ENVIRONMENTAL
C. Churchill	602 955-9200	KJVB&B
Mike Lessler	(602) 955-9200	KJVB&B
PAUL BERKOWITZ	(305) 579-0500	Greenberg & Traurig
Allene Pierce-Arey	602-265-0411	AREEA, Phoenix
Julie ANDERSON	415-744-2138	EPA WASTE DIVISION
DAN SHANE	415-744-2286	EPA OSC
Bill Jones	415-744-1283	EPA: AZ State Liaison
Jerie Johnson	415 744 2345	EPA Superfund
Matt Small	415-744-2078	EPA UST
ARTHUR HAUBENSTOCK	415/744-1355	EPA-ORC-
Jim Carlen	415/744-1345	EPA-ORC

4931

City of Phoenix

WATER SERVICES DEPARTMENT
WATER QUALITY DIVISION

Winner of the Carl Bertelsmann Prize for BEST RUN CITY IN THE WORLD

July 26, 1994

Ms. Allene Pierce-Avey
Property Manager (Agent for One Camelback Inc.)
One Camelback
One East Camelback, Suite 660
Phoenix, AZ 85012

Dear Ms. Allene Pierce-Avey:

Thank you for your time and cooperation during the unannounced inspection conducted by the City of Phoenix Pollution Control Division on July 25, 1994.

Enclosed is a copy of the inspection report for your review and comment.

Should you have any questions regarding this report, please contact me at 534-3681. Our office hours are 8:00 a.m. to 5:00 p.m., Monday through Friday.

Sincerely,

John Trujillo
Senior Water Quality Inspector
wp\e&m\JT\07264one

Enclosure

2303 West Durango, Phoenix, Arizona 85009 602-262-1859

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CITY OF PHOENIX

Enforcement & Monitoring
2303 West Durango Street
Phoenix, Arizona 85009

Telephone (602) 262-1859

PERMIT COMPLIANCE INSPECTION REPORT

SECTION A - PERMIT SUMMARY

FACILITY NAME AND ADDRESS: One Camelback One East Camelback Road Phoenix, AZ 85012	TYPE OF INDUSTRY (SIC Code): 8111/ 6022 INSPECTION DATE: 07/25/94(U)
MAILING ADDRESS One Camelback One East Camelback Road, Suite 660 Phoenix, AZ 85012	PERMIT NUMBER: 9402-5296 EXPIRATION DATE: 09/10/94
RESPONSIBLE COMPANY OFFICIAL Name: Michael Cannon Title: President, One Camelback Inc. Phone: (602) 265-0411	FACILITY REPRESENTATIVE Name: Allene Pierce-Avey Title: Property Manager (Agent for One Camelback Inc.) Phone: (602) 265-0411

SECTION B - Facility Evaluation:

S-Satisfactory M-Marginal,Improvement Required U-Unsatisfactory V-Violation Noted N/A-Not Applicable

Inspect the following:	Last Inspection Date	Current Inspection Date	
Process and Pretreatment Facilities (I,M)	02/15/94	07/25/94	S
Sampling Location (J.1)	02/15/94	07/25/94	S
I. U. Sampling (J.2)	02/15/94	07/25/94	S
I. U. Permit (G)	02/15/94	07/25/94	S
Is Sampling Location Adequate (J.1)	02/15/94	07/25/94	S
Evaluate Slug Control Plan (K.6)	N/A	N/A	N/A
Is Slug Control Plan Adequate (K.7)	N/A	N/A	N/A

N/A	Administrative Orders (F)	S	Flow Measurements (J.1)	S	Facility Management(K)
S	Facility (H)	S	Laboratory Practices (J.3)	S	Records & Reports (G,I,J)

SECTION C - Inspection Results/Review/Follow-Up

COMMENTS:
(Including Compliance Status, brief description of violations and recommendations for enforcement actions and follow-up activities):

The facility appears to be in compliance. There were no violations noted during the inspection.

INSPECTOR(S) John Trujillo	SIGNATURE	DATE 7/26/94
CHIEF INSPECTOR Michael Rose	SIGNATURE Michael Rose	DATE 7/28/94

SECTION D - Compliance History

Date and findings of last inspection.

The last inspection was an announced inspection which occurred on February 15, 1994. The facility was discharging to the storm sewer. A cross connection existed between the sanitary and storm sewers.

Connection and discharge to the sanitary sewer occurred on 02/17/94. Removal of the cross connection occurred on 02/22/94

Brief summary of effluent violations since last inspection.

Benzene violation of 240 ug/l occurred on 02/22/94.

SECTION E - Summary of Inspection Findings

Summarize the major findings for the remaining sections of this report by section title, (e.g. Section H - Facility Description).

All sections-No Major findings.

SECTION F - Administrative Orders

1. Permittee is in compliance with all Administrative Order(s)?	N/A
2. Permittee is meeting compliance schedule?	N/A

COMMENTS:

SECTION G - Permit Information Verification

1. Correct name and mailing address of permittee?	NO
2. Facility is as described in permit?	YES
3. Principal product(s) and production rates conform with those set forth in permit application?	N/A
4. Treatment processes are as described in permit application?	YES
5. Notification given to City of new, different, or increased discharges?	N/A
6. Accurate records of raw water volume maintained?	N/A
7. Number and location of discharge points are as described in permit?	YES
8. Monitoring locations in permit are appropriate?	YES

COMMENTS:

The new wastewater discharge permit became effective February 10, 1994. The site has not been permitted before.

SECTION H - Facility Description

1. Is work load seasonal? NO	If yes, fill in a and b. If no, fill in just a:
Number of employees:	Operating Hours:
a) 0 b)	a) 24 Hours/Day 7 Days/Week b) Hours/Day Days/Week

2. Description of operation and areas inspected, seasonal differences and problems/violations noted:

The facility is a groundwater discharge site. There were no chemicals stored on site.

Condition of Facility: (Good, Fair, Poor)	GOOD

COMMENTS:

SECTION H - Facility Description (continued)

3. Chemical/Waste Storage Areas:	
Potential for discharge?	NO
COMMENTS: (including description of chemicals and quantities): No chemicals are stored on site.	
Condition of Areas: (Good, Fair, Poor)	N/A
COMMENTS:	
4. Is there any water reuse within the plant?	NO
Is there any water reuse in pretreatment?	NO
COMMENTS:	
5. Are there any problems or possible violations of other environmental, plumbing or safety regulations?	NO
COMMENTS:	

SECTION I - Operation and Maintenance of Pretreatment System

Pretreatment System: (Batch, Continuous, Combination)	CONTINUOUS

Description of pretreatment processes employed:

The pretreatment process consists of activated carbon filtration treatment. The petroleum hydrocarbon contaminated groundwater is pumped through the activated carbon filters.

1. Adequate alarm system for power or equipment failures available?	YES
2. Proper stream segregation?	YES
3. All treatment units in service?	YES
4. Consulting engineer retained or available for consultation on operation and maintenance problems?	YES
5. Qualified operating staff provided?	YES
6. Established procedures available for training new operators?	N/A
7. Operation and maintenance manuals maintained?	N/A
8. Maintenance logs maintained?	YES
9. Facility operating records kept, including operating logs for each treatment unit?	YES
10. Files maintained on spare parts inventory, major equipment specifications, and parts and equipment suppliers?	YES
11. Adequate supply of spare parts?	YES
12. Condition of system? (Good, Fair, Poor)	GOOD

COMMENTS:

SECTION J - Self-Monitoring Program

1. Permittee flow measurement meets the requirements and intent of the permit?	YES
a) Primary measuring device properly installed?	YES
Type of device: (Palmer-Bowlus, Parshall Flume, Weir, Other)	WATER METER
Size of device:	4"
b) Primary flow measuring device properly maintained?	YES
c) Secondary instruments (totalizers, recorders, flow meters) properly operated and maintained?	N/A
d) Calibration frequency adequate?	N/A
Date of last calibration?	N/A
Frequency of calibration?	N/A
e) Does calibration meet O & M specifications?	N/A
f) Flow measurement equipment adequate to handle expected ranges of flow rates?	YES
g) Monitoring records (flow, pH, D.O., etc.) maintained for a minimum of three years including all original strip chart recordings (e.g. continuous monitoring instrumentation, calibration and maintenance records)?	YES

COMMENTS:

The 4" water meter is installed on the effluent side of the sampling port.

2. Permittee sampling meets the requirements and intent of the permit?	N/A
a) Do all regulated process (Federal and locally regulated) waste streams discharge through the sampling location(s)?	YES
b) Do any non-regulated process waste streams discharge through the sampling location?	N/A

If yes, describe the streams and list their volumes per day:

c) What sources were used to determine the answers to #2, 2a, and 2b? Blueprints	
Visual inspection	X
Dye test	
Interview with plant personnel	X
Other (Explain)	
d) Locations adequate for representative samples?	YES
e) Parameters and sampling frequency agree with permit?	YES
f) Is permittee using method of sample collection required by permit?	YES
Method(s) used: GRAB	X
MANUAL COMPOSITE	X
AUTOMATIC COMPOSITE	
g) Are flow proportional samples obtained?	NO

SECTION J - Self-Monitoring Program (continued)

2. h) Sample collection procedures are adequate?	YES
i) Samples refrigerated during compositing?	YES
ii) Proper preservation techniques used?	YES
iii) Sample holding times prior to analyses in conformance with 40 CFR 136.3?	YES
i) Additional monitoring and analyses:	
i) Monitoring and analyses being performed more frequently than required by permit?	NO
ii) If "Yes", are results reported in permittee's self-monitoring report?	N/A
j) Adequate records maintained of:	
i) Sampling date, time and exact location?	YES
ii) Analyses dates and times?	YES
iii) Individual performing sampling?	YES
iv) Analytical methods/techniques used?	YES
v) Analytical results consistent with self-monitoring data?	YES
k) Has the permittee met the 24 hour notification?	N/A
l) Has the permittee met the 30 day resampling and reporting when violations were found?	N/A

COMMENTS:

3. Permittee laboratory procedures meet the requirements and intent of permit?	YES
DETAILS: a) EPA approved (40 CFR 136.3) analytical testing procedures used?	YES
b) If alternate analytical procedures are used, has proper approval been obtained?	N/A
c) Are parameters other than those required by the permit analyzed? (If yes, explain on next page.)	NO
d) Satisfactory calibration and maintenance of instruments and equipment?	YES
e) Is a commercial laboratory used?	YES
f) Is the commercial laboratory state licensed?	YES
g) Lab Name: Analytical Technologies, Inc.	
h) Address: 9830 South 51st Street, Suite B-113 Tempe, Arizona 85044	

SECTION J - Self-Monitoring Program (continued)

3. i) If the answer to "e" was no, answer the following questions.	
i) Quality control (QC) procedures used?	N/A
ii) Quality assurance (QA) records kept?	N/A
iii) Duplicate samples are analyzed % of time?	N/A
iv) Spiked samples are used % of time?	N/A
v) Lab calibration and maintenance records kept?	N/A
vi) Is in-house lab state licensed?	N/A
If yes, list parameters, date and number of the license below. If no, explain below.	
COMMENTS:	

SECTION K - Facility Management Practices

1. Are hazardous wastes generated and/or stored?	NO
Does management and disposal of hazardous wastes meet RCRA requirements?	N/A
COMMENTS:	
2. Are hazardous wastes, as described in 40 CFR. 261, disposed of into the POTW? If yes, answer the following:	NO
a) Have the discharges been reported as required by 40 CFR 403.12(p)(1)?	N/A
b) What was discharged?	
c) How much was discharged?	
d) Does the facility have a waste minimization plan as required under 40 CFR 403.12(p)(4)?	NO
COMMENTS: A waste minimization plan is not required at this time.	

SECTION K - Facility Management Practices

3. Does the facility have a Pollution Prevention/Source Reduction program?	NO
If yes, explain the highlights of the program.	
4. Has a Toxic Organic Management Plan (TOMP) been submitted? If yes, answer the following:	NO
a) Is the TOMP adequate?	N/A
Date submitted: Date approved:	
b) Is the TOMP being properly implemented?	N/A
COMMENTS:	
5. Has facility been evaluated for need of a Slug Control Plan (SCP) as required by 40 CFR 403.8(f)(2)(v)?	YES
COMMENTS: A Slug Control Plan is not required at this time.	
6. Has SCP been submitted? If yes, answer the following:	NO
a) Is SCP adequate?	N/A
Date submitted: Date approved:	
b) Is SCP being properly implemented?	N/A
COMMENTS:	

4931

Maroney's

CLEANERS · LAUNDRY · STORAGE

CAR HOP SERVICE

DRIVE-IN PLANTS
3192 E. Indian School Rd. 956-2560
4902 N. Central 264-5964
Phoenix, Arizona

PICK-UP & DELIVERY

JUN 1997 RECEIVED PASI PROGRAM

JUN 1994 RECEIVED

June 1, 1994

Layali Azar-Schuster
Preremedial Unit
Arizona Department of Environmental Quality
3033 North Central Avenue
Phoenix, Arizona 85012

Re: Central Avenue and Camelback Road Investigation; Maroney's Cleaners and Laundry, Inc. Questionnaire

Dear Layali:

Enclosed is the Preliminary Assessment Questionnaire pertaining to Maroney's facility at 4902 North Central Avenue.

If you have any questions about this questionnaire, please feel free to contact me.

Sincerely,

MARONEY'S CLEANERS & LAUNDRY, INC.

Charlotte Walton

Charlotte Walton, President

Enclosure

PHX4:WALTON/4044517.

PRELIMINARY ASSESSMENT QUESTIONNAIRE
COMPANY NAME: MARONEY'S CLEANERS & LAUNDRY, INC.
JUNE 1, 1994

* *If the spaces provided for answering the question is not adequate, you may attach additional sheets as needed. If a question does not pertain to your facility, please indicate this with "N/A."*

1. Company Name: Maroney's Cleaners & Laundry Inc.("Maroney's")
Company Representative/contact: Charlotte Walton, President
Street Address: 4902 North Central Avenue
City, Zip code: Phoenix, Arizona 85012-1619
Phone Number: 602-264-5964
Property Parcel Numbers: 155-28-79, 155-28-80
Facility Size (in acres): approximately .5 acre
Standard Industrial Code: 7216
No. of employees: 90-95 (both locations)

In addition to the facility identified above, Maroney's operates a facility at the following address:

3192 East Indian School Road
Phoenix, Arizona 85016
Phone: (602) 956-2560

For purposes of this questionnaire, Maroney's two facilities are referred to as the Central Avenue Facility and the Indian School Facility.

2. *Business* Ownership History:

(a) Give name of current owner and date acquired.

Edwin Maroney was the original owner of Maroney's. Robert Riddle and Robert Menzies, Charlotte Walton's father, acquired the business from Mr. Maroney some time in the 1960s. In 1986, Mr. Menzies bought out Mr. Riddle's interest in Maroney's. The current shareholders of Maroney's are Robert Menzies, Margaret Menzies, Charlotte Walton and Robert Menzies, Jr. Charlotte Walton became the president of Maroney's in 1986 and has operated the company since that time.

In the 1970s, the Central Avenue Facility was used only as a drop-off location due to a decline in the demand for dry cleaning services at that time.

(b) Give names of previous owners and dates of acquisition.

See the response to Part (a).

(c) Provide a copy of your annual report/corporation commission report.

A copy of Maroney's 1993 Arizona Corporation Commission Annual Report is attached.

3. *Property* Ownership History:

a) Give name of current owner, owner's address and phone number, and date of acquisition.

Maroney's leases the property and building identified above as the Central Avenue Facility from the Jerry Steer Trust. According to TRW-REDI tax records, the address of the Trust is:

2515 E. Thomas Road
Suite 16-841
Phoenix, Arizona 85016

Charlotte Walton does not know the date that the Jerry Steer Trust acquired the property.

b) Give names of previous owners and dates of acquisition.

Charlotte Walton has no information on previous owners of the Central Avenue Facility. For additional information, see the response to Question 2 above.

4. How long have you been in operation at your current location?

Maroney's has operated the Central Avenue Facility since some time in the 1960s. Charlotte Walton, the President of Maroney's, has been operating the facility since 1986.

5. Has your company been located at any other addresses within Arizona? If yes, please list.

In addition to the Central Avenue and Indian School Facilities identified in the response to Question No. 1 above, Maroney's owned and operated a facility at 720 W. Buchanan Street in Phoenix from approximately 1970 to 1979.

6. Describe the nature and purpose of your business.

Maroney's provides dry cleaning and laundry service for residential customers.

7. Describe processes using chemicals at your facility, including amounts used and resulting waste products.

a) Manufacturing process(es): **Not applicable.**

b) Cleaning process(es):

Perchloroethylene ("PCE") is used in the dry cleaning machine and soaps are used in the laundry machines. Sludge is scraped from the inside of the dry cleaning machine every one or two days and put into a hazardous waste container. One barrel of sludge (approximately 195 pounds) is manifested and removed by the Safety-Kleen Corporation once a month. Approximately once every three months, the filters on the dry cleaning machine are "cooked" to recapture any PCE. The filters are then removed and disposed of by Safety-Kleen. For additional information, see the response to Question No. 10.

c) Maintenance or repair process(es):

A number of janitorial supplies are used to clean the Central Avenue Facility. In addition, there are some lubricating oils used to maintain the dry cleaning and washing machines. For additional information, see the response to Question No. 10.

8. If you have used different chemicals in the past, other than those described in Question #7, list the chemical name, quantity, and the time period in which they were used.

Other than the chemicals described in the response to Questions Nos. 7 and 10, Ms. Walton is unaware of any other chemicals used at the Central Avenue Facility.

9. Describe how chemicals are/were stored on-site. (Type of containers, locations, containment features, inside or outside, on soil or pavement, etc.)

PCE is held in a 296 gallon tank that is an integral operating part of the dry cleaning machine. Once every two or three months, PCE is added to top off the tank. The PCE is pumped directly into the tank from the PCE supplier's bulk tank truck. Other than small quantities of soaps, spot removers, lubricating oils and janitorial supplies, no other chemicals are stored on-site.

10. Provide an itemized list of the names and quantities of chemicals stored at your facility and indicate whether you have a Material Safety Data Sheet (MSDS) available.

Set forth below is a list of chemicals, including quantities presently on-site, that are used or that have been used in the past in the cleaning processes at the Central Avenue Facility. Maroney's has a Material Safety Data Sheet for each of these chemicals.

Name of Chemical:	Quantity:
Acetic Acid Glacial	2 gallons
Ajax Oxygen Bleach Cleanser	none
Alpha-Cide (disinfectant)	.5 gallon
American Paint, Oil & Grease Remover	none
Amyl Acetate	1 gallon
Aqua Ammonia	2 gallons
Caled Brite Size	5 gallons
Caled Long Life (detergent)	20 gallons
Caled Lube-It (7.75 oz)	1 can
Caled Nu Touch (detergent)	20 gallons
Calusa D-140 Laundry Detergent	80 lbs.
Clena Form 5	none
Ex-It Deodorant No. 816 (15 oz)	none
Ex-It Dry Cleaning Fluid No. 828	7 cans
Fabrilife Imperial Instant Starch 5	20 lbs.
F901 Low Temperature (emulsifier)	none
Helmac 20/20 Spot and Stain Remover	1 gallon
Hydrogen Peroxide 35%	1 gallon
Klean-All (cleaner and de-greaser)	2.5 gallons
Laidlaw Silk-Sheen	1 gallon
NCP Jinx Ink	none
Pennwalt Erusticator Rust Remover	none
Pennwalt Pennsize (laundry starch)	none
Perchloroethylene	296 gallons[1]
Picrin	2 gallons
Rapid Spot Remover	1 bottle
Salt--Coarse (Water Softener)	none
Silk Pre-Spotter	none
Sodium Pervorate	50 lbs.
Spray Sizing	6 cans
Street's Pyratex	1 gallon
Street's Streepro (12 oz.)	4 bottles
Street's Streetan (12 oz.)	4 bottles
Street's Streetex	1 gallon
Swan-Cote Spray (water & stain repellent)	8 cans
Wetspo Non-Oily Paint, Oil & Grease Remover	1 gallon
Wilson Yellow Go (dye stripper)	1 gallon

[1] When the machine tank is full.

Name of Chemical:	Quantity:
Wilson Rust-Go (14 oz.)	3 bottles
WSI Delete Laundry Sour	50 lbs.
WSI Notice (detergent)	55 lbs.
WSI Vanish Laundry Bleach	50 lbs.

Set forth below is a list of janitorial supplies, including quantities presently on-site, that are used or that have been used at the Central Avenue Facility. Maroney's has a Material Safety Data Sheet for each of these chemicals.

Name of Chemical:	Quantity:
Blitz (powdered sanitizer)	none
EZ-Off Hot Iron Cleaner	4 tubes
Hand Soap (Lemon & Pink Lotion)	none
Klear View and Super Klear View	none
Lemon Aid Furniture Polish	none
Nine-O-Four (cleaner and de-greaser)	1 gallon
Pine Kleen (cleaner and de-greaser)	none
Slide-It Liquid (rail lube)	1 bottle
Stainless Steel Cleaner	none
Top Solids (floor wax)	1 gallon
Western Bowl Cleaner	5 gallons

11. a) What methods are currently being used to dispose of wastes? Include name of waste, amount, and method.

    See the response to Question No. 7 above.

    b) If waste production and disposal has changed, list all previous wastes, amounts and methods of disposal.

    Ms. Walton is unaware of past waste production and disposal practices. Ms. Walton assumed operation of Maroney's in 1986, at which time she initiated the system that is currently used.

12. Has your business ever: generated [X], transported [No], stored [No], or disposed [No] of hazardous materials, mixtures containing hazardous materials, or hazardous wastes? (Please check all that apply.)

13. Has your facility arranged to have hazardous materials transported off-site for disposal, recycling, or sale?
    Yes [X] No [ ], If yes, what year did you start 1986
    Transporter See below. Destination See below.

Maroney's uses Safety-Kleen Corporation to dispose of its dry cleaning sludge. Ms. Walton believes that the sludge is

transported to the Safety-Kleen facility at 4401 E. University, Phoenix, Arizona, 85034. Maroney's has used Safety-Kleen since approximately 1986 when Ms. Walton assumed operation of the company. Ms. Walton does not know how the sludge was handled prior to 1986.

14. Has the company ever had a chemical, solvent and/or hazardous substance spill, leak or release at this location? Yes [X] No [ ], If yes, please provide the following:

a) Chemical name of substance spilled _____
b) Quantity spilled _____
c) Date of spill _____
d) Type of cleanup, if applicable _____
e) Regulatory agency involved _____

As with all dry cleaning establishments, there are periodic equipment malfunctions that result in spills of PCE. When a spill of PCE occurs, Maroney's employees promptly soak up the spill with laundry that is then placed into the dry cleaning machine to reclaim the PCE. Any residual PCE evaporates.

15. Please indicate if your business has any of the following:

[ ] Industrial Wastewater Discharge Permit No.: **N/A**
[ ] Underground Storage Tank Notification to ADEQ: **N/A**
[X] **U.S. Environmental Protection Agency Generator Identification No. AZD 981693351**
[X] **Maricopa County Air Pollution Control Permit No. A8500155 (Permit to Operate a Dry Cleaner and Laundry)**
[ ] Groundwater Quality Protection Permit: **N/A**

16. Do you now or have you ever used any of the following? If you answer yes to using any of the following chemicals, list which years they were used.

No	a)	Trichloroethylene (TCE)
Yes	b)	Tetrachloroethylene (PCE)
No	c)	1,1-dichloroethene (1,1-DCE)
No	d)	1,1,1-trichloroethane (1,1,1-TCA)
No	e)	1,1-dichloroethane (1, 1-DCA)
N/A	f)	_____

Ms. Walton does not know the exact date that PCE was first used at the Central Avenue Facility. However, PCE has been used at the Central Avenue facility since at least 1986, when Ms. Walton assumed operation of the facility.

17. Has your facility been on the sewer system (including domestic waste) since the beginning of occupancy?
Yes [X] No [ ] If no, when was your facility connected to the sewer system, and how was wastewater and waste disposed of prior to connection?

The City of Phoenix approved an Application for Sewer Tap filed by Edwin Maroney to connect 4902 N. Central (the Central Avenue Facility) on December 5, 1956. Ms. Walton believes that the Central Avenue Facility has been connected to the sewer system since approximately that time.

18. If your facility is currently on the sewer system, are there any pretreatment requirements? Yes [ ] No [X] If yes, please specify.

19. If you are currently regulated by any environmental agency, (city, county, state, federal) list the name of the agency(s).

Maroney's is regulated by the U.S. Environmental Protection Agency and the Arizona Department of Environmental Quality as a hazardous waste generator. In addition, Maroney's has an Maricopa County Air Pollution Control Permit. The City of Phoenix periodically inspects the boiler on Maroney's dry cleaning machine.

20. Which of the following are or were located within the boundaries of your property? (Please check all that apply.)

* Please estimate the amount and type of material disposed of to each of the checked structures; attach any design or construction data you have for the structures indicated. Also please attach copies of analyses of any solid or liquid samples from these structures on your property. In addition, any information you may have regarding structures such as these that may be located on property adjacent to your property would be appreciated.

[ ] Wells _____
If yes, provide State Well ID or registration #
[ ] Drywells (Storm Drains) _____
[ ] Surface Impoundments (Evaporation Ponds) _____
[ ] Pits _____
[ ] Septic tanks _____
[ ] Leach fields _____
[ ] Sumps _____
[ ] Underground Storage Tanks (UST's) _____
[ ] Above ground storage tanks (including drums) _____
[ ] Drainage ditches running off the property _____
[ ] Landfills _____

Ms. Walton has no knowledge that any of the above-listed improvements are located at the Central Avenue Facility.

21. Have you ever had an environmental assessment, environmental audit, or a due diligence search performed on this property?

Ms. Walton is not aware of any environmental assessments, audits or due diligence searches performed on the Central Avenue Facility.

a) If yes, list who performed the audit and when, and attach copies.

Not applicable.

b) To your knowledge, was there any physical testing performed on the property (i.e. soil gas sampling, soil sampling, groundwater sampling)?

Ms. Walton is not aware of any physical testing performed at the Central Avenue Facility.

22. Do you have any knowledge of any environmental audit or due diligence search that was performed on the property prior to your occupancy?

See the response to Question No. 21.

a) If yes, who performed the audit, and when?

See the response to Question No. 21.

b) To your knowledge, was there any physical testing performed on the property?

See the response to Question No. 21.

23. To your knowledge, does data exist from physical testing performed at this location? Please include sample reports/results.

See the response to Question No. 21.

24. Attach a diagram of your property. Include property boundaries and size, the location of building structures, and any facilities discussed in Question No. 20. Also include the location of chemical storage areas.

A general diagram of the Central Avenue Facility is attached.

VERIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Dated this 1st day of June, 1994.

MARONEY'S CLEANERS & LAUNDRY, INC.

Charlotte Walton

Charlotte Walton, President

1200 WEST WASHINGTON
P.O. BOX 6019
PHOENIX, AZ 85005

MAIL OR DELIVER TO:

ARIZONA CORPORATION COMMISSION

400 W. CONGRESS #221
TUCSON, AZ 85701-1352

ANNUAL REPORT & CERTIFICATE OF DISCLOSURE

(Pursuant to ARS 10-125, 10-1081, 10-128 and 10-1084)

DIRECTIONS: ANSWER ALL QUESTIONS IN EACH SECTION OF THIS ANNUAL REPORT AND RETURN WITH YOUR FEE TO THE ARIZONA CORPORATION COMMISSION. PLEASE TYPE OR PRINT IN BLACK INK.

A. CORPORATION INFORMATION (PLEASE MAKE ANY CHANGES OR CORRECTIONS IN SECTION B.)

FILE NO. 055909-4

Corporation Name MARONEY'S CLEANERS & LAUNDRY, INC.

Street Address 4916 NORTH CENTRAL AVENUE

P.O. Box (if any)

City, State, Zip Code PHOENIX, ARIZONA 85012

MAKE CHECK PAYABLE TO:
ARIZONA CORPORATION COMMISSION

TYPE OF CORPORATION PROFIT

FEE $ 45.00

PENALTY $ _____ (20% per month)

TOTAL DUE $ 45.00

Agent ID # 0000139476

Name of Arizona Statutory Agent JAMES P. BARTLETT

Street Address (NOT P.O. BOX) 5333 NORTH 7TH STREET SUITE B-215

City, State, Zip Code PHOENIX, ARIZONA 85014

ANNUAL REPORT FOR YEAR ENDING		
12	31	93
MO	DAY	YR
DUE ON OR BEFORE		
04	15	94
MO	DAY	YR

B. CHANGES OR CORRECTIONS: CLIENT'S COPY

C. BRIEF STATEMENT OF THE CHARACTER OF BUSINESS IN WHICH THE CORPORATION IS ACTUALLY ENGAGED IN ARIZONA.

DRY CLEANING AND LAUNDRY SERVICE

D. CAPITALIZATION: (AS STATED IN CURRENT ARTICLES OF INCORPORATION)
(NOT REQUIRED FOR NONPROFIT CORPORATIONS)

NUMBER AUTHORIZED	CLASS	SERIES	PAR VALUE
30,000	COMMON		$100

NUMBER ISSUED	CLASS	SERIES	PAR VALUE
600	COMMON		$100

E. SHAREHOLDERS DIRECTIONS: Fill in names of shareholders of record holding more than 20% of any class of shares issued by the corporation, including persons beneficially holding such shares through nominees. If additional space is needed, attach a separate sheet (IF NONE, SO STATE.)

Shareholder Name ROBERT M. MENZIES

Shareholder Name MARGARET A. MENZIES

Shareholder Name

Shareholder Name

Reprinted with permission of the Arizona Corporation Commission

NOTE: If appointing new statutory agent, the new agent must consent to that appointment, and PRESIDENT must sign this report (Page 4)

I, (individual) and/or We, (corporation), having been appointed to act as Statutory Agent, hereby consent to act in that capacity until removal or resignation is submitted in accordance with the Arizona Revised Statutes.

_____
STATUTORY AGENT

FOREIGN CORPORATIONS: Please list address of the principal place of business in the domicile state (or jurisdiction).

_____

_____

_____

NOTE: ALL CORPORATIONS MUST LIST THEIR OFFICERS AND DIRECTORS.
DATES TAKING OFFICE MUST BE INCLUDED.
ATTACH ADDITIONAL SHEETS IF NECESSARY.

F. OFFICERS
(President And Secretary Cannot Be Same Person.)

President
Name CHARLOTTE A. WALTON
Street Address 2133 EAST NICOLET
P.O. Box
City, State, Zip Code PHOENIX, AZ 85016
Date of taking this office: MO 01 DAY 01 YR 89

Vice-President
Name
Street Address
P.O. Box
City, State, Zip Code
Date of taking this office: MO ____ DAY ____ YR ____

Secretary
Name MARGARET A. MENZIES
Street Address 2133 EAST NICOLET
P.O. Box
City, State, Zip Code PHOENIX, AZ 85016
Date of taking this office: MO 01 DAY 01 YR 90

Treasurer
Name CHARLOTTE A. WALTON
Street Address 2133 EAST NICOLET
P.O. Box
City, State, Zip Code PHOENIX, AZ 85016
Date of taking this office: MO 01 DAY 01 YR 89

Other Executive Officer (title)
Name
Street Address
P.O. Box
City, State, Zip Code
Date of taking this office: MO ____ DAY ____ YR ____

G. DIRECTORS
(Profit Require At Least One (1) Director. Nonprofit Require At Least Three (3) Directors.)

Director
Name CHARLOTTE A. WALTON
Street Address 2133 EAST NICOLET
P.O. Box
City, State, Zip Code PHOENIX, AZ 85016
Date of taking this office: MO 01 DAY 01 YR 89

Director
Name
Street Address
P.O. Box
City, State, Zip Code
Date of taking this office: MO ____ DAY ____ YR ____

Director
Name
Street Address
P.O. Box
City, State, Zip Code
Date of taking this office: MO ____ DAY ____ YR ____

Director
Name
Street Address
P.O. Box
City, State, Zip Code
Date of taking this office: MO ____ DAY ____ YR ____

Director
Name
Street Address
P.O. Box
City, State, Zip Code
Date of taking this office: MO ____ DAY ____ YR ____

James A. Vogel, CPA
Jack Lawless, CPA
R. Dale Hensley, CPA
Dennis E. Landauer, CPA
Henry A. Liem, CPA
Carl F. Hintze, Jr., CPA
Donna M. Esposito, CPA

William V. Harrell, CPA
Debra Taylor Johnson, CPA

Sam Gallant, CPA (Retired)
William G. Farrow (Retired)

Member
Private Companies Practice Section, Division of Firms, American Institute of Certified Public Accountants
HLB International, a worldwide organization of accounting firms
Western Association of Accounting Firms

ACCOUNTANT'S COMPILATION REPORT

We have compiled the balance sheet of Maroney's Cleaners & Laundry, Inc. as of December 31, 1993 included in the accompanying prescribed form in accordance with Statements on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants.

Our compilation was limited to presenting in the form prescribed by the Arizona Corporation Commission information that is the representation of management. We have not audited or reviewed the financial statement referred to above and, accordingly, do not express an opinion or any other form of assurance on it. This financial statement was compiled by us from financial statements for the same period that we previously reviewed as indicated in our report dated March 25, 1994.

This balance sheet is presented in accordance with the requirements of the Arizona Corporation Commission, which differs from generally accepted accounting principles. Accordingly, this balance sheet is not designed for those who are not informed about such differences.

Gallant & Company, P.C.

March 11, 1994

Certified Public Accountants
3333 North Seventh Avenue
P. O. Box 34350
Phoenix, Arizona 85067-4350
Telephone (602) 263-8810
Fax (602) 285-1750

Form 1120S (1993) MARONEY'S CLEANERS AND LAUNDRY, INC. 86-0167179 Pag

Schedule L Balance Sheet

	Assets	Beginning of tax year (a)	Beginning of tax year (b)	End of tax year (c)	End of tax year (d)
1	Cash				858,04
2a	Trade notes and accounts receivable			187,340	
b	Less allowance for bad debts			6,000	181,34
3	Inventories				
4	U.S. Government obligations				
5	Tax-exempt securities				
6	Other current assets (attach schedule)				29,12
7	Loans to shareholders				
8	Mortgage and real estate loans				
9	Other investments (attach schedule)				
10a	Buildings and other depreciable assets			847,018	
b	Less accumulated depreciation			706,457	140,56
11a	Depletable assets				
b	Less accumulated depletion				
12	Land (net of any amortization)				
13a	Intangible assets (amortizable only)				
b	Less accumulated amortization				
14	Other assets (attach schedule)				
15	Total assets				1,209,07
	Liabilities and Shareholders' Equity				
16	Accounts payable				41,41
17	Mortgages, notes, bonds payable in less than 1 year				
18	Other current liabilities (attach schedule)				31,62
19	Loans from shareholders				
20	Mortgages, notes, bonds payable in 1 year or more				
21	Other liabilities (attach schedule)				
22	Capital stock				60,00
23	Paid-in or capital surplus				
24	Retained earnings				1,076,03
25	Less cost of treasury stock				(
26	Total liabilities and shareholders' equity				1,209,07

SEE ACCOUNTANT'S REPORT

SEE FEDERAL SCHEDULE L [illegible] HED

[illegible] STATEMENT OF FINANCIAL COND[illegible]

BALANCE SHEET

THE FOLLOWING BALANCE SHEET MUST BE COMPLETED. IF NO BUSINESS WAS CONDUCTED THIS FISCAL YEAR, THEN SO INDICATE. (PROFIT CORPORATIONS may substitute a copy of the Schedule L, Form 1120, filed with the Internal Revenue Service.)

NONPROFIT CORPORATIONS may substitute a copy of Page 2 of Form 99 filed with the Arizona Department of Revenue. NOTE: FEDERAL AND STATE TAX EXEMPTION DOES NOT EXEMPT NONPROFIT CORPORATIONS FROM FILING THIS STATEMENT OF FINANCIAL CONDITION WITH THE COMMISSION. (A.R.S. 10-1061.A.6).

ASSETS	AMOUNT	TOTAL
Cash		$
Trade notes and accounts receivable	$	
(a) Less allowance for bad debts		
Inventories		
Gov't obligations: (a) U.S. and instrumentalities		
(b) State, subdivisions thereof, etc.		
Other current assets		
Loans to shareholders		
Mortgage and Real Estate loans		
Other investments		
Buildings and other fixed depreciable assets		
(a) Less accumulated depreciation		
Depletable assets		
(a) Less accumulated depletion		
Land (net of any amortization)		
Intangible assets (amortizable only)		
(a) Less accumulated amortization		
Other assets		
Total assets		$

LIABILITIES AND CAPITAL

Accounts payable		
Mtges., notes, bonds payable in less than 1 yr.		
Other current liabilities		
Loans from shareholders		
Mtges., notes, bonds payable in 1 yr. or more		
Other liabilities		
Total Liabilities		
Capital stock (a) Preferred stock		
(b) Common stock		
Paid-in or capital surplus		
Retained earnings - Appropriated		
Retained earnings - Unappropriated		
Less cost of treasury stock		
Total Capital		
Total Liabilities and Capital		$

See accountants' compilation report.

MARONE LEANERS & LAUNDRY, INC.
CORPORATE NAME

I. CERTIFICATE OF DISCLOSURE

A.R.S. Sections 10-121, 10-1064

A. Has any person, serving either by election or appointment as officers, directors, trustees, incorporators and persons controlling or holding more than 10% of the issued and outstanding common shares or 10% of any other proprietary, beneficial or membership interest in the corporation:

1. Been convicted of a felony involving a transaction in securities, consumer fraud or antitrust in a any state or federal jurisdiction within the seven year period immediately preceeding the execution of this certificate.
2. Been convicted of a felony, the essential elements of which consisted of fraud, misrepresentation, theft by false pretenses or restraining of trade or monopoly in any state or federal jurisdiction within the seven year period immediately preceding the execution of this certificate.
3. Been or are subject to an injunction, judgement, decree or permanent order of any state or federal court entered within the seven year period immediately preceding the execution of this certificate where such injunction, judgement, decree or permanent order:

   (a) involved the violation of fraud or registration provisions of the securities laws of that jurisdiction, or
   (b) involved the violation of the consumer fraud laws of that jurisdiction, or
   (c) involved the violation of the antitrust or restraint laws of trade laws of that jurisdiction.

☐ YES ☐ NO

B. If "YES", the following information must be submitted as an attachment to this report for each person subject to one or more of the actions stated in items A.1. through A.3.

1. Full name and prior names used
2. Full birth name
3. Present home address
4. Prior addresses (for immediate preceding 7 year period)
5. Date and location of birth
6. Social Security Number
7. The nature and description of each conviction or judicial action; the date and location; the court and public agency involved, and the file or cause number of the case.

J. ALL CORPORATE TAX RETURNS REQUIRED BY TITLE 43 HAVE BEEN FILED WITH THE ARIZONA DEPARTMENT OF REVENUE.

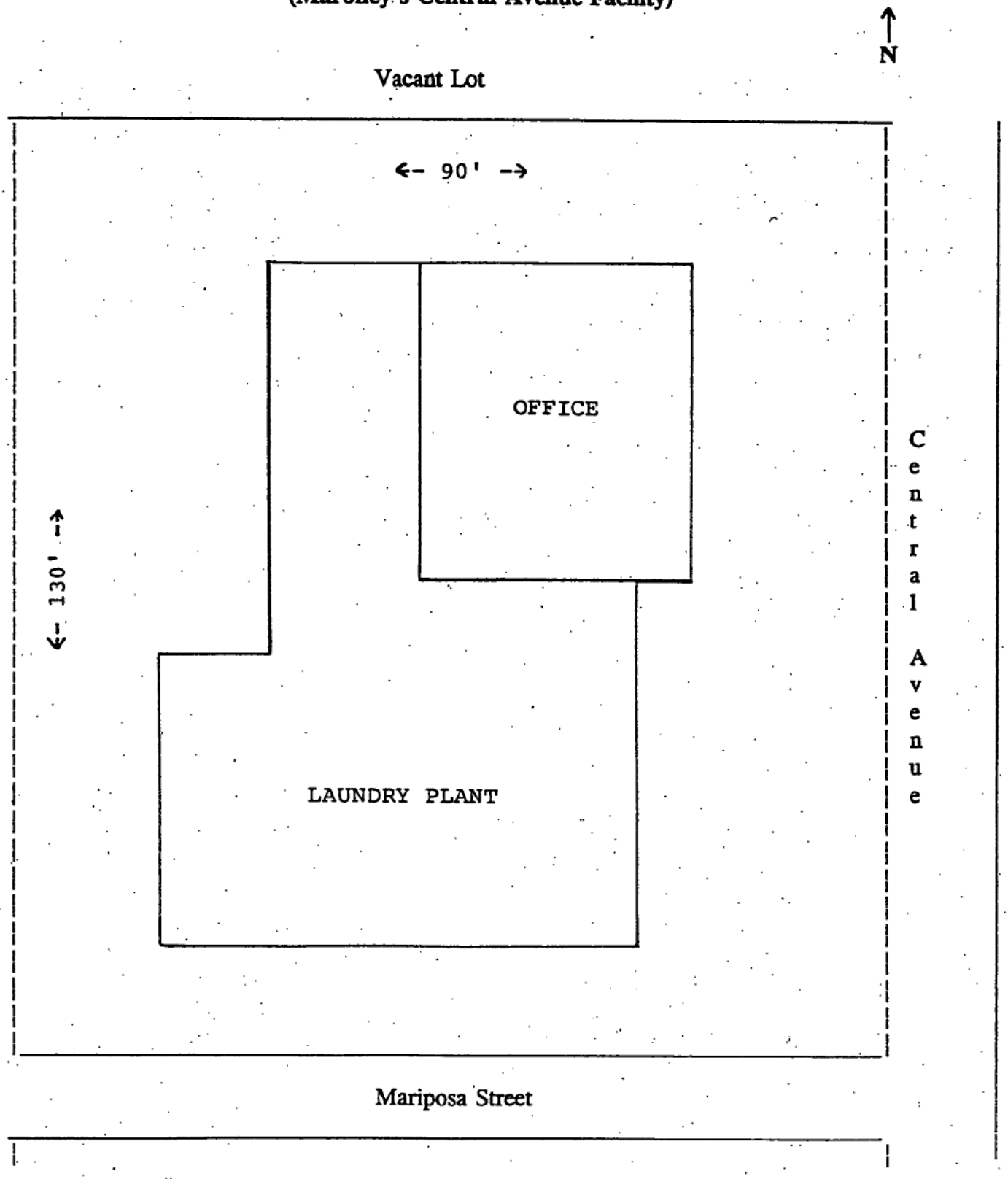
Under penalties of law, I declare that I have examined this report and the certificate, including any attachments, and to the best of my knowledge and belief it is true, correct and complete. (MUST BE SIGNED BY OFFICER INCLUDED IN SECTION F.)

BY _____ DATE _____ BY _____ DATE _____

TITLE PRESIDENT TITLE _____

REMINDER: FORM MUST BE SIGNED, ALL FEES INCLUDED AND THE FINANCIAL STATEMENT COMPLETED.

DIAGRAM OF 4902 N. CENTRAL AVENUE
(Maroney's Central Avenue Facility)



RCVD. 5/19/94

4931

INVESTMENT ADVISORY SERVICES, I.
Licensed Real Estate Brokers

May 18, 1994

Please reply to Ext. 212

MAY 24 RECEIVED SITE DISCOVERY

Ms. Laylali Azar-Schuster
Preremedial Unit, Division of Waste Programs
Arizona Department of Environmental Quality
3033 North Central Avenue
Phoenix, Arizona 85012

Re: PRU 94, 117, One Camelback Office Building
One East Camelback Road, Phoenix, Arizona 85012

Dear Ms. Azar-Schuster:

Enclosed is One Camelback Inc.'s response to the Arizona Department of Environmental Quality's (ADEQ's) letter and questionnaire dated April 4, 1994. We are pleased to cooperate with ADEQ in this matter.

As you may be aware, One Camelback Inc. is concerned about the migration onto its property of contaminated groundwater from an offsite source. We understand that ADEQ is gathering this information in an effort to identify the source of this offsite contamination.

We trust that the enclosed information will assist the ADEQ in their investigation to promptly identify the offsite source of contamination that is affecting the groundwater quality infiltrating onto our property. One Camelback Inc. is very interested in seeing this problem investigated and remediated. We would also be interested in any financial aid that the state may make available to address this problem.

We are pleased to cooperate with ADEQ in its investigation to locate the source and causation of the contaminated groundwater intruding into our property. Should we obtain any information relating to who the culprit is, we will advise the ADEQ.

Please call should you wish to meet with us to discuss the information we have submitted.

Very Truly Yours,

ONE CAMELBACK INC.

Michael Y. Cannon
President

cc: David Yoblick, Vice-President and Nat. Dir. of Property Management
Paul Berkowitz, Esq.
Rolf Von Oppenfeld, Esq.

Enclosure
[L:\WP\OEC\OECWATER]

9400 S. Dadeland Boulevard, Penthouse One
Miami, Florida 33156-2817
Telephone (305) 670-0001 / Fax (305) 670-2180
S. Florida Watts 1(800) 273-6373

PRELIMINARY ASSESSMENT QUESTIONNAIRE
COMPANY NAME: One East Camelback
APRIL 4, 1994

* *If the spaces provided for answering the questions is not adequate, you may attach additional sheets as needed. If a question does not pertain to your facility, please indicate this with "N/A".*

1. Company Name One Camelback Inc. c/o AREEA Investment Advisory Services, Inc.
   Company Representative/contact Michael Y. Cannon
   Street Address 9400 S. Dadeland Blvd., Penthouse One
   City, Zip code Miami, Florida 33156-2817
   Phone Number (305)670-0001
   Property Parcel Number 155-27-001; 155-27-002; 155-27-003
   Facility Size (in acres) approximately 1.25 acres
   Standard Industrial Code _____ No. of Employees 6

2. *Business* Ownership History:

   a) Give name of current owner and date acquired.
   One Camelback Inc., 1986

   b) Give names of previous owners and dates of acquisition.
   Not Applicable
   Corporate formed May 10, 1985

   c) Provide a copy of your annual report/corporation commission report. copy attached

3. *Property* Ownership History:

   a) Give name of current owner, owner's address and phone number, and date of acquisition.
   One Camelback Inc. c/o AREEA Investment Advisory Services, Inc.
   9400 S. Dadeland Blvd., Miami, Florida 33156-2817 - (305) 670-0001
   property acquired in 1986

   b) Give names of previous owners and dates of acquisition.
   Purchased from Park West Associates, LTD. - Central & Camelback Lmtd Partnership
   Prior owners are unknown

4. How long have you been in operation at your current location?
   8 years

5. Has your company been located at any other addresses within Arizona? If yes, please list.

No

6. Describe the nature and purpose of your business.

Owner; lease office space

7. Describe processes using chemicals at your facility, including amounts used and resulting waste products.

a) Manufacturing process(es):

Not Applicable

b) Cleaning process(es):

Cleaning is restricted to normal janitorial services, which are contracted through an off-site service.

c) Maintenance or repair process(es):

Normal office building maintenance and repair

8. If you have used different chemicals in the past, other than those described in Question #7, list the chemical name, quantity, and the time period in which they were used.

It is possible that the janitorial service has changed its cleaning agents over time.

9. Describe how chemicals are/were stored on-site. (Type of containers, locations, containment features, inside or outside, on soil or pavement etc.)

In general, no chemicals are stored on-site. Janitorial services are contracted to an outside service which brings in its own cleaning agents and does not store them on-site

10. Provide an itemized list of the names and quantities of chemicals stored at your facility and indicate whether you have a Material Safety Data Sheet (MSDS) available. *(please use attached sheet)*

Not Applicable

11. a) What methods are currently being used to dispose of wastes? Include name of waste, amount, and method.

Solid Waste, Including refuse, paper products and similar office products, is collected and placed in outdoor disposal bins, which are then collected by a private garbage hauler, The City of Phoenix provides sewer service.

b) If waste production and disposal has changed, list all previous wastes, amounts and methods of disposal.

No significant changes.

12. Has your business ever: generated [ ], transported [ ], stored [ ], or disposed [ ] of hazardous materials, mixtures containing hazardous materials, or hazardous wastes? (Please check all that apply. None

13. Has your facility arranged to have hazardous materials transported off site for disposal, recycling, or sale? Yes [ ] No [X], If yes, what year did you start _____
Transporter _____ Destination _____

14. Has the company ever had a chemical, solvent and/or hazardous substance spill, leak or release at this location?
Yes [ ] No [X], If yes, please provide the following:

a) Chemical name of substance spilled _____
b) Quantity spilled _____
c) Date of spill _____
d) Type of cleanup, if applicable _____
e) Regulatory agency involved _____

15. Please indicate if your business has any of the following.
[X] Industrial Wastewater Discharge Permit # 9402-5276 Class "B"
[ ] Underground Storage Tank Notification to ADEQ
[ ] U.S. Environmental Protection Agency
Generator Identification # _____
[ ] Air Pollution Control Permit # _____
[ ] Groundwater Quality Protection Permit # _____

16. Do you now or have you ever used any of the following? If you answer yes to using any of the following chemicals, list which years they were used.

No a) Trichloroethylene (TCE)
No b) Tetrachloroethylene (PCE)
No c) 1,1-dichloroethene (1,1-DCE)
No d) 1,1,1-trichloroethane (1,1,1-TCA)
No e) 1,1-dichloroethane (1,1-DCA)
No f) _____

17. Has your facility been on the sewer system (including domestic waste) since the beginning of occupancy?
Yes [X] No [ ] If no, when was your facility connected to the sewer system, and how was wastewater and waste disposed of prior to connection?

18. If your facility is currently on the sewer system, are there any pretreatment requirements? Yes [X] No [ ]. If yes, please specify.

Groundwater discharged to sewer pursuant to permit #9402-5276 must meet certain levels for BTEX due to presence in influent.

19. If you are currently regulated by any environmental agency, (city, county, state, federal) list the name of the agency(s).

City of Phoenix, Arizona Department of Water Resources

20. Which of the following are or were located within the boundaries of your property? (Please check all that apply.)

* Please estimate the amount and type of material disposed of to each of the checked structures; attach any design or construction data you have for the structures indicated. Also please attach copies of analyses of any solid or liquid samples from these structures on your property. In addition, any information you may have regarding structures such as these that may be located on property adjacent to your property would be appreciated.

[X] Wells Test well, 07/19/92, #535960, monitor well 01/16/93 #537626
If yes, provide State Well ID or registration #
[ ] Drywells (Storm Drains) _____
[ ] Surface Impoundments (Evaporation Ponds) _____
[ ] Pits _____
[ ] Septic tanks _____
[ ] Leach fields _____
[X] Sumps below garage level B-5 for water from floor drains and surface fount
[X] Underground Storage Tanks (UST's) building fire storage tank registered
[ ] Above ground storage tanks (including drums) _____
[ ] Drainage ditches running off the property _____
[ ] Landfills _____

21. Have you ever had an environmental assessment, environmental audit, or a due diligence search performed on this property?

a) If yes, list who performed the audit and when, and attach copies.

No formal environmental assessment, environmental audit or due diligence search has been performed on this property by One Camelback Inc. Some limited environmental investigations have been conducted in response to infiltrating water in garage.

b) To your knowledge, was there any physical testing performed on the property (i.e. soil gas sampling, soil sampling, groundwater sampling)?

Yes. Groundwater has been sampled. Soil from the drilling of the test and monitor wells was tested. Some limited air testing.

22. Do you have any knowledge of any environmental audit or due diligence search that was performed on the property prior to your occupancy?

No knowledge of any such audit or due diligence search.

a) If yes, who performed the audit, and when?

b) To your knowledge, was there any physical testing performed on the property?

23. To your knowledge, does data exist from physical testing performed at this location? Please include sample reports/results.

Attached is a copy of the most recent report

24. Attach a diagram of your property. Include property boundaries and size, the location of building structures, and any facilities discussed in Question # 20. Also include the location of chemical storage areas.

Copy attached

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

One Camelback Inc.

Signature _____

Michael Y. Cannon, President

Date 5-18-94

CHEMICAL NAME	AMT. STORED	AMT USED/YR	LOCATION	MSDS?	YRS
None					

P.O. BOX 6019
PHOENIX, AZ 85005

MAIL OR DELIVER TO:

ARIZONA CORPORATION COMMISSION

1300 W. WASHINGTON
PHOENIX, AZ 85007

400 W. CONGRESS
TUCSON, AZ 85701

ANNUAL REPORT & CERTIFICATE OF DISCLOSURE

(Pursuant to ARS 10-125, 10-1081, 10-128 and 10-1084)

DIRECTIONS: ANSWER ALL QUESTIONS IN EACH SECTION OF THIS ANNUAL REPORT AND RETURN WITH YOUR FEE TO THE ARIZONA CORPORATION COMMISSION. PLEASE TYPE OR PRINT IN BLACK INK.

A. CORPORATION INFORMATION (PLEASE MAKE ANY CHANGES OR CORRECTIONS IN SECTION B.)

FILE NO. 175353-6

Corporation Name ONE CAMELBACK INC.
Street Address % AREEA INVESTMENT ADVISORY SE
9400 S DADELAND BLVD
P O Box (if any) PENTHOUSE ONE
City State. Zip Code MIAMI FL 33156

MAKE CHECK PAYABLE TO:
ARIZONA CORPORATION COMMISSION

TYPE OF CORPORATION PROFIT
FEE $ 45
PENALTY $ _____ (20% per month)
TOTAL DUE $ _____

AGENT ID # 0000004689

Name of Arizona Statutory Agent C T CORPORATION SYSTEM
Street Address (NOT P.O. BOX) 3225 N CENTRAL AVE
City, State, Zip Code PHOENIX AZ 85012

ANNUAL REPORT FOR YEAR ENDING
12 (MO) 31 (DAY) 93 (YR)

DUE ON OR BEFORE
04 (MO) 15 (DAY) 94 (YR)

***** ALLOW 8 WEEKS FOR PROCESSING *****

B. CHANGES OR CORRECTIONS:

C. BRIEF STATEMENT OF THE CHARACTER OF BUSINESS IN WHICH THE CORPORATION IS ACTUALLY ENGAGED IN ARIZONA.

The ownership of real property.

D. CAPITALIZATION: (AS STATED IN CURRENT ARTICLES OF INCORPORATION) (NOT REQUIRED FOR NONPROFIT CORPORATIONS)

NUMBER AUTHORIZED	CLASS	SERIES	PAR VALUE
1,000	Common		$1.00

NUMBER ISSUED	CLASS	SERIES	PAR VALUE
1,000	Common		$1.00

E. SHAREHOLDERS DIRECTIONS: Fill in names of shareholders of record holding more than 20% of any class of shares issued by the corporation, including persons beneficially holding such shares through nominees. If additional space is needed, attach a separate sheet (IF NONE, SO STATE.)

Shareholder Name Zell Holdings Inc.
Shareholder Name

Shareholder Name
Shareholder Name

COPY COPY

NOTE: If appointing new statutory agent, the new agent must consent to appointment, and PRESIDENT must sign this report (Page 4)

I, (individual) and/or We, (corporation), having been appointed to act as Statutory Agent, hereby consent to act in that capacity until removal or resignation is submitted in accordance with the Arizona Revised Statutes.

STATUTORY AGENT

FOREIGN CORPORATIONS: Please list address of the principal place of business in the domicile state (or jurisdiction).

NOTE: ALL CORPORATIONS MUST LIST THEIR OFFICERS AND DIRECTORS.
DATES TAKING OFFICE MUST BE INCLUDED.
ATTACH ADDITIONAL SHEETS IF NECESSARY.

F. OFFICERS
(President And Secretary Cannot Be Same Person.)

President
Name Michael Y. Cannon
Street Address 9400 S. Dadeland Blvd., PH-1
P O Box
City, State, Zip Code Miami, FL 33156
Date of taking this office MO 06 DAY 30 YR 86

Vice-President
Name Paul Berkowitz
Street Address 1221 Brickell Avenue
P O Box
City, State, Zip Code Miami, FL 33131
Date of taking this office MO 12 DAY 12 YR 89

Secretary
Name Sergio R. Fernandez
Street Address 9400 S. Dadeland Blvd., PH-1
P O Box
City, State, Zip Code Miami, FL 33156
Date of taking this office MO 12 DAY 12 YR 89

Treasurer, Vice Pres., Asst. Secretary
Name William Wiener
Street Address 9400 S. Dadeland Blvd., PH-1
P O Box
City, State, Zip Code Miami, FL 33156
Date of taking this office MO 06 DAY 12 YR 90

Other Executive Officer (title)
Name
Street Address
P O Box
City, State, Zip Code
Date of taking this office MO ____ DAY ____ YR ____

G. DIRECTORS
(Profit Require At Least One (1) Director. Nonprofit Require At Least Three (3) Directors.)

Director
Name Michael Y. Cannon
Street Address 9400 S. Dadeland Blvd., PH-1
P O Box
City, State, Zip Code Miami, FL 33156
Date of taking this office MO 06 DAY 30 YR 86

Director
Name Paul Berkowitz
Street Address 1221 Brickell Avenue
P O Box
City, State, Zip Code Miami, FL 33131
Date of taking this office MO 12 DAY 12 YR 89

Director
Name Sergio R. Fernandez
Street Address 9400 S. Dadeland Blvd., PH-1
P O Box
City, State, Zip Code Miami, FL 33156
Date of taking this office MO 12 DAY 12 YR 89

Director
Name John Boyne
Street Address c/o Paul Berkowitz
P O Box 1221 Brickell Avenue
City, State, Zip Code Miami, FL 33131
Date of taking this office MO 04 DAY 09 YR 92

Director
Name
Street Address
P O Box
City, State, Zip Code
Date of taking this office MO ____ DAY ____ YR ____

STATEMENT OF FINANCIAL CO[illegible]IC[illegible]

BALANCE SHEET

THE FOLLOWING BALANCE SHEET MUST BE COMPLETED. IF NO BUSINESS WAS CONDUCTED THIS FISCAL YEAR, THEN SO INDICATE. (PROFIT CORPORATIONS may substitute a copy of the Schedule L, Form 1120, filed with the Internal Revenue Service.

NONPROFIT CORPORATIONS may substitute a copy of Page 2 of Form 99 filed with the Arizona Department of Revenue. NOTE: FEDERAL AND STATE TAX EXEMPTION DOES NOT EXEMPT NONPROFIT CORPORATIONS FROM FILING THIS STATEMENT OF FINANCIAL CONDITION WITH THE COMMISSION. (A.R.S. 10-1081.A.6).

ASSETS	AMOUNT	TOTAL
Cash See Attached Schedule L, Form 1120		
Trade notes and accounts receivable		
(a) Less allowance for bad debts		
Inventories		
Gov't obligations (a) U.S. and instrumentalities		
(b) State, subdivisions thereof, etc.		
Other current assets		
Loans to shareholders		
Mortgage and Real Estate loans		
Other investments		
Buildings and other fixed depreciable assets		
(a) Less accumulated depreciation		
Depletable assets		
(a) Less accumulated depletion		
Land (net of any amortization)		
Intangible assets (amortizable only)		
(a) Less accumulated amortization		
Other assets		
Total assets		

LIABILITIES AND CAPITAL		
Accounts payable		
Mtges., notes, bonds payable in less than 1 yr		
Other current liabilities		
Loans from shareholders		
Mtges., notes, bonds payable in 1 yr or more		
Other liabilities		
Total Liabilities		
Capital stock (a) Preferred stock		
(b) Common stock		
Paid-in-or capital surplus		
Retained earnings - Appropriated		
Retained earnings - Unappropriated		
Less cost of treasury stock		
Total Capital		
Total Liabilities and Capital		

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Camelback Inc.
EXACT CORPORATE NAME

I. CERTIFICATE OF DISCLOSURE
A.R.S. Sections 10-128, 10-1084

A. Has any person, serving either by election or appointment as officers, directors, trustees, incorporators and persons controlling or holding more than 10% of the issued and outstanding common shares or 10% of any other proprietary, beneficial or membership interest in the corporation:

1. Been convicted of a felony involving a transaction in securities, consumer fraud or antitrust in any state or federal jurisdiction within the seven year period immediately preceding the execution of this certificate.
2. Been convicted of a felony, the essential elements of which consisted of fraud, misrepresentation, theft by false pretenses or restraining of trade or monopoly in any state or federal jurisdiction within the seven year period immediately preceding the execution of this certificate.
3. Been or are subject to an injunction, judgment, decree or permanent order of any state or federal court entered within the seven year period immediately preceding the execution of this certificate where such injunction, judgment, decree or permanent order:

   (a) Involved the violation of fraud or registration provisions of the securities laws of that jurisdiction, or
   (b) Involved the violation of the consumer fraud laws of that jurisdiction, or
   (c) Involved the violation of the antitrust or restraint laws of trade laws of that jurisdiction.

[ ] YES [X] NO

B. If "YES", the following information must be submitted as an attachment to this report for each person subject to one or more of the actions stated in Items A.1. through A.3

1. Full name and prior names used
2. Full birth name
3. Present home address
4. Prior addresses (for immediate preceding 7 year period)
5. Date and location of birth
6. Social Security Number
7. The nature and description of each conviction or judicial action; the date and location; the court and public agency involved, and the file or cause number of the case.

J. ALL CORPORATE TAX RETURNS REQUIRED BY TITLE 43 HAVE BEEN FILED WITH THE ARIZONA DEPARTMENT OF REVENUE.

Under penalties of law, I declare that I have examined this report and the certificate, including any attachments, and to the best of my knowledge and belief it is true, correct and complete. (MUST BE SIGNED BY OFFICER INCLUDED IN SECTION F.)

BY _____ DATE 4/9/94
TITLE Michael Y. Cannon, President

BY _____ DATE 4/9/94
TITLE William Wiener, Asst. Secretary

REMINDER: FORM MUST BE SIGNED, ALL FEES INCLUDED AND THE FINANCIAL STATEMENT COMPLETED.

COPY

ARIZONA CORPORATION COMMISSION
P.O. BOX 6019
PHOENIX, ARIZONA 85005

PRESORTED
FIRST CLASS MAIL
U.S POSTAGE PAID
PHOENIX AZ
Permit No 621

ONE CAMELBACK INC.

% AREEA INVESTMENT ADVISORY SE
9400 S DADELAND BLVD
PENTHOUSE ONE
MIAMI FL 33156

Form 1120 (1992)

Schedule L Balance Sheets

Assets	Beginning of tax year (a)	Beginning of tax year (b)	End of tax year (c)	End of tax year (d)
1 Cash		70,186.		324,580.
2a Trade notes and accounts receivable				
b Less allowance for bad debts	( )		( )	
3 Inventories				
4 U.S. government obligations				
5 Tax-exempt securities (see instructions)				
6 Other current assets (attach schedule)	STMT 7	8,014.		2,807.
7 Loans to stockholders				
8 Mortgage and real estate loans				
9 Other investments (attach schedule)				
10a Buildings and other depreciable assets	32,988,573.		33,286,632.	
b Less accumulated depreciation	(4,387,245)	28,601,328.	(5,131,134)	28,155,498.
11a Depletable assets				
b Less accumulated depletion	( )		( )	
12 Land (net of any amortization)		4,530,000.		4,530,000.
13a Intangible assets (amortizable only)				
b Less accumulated amortization	( )		( )	
14 Other assets (attach schedule)	STMT 7	3,537,834.		3,697,502.
15 Total assets		36,747,362.		36,710,387.
Liabilities and Stockholders' Equity				
16 Accounts payable		44,137.		49,623.
17 Mtges, notes, bonds payable in less than 1 year				
18 Other current liabilities (attach schedule)	STMT 7	3,708,851.		5,931,717.
19 Loans from stockholders				
20 Mtges., notes, bonds payable in 1 year or more				
21 Other liabilities (attach schedule)	STMT 8	25,000,000.		25,000,000.
22 Capital stock: a Preferred stock			1,000.	
b Common stock	1,000.	1,000.		1,000.
23 Paid-in or capital surplus	STMT 8	16,081,000.		16,481,000.
24 Retained earnings-Appropriated (attach schedule)				
25 Retained earnings - Unappropriated		-8,087,626.		-10,752,953.
26 Less cost of treasury stock		( )		( )
27 Total liabilities and stockholders' equity		36,747,362.		36,710,387.

Note: You are not required to complete Schedules M-1 and M-2 below if the total assets on line 15, column (d) of Schedule L are less than $25,000.

Schedule M-1 Reconciliation of Income (Loss) per Books With Income per Return (See instructions.)

1 Net income (loss) per books	-2,665,327.	7 Income recorded on books this year not included on this return (itemize): a Tax-exempt interest $	
2 Federal income tax			
3 Excess of capital losses over capital gains			
4 Income subject to tax not recorded on books this year (itemize): SEE STATEMENT 9	79,702.	8 Deductions on this return not charged against book income this year (itemize): a Depreciation $ b Contributions carryover $	1,019,416.
5 Expenses recorded on books this year not deducted on this return (itemize): a Depreciation $ b Contributions carryover $ c Travel and entertainment $	NONE		
6 Add lines 1 through 5	-2,585,625.	9 Add lines 7 and 8	1,019,416.
		10 Income (line 28, page 1)-line 6 less line 9	-3,605,041.

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Schedule M-2 Analysis of Unappropriated Retained Earnings per Books (Line 25, Schedule L)

1 Balance at beginning of year	-8,087,626.	5 Distributions: a Cash	
2 Net income (loss) per books	-2,665,327.	b Stock	
3 Other increases (itemize):		c Property	
		6 Other decreases (itemize):	
		7 Add lines 5 and 6	
4 Add lines 1, 2, and 3	-10,752,953.	8 Balance at end of year (line 4 less line 7)	-10,752,953.

Southwest Ground-water Consultants, Inc.

May 16, 1994

Mr. John Trujillo
Senior Water Quality Inspector
City of Phoenix Water Services Department
Water Quality Division, Enforcement and Monitoring Section
2303 W. Durango
Phoenix, AZ 85009

SUBJECT: APRIL 1994 DISCHARGE SAMPLING RESULTS - ONE CAMELBACK INC., PERMIT NO. 9402-5296

Dear Mr. Trujillo:

The following discharge sampling report has been prepared in accordance with requirements of the Class "B" Groundwater Discharge Permit No. 9402-5296 issued to One Camelback Inc. on February 10, 1994. The report summarizes the results obtained during four sampling events performed on April 4, 11, 18, and 25, 1994. The completed Monitoring Report form is included in Attachment I. Discharge meter readings are included as Attachment II, and copies of the laboratory reports and chain-of-custody documentation are included as Attachment III.

Review of the April 1994 sampling event results indicate that concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) and total metals (arsenic, boron, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc) were all within instantaneous effluent limitations specified in the permit.

If you have any questions regarding this report, please call.

Sincerely,

Southwest Ground-water Consultants, Inc.

Stephen D. Noel

Stephen D. Noel, P.G.
President

Attachments: I - III

cc: Allene M. Pierce-Avey, Property Manager, One Camelback Inc.
Michael Y. Cannon, President, One Camelback Inc.
Georgia L. Waters, P.G., Southwest Ground-water Consultants, Inc.
SGC File No. B.061

SMPLRPT.L-3

3030 North 3rd Street, Suite 1100
Phoenix, Arizona 85012-3039
(602) 241-8520 Fax (602) 241-8595

Phoenix, Arizona
Prescott, Arizona

ATTACHMENT I

Monitoring Report

Company Name: One Camelback Inc.

Address: One East Camelback Road, Suite 660
Phoenix, AZ, 85012

Compliance Sampling Point*: Sample tap in risers from the sump Permit# 9402-5296

Report Period: From 04-01-94 Through 04-30-94

Average Daily Flow through Compliance Sampling Point: 29.87 gallons per minute (gpm)	GPD Measured 43,013	X	Estimated	
Minimum Daily Flow through Compliance Sampling Point: 26.11 gpm on 04/06/94	GPD Measured 37,598	X	Estimated	
Maximum Daily Flow through Compliance Sampling Point: 35.56 gpm on 04/27/94	GPD Measured 51,206	X	Estimated	

Date Last Compliance Sampling Point Maintenance Was Performed: 04-25-94

Monitoring Results Attached: Yes: X No: _____

Other Attachments (List): April 1994 discharge meter readings

I certify under penalty of law that the analysis for any parameters included with this report was performed by a laboratory licensed by the State of Arizona to perform such analysis, and that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____
SIGNATURE OF RESPONSIBLE COMPANY OFFICIAL DATE

Printed Name: Michael Y. Cannon

Title: President, One Camelback Inc.

* This form is to be submitted for each Compliance Sample Point.

wp\PP\rr\11303wwdispig

CITY OF PHOENIX
CLASS "B" GROUNDWATER DISCHARGE
MONITORING REPORT FORM

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

Date/Time Samples Collected: 04-04-94, 1655 hrs

Describe Place Where Samples Were Taken Sample tap in riser from sump in Room 12 (B-5 parking level)

Sampling Methodology (indicate type of sample used for all pollutants sampled and preservation methods):

Metals Analysis - Four grab samples were collected from the sample tap (compliance point) in the riser pipe from the sump in Room 12 of the B-5 parking level for analysis of metals content. The grab samples were collected at equal time intervals over an eight-hour period (1055 hrs, 1255hrs, 1455 hrs, and 1655 hrs). A clean 250 milliliter (ml) plastic sample container (unpreserved) was rinsed by filling the bottle approximately half-way with sample water from the tap, and then pouring the rinse water back into the sump. The 250 ml bottle was then immediately filled with more water from the sample tap, sealed with a water-tight lid and security tape, labeled, and placed in a cooler containing blue ice. This process was repeated three more times at 2-hour intervals to obtain a total of 4 grab samples over an 8-hour period. The four grab samples were then composited into a 1,000 ml plastic sample bottle preserved by the laboratory with nitric acid. The composite sample was labeled, sealed with a water-tight lid and security tape, and placed in a cooler containing blue ice. Chain-of-custody documentation was completed and kept with the samples at all times.

BTEX Analysis - A grab sample was collected from the sample tap (compliance point) in the riser pipe from the sump in Room 12 of the B-5 parking level for analysis of BTEX content. Three, 40 ml glass VOA vials, preserved by the laboratory with hydrochloric acid, were filled completely until a meniscus formed at the top of each vial. A teflon-lined lid was then placed on the vial in such a manner as to prevent entrapment of any air bubbles. The vials were immediately labeled and placed in a cooler containing blue ice. Chain-of-custody documentation was completed and kept with the samples at all times.

The samples on ice were promptly submitted to Analytical Technologies, Inc., 9830 S. 51st Street, Suite B-113, Phoenix, AZ 85044 for analysis of the requested parameters within applicable holding times.

Names(s) of Person(s) Sampling: Georgia L. Waters, P.G., Southwest Ground-water Consultants, Inc.

wp\PP\rr\11303wwdisplg

CITY OF PHOENIX
CLASS "B" GROUNDWATER DISCHARGE
MONITORING REPORT FORM

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

Date/Time Samples Collected: 04-11-94, 1005 hrs

Describe Place Where Samples Were Taken Sample tap in riser from sump in Room 12 (B-5 parking level)

Sampling Methodology (indicate type of sample used for all pollutants sampled and preservation methods):

BTEX Analysis - A grab sample was collected from the sample tap (compliance point) in the riser pipe from the sump in Room 12 of the B-5 parking level for analysis of BTEX content. Three, 40 ml glass VOA vials, preserved by the laboratory with hydrochloric acid, were filled completely until a meniscus formed at the top of each vial. A teflon-lined lid was then placed on the vial in such a manner as to prevent entrapment of any air bubbles. The vials were immediately labeled and placed in a cooler containing blue ice. Chain-of-custody documentation was completed and kept with the samples at all times.

The samples on ice were promptly submitted to Analytical Technologies, Inc., 9830 S. 51st Street, Suite B-113, Phoenix, AZ 85044 for analysis of the requested parameters within applicable holding times.

Names(s) of Person(s) Sampling: Georgia L. Waters, P.G., Southwest Ground-water Consultants, Inc.

CITY OF PHOENIX
CLASS "B" GROUNDWATER DISCHARGE
MONITORING REPORT FORM

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

Date/Time Samples Collected: 04-18-94, 0920 hrs

Describe Place Where Samples Were Taken Sample tap in riser from sump in Room 12 (B-5 parking level)

Sampling Methodology (indicate type of sample used for all pollutants sampled and preservation methods):

BTEX Analysis - A grab sample was collected from the sample tap (compliance point) in the riser pipe from the sump in Room 12 of the B-5 parking level for analysis of BTEX content. Three, 40 ml glass VOA vials, preserved by the laboratory with hydrochloric acid, were filled completely until a meniscus formed at the top of each vial. A teflon-lined lid was then placed on the vial in such a manner as to prevent entrapment of any air bubbles. The vials were immediately labeled and placed in a cooler containing blue ice. Chain-of-custody documentation was completed and kept with the samples at all times.

The samples on ice were promptly submitted to Analytical Technologies, Inc., 9830 S. 51st Street, Suite B-113, Phoenix, AZ 85044 for analysis of the requested parameters within applicable holding times.

Names(s) of Person(s) Sampling: Georgia L. Waters, P.G., Southwest Ground-water Consultants, Inc.

wp\PP\rr\11303wwdisplg

CITY OF PHOENIX
CLASS "B" GROUNDWATER DISCHARGE
MONITORING REPORT FORM

COMPLETE FOR EACH SAMPLING EVENT DURING THE REPORTING PERIOD

Date/Time Samples Collected: 04-25-94, 1700 hrs

Describe Place Where Samples Were Taken Sample tap in riser from sump in Room 12 (B-5 parking level)

Sampling Methodology (indicate type of sample used for all pollutants sampled and preservation methods):

BTEX Analysis - A grab sample was collected from the sample tap (compliance point) in the riser pipe from the sump in Room 12 of the B-5 parking level for analysis of BTEX content. Three, 40 ml glass VOA vials, preserved by the laboratory with hydrochloric acid, were filled completely until a meniscus formed at the top of each vial. A teflon-lined lid was then placed on the vial in such a manner as to prevent entrapment of any air bubbles. The vials were immediately labeled and placed in a cooler containing blue ice. Chain-of-custody documentation was completed and kept with the samples at all times.

The samples on ice were promptly submitted to Analytical Technologies, Inc., 9830 S. 51st Street, Suite B-113, Phoenix, AZ 85044 for analysis of the requested parameters within applicable holding times.

Names(s) of Person(s) Sampling: Georgia L. Waters, P.G., Southwest Ground-water Consultants, Inc.

CLASS "B" GROUNDWATER DISCHARGE MONITORING REPORT FORM

User Name: One Camelback

User #: 9402-5296

Period of Report: April 1994

Compliance Sampling Point (1): Sampling port above risers

Parameter	Unit	Daily Limit	Sampling Frequency	Sample Type (2)	Date(3) 04/04/94	Date(4) 04/11/94	Date 04/18/94	Date 04/25/94	Date / /	Date / /
Benzene	ug/l	130.0	1/ Weekly	Grab	4.1	5.6	5.8	6.2		
Ethylbenzene	ug/l	1000.0	1/ Weekly	Grab	2.3	2.8	2.4	2.4		
Toluene	ug/l	1000.0	1/ Weekly	Grab	6.6	8.1	7.4	7.5		
Xylene	ug/l	1000.0	1/ Weekly	Grab	8.4	9.8	8.8	7.9		
Arsenic	mg/l	0.100	1/ Monthly	Composite	< 0.005	NS*	NS	NS		
Boron	mg/l	5.600	1/ Monthly	Composite	0.98	NS	NS	NS		
Cadmium	mg/l	0.047	1/ Monthly	Composite	< 0.0005	NS	NS	NS		
Chromium	mg/l	1.400	1/ Monthly	Composite	< 0.010	NS	NS	NS		
Copper	mg/l	1.700	1/ Monthly	Composite	0.026	NS	NS	NS		
Lead	mg/l	0.500	1/ Monthly	Composite	0.011	NS	NS	NS		
Mercury	mg/l	0.050	1/ Monthly	Composite	< 0.0002	NS	NS	NS		
Nickel	mg/l	5.000	1/ Monthly	Composite	< 0.020	NS	NS	NS		
Selenium	mg/l	0.100	1/ Monthly	Composite	< 0.005	NS	NS	NS		
Silver	mg/l	0.500	1/ Monthly	Composite	< 0.010	NS	NS	NS		
Zinc	mg/l	5.400	1/ Monthly	Composite	0.118	NS	NS	NS		

* Not Sampled. See sampling frequency.

Notes:
(1) This form is to be submitted for each sampling point.
(2) Sampling type: "C" is a composite sample; "G" is a grab sample; C/G is a composite and/or grab sample (Some Toxic Organic Compounds may not be sampled with automatic sampling equipment (cf. 40 CFR 136)).
(3) Indicate "NS" if no sample was taken for that parameter on the sampling date. Attach an explanation for not sampling for these parameters.
(4) Do not use "ND" for sampling results. Use less than (<) the detection limit for these parameters.

ATTACHMENT III

Laboratory Reports and Chain-of-Custody Documentation

Analytical Technologies, Inc. 9830 S. 51st Street Suite B-113 Phoenix, AZ 85044 (602) 496-4400

ATI I.D. 404544

April 19, 1994

Southwest Groundwater Consultants
3030 N. 3rd Street
Suite 1100
Phoenix, AZ 85012-3039

Project Name/Number: One Camelback/B.061

Attention: Stephen Noel

On 04/04/94, Analytical Technologies, Inc., received a request to analyze aqueous sample(s). The sample(s) were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

Iron and manganese analyses were added on 04/11/94 for sample S-1.

If you have any questions or comments, please do not hesitate to contact us at (602) 496-4400.

Mary H. Tyer
Mary Tyer
Project Manager

Enclosure

ADHS License No. AZ0061
Robert V. Woods, Laboratory Manager

Analytical Technologies, Inc.

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS DATE RECEIVED : 04/04/94
PROJECT # : B.061
PROJECT NAME : 1 CAMELBACK REPORT DATE : 04/20/94
ATI I.D. : 404544

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	S-1	AQUEOUS	04/04/94
02	S-2 (TRIP BLANK)	AQUEOUS	03/28/94

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 404544

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS
PROJECT # : B.061
PROJECT NAME : 1 CAMELBACK

DATE RECEIVED : 04/04/94
REPORT DATE : 04/20/94

PARAMETER	UNITS	01
SILVER (EPA 200.7/6010)	MG/L	<0.010
ARSENIC (EPA 206.2/7060)	MG/L	<0.005
BORON (EPA 200.7/6010)	MG/L	0.98
CADMIUM (EPA 213.2/7131)	MG/L	<0.0005
CHROMIUM (EPA 200.7/6010)	MG/L	<0.010
COPPER (EPA 200.7/6010)	MG/L	0.026
IRON (EPA 200.7/6010)	MG/L	0.180
MERCURY (EPA 245.1/7470)	MG/L	<0.0002
MANGANESE (EPA 200.7/6010)	MG/L	0.610
NICKEL (EPA 200.7/6010)	MG/L	<0.020
LEAD (EPA 239.2/7421)	MG/L	0.011
SELENIUM (EPA 270.2/7740)	MG/L	<0.005
ZINC (EPA 200.7/6010)	MG/L	0.118

Analytical Technologies, Inc.

METALS - QUALITY CONTROL

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS
PROJECT # : B.061
PROJECT NAME : 1 CAMELBACK ATI I.D. : 404544

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
SILVER	MG/L	40454401	<0.010	<0.010	NA	0.873	1.00	87
ARSENIC	MG/L	40454901	0.009	0.008	12	0.052	0.050	86
BORON	MG/L	40454401	0.98	0.97	1	2.02	1.00	104
CADMIUM	MG/L	40461107	<0.0005	<0.0005	NA	0.0099	0.0100	99
CHROMIUM	MG/L	40454401	<0.010	<0.010	NA	1.89	2.00	94
COPPER	MG/L	40454401	0.026	0.026	0	0.910	1.00	88
IRON	MG/L	40454401	0.180	0.168	7	2.05	2.00	94
MERCURY	MG/L	40457105	<0.0002	<0.0002	NA	0.0051	0.0050	102
MANGANESE	MG/L	40454401	0.610	0.622	2	2.47	2.00	93
NICKEL	MG/L	40454401	<0.020	<0.020	NA	1.86	2.00	93
LEAD	MG/L	40461107	<0.002	<0.002	NA	0.110	0.100	110
SELENIUM	MG/L	40453303	<0.005	<0.005	NA	0.046	0.050	92
ZINC	MG/L	40432701	0.038	0.037	3	1.02	1.00	98

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40454401

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/04/94
PROJECT #	: B.061	DATE RECEIVED	: 04/04/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-1	DATE ANALYZED	: 04/06/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	4.1
TOLUENE	6.6
ETHYLBENZENE	2.3
TOTAL XYLENES	8.4

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	112

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40454402

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 03/28/94
PROJECT #	: B.061	DATE RECEIVED	: 04/04/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-2 (TRIP BLANK)	DATE ANALYZED	: 04/06/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	101

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : BTEX (EPA METHOD 602)

		ATI I.D.	: 404544
CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE EXTRACTED	: 04/05/94
PROJECT #	: B.061	DATE ANALYZED	: 04/05/94
PROJECT NAME	: 1 CAMELBACK	UNITS	: UG/L
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	111

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 404544

TEST : BTEX (EPA METHOD 602)

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS
PROJECT # : B.061
PROJECT NAME : 1 CAMELBACK
REF I.D. : 40454401

DATE ANALYZED : 04/05/94
SAMPLE MATRIX : AQUEOUS
UNITS : UG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	4.1	10	14	99	14	99	0
TOLUENE	6.6	10	18	114	18	114	0
ETHYLBENZENE	2.3	10	14	117	14	117	0
TOTAL XYLENES	8.4	30	43	115	43	115	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

AnalyticalTechnologies, Inc., Phoenix, Arizona
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CHAIN OF CUSTODY

DATE: 4-4-94 PAGE 1 OF 1

ATI LAB I.D.: 40454

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: Stephen D. Noel

COMPANY: Southwest Ground-water Consult.
ADDRESS: 3030 N. 3rd Street, #1100
Phoenix, AZ 85012-3039
PHONE: 241-8520
FAX: 241-8595

BILL TO:
COMPANY:
ADDRESS: ABOVE

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)			Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020) BTEX	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.	As, B, Cd, Cr, Cu, Pb	Hg, Ni, Se, Ag, Zn	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)			SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal			The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)		NUMBER OF CONTAINERS
S-1	4/4/94	1655	H2O	1								✓		✓	✓																		4
S-2 (T. Blank)	3/28/94	11:46	H2O	2								✓																					1

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:	B.061	NO. CONTAINERS	5
PROJ. NAME:	Oil Camelback	CUSTODY SEALS	Y / N / NA
P.O. NO.:		RECEIVED INTACT	Y
SHIPPED VIA:		RECEIVED COLD	Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments: Total Metals as per letter to M. Tyler dated 2-11-94, except no Cr+6.

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Georgia Waters Time: 554pm	Signature: Time:	Signature: Time:
Printed Name: G. Waters Date: 4-4-94	Printed Name: Date:	Printed Name: Date:
Company: SGC Phone: 241-8520	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: Time:	Signature: Time:	Signature: Rosella Vidal Time: 554
Printed Name: Date:	Printed Name: Date:	Printed Name: Rosella Vidal Date: 4/4/94
Company:	Company:	Analytical Technologies, Inc.

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447

DISTRIBUTION: White, Canary - ANALYTICAL TECHNOLOGIES, INC. • Pink - ORIGINATOR

Analytical Technologies, Inc. 9830 S. 51st Street Suite B-113 Phoenix, AZ 85044 (602) 496-4400

ATI I.D. **404707**

April 20, 1994

Southwest Groundwater Consultants
3030 N. 3rd Street
Suite 1100
Phoenix, AZ 85012-3039

Project Name/Number: One Camelback/B.061

Attention: Stephen D. Noel

On **04/11/94**, Analytical Technologies, Inc., received a request to analyze **aqueous** sample(s). The sample(s) were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (602) 496-4400.

Mary Tyer
Project Manager

Enclosure

ADHS License No. AZ0061
Robert V. Woods, Laboratory Manager

Analytical Technologies, Inc.

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS DATE RECEIVED : 04/11/94
PROJECT # : B.061
PROJECT NAME : 1 CAMELBACK REPORT DATE : 04/19/94
ATI I.D. : 404707

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	S-1	AQUEOUS	04/11/94
02	S-2 (TRIP BLANK)	AQUEOUS	04/01/94

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40470701

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/11/94
PROJECT #	: B.061	DATE RECEIVED	: 04/11/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-1	DATE ANALYZED	: 04/12/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	5.6
TOLUENE	8.1
ETHYLBENZENE	2.8
TOTAL XYLENES	9.8

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	113

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40470702

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/01/94
PROJECT #	: B.061	DATE RECEIVED	: 04/11/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-2 (TRIP BLANK)	DATE ANALYZED	: 04/12/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	110

Analytical Technologies, Inc. GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : BTEX (EPA METHOD 602)

		ATI I.D.	: 404707
CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE EXTRACTED	: 04/12/94
PROJECT #	: B.061	DATE ANALYZED	: 04/12/94
PROJECT NAME	: 1 CAMELBACK	UNITS	: UG/L
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	109

AnalyticalTechnologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 404707

TEST : BTEX (EPA METHOD 602)

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS
PROJECT # : B.061
PROJECT NAME : 1 CAMELBACK
REF I.D. : 40470701

DATE ANALYZED : 04/12/94
SAMPLE MATRIX : AQUEOUS
UNITS : UG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	5.6	10	16	104	16	104	0
TOLUENE	8.1	10	19	109	19	109	0
ETHYLBENZENE	2.8	10	14	112	14	112	0
TOTAL XYLENES	9.8	30	43	111	43	111	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

AnalyticalTechnologies, Inc., Phoenix, Arizona
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CHAIN OF CUSTODY

DATE: 4-11-94 PAGE 1 OF 1

ATI LAB I.D. 404707

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: Stephen D. Neel

COMPANY: Southwest Ground-water Consultants
ADDRESS: 3030 N. 3rd Street, #1100
Phoenix, AZ 85012-3031
PHONE: (602) 241-8520
FAX: 241-8595

BILL TO: ABOVE
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)			Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020) BTEX	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.			Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)			SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal			The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)	NUMBER OF CONTAINERS
S-1	4-11-94	1005	H_2O	1								✓																				5
S-2 (T. Blank)	4-1-94	—	H_2O	2								✓																				1

PROJECT INFORMATION

PROJ. NO.: B.061
PROJ. NAME: One Camelback
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS: 4
CUSTODY SEALS: Y N NA
RECEIVED INTACT: Y
RECEIVED COLD: Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments:

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Georgia Waters Time: 1410	Signature: Time: 4:15	Signature: Time:
Printed Name: G. Waters Date: 4-11-94	Printed Name: Selbig Date: 4-11-94	Printed Name: Date:
Company: SGC Phone: 241-8520	Company: TS	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: Time: 1410	Signature: Time:	Signature: Time: 415
Printed Name: Selbig Date: 4/11/94	Printed Name: Date:	Printed Name: Date:
Company: TS	Company:	Analytical Technologies, Inc.

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447

DISTRIBUTION: White, Canary - ANALYTICAL TECHNOLOGIES, INC. • Pink - ORIGINATOR

Analytical Technologies, Inc. 9830 S. 51st Street Suite B-113 Phoenix, AZ 85044 (602) 496-4400

ATI I.D. **404854**

April 25, 1994

Southwest Groundwater Consultants
3030 N. 3rd Street
Suite 1100
Phoenix, AZ 85012-3039

Project Name/Number: One Camelback/B.061

Attention: Stephen D. Noel

On **04/18/94**, Analytical Technologies, Inc., received a request to analyze **aqueous** sample(s). The sample(s) were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (602) 496-4400.

Mary Tyer
Project Manager

Enclosure

ADHS License No. AZ0061
Robert V. Woods, Laboratory Manager

Analytical Technologies, Inc.

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS DATE RECEIVED : 04/18/94
PROJECT # : B.061
PROJECT NAME : 1 CAMELBACK REPORT DATE : 04/21/94
ATI I.D. : 404854

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	S-1	AQUEOUS	04/18/94
02	S-2 (T. BLANK)	AQUEOUS	04/15/94

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40485401

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/18/94
PROJECT #	: B.061	DATE RECEIVED	: 04/18/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-1	DATE ANALYZED	: 04/19/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	5.8
TOLUENE	7.4
ETHYLBENZENE	2.4
TOTAL XYLENES	8.8

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	110

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40485402

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/15/94
PROJECT #	: B.061	DATE RECEIVED	: 04/18/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-2 (T. BLANK)	DATE ANALYZED	: 04/19/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	116

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : BTEX (EPA METHOD 602)

		ATI I.D.	: 404854
CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE EXTRACTED	: 04/19/94
PROJECT #	: B.061	DATE ANALYZED	: 04/19/94
PROJECT NAME	: 1 CAMELBACK	UNITS	: UG/L
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	113

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 404854

TEST : BTEX (EPA METHOD 602)

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS
PROJECT # : B.061
PROJECT NAME : 1 CAMELBACK
REF I.D. : 40449801

DATE ANALYZED : 04/19/94
SAMPLE MATRIX : AQUEOUS
UNITS : UG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	<0.5	10	9.4	94	9.3	93	1
TOLUENE	<0.5	10	10	100	10	100	0
ETHYLBENZENE	<0.5	10	10	100	10	100	0
TOTAL XYLENES	<0.5	30	30	100	30	100	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

AnalyticalTechnologies, Inc., Phoenix, Arizona
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CHAIN OF CUSTODY

DATE: 4-18-94 PAGE 1 OF 1

ATI LAB I.D. 404854

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: Stephen D. Noel

COMPANY: Southwest Groundwater Consultants
ADDRESS: 3030 N. 3rd Street, #1100
Phoenix, AZ 85012-3039
PHONE: (602) 241-8520
FAX: 241-8595

BILL TO:
COMPANY: ABOVE
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)			Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020) BTEX	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.			Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)			SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal			The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)		NUMBER OF CONTAINERS
S-1	4-18-94	0920	H2O									✓																					3
S-2 (T. Blank)	4-15-94	1230	H2O									✓																					3

PROJECT INFORMATION

PROJ. NO.: B.061
PROJ. NAME: Orc Camelback
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS: 4
CUSTODY SEALS: (Y) / N / NA
RECEIVED INTACT: Y
RECEIVED COLD: Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments:

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Georgia Waters Time: 1100 hrs	Signature: [illegible] Time: 1119	Signature: Time:
Printed Name: G. Waters Date: 4-18-94	Printed Name: Katy Strait Date: 4-18-94	Printed Name: Date:
Company: SGC Phone: 241-8520	Company: ISD	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: [illegible] Time: 1100	Signature: Time:	Signature: [illegible] Time: 1117
Printed Name: Katy Strait Date: 4-18-94	Printed Name: Date:	Printed Name: MARGUERITE [illegible] Date: 4/18/94
Company: ISD	Company:	Analytical Technologies, Inc.

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 DISTRIBUTION: White, Canary - ANALYTICAL TECHNOLOGIES, INC. / Pink - ORIGINATOR

Analytical Technologies, Inc. 9830 S. 51st Street Suite B-113 Phoenix, AZ 85044 (602) 496-4400

ATI I.D. 404008

May 3, 1994

Southwest Groundwater Consultants
3030 N. 3rd Street
Suite 1100
Phoenix, AZ 85012-3039

Project Name/Number: One Camelback/B.061

Attention: Stephen D. Noel

On 04/26/94, Analytical Technologies, Inc., received a request to analyze aqueous sample(s). The sample(s) were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (602) 496-4400.

Mary Tyer
Project Manager

Enclosure

ADHS License No. AZ0061
Robert V. Woods, Laboratory Manager

Analytical Technologies, Inc.

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS DATE RECEIVED : 04/26/94
PROJECT # : B.061
PROJECT NAME : 1 CAMELBACK REPORT DATE : 05/04/94
ATI I.D. : 404008

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	S-1	AQUEOUS	04/25/94
02	S-2 (TRIP BLANK)	AQUEOUS	04/15/94

----- TOTALS -----

MATRIX	# SAMPLES
AQUEOUS	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40400801

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/25/94
PROJECT #	: B.061	DATE RECEIVED	: 04/26/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-1	DATE ANALYZED	: 04/30/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	6.2
TOLUENE	7.5
ETHYLBENZENE	2.4
TOTAL XYLENES	7.9

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	108

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 40400802

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	DATE SAMPLED	: 04/15/94
PROJECT #	: B.061	DATE RECEIVED	: 04/26/94
PROJECT NAME	: 1 CAMELBACK	DATE EXTRACTED	: N/A
CLIENT I.D.	: S-2 (TRIP BLANK)	DATE ANALYZED	: 04/30/94
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	98

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : BTEX (EPA METHOD 602)

CLIENT	: SOUTHWEST GROUNDWATER CONSULTANTS	ATI I.D.	: 404008
PROJECT #	: B.061	DATE EXTRACTED	: 04/29/94
PROJECT NAME	: 1 CAMELBACK	DATE ANALYZED	: 04/29/94
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	105

AnalyticalTechnologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 404008

TEST : BTEX (EPA METHOD 602)

CLIENT : SOUTHWEST GROUNDWATER CONSULTANTS
PROJECT # : B.061
PROJECT NAME : 1 CAMELBACK
REF I.D. : 40549805

DATE ANALYZED : 04/29/94
SAMPLE MATRIX : AQUEOUS
UNITS : UG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	<0.5	10	11	110	11	110	0
TOLUENE	<0.5	10	11	110	11	110	0
ETHYLBENZENE	<0.5	10	11	110	12	120	9
TOTAL XYLENES	<0.5	30	32	107	33	110	3

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

AnalyticalTechnologies, Inc., Phoenix, Arizona
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland

CHAIN OF CUSTODY

DATE: 4-26-94 PAGE 1 OF 1

ATI LAB I.D. 404 008

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: Stephen D. Noel

COMPANY: Southwest Ground-water Consultants
ADDRESS: 3030 N. 3rd Street, #1100
Phoenix, AZ 85012-3039
PHONE: 241-8520
FAX: 241-8595

BILL TO:
COMPANY: ABOVE
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)			Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020) BTEX	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.			Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)			SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal			The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)		NUMBER OF CONTAINERS
S-1	4/25/94	1709	H2O	1								✓	✓																				3
S-2 (T. Blank)	4-15-94	1230	H2O	2								✓	✓																				1

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.: 8.061		NO. CONTAINERS	4
PROJ. NAME: One Camelback		CUSTODY SEALS	(Y) N / NA
P.O. NO.:		RECEIVED INTACT	Y
SHIPPED VIA:		RECEIVED COLD	Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

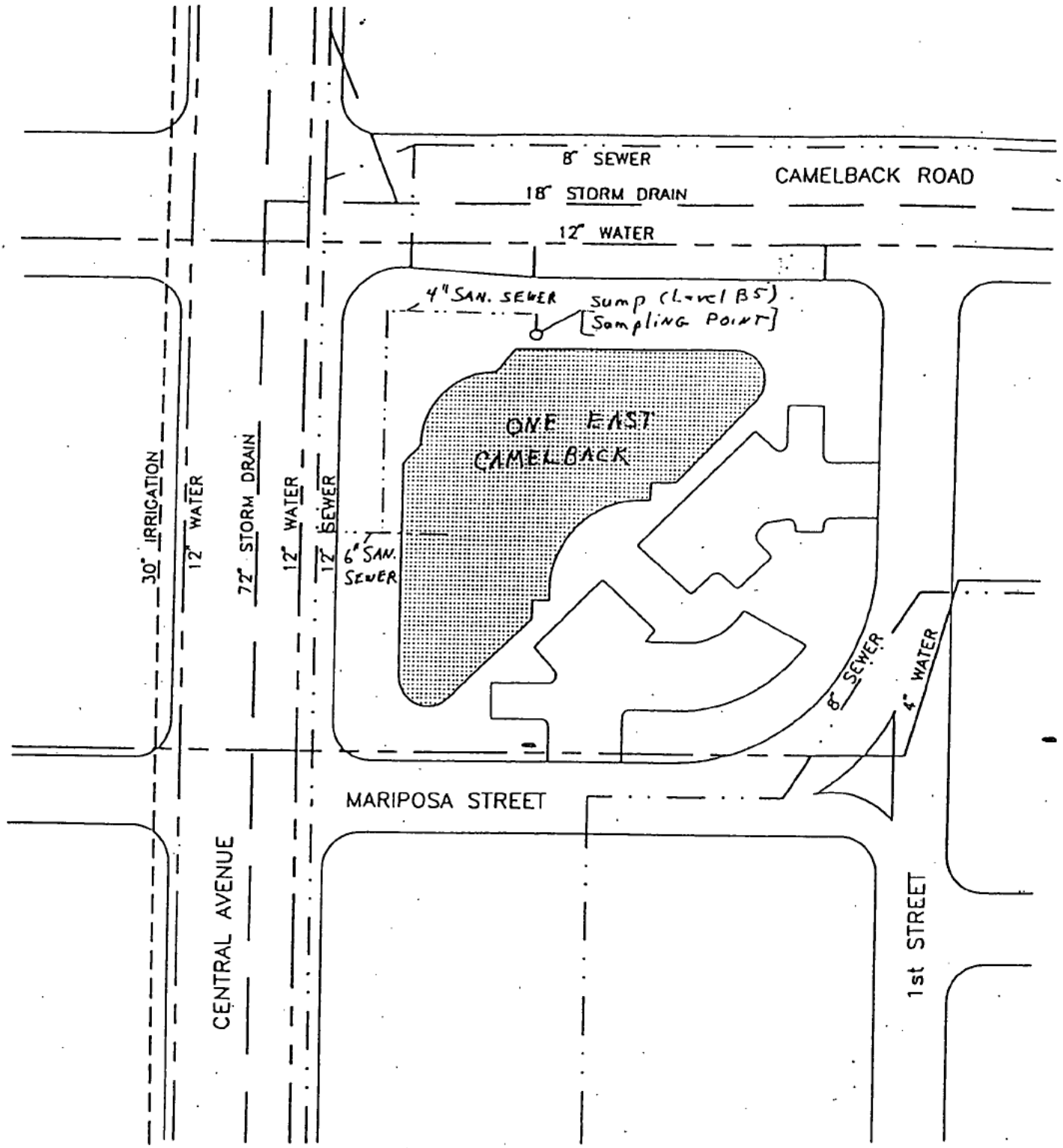
Comments:

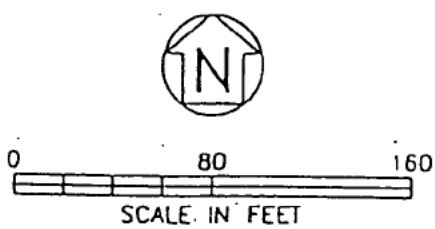
SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Nicoya Waters Time: 0840	Signature: Time:	Signature: Time:
Printed Name: G. Waters Date: 4-26-94	Printed Name: Date:	Printed Name: Date:
Company: SGC Phone: 241-8520	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: Time:	Signature: Time:	Signature: Time: 08:40
Printed Name: Date:	Printed Name: Date:	Printed Name: Date: AL FORTUNATO 4-26-94
Company:	Company:	Analytical Technologies, Inc.

APPENDIX C

SITE PLAN





LOCATIONS OF WATER, SEWER, AND STORM DRAIN LINES

Figure 7

Dames & Moore
22838-001-033

ATTACHMENT II

Discharge Meter Readings

DISCHARGE METER READINGS
1994

DATE	TIME/A.M.	READING	TOTAL GAL.	GAL PER MINUTE
04/01/94	11:00	3723100	41500	28.819444444
04/04/94	11:00	3853300	130200	30.138888889
04/05/94	11:00	3894100	40800	28.333333333
04/06/94	11:00	3931700	37600	26.111111111
04/07/94	11:00	3971100	39400	27.361111111
04/08/94	11:00	4012700	41600	28.888888889
04/11/94	11:00	4142100	129400	29.953703704
04/12/94	11:00	4186500	44400	30.833333333
04/13/94	11:00	4230100	43600	30.277777778
04/14/94	11:00	4272600	42500	29.513888889
04/15/94	11:00	4313200	40600	28.194444444
04/18/94	11:00	4441100	127900	29.606481481
04/19/94	11:00	4484300	43200	30
04/20/94	11:00	4527400	43100	29.930555556
04/21/94	11:00	4570500	43100	29.930555556
04/22/94	11:00	4614700	44200	30.694444444
04/25/94	11:00	4741600	126900	29.375
04/26/94	11:00	4784700	43100	29.930555556
04/27/94	11:00	4835900	51200	35.555555556
04/28/94	11:00	4881300	45400	31.527777778
04/29/94	11:00	4927600	46300	32.152777778

==========

1204500 1204500 29.873511905 AVG.PER MIN.

==========

AREEA
INVESTMENT ADVISORY SERVICES, INC.
Licensed Real Estate Brokers

Please reply to Ext._____

November 24, 1993

Mr. Edward Z. Fox, Director
Arizona Department of Environmental Quality
3033 North Central Avenue
Phoenix, AZ 85021

VIA FAX & U.S. MAIL
(602-207-2218)

Re: Ref. No. HUS.0193493

Dear Mr. Fox:

As owner of One East Camelback, we are quite concerned as to the infiltration of various types of contaminants onto our property as tested through six monitoring wells at various locations on our property.

Our geologists have determined that the cause of the water infiltration into the fifth level of our parking garage is primarily a result of the implementation of the Ground Water Management Code of 1980. Our consultants have advised us that the ground-water surface continues to rise at the rate of .03 to .06 feet per month (ft/mo) over the past 13 months, and 0.23 to 0.27 ft/mo over the past 6 months. Recent ground-water quality data indicates that hydrocarbons in the water infiltrating our facility continue to exceed ADEQ Aquifer Water Quality standards for benzene and ethylbenzene.

We have embarked upon a program of filtering the water. However the amount of water currently pumped is far below what is necessary to bring the level down below the floor slab. We have requested that the City permit us to pump up to 200 gallons/minute into the sanitary sewer system, and we continue to await their permit approval.

Your letter to Mr. David Yoblick dated September 17, 1993, indicated that ADEQ has cited Unocal Service Station #3166, located at Four West Camelback Road, and the Weiss Guys Car Wash, located at Fifteen West Camelback Road. Your letter further stated that you cannot rule out the possibility that petroleum hydrocarbon contamination in the ground water beneath our building emanates from one of the two nearby LUST sites. Our investigation into the applicable files is in progress.

9400 S. Dadeland Boulevard, Penthouse One
Miami, Florida 33156-2817
Telephone (305) 670-0001 / Fax (305) 670-2180
S. Florida Watts 1(800) 273-6373

Affiliated with AREEA Investment Managers, Inc. & Appraisal and Real Estate Economics Associates, Inc.

Mr. Edward Z. Fox, Director
November 24, 1993
Page Two . . .

We believe, however, that other nearby sites may be contributing to our problem. Please advise if your office has investigated the following businesses located near our building that may also be a contributing factor:

Texaco Service Station, located at the northeast corner of Central and Colter;

Maroney's Cleaners, located at 4902 North Central, directly west of our building; and

Kinko's Printing, located at 4801 North Central, one-half block south of our building on Central.

Mr. Paul Berkowitz will be in Phoenix on Tuesday, November 30, through Thursday, December 2, and would like to set an appointment to meet you or your associates in reference to this matter.

We appreciate your offer to assist on any interim measures.

Sincerely,

ONE CAMELBACK INC.
c/o AREEA Investment Advisory
Services, Inc.

Michael Y. Cannon, President

MYC/ljt

Enclosure

cc: David Yoblick, Dir. of Property Management/AREEA Investment Managers, Inc.
Allene Pierce-Avey, Property Manager/One East Camelback Building
Thomas Klimek/Gilbertson Associates, Inc.
Paul Berkowitz, Esq., Director/One Camelback Inc.

[I:\APPS\WP51\CANNON\MYC93.2]

4931

JUL 1994 RECEIVED

PRELIMINARY ASSESSMENT QUESTIONNAIRE
COMPANY NAME: JERRY STEER
MARCH 30, 1994

* ***If the spaces provided for answering the questions is not adequate, you may attach additional sheets as needed. If a question does not pertain to your facility, please indicate this with "N/A".***

1. **Company Name** Steer West Enterprises, Inc. Profit Sharing Trust dated 5-1-84
   Company Representative/contact Marc Steer, Esq.
   Street Address (See attached page)
   City, Zip code (See attached page)
   Phone Number (See attached page)
   Property Parcel Number Lots 16-24, Stanley Place (see attached page)
   Facility Size (in acres) Approximately 2 acres total
   Standard Industrial Code N/A **No. of Employees** N/A

2. ***Business* Ownership History:**

   a) **Give name of current owner and date acquired.**

   Estate of Jerald H. Steer, as Successor Trustee of the Trust (3-28-92)

   b) **Give names of previous owners and dates of acquisition.**

   Jerald H. Steer, as Trustee of the Trust (5-1-84)

   c) **Provide a copy of your annual report/corporation commission report.**

   N/A

3. ***Property* Ownership History:**

   a) **Give name of current owner, owner's address and phone number, and date of acquisition.**

   (See attached page)

   b) **Give names of previous owners and dates of acquisition.**

   (See attached page)

4. **How long have you been in operation at your current location?**

   (See attached page)

5. **Has your company been located at any other addresses within Arizona? If yes, please list.**

N/A

6. **Describe the nature and purpose of your business.**

Pension Trust

7. **Describe processes using chemicals at your facility, including amounts used and resulting waste products.**

a) **Manufacturing process(es):** None

b) **Cleaning process(es):** Maroney's Cleaners operates a dry cleaning business on Lots 18 and 19. THe Trust does not know the specifics of Maroney's chemical use but understands Maroney's has provided ADEQ with a questionnaire detailing Maroney's operations. Please see Maroney's questionnaire for details.

c) **Maintenance or repair process(es):** None

8. **If you have used different chemicals in the past, other than those described in Question #7, list the chemical name, quantity, and the time period in which they were used.**

N/A

9. **Describe how chemicals are/were stored on-site. (Type of containers, locations, containment features, inside or outside, on soil or pavement etc.)**

Maroney's stores chemicals in containers in building. See Maroney's questionnaire for details. Do not have knowledge about past practices.

10. **Provide an itemized list of the names and quantities of chemicals stored at your facility and indicate whether you have a Material Safety Data Sheet (MSDS) available.** ***(please use attached sheet)***

Only chemicals are those used by Maroney's. Please see Maroney's questionnaire for details.

11. a) What methods are currently being used to dispose of wastes? Include name of waste, amount, and method.
The Trust understands Maroney's uses a closed system to capture chemical wastes used in the dry cleaning process and such wastes are disposed of by Safety Kleen Corp. Please see Maroney's questionnaire.
b) If waste production and disposal has changed, list all previous wastes, amounts and methods of disposal.

The Trust has no knowledge of this.

12. Has your business ever: generated [ ], transported [ ], stored [ ], or disposed [ ] of hazardous materials, mixtures containing hazardous materials, or hazardous wastes? (Please check all that apply.

N/A

13. Has your facility arranged to have hazardous materials transported off site for disposal, recycling, or sale? Yes [ ] No [ ], If yes, what year did you start _____
Transporter _____ Destination _____
The Trust is only aware of Maroney's waste disposal as mentioned in paragraph 11.a above. Please see Maroney's questionnaire for details.

14. Has the company ever had a chemical, solvent and/or hazardous substance spill, leak or release at this location?
Yes [ ] No [XX], If yes, please provide the following:

a) Chemical name of substance spilled N/A
b) Quantity spilled N/A
c) Date of spill N/A
d) Type of cleanup, if applicable N/A
e) Regulatory agency involved N/A

15. Please indicate if your business has any of the following. None
[ ] Industrial Wastewater Discharge Permit # _____
[ ] Underground Storage Tank Notification to ADEQ
[ ] U.S. Environmental Protection Agency Generator Identification # _____
[ ] Air Pollution Control Permit # _____
[ ] Groundwater Quality Protection Permit # _____

16. Do you now or have you ever used any of the following? If you answer yes to using any of the following chemicals, list which years they were used. No

_____ a) Trichloroethylene (TCE)
_____ b) Tetrachloroethylene (PCE)
_____ c) 1,1-dichloroethene (1,1-DCE)
_____ d) 1,1,1-trichloroethane (1,1,1-TCA)
_____ e) 1,1-dichloroethane (1,1-DCA)
_____ f) _____

17. Has your facility been on the sewer system (including domestic waste) since the beginning of occupancy? Yes [ ] No [ ] If no, when was your facility connected to the sewer system, and how was wastewater and waste disposed of prior to connection?

The property is connected to the City of Phoenix sewer system. The Trust does not know when this occurred.

18. If your facility is currently on the sewer system, are there any pretreatment requirements? Yes [ ] No [XX] If yes, please specify.

The Trust is not aware of any pretreatment requirements.
Please see Maroney's questionnaire regarding any requirements applicable to Maroney's.

19. If you are currently regulated by any environmental agency, (city, county, state, federal) list the name of the agency(s).

N/A

20. Which of the following are or were located within the boundaries of your property? (Please check all that apply.)

* Please estimate the amount and type of material disposed of to each of the checked structures; attach any design or construction data you have for the structures indicated. Also please attach copies of analyses of any solid or liquid samples from these structures on your property. In addition, any information you may have regarding structures such as these that may be located on property adjacent to your property would be appreciated.

[ ] Wells N/A
If yes, provide State Well ID or registration #
[ ] Drywells (Storm Drains) N/A
[ ] Surface Impoundments (Evaporation Ponds) N/A
[ ] Pits N/A
[ ] Septic tanks N/A
[ ] Leach fields N/A
[XX] Sumps (see attached page)
[XX] Underground Storage Tanks (UST's) (see attached page)
[ ] Above ground storage tanks (including drums) N/A
[ ] Drainage ditches running off the property N/A
[ ] Landfills N/A

21. Have you ever had an environmental assessment, environmental audit, or a due diligence search performed on this property?

a) If yes, list who performed the audit and when, and attach copies.

(See attached page)

b) To your knowledge, was there any physical testing performed on the property (i.e. soil gas sampling, soil sampling, groundwater sampling)? No.

22. Do you have any knowledge of any environmental audit or due diligence search that was performed on the property prior to your occupancy? No.

a) If yes, who performed the audit, and when?
N/A

b) To your knowledge, was there any physical testing performed on the property? No.

23. To your knowledge, does data exist from physical testing performed at this location? Please include sample reports/results. No.

24. Attach a diagram of your property. Include property boundaries and size, the location of building structures, and any facilities discussed in Question # 20. Also include the location of chemical storage areas.

See attached plat for dimensions.
See attached diagram.

25. To your knowledge, have any dry cleaners operated on your property? If so, please provide any information you may have regarding name, business and property owners, dates of operation, and waste management and disposal practices of the dry cleaners. Please indicate on the diagram the area of the property occupied by dry cleaners.

(See attached page)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____

Marc H. Steer, as Personal Representative of the Estate of Jerald H. Steer, as Successor Trustee of Steer West Enterprises, Inc. Profit Sharing Trust dated 5-1-84

Date July 14, 1994

Supplemental Responses to Preliminary Assessment Questionnaire

Question No. 1:

Marc Steer, Esq.
Marcus, Steer & Freibrun
Hyatt Deerfield Business Campus
102 Wilmot Road, Suite 190
Deerfield, Illinois 60015
Phone: (708) 940-0060

(Mr. Steer is the personal representative of the Estate of Jerald H. Steer, which is the Trustee of the Trust)

Question No. 3.a:

Name and Address of Current Property Owner:

Estate of Jerald H. Steer, as Successor Trustee of the Steer West Enterprises, Inc. Profit Sharing Trust Dated 5-1-84

(See response to Question No. 1 for address.)

Date Property Acquired:	Lots 16 & 17	11-22-91
	Lots 18-21	11-14-84
	Lot 22	11-27-84
	Lot 23	11-20-84
	Lot 24	01-03-85

Question No. 3.b:

Names of Previous Owners and Dates of Acquisition:

Lots 16 & 17:	Outdoor Systems Company	10-18-91
	Turner Camp, M.D.	7-1-70
	Thomas Farish & May C. Farish	?
Lots 18 & 19:	Steer West Enterprises	5-16-84
	C & C Land Venture	6-1-72
	Outdoor Systems Company	3-2-81
	Benjamin & Jacwin Weinstein	5-28-81
	Ideal Center	5-7-76

	Allan J. & Elaine Waxman	5-28-81
	Rountree Enterprises	8-22-63
	Walter Rountree	8-7-58
	Edith Brown	8-7-58
	Lawrence Lee & Gladys Hood and Rose McLaren	2-25-53
	Edwin J. & Margaret Maroney	?
	Ray C. & Alice A. Roles	?
Lots 20-21:	Steer West Enterprises	5-16-84
	C & C Land Venture	6-1-72
	Outdoor Systems Company	3-2-81
	Emily Pourchot	8-22-63
	Sandra Harris Casillas	?
	Joe Allen Harris	?
	Joe B. Harris	?
	Anni Lena Harris	?
Lot 22:	Jerry Steer, as Trustee of the Steer West Enterprises, Inc. Defined Benefit Pension Plan Dated 5-1-83	11-20-84
	Goodman & Co.	9-26-74
	Roy M. & Grace Hall	1-7-66
	Elias & Victoria Abraham	8-29-57
	Wm. P. & Edna A. Lufty	8-29-57
	Daniel H. & Jo Anne Goodman	9-26-56
Lot 23:	Daniel H. & Jo Anne Goodman	?
Lot 24:	Virginia Smoot	12-13-84
	Joanne F. Ralston	02-27-73
	Anthony G. Smoot	02-27-73
	La Rhue P. Holmes	02-27-73

Question No. 4:

The Trust leases the property to tenants, but does not itself operate any business on the property. Lots 16 and 17 are vacant except for a billboard, that is leased by Outdoor Systems Company. Lots 18 and 19 contain a building leased to Maroney's Cleaners, which operates a dry cleaning business. The remaining property consists of residential lots that are either vacant or contain residential housing.

Question No. 20:

Sumps: The Trust understands there is an old sump located near the Maroney's building that is not longer in use and has not been used since the Trust has owned the property. The Trust understands the sump may have been used in the past as an oil-water separator.

USTs: The Trust has not owned or operated any underground storage tanks on the property. However, a Chevron service station operated on Lots 16 & 17 from 1952 to 1979. The Trust understands there may be a waste oil tank remaining on the property that was used by the service station.

Question No. 21:

In early 1993, attorneys for the Estate employed Scott, Allard & Bohannan, Inc. to review the environmental condition of the property in connection with an estate tax audit. No written report was ever finalized.

Question No. 25:

Yes--Maroney's Cleaners, which is owned and operated by Dick and Charlotte Walton (See Maroney's questionnaire). The Trust understands a dry cleaning business may have operated on the property for over 30 years, but does not have any information about past practices. Based on title information, it appears previous owners of the dry cleaning business included: Maroney's Cleaners & Laundry, Inc. (disclosed in Amendment to Lease recorded 4-1-76 in Docket 111613, page 36, records of Maricopa County, Arizona); and Flair Laundry-Cleaning & Storage, Inc. (disclosed in Assignment of Leases recorded 5-16-84 in Document No. 84-210567 records of Maricopa County, Arizona). The Trust does not have copies of these recorded documents or any other information about previous owners of the dry cleaning business.

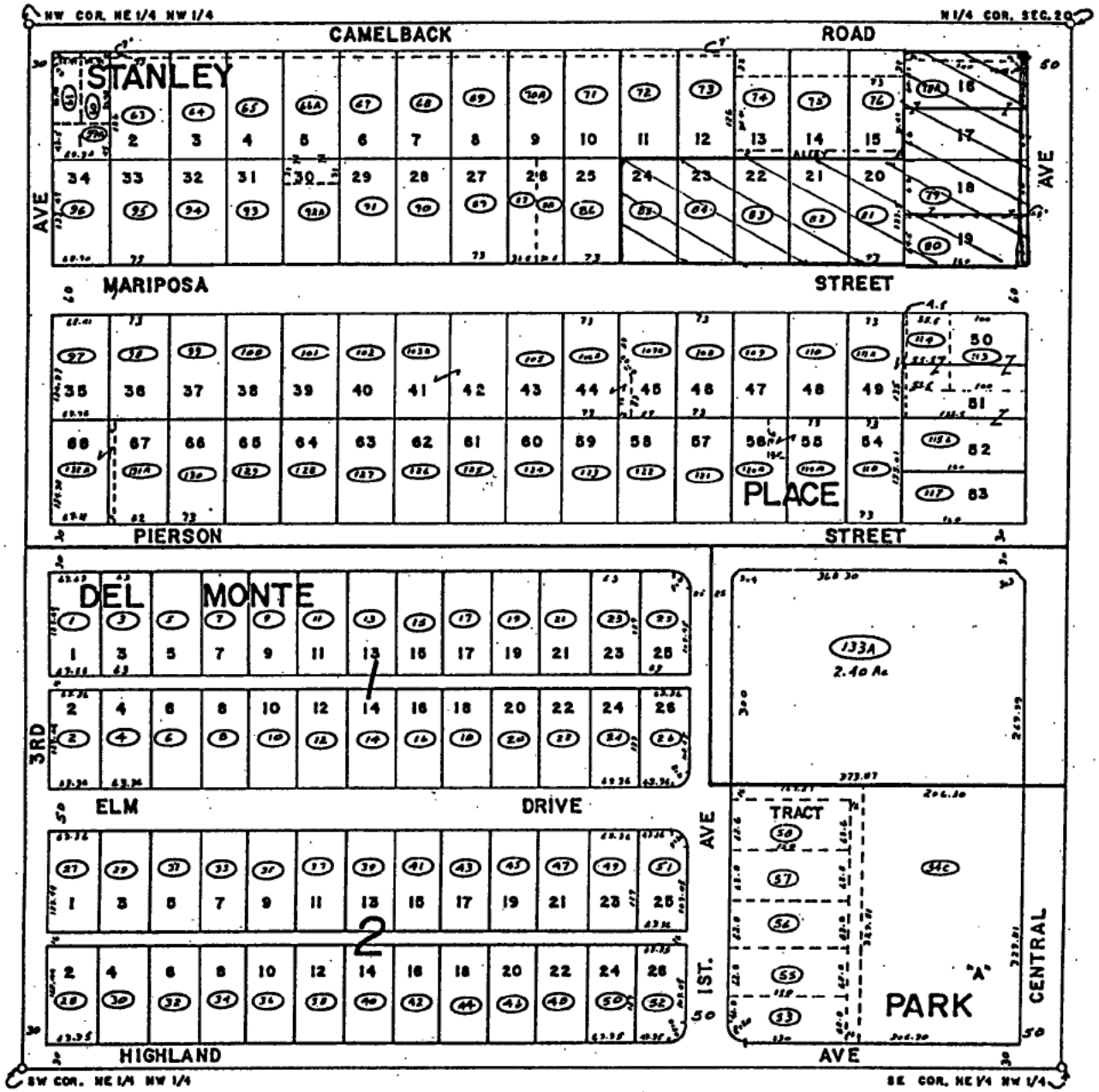
NE 1/4 NW 1/4 SEC 20 T. 2 N R. 3 E

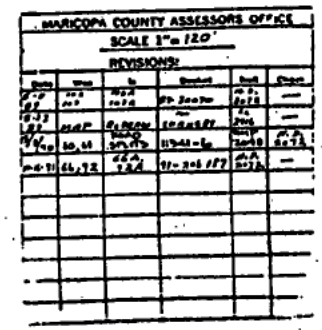
BOOK 133

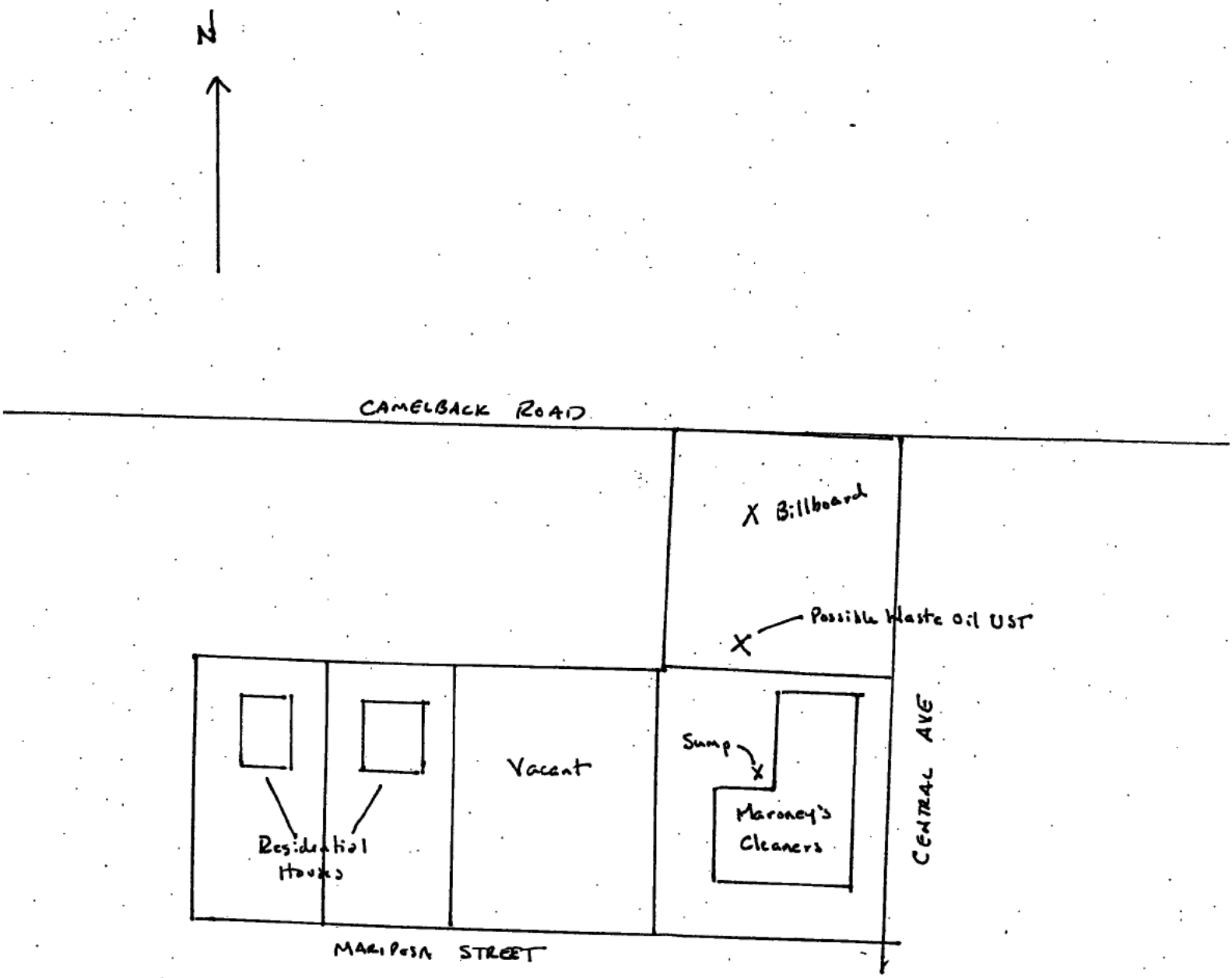
MAP 28

STANLEY PLACE: LOTS 1-68 (MCR 18-21)

DEL MONTE PARK: BLOCK 1-LOTS 1-26; BLOCK 2- LOTS 1-26, TR. "A" (MCR 36-38)







Lots 16-24, Stanley Place
Phoenix, Arizona