RO 258

Shaw™ Shaw Environmental, Inc.
4005 Port Chicago Hwy
Concord, California 94520

September 28, 2005

Mr. Jerry Wickham
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, California 94502

Re: **Report Transmittal**
Sensitive Receptor Survey
76 Service Station #6034
4700 First Street
Livermore, CA

Dear Mr. Wickham:

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please call me at (916) 558-7609.

Sincerely,

Shelby Suzanne Lathrop
Project Manager
Shaw Environmental, Inc.
Approved service provider of ConocoPhillips -Risk Management & Remediation
Cell: 707-592-1146

Client Contact Information:
ConocoPhillips
76 Broadway
Sacramento, California 95818
Client office: 916-558-7609
Client fax: 916-558-7639

Attachment
cc: Myron Smith, ConocoPhillips

R0258

ATC ASSOCIATES INC.

Mr. Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

September 15, 2005

Alameda County
OCT 06 2005
Environmental Health

Re: Sensitive Receptor Survey
76 Station # 6034 / WNO # 1525
4700 First Street
Livermore, CA
Fuel Leak Case No. RO 0000258

Dear Mr. Wickham:

This report has been prepared by ATC Associates on behalf of ConocoPhillips as stated in the June 6, 2005 Work Plan. This sensitive receptor survey was performed to identify surface water bodies, domestic water wells within a 2,000 foot radius of the site referenced above (**Figure 1**).

SENSITIVE RECEPTOR SURVEY

ATC performed a sensitive receptor survey within a 2,000 foot radius of the site, **Figure 1**. The survey included identifying surface water bodies, and reviewing California Department of Water Resources (DWR) records as well as local agency records to identify domestic water wells within the survey area.

FINDINGS

Sensitive Receptors: ATC performed a search of the nearby areas for day care facilities, nursing homes, hospitals, and schools. Locations are shown on the map of **Figure 1** and tabulated in **Table 1**.

Surface Water Bodies: Livermore street maps and the 1981 United States Geological Survey 7 ½ minute quadrangle topographic map for Livermore, California were reviewed to identify surface water bodies within the survey area. A field visit was conducted on September 14, 2005 to confirm the locations of mapped surface water bodies and to determine whether any unmapped surface water bodies exist within the survey area.

The only surface water body identified within the area of the survey was the Arroyo Seco drainage system. The location of the drainage system is shown on **Figure 1**. The system flows to the northwest and takes a sharp turn to the northeast behind the subject site then bends toward the northwest again.

During the field visit the direction of water flow in the creek was observed to be toward the northwest. The Arroyo Seco drainage system flows though a concrete drainage canal. The

concrete lined canal ends abruptly at the sharp northeast trending turn and then the creek bed is unlined.

Water Well Survey: Livermore Zone 7 water district records were reviewed on September 14, 2005 to determine the location of domestic and production wells in the vicinity of the subject site. A total of five domestic production wells were identified in the Zone 7 records as well as several gas station monitor wells within a 2,438 foot radius of the subject site. The production wells are listed in **Table 2** and their locations are shown on **Figure 1**. One production well is located outside the survey area and four are within the survey area. Two wells, located within the survey area, are located approximately 1,875 feet west of the subject site. The third well is located approximately 1,688 feet east of the subject site. The fourth well is located approximately 1,875 feet southwest of the subject site.

CONCLUSIONS

No sensitive receptors down-gradient of site with in the search radius. One surface body, the Arroyo Seco drainage system, was identified within the area surveyed. The current groundwater flow direction in the survey area is to the northwest. The unlined drainage system is located to the west and northwest of the subject site. It is possible that a petroleum hydrocarbon release could flow toward and enter the natural drainage.

There are four domestic production wells located within 2,000 feet of the subject site. The eastern production well, identified in the well survey, is located topographically upslope from the subject site. This suggests groundwater flow from the subject sites would not be toward this well, thus the well would not likely be at risk due to a petroleum hydrocarbon release at the subject site. The well to the southwest is cross gradient of the subject site. The two production wells to the west are also down and cross gradient of the subject site and are not likely to be at risk of contamination from the plume at the subject site. These wells are depicted in **Figure 1**.

If you have any questions regarding the contents of this report please do not hesitate to contact me at (925) 460-5300.

Sincerely,
ATC Associates

David A. Evans for
Project Manager

Janine Weber-Band
Sr. Project Geologist

Stephanie Davi
Staff Geologist

Attachments: Site Vicinity Map
Site Map
Sensitive Receptor Table
Well Table

Cc: Shelby Lathrop, ConocoPhillips electronic only

Missing well from RO477 well search
12/15/02
Delta

SOURCE: USGS ALTAMONT QUADRANGLE, CALIFORNIA (7.5 MINUTE SERIES) TOPOGRAPHIC MAP. OBTAINED FROM THE 2000 NATIONAL GEOGRAPHIC TOPO! SOFTWARE.

VATC ASSOCIATES INC.
6602 Owens Drive, Suite 100
Pleasanton, CA 94588
(925) 460-5300

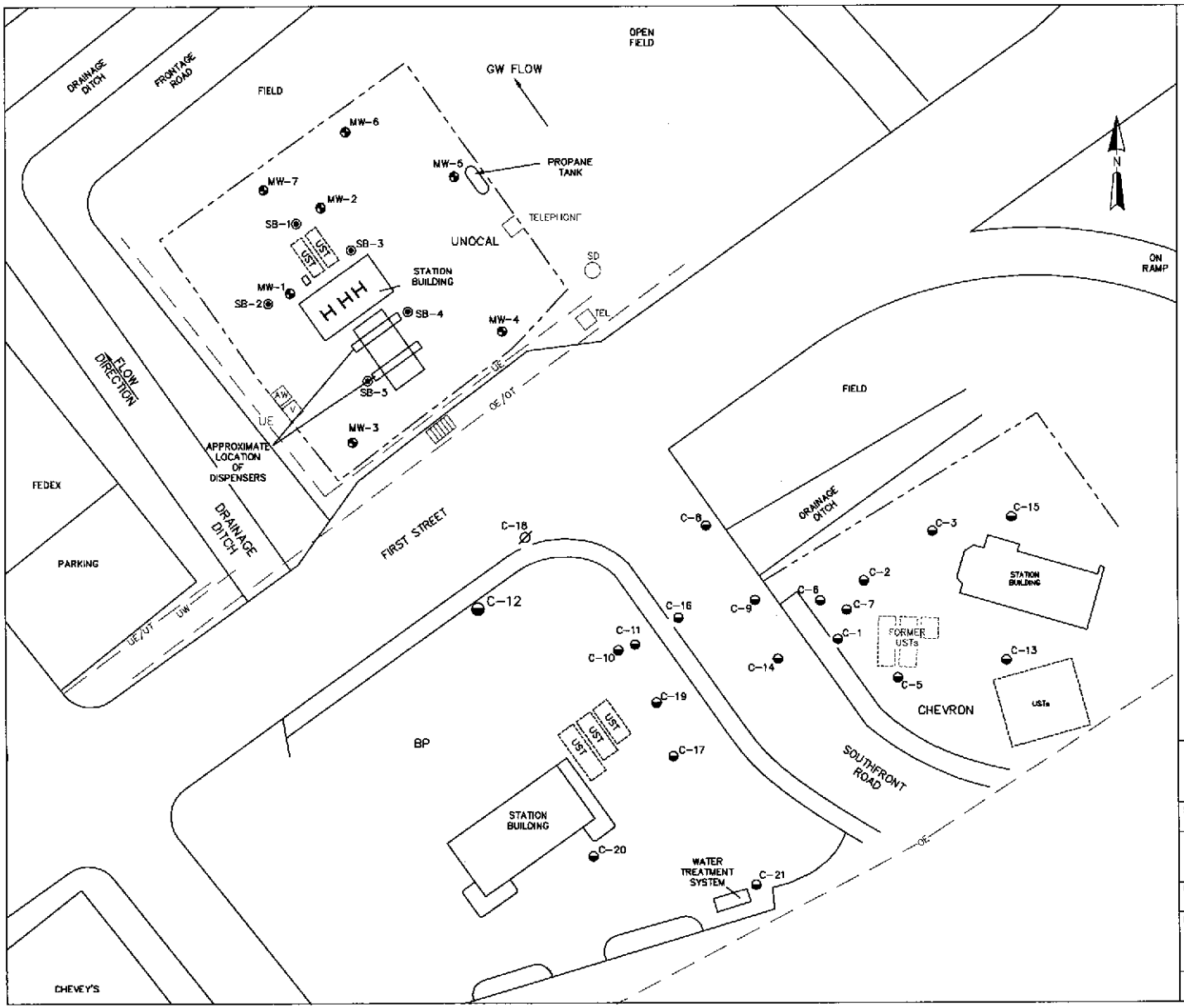
PROJECT NO: 75.75118.1525

DESIGNED BY: DE	SCALE:N/A	REVIEWED BY: DE
DRAWN BY: EC	DATE: 04/05	FILE: 6034 SITE VIC

FIGURE 1

SITE VICINITY MAP

76 STATION 6034
4700 FIRST STREET
LIVERMORE, CALIFORNIA



LEGEND

————	PROPERTY BOUNDARY
MW-7 ⊕	GROUNDWATER MONITORING WELL (TOSCO)
C-21 ◒	GROUNDWATER MONITORING WELL (CHEVRON)
C-18 Ø	ABANDONED WELL
SB-5 ⊛	SOIL BORING
OE/OT	OVERHEAD ELECTRIC/TELEPHONE
UE/UT	UNDERGROUND ELECTRIC/TELEPHONE
SD	STORM DRAIN
UW	UNDERGROUND WATER
AW	AIR/WATER
V	VACUUM
▥	CATCHBASIN

Scale

60 0 60 feet

Offsite features not to scale

BASE MAP REFERENCE:
MODIFIED FROM SITE PLAN SUPPLIED BY GETTLER-RYAN, NOVEMBER 2000.

ATC ASSOCIATES INC.
6602 Owens Drive, Suite 100
Pleasanton, CA 94588
(925) 460-5300

SCALE	DRAWING DATE	ACAD FILE
AS SHOWN	06/21/05	6034-site map

SITE MAP

CLIENT	CONOCOPHILLIPS		PM DAE
LOCATION	76 STATION 6034 4700 FIRST STREET LIVERMORE, CALIFORNIA		PE DA
DESIGNED	DRAWN BY: EC	PROJECT NO. 75.75118.1525	FIGURE 2

TABLE 1
SENSITIVE RECEPTOR SURVEY
ConocoPhillips
76 Station # 6034
4700 First Steet, Livermore

Map #	Address	Facility	Distance From Site
A	4655 Lassen Road	Kinder Care Learning Center	0.36 miles

* This facility is located cross gradient of the site and uphill

Table 2
Well Survey
ConocoPhillips
76 Station No. 6034
4700 First Street, Livermore, CA

Map #	Well #	Address	Owner	Well Depth	Screened Interval	Distance From Site	Location Relative to Site
1	3S/2E 3M2	4111 Las Positas Rd	McCann	240	140-155, 204-232	1875 feet	Down/cross gradient
2	3S/2E 3M1	4221 Las Positas Rd	Dickinson	192	74-79, 124-126, 141-147, 158-172	1875 feet	Down/cross gradient
3	3S/2E 3P2	Unknown	Unknown	Unknown	Unknown	1875 feet	Cross gradient
4	3S/2E 3H1	5179 Preston Ave	PG&E	184	115-117, 168-170	1688 feet	Up gradient