## RECEIVED

By Alameda County Environmental Health 10:19 am, Apr 29, 2015

Ms. Karel Detterman<br>Alameda County Environmental Health Services<br>1131 Harbor Bay Parkway, Suite 250<br>Alameda, California 94502-6577<br>Subject: Well Decommissioning Report<br>Former Auto Pro<br>5200 Telegraph Avenue, Oakland, California<br>Case Number RO0000323<br>GeoTracker Global ID T0600100131<br>PSI Project No. 575-401-2

Dear Ms. Detterman:
Tri Star Partnership is pleased to submit the Well Decommissioning Report for the subject site. Please refer to the attached report for details.

I declare, under penalty of perjury, that the information contained in the attached Well Decommissioning Report are true and correct to the best of my knowledge, without independently investigating or verifying the information contained therein.

If you have any questions regarding this report or any aspect of the project, please call Mr. Frank Poss with PSI at 510-434-9200 (x303).

Sincerely,

George Tuma
General Partner
Tri Star Partnership
cc: Mr. Frank Poss, PSI

# WELL DECOMMISSIONING REPORT <br> FORMER AUTOPRO 5200 TELEGRAPH AVENUE OAKLAND, CALIFORNIA 

prepared for

Tri Star Partnership
30 Arjang Court
Alamo, California 94507
prepared by
Professional Service Industries, Inc.
4703 Tidewater Avenue, Suite B
Oakland, California 94601
(510) 434-9200

April 24, 2015
PSI Project No. 575-401-2

## Tri Star Partnership

30 Arjang Court,
Alamo, California 94507

Attention: Mr. George Tuma

## Subject: Well Decommissioning Report

Former Autopro
5200 Telegraph Avenue, Oakland, California
PSI Project No. 575-401-2

Dear Mr. Tuma:
Professional Service Industries, Inc. (PSI) is pleased to present this report documenting the decommissioning of the five monitoring wells located at the subject site. The well decommissioning was performed on March 27, 2015. This report presents a description of the work performed and includes a copy of the required permits obtained from the Alameda County Public Works Agency (ACPWA) and the City of Oakland.

If you have any questions regarding this report or any aspect of the project please do not hesitate to contact us at (510) 434-9200.

Sincerely,

## PROFESSIONAL SERVICE INDUSTRIES, INC.



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## STATEMENT OF LIMITATIONS AND PROFESSIONAL CERTIFICATION

Information provided in this report is intended exclusively for Tri Star Partnership, (PSI Project Number 575-401) for the decommissioning of wells MW-1 through MW-5 at the subject site. Professional Service Industries, Inc. is responsible for the facts and accuracy of the data presented herein. The professional services provided have been performed in accordance with practices generally accepted by other geologists, hydrologists, hydrogeologists, engineers, and environmental scientists practicing in this field. No other warranty, either expressed or implied, is made.

This Well Decommissioning Report is issued with the understanding that PSI will provide the report to the appropriate regulatory agencies through an upload to the California State GeoTracker database. This report has been reviewed by a geologist who is registered in the State of California and whose signature and license number appears below.


Frank R. Poss
Principal Consultant


## INTRODUCTION

The site is located at 5200 Telegraph Avenue in Oakland, Alameda County, California (see Figure 1-Site Location Map). The subject site is a triangular-shaped property (APN No. 14-1225-17-2) measuring about 9,000 square foot in plan area.

The site is currently a Test Only Smog Station, but was used as an automobile filling and service station (Autopro) from 1973 to 1990. The site was under environmental investigation due to historical release of fuel to the subsurface associated with leaking underground storage tanks (LUSTs). Groundwater monitoring wells MW-1 through MW-4 were installed in April, 1994 as part of the investigation regarding the release. An off-site monitoring well from a southwest-adjacent LUST site (MW-4 from the former Chevron station at 5101 Telegraph Ave.) was added to the site's monitoring program in July 1998, with its name changed to MW-5 to avoid confusion with the existing on-site MW-4. It was agreed that Tri Star Partnership would be responsible for the eventual abandonment of Chevron's MW-4. Copies of the well installation diagrams are presented in Appendix A. The approximate locations of the wells are presented in Figure 2 - Monitoring Well Location Map.

On November 14, 2014, notice of closure of this former LUST case was issued by Ms. Karel Detterman of Alameda County Environmental Health (ACEH) with a requirement to decommission the monitoring wells at the site. Professional Service Industries, Inc. (PSI) was retained by Tri Star Partnership to perform the decommissioning of the wells. This report presents a description of the work performed and includes copies of the permits obtained from the regulatory and City agencies for the decommissioning of monitoring wells MW-1 through MW-5.

## SCOPE OF WORK

The work consisted of the decommissioning of five monitoring wells (MW-1 through MW-5) at the subject site. The scope of work for the well decommissioning included:

- Reviewing the monitoring well installation records;
- Obtaining permits for the destruction of the wells from the Alameda County Public Works Agency (ACPWA) and the City of Oakland;
- Decommissioning the monitoring wells in general accordance with ACPWA and California Department of Water Resources (DWR) guidelines;
- Completion and submittal of required DWR Well Completion Reports; and
- Preparing this report.

Copies of the well destruction, excavation and obstruction permits are presented in Appendix B.

## WELL DECOMMISSIONING

## Pre-Field Activities

Underground Service Alert - Prior to initiation of field drilling activities, PSI marked the proposed boring location in the street and contacted Underground Service Alert (USA) a minimum of 48 hours prior to beginning work to locate any potential buried utilities. The USA inquiry identification number (or "Ticket Number") for the utility locate request was \#130054.

Well Destruction Permits - Prior to decommissioning of the wells, PSI obtained Well Destruction Permits (Permit Numbers W2015-189 through W2015-193) from the Alameda County Public Works Agency, Water Resources Division (ACPWA). A copy of the permits is included in Appendix $B$.

Public Right-Of-Way Permits - For the decommissioning of MW-5, which is located within the public right-of-way, the work required temporarily shutting down traffic in the right-hand, northbound lane of Telegraph Avenue adjacent to the site. As required for work in the right-of-way, PSI applied for and obtained both an Excavation Permit and an Obstruction Permit from the City of Oakland Planning and Building Department. As a condition to obtain the Obstruction Permit, PSI also submitted a Traffic Control Plan (TCP) for approval by the City of Oakland Transportation Services Division. As part of the requirements for TCP approval, PSI coordinated with and obtained permission from AC Transit for the temporary relocation of the bus stop (Stop ID Number 56646) blocked by the lane closure. PSI contracted Traffic Management, Inc. of San Leandro, California, to prepare the TCP. Copies of the City of Oakland permits and the approved TCP are included in Appendix B.

## Method Selection

Five monitoring wells (MW-1 through MW-5) were decommissioned on March 27, 2015. Prior to decommissioning, the wells were uncapped and sounded. Sounded depths of wells MW-1, MW-3 and MW-4 did not agree with the construction data for the wells; the sounded depths measured about 5 to 10 feet less than their installation depth, indicating a blockage (e.g. siltation or stuck bailer) or an irregularity (e.g. bend, kink or break) in the well casings. As such, these 3 wells were planned to be drilled out to their total installed depths. Well MW-5, located in Telegraph Avenue, was also planned to be drilled out.

Due to the close proximity of overhead or underground utilities, it was determined that it would be unsafe to drill out wells MW-1 and MW-5. As such, permission to decommission these wells using the pressure grout method was requested of, and subsequently granted by Mr. Steve Miller of the ACPWA.

## Decommissioning

Two (2) wells (MW-3 and MW-4) were destroyed by drilling them out. Initially, the flush-mounted, protective well box at the surface of each well was removed from the ground surface. The wells were then destroyed by drilling out the well casings and annular materials with an 8-inch diameter, hollow-stem auger to a depth of approximately 26 feet (one foot beyond their total installed well depths). The resultant boreholes were subsequently filled with a grout mixture consisting of 95\% Portland Type II cement and 5\% powdered bentonite, placed from the bottom of the well to the surface using a tremmie pipe. The holes were topped with asphalt patch or tinted concrete to match the adjacent ground surface.

Three (3) wells (MW-1, MW-2 and MW-5) were decommissioned using the pressure grouting method. The well casings were filled with a grout mixture consisting of neat Portland Type II cement, mixed at a ratio of no more than 6 gallons of water per 94 pounds of cement. The grout was placed from the bottom of the wells to the surface using a tremie pipe. A grout pump was then attached to the head of each well casing using a water-tight fitting and used to pressurize the casing with grout at 25 psi for no less than 5 minutes. The protective well boxes at the surface of each well were removed from the ground and the resultant holes were backfilled with concrete and topped with asphalt patch to match the existing ground surface.

Drilling and grouting services for the decommissioning of the wells were provided by V\&W Drilling Inc. of Stockton, California. Mr. Steve Miller of the ACPWA was present at the site for inspection of the well decommissioning. PSI contracted Traffic Management, Inc. of San Leandro, California, to perform the traffic control services during the decommissioning of MW-5. A copy of the TCP, which shows a diagram of the locations and types of signage, traffic cones and other safety devices used for the lane closures, is included in Appendix $B$.

## Well Completion Reports

A California Department of Water Resources (DWR) Well Completion Report was subsequently completed for each well, signed by the licensed drilling contractor, and sent to Mr. Miller of the ACPWA for filing with the DWR. Copies of the form and the attachments (geologic log and well construction diagram) for each well are presented in Appendix A.

## WASTE DISPOSAL

Waste from the well decommissioning activities, in the form of annular well material (sand, bentonite and cement), metal well boxes, PVC casing and small amounts of concrete, were placed in four (4) 55-gallon drums. The drums were labeled with the date and pertinent project information, and secured and stored on-site for pickup and proper disposal. Additionally, one (1) 55-gallon drum of purge water was on site from the most recent groundwater monitoring event.

PSI contracted a licensed waste hauler, National Response Corporation of Alameda, California (NRC) to pick up the 5 drums and transport them to a suitable site for proper disposal. A copy of the most recent groundwater laboratory analytical report was provided to NRC to characterize the waste for disposal, as we expect that to be a conservative characterization of contamination that may be present in both the purge water and the annular well materials. The drums were picked up from the site by NRC on April 21, 2015. A copy of the analytical report and the waste disposal manifest is included in Appendix C.

## CONCLUSIONS

A total of five (5) wells were decommissioned at the site on March 27, 2015, as required by the ACEH for case closure. All waste, drums, debris and other investigation- or remediation-derived materials have been removed from the site for disposal in accordance with applicable regulatory requirements. As such, it is our opinion that the subject LUST case (ACEH Fuel Leak Case No. RO0000323) qualifies for closure. PSI will submit a copy of this report to the ACEH via electronic upload and to the State Water Resources Control Board's Geotracker database.

## FIGURES



## REFERENCE:

U.S.G.S. OAKLAND WEST AND OAKLAND EAST, CALIFORNIA, 7.5 MINUTE SERIES TOPOGRAPHIC MAPS, DATED 1993 AND 1997.


Engineering ${ }^{\bullet}$ Consulting•Testing



APPENDIX A

## WELL COMPLETION REPORTS

# CONFIDENTIAL 

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

REMOVED

# CONFIDENTIAL 

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

## REMOVED

# CONFIDENTIAL 

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

## REMOVED

# CONFIDENTIAL 

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

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STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

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STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

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# CONFIDENTIAL 

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

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# CONFIDENTIAL 

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

## REMOVED

# CONFIDENTIAL 

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

## REMOVED

# CONFIDENTIAL 

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

REMOVED

# CONFIDENTIAL 

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

REMOVED

## APPENDIX B

PERMITS

Public Works Agency
_- Alameda County _-
Application Approved on: 03/12/2015 By jamesy

Permit Numbers: W2015-0189 to W2015-0193 Permits Valid from 03/17/2015 to 03/30/2015


## Works Requesting Permits:

Well Destruction-Monitoring - 5 Wells
Driller: V\&W Drilling, Inc. - Lic \#: 720904 - Method: over
Work Total: \$1985.00

Specifications

| Permit \# | Issued Date | Expire Date | Owner Well Id | Hole Diam. | Casing Diam. | Seal Depth | Max. Depth | State Well \# Orig. <br> Permit \# | DWR \# |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W2015- | 03/12/2015 | 06/15/2015 | MW-1 | 8.00 in . | 2.00 in. | 14.00 ft | 30.00 ft |  |  |
| 0189 |  |  |  |  |  |  |  |  |  |
| W2015- | 03/12/2015 | 06/15/2015 | MW-2 | 8.00 in . | 2.00 in. | 14.00 ft | 25.00 ft |  |  |
| 0190 |  |  |  |  |  |  |  |  |  |
| W2015- | 03/12/2015 | 06/15/2015 | MW-3 | 8.00 in . | 2.00 in . | 14.00 ft | 25.00 ft |  |  |
| 0191 |  |  |  |  |  |  |  |  |  |
| W2015- | 03/12/2015 | 06/15/2015 | MW-4 | 8.00 in . | 2.00 in. | 14.00 ft | 25.00 ft |  |  |
| 0192 |  |  |  |  |  |  |  |  |  |
| W2015- | 03/12/2015 | 06/15/2015 | MW-5 | 8.00 in . | 2.00 in. | 6.00 ft | 22.00 ft | 93361 (Z7) |  |
| 0193 |  |  |  |  |  |  |  |  |  |

## Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

## Alameda County Public Works Agency - Water Resources Well Permit

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.
4. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.
5. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.
6. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
7. Remove the Christy box or similar structure. Destroy well MW-5 by overdrilling the upper 5ft. bgs \& Tremie Grouting with Cement. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.
8. Remove the Christy box or similar structure. Destroy all other wells by grouting neat cement with a tremie pipe or pressure grouting ( 25 psi for 5 min .) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.
9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $\$ 500.00$.


|  | Name | Applicant | Address | Phone | License \# |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Owner: | TEKIN FATIH \& FERDA |  |  | 121 DIAMOND CT HERCULES, CA |  |
| Contractor: | $V \& W$ DRILLING INC | $x$ | 3806 DUCK CREEK DRIVE STOCKTON, CA | (209) 469-7700 |  |


| PERMIT DETAILS: Building/Public Use/Activity/Obstructions |  |  |
| :--- | :--- | :--- |
| Work Information |  | Short Term (Max 14 Days) |
| Start Date: $03 / 27 / 2015$ | Obstruction Permit Type: | Number of Meters (Metered Area): |
| End Date: | $03 / 27 / 2015$ | Length Of Obstruction (Unmetered Area): |
|  |  | 50 |


|  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| TOTAL FEES TO BE PAID AT FILING: $\$ 121.06$ |  |  |  |  |
| Application Fee | $\$ 71.00$ | Records Management Fee | $\$ 10.02$ | Short Term Permits |
| Technology Enhancement Fee | $\$ 5.54$ |  |  |  |

Plans Checked By $\qquad$ Date $\qquad$ Permit Issued By $\qquad$ Date $\qquad$

Finalized By $\qquad$ Date $\qquad$

Permits for which no major inspection has been approved within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.


| Planning and Building Department |
| :--- |
| PH: $510-238-3891$ <br> www.oaklandnet.com <br> FAX: $510-238-2263$ |
| TDD: 510-238-3254 |


| Permit No: | X1500640 Excavation | Filed Date: 3/23/2015 |
| :--- | :--- | :--- |
| Job Site: | 5240 TELEGRAPH AVE | Schedule Inspection by calling:510-238-54444 |
|  | 014122501702 |  |

Parcel No: $\quad 014122501702$

District:


|  | Name | Applicant | Address | Phone | License \# |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Owner: | TEKIN FATIH \& FERDA |  |  | 121 DIAMOND CT HERCULES, CA |  |
| Contractor: | $V \& W$ DRILLING INC | $\times$ | 3806 DUCK CREEK DRIVE STOCKTON, CA | (209) 469-7700 |  |


| PERMIT DETAILS: Building/Public Infrastructure/Excavation/NA |  |  |
| :--- | :--- | :--- |
| General Information |  |  |
| Excavation Type: Private Party | Special Paving Detail Required: | Tree Removal Involved: |
| Date Street Last Resurfaced: |  | Holiday Restriction (Nov1 - Jan 1): |
| Worker's Compensation Company Name: |  |  |
| Worker's Compensation Policy \#: |  |  |

## Key Dates

Approximate Start Date:
Approximate End Date:

|  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| TOTAL FEES TO BE PAID AT FILING: $\$ 436.05$ |  |  |  |  |
| Application Fee | $\$ 71.00$ | Excavation - Private Party Type | $\$ 309.00$ | Records Management Fee |
| Technology Enhancement Fee | $\$ 19.95$ |  |  |  |

Plans Checked By $\qquad$ Date $\qquad$
$\qquad$ Date $\qquad$

Finalized By $\qquad$ Date $\qquad$

FEDCOPY

## CITY of OAKLAND

Public Works Agency • 250 Frank H. Ogawa Plaza • Suite 4344 • Oakland, California 94612-2033
Transportation Services Division
Office (510) 238-3466
FAX (510) 238-7415
TDD (510) 839-6451
Traffic Engineering Services Analysis Fee Invoice
Date:
March 19, 2015

TSD Invoice \# :
15-0048
To: Brand Burfield
Company: Professional Service
Address: 4703 Tidewater Ave, Ste B Oakland, CA 94601
Phone: $\quad$ 510-434-9200 $\times 305$
Created/Received By: Joe Watson

| Location | Description of Work | Project Name / <br> Permit \# | \# of Hours * |
| :---: | :--- | :--- | :--- |
| Telegraph Avenue | Walk In TCP Review |  | 1 |
|  |  |  |  |
|  |  |  |  |
|  |  |  | 1 |
|  |  | Total Hours |  |
|  | TSD Service Rate | $\$$ | 123.00 |
|  | Total Fee | $\$$ | 123.00 |

*     - minimum 1 hour service

| FOR CITY USE ONLY |  |
| :---: | :---: |
| Cost Center No. | W045 |
| Organization No. | 30265 |
| Account No. | 45119 |
| Fund No. | 1750 |

Cc: Rosalie

## APPLICATION FOR TRAFFIC CONTROL PLAN

REDGEB

anfte fugineeping

Public Works Agency<br>Transportation Services Division<br>15MRR1| PM 2:00

Transportation Services Fee: $\$ 123 /$ hour (Check or Money Order Only)

Check the box that apply:
$\begin{array}{ll}\text { New Application (Utility, Excavation) } \\ \square & \text { Renewal Application } \\ \square & \text { New Development w/ Mgmt Plan } \\ \square & \text { City of Oakland Project }\end{array}$

## Please Read the Following Statements Below:

1. Processing time for a Traffic Control Application is a minimum of 10 business days.
2. Traffic Control review is scheduled only on Tuesdays and Thursdays from 8:30am thru 11:30am by appointment only.
3. A scheduled appointment by phone or email with a TSD staff member is necessary to discuss any and all traffic control application and plans.
4. Please call ahead to confirm that the traffic control application is ready for pickup @ 510-238-3467.
5. Businesses and residences adjacent to the work area must be provided 72 hour advance notice.
6. A completed traffic control application may be faxed to (510) 238-7415.
7. Incomplete traffic control applications will not be processed and returned to applicant immediately.
8. The initial approval for a traffic control plan is 1 month, the renewal submittal may be approved up to 3 months.
9. The traffic control provision dates cannot be changed or extended if work has already commenced.
10. After receiving TSD approval of the traffic control application, contractor shall proceed to the Permit Center to "Obstruction obtain an obstruction permit.


## Please Follow these Steps in Order to Complete a Traffic Control Plan:

A. Drawing Area: The full width of all streets adjacent to the site MUST be included in the drawing. Include the entire block in which your work is located for every street that is adjacent to your site.
B. Include Street Names, Direction of Traffic on the Street, and North Arrow
C. Show Existing Number of Lanes in all Directions (with any pavement arrows)
D. Check the Box(s) that Apply: All checked items MUST be shown on the drawing

| $\square$ Lane Closure | $\square$ | Use of Median | $\square$ | Sidewalk Closure |
| :--- | :--- | :--- | :--- | :--- |
| $\square$ | Street Closures (must provide detour plan) | $\square$ | Use Parking Lane | (must provide pedestrian walk way) |

E. Show All Dimensions of street widths (curb to curb), lane widths, sidewalk widths, and work area dimension. (Note: Traffic Control Application / Plans missing the above information will not be accepted or processed.)
F. Show the Name and Locations of all advanced warning devices, flaggers, delineators, warning and construction signs to be used.

[^0]Project Name:
Project Number: TSD-15-0048 Reviewed By: JWatson A 1 (ut5 Date: 3/19/2015 Permit good from 03/27(2015
to $\qquad$ 03/27/2015 $\qquad$
ADD NEW SUBSECTION TO READ:
SP 7-10.1.4 Vehicular Traffic

Attention is directed to Section 7-10. Public Convenience and Safety, of the City of Oakland Standard Specification for Public Works Construction, 2006 Edition (Include this paragraph for p-iobs, excavation permits or obstruction permits).

The Contractor shall conduct its work in such a manner as to provide public convenience and safety and according to the provisions in this subsection. The provisions shall not be modified or altered without written approval from the Engineer.

Standard traffic control devices shall be placed at the construction zone according to the latest edition of the Work Area Traffic Control Handbook or Manual on Uniform Traffic Control Devices (MUTCD), Chapter 6 - "Traffic Controls for Construction and Maintenance Work Zone," or as directed by the Engineer.

All trenches and excavations in any public street or roadway shall be back filled and opened to traffic, or covered with suitable steel plates securely placed and opened to traffic at all times except during actual construction operations unless otherwise permitted by the Engineer.

Each section of work shall be completed or temporarily paved and open to traffic in not more than 5 days after commencing work unless otherwise permitted in writing by the Engineer.

Where construction encroaches into the sidewalk area, a minimum of $51 / 2$ feet of unobstructed sidewalk shall be maintained at all times for pedestrian use. Pedestrian barricades, shelter, and detour signs per Caltrans standards may be required.

The contractor shall conduct its operation in such a manner as to leave the following traffic lanes unobstructed and in a condition satisfactory for vehicular travel during the Obstruction Period. At all times traffic lanes will be restricted and reopened to travel. Emergency access shall be provided at all times.

| Street Name Limits | Obstruction <br> Period | North <br> Bound | South <br> Bound | East <br> Bound | West <br> Bound |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Telegraph Avenue between <br> Claremont Avenue and $55^{\text {th }}$ <br> Street | Mon. - Fri. <br> 9am - 4pm | $1-12^{\prime}$ lane open <br> minimum | N/A | N/A | N/A |
| $51^{\text {st }}$ Street between Telegraph <br> Avenue and Shattuck Avenue | Mon. - Fri. <br> 9am - 4pm | N/A | N/A | $3-12^{\prime}$ lane open <br> minimum | N/A |

Coordinate all work dates and locations with City of Oakland Right-Of-Way Inspection team.

## The Contractor shall also include all check items:

1. $\square$ Design a construction traffic control plan and submit (2) copies to the Engineer for approval prior to starting any work.
2. $\boxtimes$ Replace all signs, pavement markings, and traffic detector loops damaged or removed due to construction within 3 days of completion of work or the final pavement lift.
3. $\boxtimes$ Provide advance notice to Oakland Police at (510) 777-3333 (24-hrs) and Oakland Fire at (510) 238-3331 (2-rhs) when a single lane of traffic or less is provided on any street.
4. $\boxtimes$ Provide 72-hour advance notice to AC Transit at (510) 891-4909 when affecting a bus stop.
5. $\square$ For Caltrans roadways, ramps, or maintained facilities, the Contractor shall obtain appropriate permits and notify the Traffic Management Center 24 hours in advance of any work.
6. $\boxtimes$ Flagger control is required. Certified Flagger is required.
7. $\square$ Pedestrian walkway by K-rail, Canopy or Plywood is required. (See detour plan)
8. $\boxtimes$ Pedestrian traffic shall be maintained and guided through the project at all times.
9. $\boxtimes$ Provide advance notice to Business and Residence within 72-hours.
10. $\boxtimes$ Allow all traffic movement at intersection.



## TRAFFIC mANAGEMENT <br> I N C O R P O R A T E D

## PROFESSIONAL SERVICE

 INDUSTRIES, INC.
## GENERAL NOTES

| 1 THIS PLAN SUPPLEMENTED WTH 2014 CA MUTCD. |  |  |  |
| :---: | :---: | :---: | :---: |
| $2 \begin{aligned} & \text { THE LOCATION OF THE SIGNS SHOWN ON THE PLAN ARE GUIDELINES AND ACTUAL LOCATION WILL DEPEND UPON ALIGNMENT, GRADE, LOCATION OF THE STREET } \\ & \text { INTERSECTIONS, AND 85TH PERCENTLLE. }\end{aligned}$ |  |  |  |
| NOTIFY LOCAL LAW ENFORCEMENT, FIRE, AND AMBULANCE COMPANIES WITHIN 72 HOURS BEFORE CONSTRUCTION BEGINS. KEEP OPEN ACCESS FOR EMERGENCY vEHICLES AT ALL TIMES |  |  |  |
| CONTINUAL MONTIORING AND MAINTENANCE OF THE TRAFFIC CONTROLZONE WIL BE IMPLEMENTED FOR THE PURPOSE OF MAINTAINING EMERGENCY ACCESS, ACCOMMODATION FOR PEDESTRIANS, BICYCLL TTAFFIC AND THE DISABLLD. |  |  |  |
| PROPER TRAINING OF TRAFFIC CONTROLLERS, PROPER DEVICES \& PROPER USE OF THE DEVICES, REOUIRED AT ALL TIMES. |  |  |  |
| ALL SIGNS IMPLEMENTED WIL ONLY BE VIEWABLE WHEN IN USE, OTHERWISE ALL WARNING DEVIGES ARE TO BE TAKEN DOWN OR COVERED. |  |  |  |
| Nothing all |  |  |  |
| ALL Conflcting markings are to be removed for projects that Last aterm of 3 days or Longer. |  |  |  |
| SIGNS AND CHANNELZING DEVICES MUST PE RETRO REFLECTVE OR ILLUMINATE DURING THE NIGHT. MIMMUM VIIIBILITY 1000' (FEET). |  |  |  |
| ONLY ONE SIDEWALK WLLL BE CLOSED AT A TIME. PEDESTRIAN AND DISABLED ACCESS TO BE MAINTAINED PER 2014 CA MUTCD STANDARD (SACRAMENTO COUNTY USE STANDARD CONSTRUCTION SPEC 6-12.02) PROVIDED BY CONTRACTOR |  |  |  |
| 11 CONTACT UNDERGROUND SERVICE ALERT (USA) 48 HOURS PRIOR TO ANY EXCAVATION FOR POTENTIAL UTLITY CONFLICTS. |  |  |  |
| RECOMMENDED ADVANCE WARNING SIGN SPACING TABLE <br> (CA MUTCD 2014 EDITION TABLE 6C-1, SEE TABLE FOR ADDITIONAL DETAILS) |  |  |  |
| ROAD TYPE | DISTANCE BETWEEN SIGNS |  |  |
|  | A | B | C |
| URBAN (LOW SPEED)-25MPH OR LESS | 100 | 100 | 100 |
| URBAN (LOW SPEED)-MORE THAN 25MPH TO 40MPH | 250 | 250 | 250 |
| URBAN (HIGH SPEED)-MORE THAN 40MPH | 350 | 350 | 350 |
| RURAL | 500 | 500 | 500 |
| EXPRESSWAY/FREEWAY | 1000 | 1500 | 2640 |


| DEVICE SPACING TABLE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { SPEED } \\ \text { (MPH) } \end{gathered}$ | FORMULA | BUFFER SPACE | MINIMUM TAPER LENGTHS |  |  |  |  |  |  |  |  | MAXIMUM CONE SPACING |  | 2014 MUTCD SECTION 6C. 04 <br> SIGN SPACING |
|  |  |  | 10' OFFSET |  |  | 11' OFFSET |  |  | 12' OFFSET |  |  |  |  |  |
|  |  |  |  | ${ }_{2}^{1} \mathrm{~L}$ | $\frac{1}{3} \mathrm{~L}$ | L | ${ }_{2}^{1} \mathrm{~L}$ | $\frac{1}{3} \mathrm{~L}$ | L | ${ }_{2}^{1} \mathrm{~L}$ | ${ }_{3}^{1} \mathrm{~L}$ | LONG | TAPER |  |
|  |  |  | MERGE | SHIFT | SHOULER | MERGE | SHIFT | SHOULDER | MERGE | SHIFT | SHOULDER |  |  |  |
| 25 |  | 155' | 104' | 52' | $35^{\prime}$ | 115' | 57' | $38^{\prime}$ | 125' | 63' | 42' | $25^{\prime}$ | 13' | 100'-200' |
| 30 | WS ${ }^{2}$ | 2001 | 150 | $75^{\prime}$ | $50^{\prime}$ | 165 | 83' | $55^{\prime}$ | 180' | 90' | $60^{\prime}$ | 30' | 15' | 120'-250' |
| 35 | 60 | 250' | 204' | 102' | $68^{\prime}$ | 225' | 112' | 75' | 245' | 123' | 82' | 35' | 18' | 140'-280' |
| 40 |  | 305 | 267' | 133' | 89' | 293' | 147' | 98' | 320' | $160^{\prime}$ | 107' | 40' | $20^{\prime}$ | 160'320' |
| 45 |  | 360' | 450' | $225^{\circ}$ | 150' | 495' | 248' | 165' | 540' | $270^{\circ}$ | 180' | 45' | 23' | 360'540' |
| 50 |  | 425' | 500' | $250{ }^{\prime}$ | 167 | 550' | 275 | 183' | 600' | 300 | 200' | 50' | $25^{\prime}$ | 400' $600{ }^{\prime}$ |
| 55 | WWS | 495' | 550' | $275{ }^{\prime}$ | 183' | 605' | 303' | 202' | $660^{\circ}$ | 330' | 220 | $50^{\prime}$ | $28^{\prime}$ | $440^{\prime}-660^{\prime}$ |
| 60 | $L=W$ S | 570' | $600 \cdot$ | $300^{\prime}$ | 200' | 660' | 330' | 220 | 720 | 360' | 240' | $50^{\prime}$ | $30^{\prime}$ | 480'-720' |
| 65 |  | 645 | $650{ }^{\prime}$ | 325' | 217 | 715' | 358' | 238' | 780 | 390' | 260' | $50^{\prime}$ | $33^{\prime}$ | $520^{\prime}-700^{\prime}$ |
| 70 |  | $730^{\prime}$ | 700' | 350' | $233 '$ | 770' | 385' | 257' | 840' | 420' | 280' | $50^{\prime}$ | 35' | 560'-820' |
| LOW SPEED HIGH SPEED BOTH ARE <br> 1.) 85 TH \% <br> 2.) POSTED <br> 3.) ANTICIP | IS 40 MPH \& LE IS 45 MPH \& AB BASED ON: TILE OR IF NOT A SPEED LIMIT (PSL) ATED SPEED. | ove <br> vailable, TH <br> L) | EN USE |  |  |  |  | $\begin{aligned} & \mathbf{S}=\mathrm{SPEE} \\ & \mathbf{W}=\mathrm{WID} \\ & \mathrm{~L}=\text { TAPE } \end{aligned}$ | ED <br> TH (OF ER LEN | $\begin{aligned} & \text { FFSET } \\ & \text { VGTH } \end{aligned}$ | FROM PA | TH OF | RAVEL) |  |


| LEGEND |  |  |
| :---: | :---: | :---: |
| ZZ $\triangle$ - WORK AREA | II | - TYPE-III BARRICADE WISIGN |
| Y - high level warning device | II | - TYPE-I OR II BARRICADE W/ SIGN |
| [Y -FLASHING ARROW SIGN (FAS) | - | - CHANNELIZATION DEYICE |
| P - flagger | d | - SIIGN |



| WORK AREA TRAFFIC CONTROL: WELL DRILLING |  |
| :---: | :---: |
| CONTACT: BRAND BURFIELD |  |
| CONTACT\#: 510-434-9200 X19 |  |
| JOB NUMBER: 54458 | PLAN\#: 17589 |
| PERMIT NUMBER: |  |
| COVER SHEET SIZE: B | SCALE: N.T.S. |
| DATE: 3/3/2015 | PREPARED |

TRAFFIC MANAGEMENT, INC. California - Great Lakes • New York 800.763 .3999 www.trafficmanagement.com

Traffic Contol Services S. Seles | Traffic Control Sevices. Sales \& Rentals |
| :--- |
| Permis $\&$ Consulting Engineaing - Traning | $\overline{\mathbf{C 3 1}}$ \# 785804



## APPENDIX C

WASTE DISPOSAL DOCUMENTATION

25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

13 February 2014

Brand Burfield
PSI -- Oakland
4703 Tidewater Ave Ste B
Oakland, CA 94601
RE: Tristar
Enclosed are the results of analyses for samples received by the laboratory on 02/10/14 09:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

## Katherine RunningCrane

Katherine RunningCrane
Project Manager

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
| :--- | :--- | :--- | :---: | :---: |
| MW-1 | T140237-01 | Water | $02 / 07 / 1411: 35$ | $02 / 10 / 1409: 00$ |
| MW-2 | T140237-02 | Water | $02 / 07 / 1410: 45$ | $02 / 10 / 1409: 00$ |
| MW-3 | T140237-03 | Water | $02 / 07 / 1412: 40$ | $02 / 10 / 1409: 00$ |
| MW-4 | T140237-04 | Water | $02 / 07 / 1412: 15$ | $02 / 10 / 1409: 00$ |

25712 Commercentre Drive
949.297.5020 Phone
949.297.5027 Fax

| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

MW-1
T140237-01(Water)

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

SunStar Laboratories, Inc.
Extractable Petroleum Hydrocarbons by 8015C

| C6-C12 (GRO) | ND | 0.013 | 0.50 | $\mathrm{mg} / 1$ | 1 | 4021009 | 02/10/14 | 02/11/14 | EPA 8015C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C13-C28 (DRO) | ND | 0.016 | 0.50 | " | " | " | " | " | " |
| C29-C40 (MORO) | ND | 0.013 | 0.50 | " | " | " | " | " | " |
| Surrogate: p-Terphenyl |  |  | 68.8\% |  |  | " | " | " | " |

Volatile Organic Compounds by EPA Method 8260B

| Bromobenzene | ND | 1.0 | ug/l | 1 | 4021014 | 02/10/14 | 02/11/14 | EPA 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromochloromethane | ND | 1.0 | " | ${ }^{\prime}$ | " | ${ }^{\prime}$ | ${ }^{\prime}$ | " |
| Bromodichloromethane | ND | 1.0 | " | " | " | " | " | " |
| Bromoform | ND | 1.0 | " | " | " | " | " | " |
| Bromomethane | ND | 1.0 | " | " | " | " | " | " |
| n-Butylbenzene | 1.4 | 1.0 | " | " | " | " | " | " |
| sec-Butylbenzene | 1.8 | 1.0 | " | " | " | " | " | " |
| tert-Butylbenzene | ND | 1.0 | " | " | " | " | " | " |
| Carbon tetrachloride | ND | 0.50 | " | " | " | " | " | " |
| Chlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| Chloroethane | ND | 1.0 | " | " | " | " | " | " |
| Chloroform | ND | 1.0 | " | " | " | " | " | " |
| Chloromethane | ND | 1.0 | " | " | " | " | " | " |
| 2-Chlorotoluene | ND | 1.0 | " | " | " | " | " | " |
| 4-Chlorotoluene | ND | 1.0 | " | " | " | " | " | " |
| Dibromochloromethane | ND | 1.0 | " | " | " | " | " | " |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | " | " | " | " | " | " |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | " | " | " | " | " | " |
| Dibromomethane | ND | 1.0 | " | " | " | " | " | " |
| 1,2-Dichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,3-Dichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,4-Dichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| Dichlorodifluoromethane | ND | 0.50 | " | " | " | " | " | " |
| 1,1-Dichloroethane | ND | 1.0 | " | " | " | " | " | " |
| 1,2-Dichloroethane | ND | 0.50 | " | " | " | " | " | " |
| 1,1-Dichloroethene | ND | 1.0 | " | " | " | " | " | " |
| cis-1,2-Dichloroethene | ND | 1.0 | " | " | " | " | " | " |

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-1

T140237-01(Water)

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

SunStar Laboratories, Inc.
Volatile Organic Compounds by EPA Method 8260B

| trans-1,2-Dichloroethene | ND | 1.0 | ug/l | 1 | 4021014 | 02/10/14 | 02/11/14 | EPA 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,3-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 2,2-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,1-Dichloropropene | ND | 1.0 | " | " | " | " | " | " |
| cis-1,3-Dichloropropene | ND | 0.50 | " | " | " | " | " | " |
| trans-1,3-Dichloropropene | ND | 0.50 | " | " | " | " | " | " |
| Hexachlorobutadiene | ND | 1.0 | " | " | " | " | " | " |
| Isopropylbenzene | 2.8 | 1.0 | " | " | " | " | " | " |
| p-Isopropyltoluene | ND | 1.0 | " | " | " | " | " | " |
| Methylene chloride | ND | 1.0 | " | " | " | " | " | " |
| Naphthalene | ND | 1.0 | " | " | " | " | " | " |
| n-Propylbenzene | 3.5 | 1.0 | " | " | " | " | " | " |
| Styrene | ND | 1.0 | " | " | " | " | " | " |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | " | " | " | " | " | " |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | " | " | " | " | " | " |
| Tetrachloroethene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,3-Trichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,4-Trichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,1,2-Trichloroethane | ND | 1.0 | " | " | " | " | " | " |
| 1,1,1-Trichloroethane | ND | 1.0 | " | " | " | " | " | " |
| Trichloroethene | ND | 1.0 | " | " | " | " | " | " |
| Trichlorofluoromethane | ND | 1.0 | " | " | " | " | " | " |
| 1,2,3-Trichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,3,5-Trimethylbenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,4-Trimethylbenzene | ND | 1.0 | " | " | " | " | " | " |
| Vinyl chloride | ND | 1.0 | " | " | " | " | " | " |
| Benzene | ND | 0.50 | " | " | " | " | " | " |
| Toluene | ND | 0.50 | " | " | " | " | " | " |
| Ethylbenzene | ND | 0.50 | " | " | " | " | " | " |
| m,p-Xylene | ND | 1.0 | " | " | " | " | " | " |
| o-Xylene | ND | 0.50 | " | " | " | " | " | " |
| Tert-amyl methyl ether | ND | 2.0 | " | " | " | " | " | " |
| SunStar Laboratories, |  |  | The re |  | port apply his analytic | the sample report mu | nalyzed in <br> be reprod | ccordance w d in its entir |


| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-1

## T140237-01(Water)

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

| Tert-butyl alcohol | ND | 10 | ug/l | 1 | 4021014 | 02/10/14 | 02/11/14 | EPA 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Di-isopropyl ether | ND | 2.0 | " | " | " | " | " | " |
| Ethyl tert-butyl ether | ND | 2.0 | " | " | " | " | " | " |
| Methyl tert-butyl ether | ND | 1.0 | " | " | " | " | " | " |
| Surrogate: 4-Bromofluorobenzene |  | $111 \%$ | 83.5-119 |  | " | " | " | " |
| Surrogate: Dibromofluoromethane |  | $101 \%$ | 81-136 |  | " | " | " | " |
| Surrogate: Toluene-d8 |  | 98.1 \% | 88.8-117 |  | " | " | " | " |

25712 Commercentre Drive
949.297.5020 Phone
949.297.5027 Fax

| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-2

T140237-02(Water)

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Analyte | Result | MDL | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

SunStar Laboratories, Inc.
Extractable Petroleum Hydrocarbons by 8015C

| C6-C12 (GRO) | ND | 0.013 | 0.50 | $\mathrm{mg} / 1$ | 1 | 4021009 | 02/10/14 | 02/11/14 | EPA 8015C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C13-C28 (DRO) | ND | 0.016 | 0.50 | " | " | " | " | " | " |
| C29-C40 (MORO) | ND | 0.013 | 0.50 | " | " | " | " | " | " |
| Surrogate: p-Terphenyl |  |  | 66.0 \% |  |  | " | " | " | " |

Volatile Organic Compounds by EPA Method 8260B


| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-2

T140237-02(Water)

| Analyte | Result | MDL | Reporting <br> Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

SunStar Laboratories, Inc.
Volatile Organic Compounds by EPA Method 8260B

| trans-1,2-Dichloroethene | ND | 1.0 | ug/l | 1 | 4021014 | 02/10/14 | 02/11/14 | EPA 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,3-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 2,2-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,1-Dichloropropene | ND | 1.0 | " | " | " | " | " | " |
| cis-1,3-Dichloropropene | ND | 0.50 | " | " | " | " | " | " |
| trans-1,3-Dichloropropene | ND | 0.50 | " | " | " | " | " | " |
| Hexachlorobutadiene | ND | 1.0 | " | " | " | " | " | " |
| Isopropylbenzene | ND | 1.0 | " | " | " | " | " | " |
| p-Isopropyltoluene | ND | 1.0 | " | " | " | " | " | " |
| Methylene chloride | ND | 1.0 | " | " | " | " | " | " |
| Naphthalene | ND | 1.0 | " | " | " | " | " | " |
| n -Propylbenzene | ND | 1.0 | " | " | " | " | " | " |
| Styrene | ND | 1.0 | " | " | " | " | " | " |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | " | " | " | " | " | " |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | " | " | " | " | " | " |
| Tetrachloroethene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,3-Trichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,4-Trichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,1,2-Trichloroethane | ND | 1.0 | " | " | " | " | " | " |
| 1,1,1-Trichloroethane | ND | 1.0 | " | " | " | " | " | " |
| Trichloroethene | ND | 1.0 | " | " | " | " | " | " |
| Trichlorofluoromethane | ND | 1.0 | " | " | " | " | " | " |
| 1,2,3-Trichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,3,5-Trimethylbenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,4-Trimethylbenzene | ND | 1.0 | " | " | " | " | " | " |
| Vinyl chloride | ND | 1.0 | " | " | " | " | " | " |
| Benzene | ND | 0.50 | " | " | " | " | " | " |
| Toluene | ND | 0.50 | " | " | " | " | " | " |
| Ethylbenzene | ND | 0.50 | " | " | " | " | " | " |
| m,p-Xylene | ND | 1.0 | " | " | " | " | " | " |
| o-Xylene | ND | 0.50 | " | " | " | " | " | " |
| Tert-amyl methyl ether | ND | 2.0 | " | " | " | " | " | " |
| SunStar Laboratories, Inc. |  |  | The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. |  |  |  |  |  |


| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-2

## T140237-02(Water)

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

SunStar Laboratories, Inc.
Volatile Organic Compounds by EPA Method 8260B

| Tert-butyl alcohol | ND | 10 | ug/ | 4021014 | 02/10/14 | 02/11/14 | EPA 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Di-isopropyl ether | ND | 2.0 | " | " | " | " | " |
| Ethyl tert-butyl ether | ND | 2.0 | " | " | " | " | " |
| Methyl tert-butyl ether | ND | 1.0 | " | " | " | " | " |
| Surrogate: 4-Bromofluorobenzene |  | $115 \%$ |  | " | " | " | " |
| Surrogate: Dibromofluoromethane |  | $101 \%$ |  | " | " | " | " |
| Surrogate: Toluene-d8 |  | 97.0\% |  | " | " | " | " |


| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-3

T140237-03(Water)

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

SunStar Laboratories, Inc.
Extractable Petroleum Hydrocarbons by 8015C

| C6-C12 (GRO) | ND | 0.013 | 0.50 | $\mathrm{mg} / 1$ | 1 | 4021009 | 02/10/14 | 02/11/14 | EPA 8015C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C13-C28 (DRO) | 0.68 | 0.016 | 0.50 | " | " | " | " | " | " |
| C29-C40 (MORO) | 0.048 | 0.013 | 0.50 | " | " | " | " | " | " |
| Surrogate: p-Terphe |  |  | 66.0 \% |  |  | " | " | " | " |

Volatile Organic Compounds by EPA Method 8260B


| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-3

T140237-03(Water)

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

SunStar Laboratories, Inc.
Volatile Organic Compounds by EPA Method 8260B

| trans-1,2-Dichloroethene | ND | 1.0 | ug/l | 1 | 4021014 | 02/10/14 | 02/11/14 | EPA 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,3-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 2,2-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,1-Dichloropropene | ND | 1.0 | " | " | " | " | " | " |
| cis-1,3-Dichloropropene | ND | 0.50 | " | " | " | " | " | " |
| trans-1,3-Dichloropropene | ND | 0.50 | " | " | " | " | " | " |
| Hexachlorobutadiene | ND | 1.0 | " | " | " | " | " | " |
| Isopropylbenzene | 22 | 1.0 | " | " | " | " | " | " |
| p-Isopropyltoluene | 5.7 | 1.0 | " | " | " | " | " | " |
| Methylene chloride | ND | 1.0 | " | " | " | " | " | " |
| Naphthalene | ND | 1.0 | " | " | " | " | " | " |
| n-Propylbenzene | 45 | 1.0 | " | " | " | " | " | " |
| Styrene | ND | 1.0 | " | " | " | " | " | " |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | " | " | " | " | " | " |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | " | " | " | " | " | " |
| Tetrachloroethene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,3-Trichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,4-Trichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,1,2-Trichloroethane | ND | 1.0 | " | " | " | " | " | " |
| 1,1,1-Trichloroethane | ND | 1.0 | " | " | " | " | " | " |
| Trichloroethene | ND | 1.0 | " | " | " | " | " | " |
| Trichlorofluoromethane | ND | 1.0 | " | " | " | " | " | " |
| 1,2,3-Trichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,3,5-Trimethylbenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,4-Trimethylbenzene | ND | 1.0 | " | " | " | " | " | " |
| Vinyl chloride | ND | 1.0 | " | " | " | " | " | " |
| Benzene | ND | 0.50 | " | " | " | " | " | " |
| Toluene | ND | 0.50 | " | " | " | " | " | " |
| Ethylbenzene | 1.9 | 0.50 | " | " | " | " | " | " |
| m,p-Xylene | 4.4 | 1.0 | " | " | " | " | " | " |
| o-Xylene | ND | 0.50 | " | " | " | " | " | " |
| Tert-amyl methyl ether | ND | 2.0 | " | " | " | " | " | " |
| SunStar Laboratories, Inc. |  |  | The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. |  |  |  |  |  |


| PSI -- Oakland | Project: Tristar |  |
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| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-3

T140237-03(Water)

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

SunStar Laboratories, Inc.
Volatile Organic Compounds by EPA Method 8260B

| Tert-butyl alcohol | ND | 10 | ug/l | 1 | 4021014 | 02/10/14 | 02/11/14 | EPA 8260B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Di-isopropyl ether | ND | 2.0 | " | " | " | " | " | " |  |
| Ethyl tert-butyl ether | ND | 2.0 | " | " | " | " | " | " |  |
| Methyl tert-butyl ether | ND | 1.0 | " | " | " | " | " | " |  |
| Surrogate: 4-Bromofluorobenzene |  | 74.2 \% | 83.5-119 |  | " | " | " | " | $S-G C$ |
| Surrogate: Dibromofluoromethane |  | 96.2 \% | 81-136 |  | " | " | " | " |  |
| Surrogate: Toluene-d8 |  | 95.4 \% | 88.8-117 |  | " | " | " | " |  |

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| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-4

T140237-04(Water)

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Analyte | Result | MDL | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

SunStar Laboratories, Inc.
Extractable Petroleum Hydrocarbons by 8015C

| C6-C12 (GRO) | ND | 0.013 | 0.50 | $\mathrm{mg} / \mathrm{l}$ | 1 | 4021009 | 02/10/14 | 02/11/14 | EPA 8015C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C13-C28 (DRO) | ND | 0.016 | 0.50 | " | " | " | " | " | " |
| C29-C40 (MORO) | ND | 0.013 | 0.50 | " | " | " | " | " | " |
| Surrogate: p-Terphenyl |  |  | 66.0 \% |  |  | " | " | " | " |

Volatile Organic Compounds by EPA Method 8260B

| Bromobenzene | ND | 1.0 | ug/l | 1 | 4021014 | 02/10/14 | 02/11/14 | EPA 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bromochloromethane | ND | 1.0 | " | " | " | " | ${ }^{\prime}$ | " |
| Bromodichloromethane | ND | 1.0 | " | " | " | " | " | " |
| Bromoform | ND | 1.0 | " | " | " | " | " | " |
| Bromomethane | ND | 1.0 | " | " | " | " | " | " |
| n-Butylbenzene | 2.5 | 1.0 | " | " | " | " | " | " |
| sec-Butylbenzene | 3.1 | 1.0 | " | " | " | " | " | " |
| tert-Butylbenzene | ND | 1.0 | " | " | " | " | " | " |
| Carbon tetrachloride | ND | 0.50 | " | " | " | " | " | " |
| Chlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| Chloroethane | ND | 1.0 | " | " | " | " | " | " |
| Chloroform | ND | 1.0 | " | " | " | " | " | " |
| Chloromethane | ND | 1.0 | " | " | " | " | " | " |
| 2-Chlorotoluene | ND | 1.0 | " | " | " | " | " | " |
| 4-Chlorotoluene | ND | 1.0 | " | " | " | " | " | " |
| Dibromochloromethane | ND | 1.0 | " | " | " | " | " | " |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | " | " | " | " | " | " |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | " | " | " | " | " | " |
| Dibromomethane | ND | 1.0 | " | " | " | " | " | " |
| 1,2-Dichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,3-Dichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,4-Dichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| Dichlorodifluoromethane | ND | 0.50 | " | " | " | " | " | " |
| 1,1-Dichloroethane | ND | 1.0 | " | " | " | " | " | " |
| 1,2-Dichloroethane | ND | 0.50 | " | " | " | " | " | " |
| 1,1-Dichloroethene | ND | 1.0 | " | " | " | " | " | " |
| cis-1,2-Dichloroethene | ND | 1.0 | " | " | " | " | " | " |

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| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-4

T140237-04(Water)

| Analyte | Result | MDL | Reporting <br> Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

SunStar Laboratories, Inc.
Volatile Organic Compounds by EPA Method 8260B

| trans-1,2-Dichloroethene | ND | 1.0 | ug/l | 1 | 4021014 | 02/10/14 | 02/11/14 | EPA 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,3-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 2,2-Dichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,1-Dichloropropene | ND | 1.0 | " | " | " | " | " | " |
| cis-1,3-Dichloropropene | ND | 0.50 | " | " | " | " | " | " |
| trans-1,3-Dichloropropene | ND | 0.50 | " | " | " | " | " | " |
| Hexachlorobutadiene | ND | 1.0 | " | " | " | " | " | " |
| Isopropylbenzene | 2.2 | 1.0 | " | " | " | " | " | " |
| p-Isopropyltoluene | 1.6 | 1.0 | " | " | " | " | " | " |
| Methylene chloride | ND | 1.0 | " | " | " | " | " | " |
| Naphthalene | ND | 1.0 | " | " | " | " | " | " |
| n-Propylbenzene | 4.1 | 1.0 | " | " | " | " | " | " |
| Styrene | ND | 1.0 | " | " | " | " | " | " |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | " | " | " | " | " | " |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | " | " | " | " | " | " |
| Tetrachloroethene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,3-Trichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,4-Trichlorobenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,1,2-Trichloroethane | ND | 1.0 | " | " | " | " | " | " |
| 1,1,1-Trichloroethane | ND | 1.0 | " | " | " | " | " | " |
| Trichloroethene | ND | 1.0 | " | " | " | " | " | " |
| Trichlorofluoromethane | ND | 1.0 | " | " | " | " | " | " |
| 1,2,3-Trichloropropane | ND | 1.0 | " | " | " | " | " | " |
| 1,3,5-Trimethylbenzene | ND | 1.0 | " | " | " | " | " | " |
| 1,2,4-Trimethylbenzene | ND | 1.0 | " | " | " | " | " | " |
| Vinyl chloride | ND | 1.0 | " | " | " | " | " | " |
| Benzene | ND | 0.50 | " | " | " | " | " | " |
| Toluene | ND | 0.50 | " | " | " | " | " | " |
| Ethylbenzene | ND | 0.50 | " | " | " | " | " | " |
| m,p-Xylene | ND | 1.0 | " | " | " | " | " | " |
| o-Xylene | ND | 0.50 | " | " | " | " | " | " |
| Tert-amyl methyl ether | ND | 2.0 | " | " | " | " | " | " |
| SunStar Laboratories, Inc. |  |  | The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. |  |  |  |  |  |


| PSI -- Oakland | Project: Tristar |  |
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| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## MW-4

T140237-04(Water)

| Analyte | Result | MDL | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

SunStar Laboratories, Inc.
Volatile Organic Compounds by EPA Method 8260B

| Tert-butyl alcohol | ND | 10 | ug/l | 1 | 4021014 | 02/10/14 | 02/11/14 | EPA 8260B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Di-isopropyl ether | ND | 2.0 | " | " | " | " | " | " |
| Ethyl tert-butyl ether | ND | 2.0 | " | " | " | " | " | " |
| Methyl tert-butyl ether | ND | 1.0 | " | " | " | " | " | " |
| Surrogate: 4-Bromofluorobenzene |  | 99.8 \% | 83.5-119 |  | " | " | " | " |
| Surrogate: Dibromofluoromethane |  | 95.5 \% | 81-136 |  | " | " | " | " |
| Surrogate: Toluene-d8 |  | 97.4\% | 88.8-117 |  | " | " | " | " |

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| PSI -- Oakland | Project: Tristar |  |
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| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## Extractable Petroleum Hydrocarbons by 8015C - Quality Control <br> SunStar Laboratories, Inc.

|  | Reporting |  |  |  | Spike <br> Level | Source |  | \%REC Limits |  | RPD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte | Result | MDL | Limit | Units | Level | Result | \%REC | Limits | RPD | Limit | Notes |

## Batch 4021009 - EPA 3510C GC

| Blank (4021009-BLK1) | Prepared: 02/10/14 Analyzed: 02/11/14 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: p-Terphenyl | 2.86 |  |  | $m g / l$ | 4.00 | 71.4 | 65-135 |
| C13-C28 (DRO) | ND | 0.016 | 0.50 | " |  |  |  |
| C29-C40 (MORO) | ND | 0.013 | 0.50 | " |  |  |  |
| LCS (4021009-BS1) |  |  |  |  | epared | Analyz | 02/11/14 |
| Surrogate: p-Terphenyl | 2.64 |  |  | $m g / l$ | 4.00 | 66.0 | 65-135 |
| C13-C28 (DRO) | 18.2 | 0.016 | 0.50 | " | 20.0 | 91.2 | 75-125 |


| Matrix Spike (4021009-MS1) |  | Source: T140234-11RE |  |  |  |  |  |  |  | Prepared: 02/10/14 Analyzed: 02/11/14 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| Surrogate: p-Terphenyl | 2.64 |  |  | $m g / l$ | 4.00 |  | 66.0 |  |  |  |
| C13-C28 (DRO) | 17.5 | 0.016 | 0.50 | $"$ | 20.0 | ND | 87.3 |  |  |  |

## Matrix Spike Dup (4021009-MSD1)

Source: T140234-11RE Prepared: 02/10/14 Analyzed: 02/11/14

| Surrogate: p-Terphenyl | 2.65 |  | $m g / l$ | 4.00 | $65-135$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C13-C28 (DRO) | 17.3 | 0.016 | 0.50 | $"$ | 20.0 | ND | 86.5 | $75-125$ |


| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.



## Batch 4021014 - EPA 5030 GCMS

| Blank (4021014-BLK1) |  |  |  | epare | nalyz | 02/11/14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 4-Bromofluorobenzene | 8.00 |  | $u g / l$ | 8.00 | 100 | 83.5-119 |
| Surrogate: Dibromofluoromethane | 6.62 |  | " | 8.00 | 82.8 | 81-136 |
| Surrogate: Toluene-d8 | 7.87 |  | " | 8.00 | 98.4 | 88.8-117 |
| Bromobenzene | ND | 1.0 | " |  |  |  |
| Bromochloromethane | ND | 1.0 | " |  |  |  |
| Bromodichloromethane | ND | 1.0 | " |  |  |  |
| Bromoform | ND | 1.0 | " |  |  |  |
| Bromomethane | ND | 1.0 | " |  |  |  |
| n-Butylbenzene | ND | 1.0 | " |  |  |  |
| sec-Butylbenzene | ND | 1.0 | " |  |  |  |
| tert-Butylbenzene | ND | 1.0 | " |  |  |  |
| Carbon tetrachloride | ND | 0.50 | " |  |  |  |
| Chlorobenzene | ND | 1.0 | " |  |  |  |
| Chloroethane | ND | 1.0 | " |  |  |  |
| Chloroform | ND | 1.0 | " |  |  |  |
| Chloromethane | ND | 1.0 | " |  |  |  |
| 2-Chlorotoluene | ND | 1.0 | " |  |  |  |
| 4-Chlorotoluene | ND | 1.0 | " |  |  |  |
| Dibromochloromethane | ND | 1.0 | " |  |  |  |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | " |  |  |  |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | " |  |  |  |
| Dibromomethane | ND | 1.0 | " |  |  |  |
| 1,2-Dichlorobenzene | ND | 1.0 | " |  |  |  |
| 1,3-Dichlorobenzene | ND | 1.0 | " |  |  |  |
| 1,4-Dichlorobenzene | ND | 1.0 | " |  |  |  |
| Dichlorodifluoromethane | ND | 0.50 | " |  |  |  |
| 1,1-Dichloroethane | ND | 1.0 | " |  |  |  |

SunStar Laboratories, Inc.

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| PSI -- Oakland | Project: Tristar |  |
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| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.



## Batch 4021014 - EPA 5030 GCMS

| Blank (4021014-BLK1) |  |  |  | Prepared: 02/10/14 Analyzed: 02/11/14 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane | ND | 0.50 | ug/l |  |  |
| 1,1-Dichloroethene | ND | 1.0 | " |  |  |
| cis-1,2-Dichloroethene | ND | 1.0 | " |  |  |
| trans-1,2-Dichloroethene | ND | 1.0 | " |  |  |
| 1,2-Dichloropropane | ND | 1.0 | " |  |  |
| 1,3-Dichloropropane | ND | 1.0 | " |  |  |
| 2,2-Dichloropropane | ND | 1.0 | " |  |  |
| 1,1-Dichloropropene | ND | 1.0 | " |  |  |
| cis-1,3-Dichloropropene | ND | 0.50 | " |  |  |
| trans-1,3-Dichloropropene | ND | 0.50 | " |  |  |
| Hexachlorobutadiene | ND | 1.0 | " |  |  |
| Isopropylbenzene | ND | 1.0 | " |  |  |
| p-Isopropyltoluene | ND | 1.0 | " |  |  |
| Methylene chloride | ND | 1.0 | " |  |  |
| Naphthalene | ND | 1.0 | " |  |  |
| n -Propylbenzene | ND | 1.0 | " |  |  |
| Styrene | ND | 1.0 | " |  |  |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | " |  |  |
| 1,1,1,2-Tetrachloroethane | ND | 1.0 | " |  |  |
| Tetrachloroethene | ND | 1.0 | " |  |  |
| 1,2,3-Trichlorobenzene | ND | 1.0 | " |  |  |
| 1,2,4-Trichlorobenzene | ND | 1.0 | " |  |  |
| 1,1,2-Trichloroethane | ND | 1.0 | " |  |  |
| 1,1,1-Trichloroethane | ND | 1.0 | " |  |  |
| Trichloroethene | ND | 1.0 | " |  |  |
| Trichlorofluoromethane | ND | 1.0 | " |  |  |
| 1,2,3-Trichloropropane | ND | 1.0 | " |  |  |
| SunStar Laboratories, |  |  |  | esults in this report apply to the samples analyzed dy document. This analytical report must be rep | in accordance with the chain of duced in its entirety. |

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| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.



## Batch 4021014 - EPA 5030 GCMS

| Blank (4021014-BLK1) | Prepared: 02/10/14 Analyzed: 02/11/14 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,3,5-Trimethylbenzene | ND | 1.0 | ug/l |  |  |  |
| 1,2,4-Trimethylbenzene | ND | 1.0 | " |  |  |  |
| Vinyl chloride | ND | 1.0 | " |  |  |  |
| Benzene | ND | 0.50 | " |  |  |  |
| Toluene | ND | 0.50 | " |  |  |  |
| Ethylbenzene | ND | 0.50 | " |  |  |  |
| m,p-Xylene | ND | 1.0 | " |  |  |  |
| o-Xylene | ND | 0.50 | " |  |  |  |
| Tert-amyl methyl ether | ND | 2.0 | " |  |  |  |
| Tert-butyl alcohol | ND | 10 | " |  |  |  |
| Di-isopropyl ether | ND | 2.0 | " |  |  |  |
| Ethyl tert-butyl ether | ND | 2.0 | " |  |  |  |
| Methyl tert-butyl ether | ND | 1.0 | " |  |  |  |
| LCS (4021014-BS1) | Prepared: 02/10/14 Analyzed: 02/11/14 |  |  |  |  |  |
| Surrogate: 4-Bromofluorobenzene | 8.23 |  | $u g / l$ | 8.00 | 103 | 83.5-119 |
| Surrogate: Dibromofluoromethane | 7.75 |  | " | 8.00 | 96.9 | 81-136 |
| Surrogate: Toluene-d8 | 8.13 |  | " | 8.00 | 102 | 88.8-117 |
| Trichloroethene | 19.4 | 1.0 | " | 20.0 | 97.2 | 75-125 |


| Matrix Spike (4021014-MS1) |  | Source: T140238-01 | Prepared: 02/10/14 Analyzed: 02/11/14 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Surrogate: 4-Bromofluorobenzene | 9.22 | $u g / l$ | 8.00 | 115 | 83.5-119 |
| Surrogate: Dibromofluoromethane | 8.02 | " | 8.00 | 100 | 81-136 |
| Surrogate: Toluene-d8 | 7.99 | " | 8.00 | 99.9 | 88.8-117 |
| Trichloroethene | 20.8 | 1.0 | $20.0 \quad 0.780$ | 100 | 75-125 |
| Matrix Spike Dup (4021014-MSD1) |  | Source: T140238-01 | Prepared: 02/10/14 | Analyzed: 02/11/14 |  |
| Surrogate: 4-Bromofluorobenzene | 8.95 | $u g / l$ | 8.00 | 112 | 83.5-119 |
| Surrogate: Dibromofluoromethane | 7.63 | " | 8.00 | 95.4 | 81-136 |
| Surrogate: Toluene-d8 | 7.59 | " | 8.00 | 94.9 | 88.8-117 |
| SunStar Laboratories, Inc. |  | The r custo | sults in this report app document. This analy | $y$ to the tical rep | mples analyz must be rep |

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.



Batch 4021014 - EPA 5030 GCMS

| Matrix Spike Dup (4021014-MSD1) |  |  | Source: T140238-01 |  | Prepared: 02/10/14 | Analyzed: 02/11/14 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Trichloroethene | 20.0 | 1.0 | ug/1 | 20.0 | 0.780 | 95.9 | $75-125$ | 3.98 | 20 |

25712 Commercentre Drive

| PSI -- Oakland | Project: Tristar |  |
| :--- | :---: | :---: |
| 4703 Tidewater Ave Ste B | Project Number: 575-102-9 | Reported: |
| Oakland CA, 94601 | Project Manager: Brand Burfield | $02 / 13 / 1414: 42$ |

## Notes and Definitions

| S-GC | Surrogate recovery outside of established control limi |
| :--- | :--- |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |

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Phone: $70434-9200$
Fax: $510434-7676$
Project Manager: BRAND BMFFIECD

Date: $\qquad$ 2/7/14 Page: $\qquad$ 1 Of $\qquad$
Project Name: TVR STAR
$\qquad$ RUSENDOMAHAN Client Project \#: $\qquad$ 575-102-9
Collector $\qquad$ TH0237 EDP \#: $\qquad$ Batch \#: $\qquad$


Sample disposal Instructions: $\qquad$

## SAMPLE RECEIVING REVIEW SHEET





[^0]:    RENEWAL PROCESS: Resubmit a completed Traffic Control Application with the old approved plan (with the necessary modifications / changes to the plans).
    FOR HELP in preparing a traffic control plan, see Temporary Traffic Control Pocket Reference Guide 2007, Work Area Traffic Control Handbook 2006, or the California Manual on Uniform Traffic Control (MUTCD) 2003, Chapter 6.
    http://www.dot.ca. qov/hg/traffops/signtech/mutcdsupp/ca mutcd.htm
    For City website: http://www.oaklandpw.com/Page548.aspx

    * Name the streets that are the boundaries of your work area.

