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California Regional Water Quality Control Board

Los Angeles Region

Linda S. Adams
Cal/EPA Secretary

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Arnold Schwarzenegger
Governor

July 8, 2008

Mr. Sean Baker
ConocoPhillips
3611 South Harbor Boulevard, Suite 200
Santa Ana, CA 92704

GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER CLEANUP AT PETROLEUM HYDROCARBON FUEL, VOLATILE ORGANIC COMPOUND AND/OR HEXAVALENT CHROMIUM IMPACTED SITES – FORMER 76 STATION 5572, 341 WEST GONZALES ROAD, OXNARD (ORDER NO. R4-2007-0019, SERIES NO. 064; CI NO. 9421)

Dear Mr. Baker:

We have completed our review of your application for coverage under the General Waste Discharge Requirements to inject Ozone at the site referenced above in Oxnard for groundwater cleanup and remediation.

Starting in August 1990, various subsurface investigations have been conducted at the site, which consisted of drilling and sampling numerous soil borings, installing sixteen groundwater monitoring wells (please refer to attached Figure 2 for groundwater contour, Figure 4 for groundwater contaminant plume). Groundwater monitoring data collected in December 2007 indicated that TPHg and BTEX were detected at concentration of 19,000 and 4,500 micrograms per liter (µg/L), respectively.

To remediate the residual groundwater contaminations, a "Ozone Sparge/Soil Vapor Extraction Remedial System Workplan" (RAP) dated April 9, 2008, by SECOR, proposed to inject ozone into the groundwater to enhance biodegradation and natural attenuation of petroleum hydrocarbons (please refer Figure 3). Ozone will be injected through three injection wells OZ-1, OZ-2 and OZ-3; and vapor extraction will be conducted through four extraction wells VE-1, VE-2, VE-3 and VE-4.

A letter dated February 13, 2008 from County of Ventura, Environmental Health Division approved the Remedial Action Plan.

Regional Board staff has determined that the proposed discharge meets the conditions specified in Order No. R4-2007-0019, "*Revised General Waste Discharge Requirements for Groundwater Remediation At Petroleum Hydrocarbon Fuel, Volatile Organic Compound and/or Hexavalent Chromium Impacted Sites (General WDRs)*," adopted by the Los Angeles Regional Water quality Control Board on March 1, 2007.

Enclosed are your Waste Discharge Requirements, consisting of General WDRs Board Order No. 2007-0019 and Monitoring and Reporting Program No. CI-9421 and Standard Provisions. This

Waste Discharge Requirements shall not be rescinded without the regulatory oversight agency's prior approval.

The Monitoring and Reporting Program requires you to implement the monitoring program on the effective date of this enrollment under Regional Board Order No. R4-2007-0019. All monitoring reports shall be sent to the Regional Board, ATTN: Information Technology Unit.

When submitting monitoring or technical reports to the Regional Board per these requirements, please include a reference to Compliance File No. CI-9421, which will assure that the reports are directed to the appropriate file and staff. Do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

We are sending a copy of Order No. R4-2007-0019 only to the applicant. A copy of the Order will be furnished to anyone who requests it, or on line at:
http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/general_orders/r4-2007-0019/r4-2007-0019.pdf

If you have any questions, please contact Dr. Rebecca Chou at (213) 620-6156.

Sincerely,

Tracy J. Egoscue
Executive Officer

Enclosures: 1. Board Order No. R4-2007-0019
2. Standard Provisions for Reporting and Monitoring
3. Monitoring and Reporting Program No. CI-9421

cc: Mr. David Salter, Ventura County Division of Environmental Health
Ms. Leslie Bond, SECOR International, Inc.

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
MONITORING AND REPORTING PROGRAM NO. CI-9421
FOR
FORMER 76 STATION 5572
341 WEST GONZALES ROAD, OXNARD
(OZONE INJECTION FOR GROUNDWATER CLEANUP)
(ORDER NO. R4-2007-0019, SERIES NO. 064)

I. REPORTING REQUIREMENTS

A. ConocoPhillips (hereinafter Discharger) shall implement this monitoring program on the effective date of Regional Board Order No. R4-2007-0019. The first monitoring report under this program, for July - September 2008, shall be received at the Regional Board by October 15, 2008. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

Monitoring Period	Report Due
January – March	April 15
April – June	July 15
July – September	October 15
October – December	January 15

If there is no discharge or injection during any reporting period, the report shall so state. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit.

B. By March 1st of each year, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the Discharger shall explain the compliance record and the corrective actions taken, or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements (WDRs).

C. Laboratory analyses – all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certification shall be provided each time a new and/or renewal certification is obtained from ELAP.

July 8, 2008

D. The method limits (MLs) employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Regional Board Executive Officer (Executive Officer). The Discharger shall submit a list of the analytical methods employed for each test and the associated laboratory quality assurance/quality control (QA/QC) procedures upon request by the Regional Board.

E. Groundwater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136. All QA/QC samples must be run on the same dates when samples were actually analyzed. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board staff.

F. Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services, and in accordance with current United States Environmental Protection Agency (USEPA) guideline procedures or as specified in this Monitoring Program." Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report.

G. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with WDRs. This section shall be located at the front of the report and shall clearly list all non-compliance with WDRs, as well as all excursions of effluent limitations.

H. The Discharger shall maintain all sampling and analytical results: date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

I. If the Discharger performs analyses on any groundwater samples more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the report.

J. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements and, where applicable, shall include results of receiving water observations.

K. The Discharger should not implement any changes to the Monitoring and Reporting Program prior to receiving Executive Officer's written approval.

II. OZONE INJECTION MONITORING REQUIREMENTS

The quarterly reports shall contain the following information regarding injection activities:

1. Location map showing injection points used for the ozone injection. Groundwater monitoring wells shall not be used as injection points to avoid reduction of groundwater monitoring network, data bias, well screen clogging and alteration. Three injection points; OZ-1, OZ-2 and OZ-3; are currently proposed that can be referenced in the Figure 3. Additional injection points, if needed for full-scale ozone sparging system, must be approved by Ventura County Division of Environmental Health prior to implementation.

2. Written and tabular summary defining the quantity of ozone injected per month to the groundwater and a summary describing the days on which the injection system was in operation.

III. GROUNDWATER MONITORING PROGRAM

The Discharger shall conduct groundwater monitoring at the site. Groundwater samples shall be collected from up-gradient area groundwater monitoring well MW-9; source area groundwater monitoring wells MW-14 and MW-13; and down-gradient area groundwater monitoring wells MW-11 and MW-6 on a quarterly basis to monitor the effectiveness of the in-situ groundwater remediation. Ozone injection points shall not be used as monitoring points. Groundwater shall be monitored for the duration of the remediation in accordance with the following discharge monitoring program:

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total petroleum hydrocarbons as gasoline (TPHg) and as diesel (TPHd)	µg/L	Grab	• Quarterly[1]
Benzene, Toluene, Ehylbenzene, Xylenes (BTEX)	µg/L	Grab	• Quarterly[1]
Methyl tertiary butyl ether (MTBE), Tertiary butyl alcohol (TBA), Tertiary amyl methyl	µg/L	Grab	• Quarterly[1]

ether (TAME), Di-isopropyl ether (DIPE), ether (ETBE)			
Ethanol Formaldehyde Acetone	µg/L	Grab	• Quarterly[1]
Total dissolved solids, Arsenic, Boron, Chloride, Bromide, Sulfate, Lead, Nickel, Cadmium, Manganese	mg/L	Grab	• Quarterly[1]
Oxidation-reduction potential	milivolts		• Quarterly[1]
Dissolved Oxygen	µg/L	Grab	• Quarterly[1]
Dissolved ferrous iron	µg/L	Grab	• Quarterly[1]
Total Chromium and chromium six[2]	µg/L	Grab	• Quarterly[1]
PH	pH units	Grab	• Quarterly[1]
Temperature	$^0F/^0C$	Grab	• Quarterly[1]
Groundwater Elevation	Feet, mean sea level and below ground surface	In situ	• Quarterly[1]

[1] One week before injection and Quarterly thereafter

[2] The Discharger is required to monitor for total chromium and chromium six in the baseline, second and fourth quarterly sampling. If detected at any of these sampling events, the total chromium and chromium six must be monitored quarterly thereafter.

All groundwater monitoring reports must include, at a minimum, the following:

a. Well identification, date and time of sampling;
b. Sampler identification, and laboratory identification;
c. Quarterly observation of groundwater levels, recorded to 0.01 feet mean sea level and groundwater flow direction.

IV. MONITORING FREQUENCIES

Monitoring frequencies may be adjusted to a less frequent basis or parameters dropped by the Executive Officer if the Discharger makes a request and the Executive Officer determines that the request is adequately supported by statistical trends of monitoring data submitted.

V. CERTIFICATION STATEMENT

Each report shall contain the following declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on 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 a fine and imprisonment.

Executed on the _____day of _____ at _____.

_____(Signature)

_____(Title)"

VI. PUBLIC DOCUMENTS

These records and reports are public documents and shall be made available for inspection during normal business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by: _____
Tracy J. Egoscue
Executive Officer

Date: July 8, 2008

MS=1:1 5572-003 L:\DGraphics\QMS NORTH-SOUTH\x-5000\5572+\5572-QMS(NEW).DWG Apr 11, 2008 - 7:41am cvuong

LEGEND

MW-16 ⊕ Monitoring Well with Groundwater Elevation (feet)

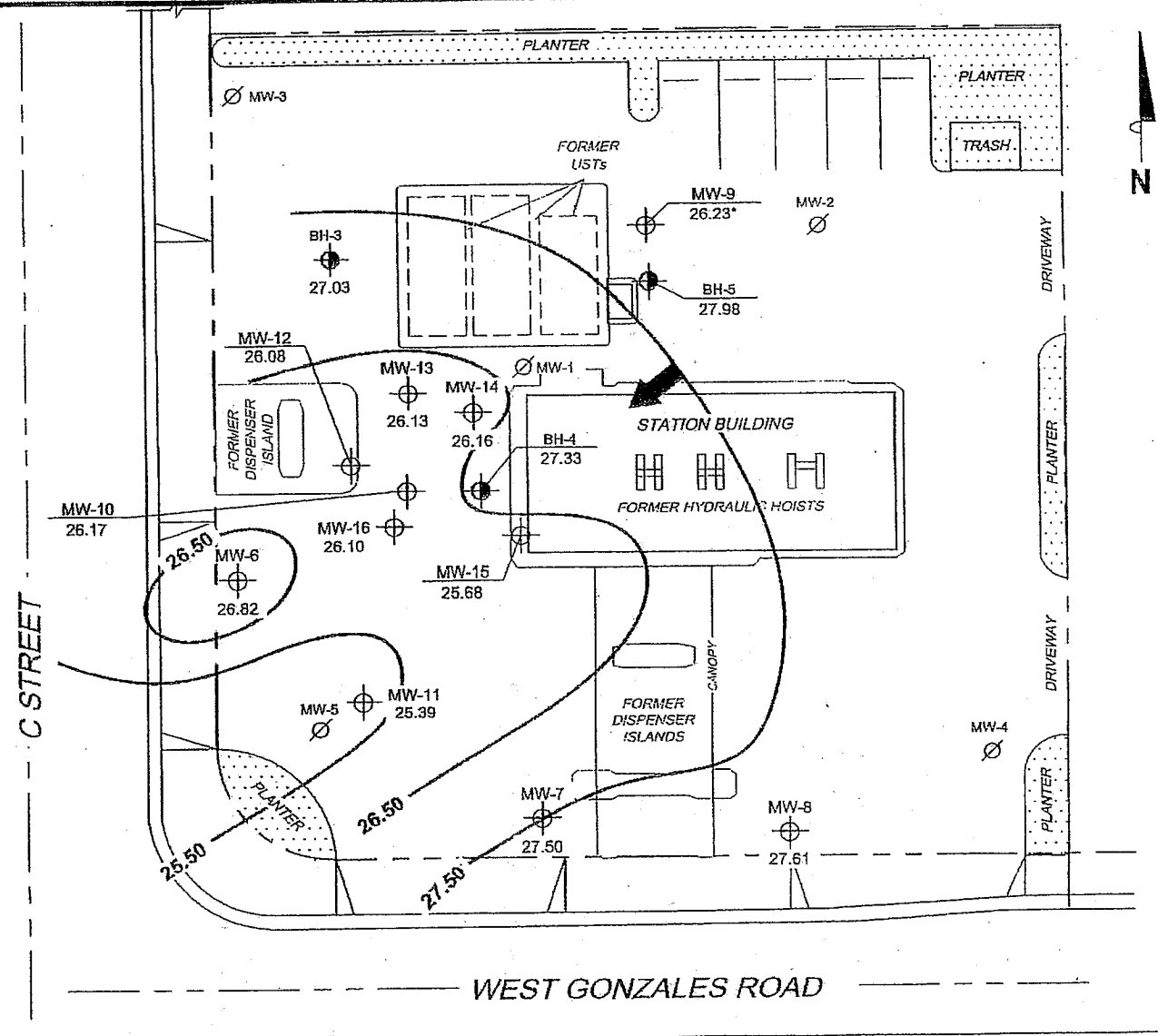
BH5 ⊕ Monitoring/Vapor Extraction Well

BH5
MW-5 ∅ Abandoned Well

27.50 — Groundwater Elevation Contour

General Direction of Groundwater Flow

SCALE (FEET)
0 30



NOTES:

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. * = not included in groundwater contour interpretation. UST = underground storage tank.

TRC

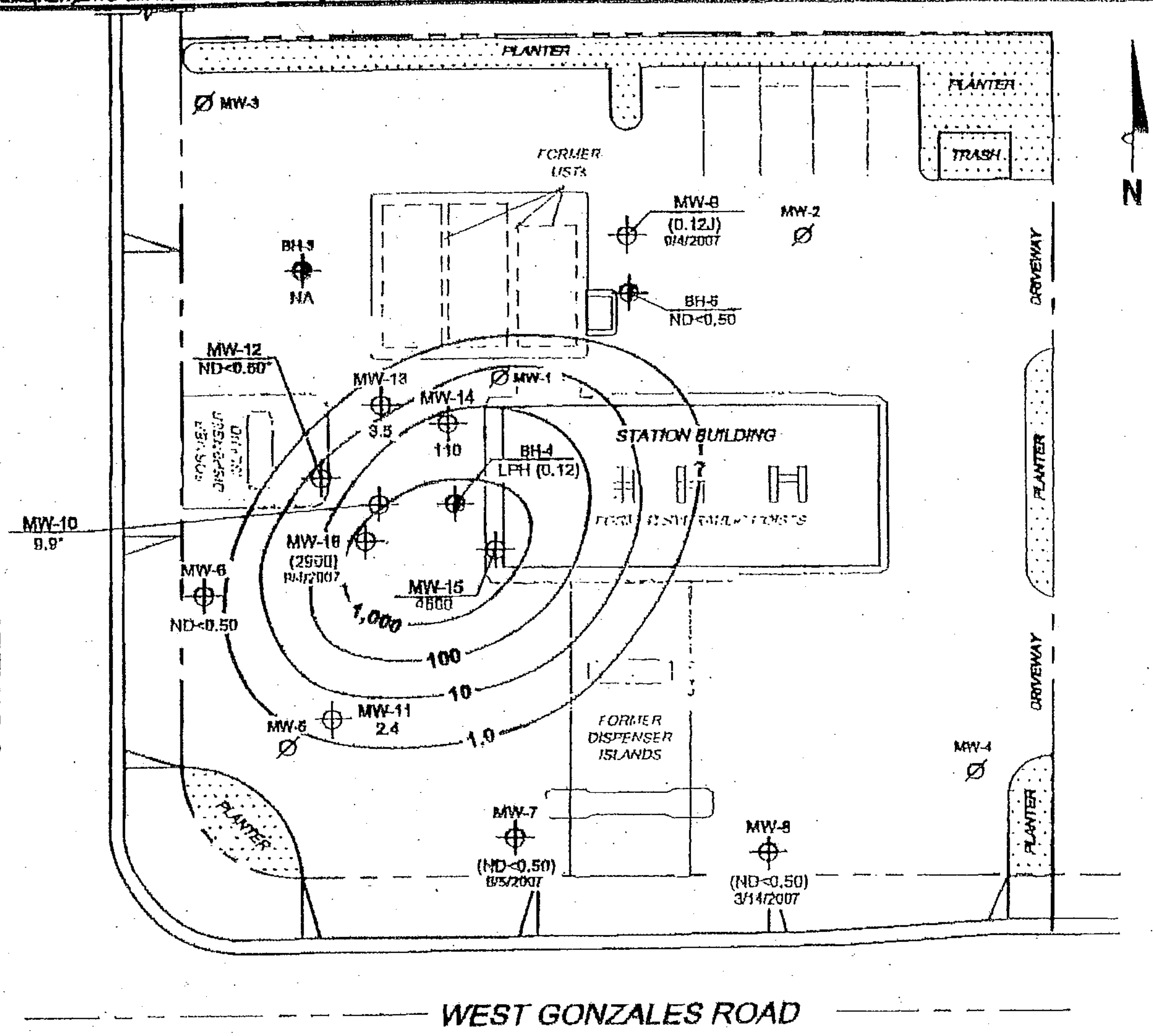
PROJECT: 154770

FACILITY:
76 STATION 5572
341 WEST GONZALES ROAD
OXNARD, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
March 18, 2008

FIGURE 2

MS=1:1 5572-003



LEGEND

- MW-16 — Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l) or LPH Thickness (feet)
- BH5 — Monitoring/Vapor Extraction Well
- MW-5 — Abandoned Well
- 1,000 — Dissolved-Phase Benzene Contour (µg/l)

SCALE (FEET)
0 30

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.
µg/l = micrograms per liter. LPH = liquid-phase hydrocarbons. ND = not detected at limit indicated on official laboratory report. NA = not analyzed, measured, or collected. * = not included in contour interpretation.
( ) = representative historical value.
UST = underground storage tank.

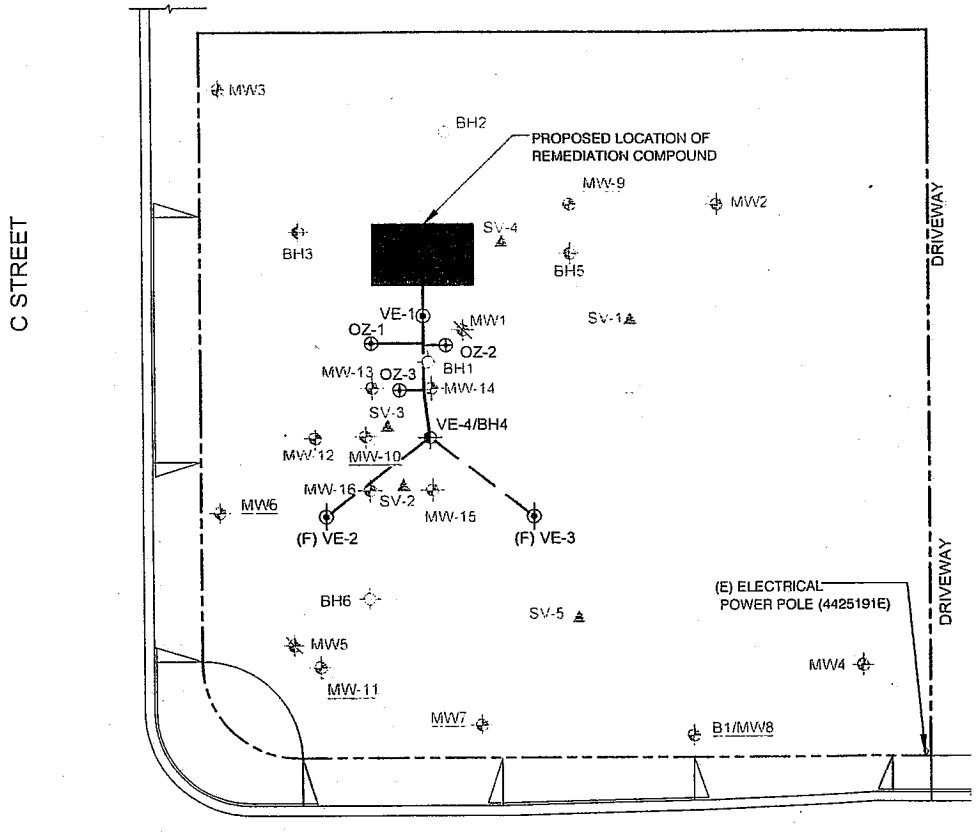
TRC

PROJECT: 154770

FACILITY:
76 STATION 5572
341 WEST GONZALES ROAD
OXNARD, CALIFORNIA

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
December 10, 2007

FIGURE 4



LEGEND:

SV-1	SOIL VAPOR PROBE LOCATION
MW-9	GROUNDWATER MONITORING WELL
B3	SOIL BORING
BH3	VAPOR EXTRACTION/GROUNDWATER MONITORING WELL
MW1	ABANDONED GROUNDWATER MONITORING WELL
VE-1	SOIL VAPOR EXTRACTION WELL
OZ-1	OZONE SPARGE WELL
	APPROXIMATE PROPERTY BOUNDARY LINES
	PROPOSED TRENCH ROUTE

0 30 60

SCALE IN FEET

N

REFERENCE: THIS FIGURE IS BASED ON MAPS BY ATC

SECOR
3017 KILGORE ROAD, SUITE 100
RANCHO CORDOVA, CALIFORNIA

FOR:
CONOCOPHILLIPS 76 STATION NO. 5572
341 WEST GONZALES ROAD
OXNARD, CALIFORNIA

SITE PLAN
W/ PROPOSED REMEDIATION
SYSTEM

FIGURE
3

JOB NUMBER	DRAWN BY	CHECKED BY	APPROVED BY	DATE