R D M
Environmental

6280 Brookshire Drive, Rocklin, CA 95747 Tel: (916) 415-1134, FAX :(916) 415-1154

November 19, 2006

Mr. Jeff Baker
Tesoro Environmental Resources Company
3450 South 344th Way, Suite 201
Auburn, Washington 98001

Subject: *Monitoring Well Installation Work Plan*
Tesoro Station No. 67107
(Former Beacon Station No. 3721)
44 Lewelling Boulevard
San Lorenzo, California
RDM Project No. 02-67107

Dear Mr. Baker:

RDM Environmental (RDM) has been authorized by Tesoro Environmental Resources Company (Tesoro) to submit the following monitoring well installation work plan for the above referenced site. The purpose of this work plan is to install an off site monitoring well (MW-12) southwest of the site to close the data gap between monitoring wells MW-9 and MW-11. The location of the site is presented in Figure 1, and the site detail map illustrating the location of the proposed well is included in Figure 2.

This well was requested by Alameda County Health Agency (County) during the September 19, 2006 meeting between RDM, County, and Haley & Aldrich (H&A). This meeting was requested by RDM and H&A to clarify the requested in the County Letter dated August 10, 2006. A copy of the County Letter is included in Enclosure A. In addition, RDM included a ground water contour map in Figure 3 illustrating the performance of the newly modified ground water system on the ground water table.

Monitoring Well Installation

Due to limited access and a need to continuously log the soil boring, RDM recommends using a Power Probe 9630 Pro-D (Pro-D) truck-mounted Geoprobe® rig with hollow stem auger capabilities. The Pro-D is a hydraulically powered machine that utilizes both static force and percussion to advance sampling tools into the subsurface. It allows for continuous logging, with the capability of discrete soil sampling at varying depths, and with the auger capabilities the rig will be able to install the monitoring well.

The Geoprobe rig is equipped with a dual-walled split spoon or window sheath sampler. The Geoprobe consists of an outer casing that has a 3.25-inch outside diameter (OD) and a 2-inch inside diameter (ID). The window sheath sampler is 2 feet in length with a 2-inch OD and 1.75-inch ID. Each window sheath sampler houses four 1.75-inch X 6-inch long brass or stainless steel liners, or one 1.75-inch X 2-foot clear acetate liner. RDM recommends the use of acetate liners to assist in continuously logging the borings and help evaluate soil lithology and petroleum hydrocarbon concentrations in soil.

The window sheath is loaded with the desired sample liner/liners and is installed inside the outer casing. Simultaneously, the outer drive casing and inner split spoon sample barrel are advanced 2, 4, or 5 feet, depending on the sampling system application. As these tools are advanced, the inner sampling barrel collects the soil core sample. The sampler is then retrieved while the outer casing remains in place, protecting the integrity of the hole and minimizing the potential of ground water infiltration. The outer casing performs similar to a conductor casing.

The sample barrel is then washed with phosphate-free soap and double-rinsed with deionized water; a new sample liner is installed in the core barrel. The clean sampler is lowered into place, and advanced further to collect the next soil sample. This process continues until the desired depth has been reached. The soil will be characterized using the Unified Soil Classification System visual manual method and recorded on the soil-boring logs. Samples collected will be screened in the field for the presence of petroleum vapors using a photoionization detector (PID). Select soil samples will be submitted to Kiff Analytical (Kiff) of Davis California to be analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), total petroleum hydrocarbons (TPH) as gasoline, methyl tertiary butyl ether (MTBE), diisopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), tert-amyl methyl ether (TAME) and tert-butanol (TBA) using EPA Method 8260B.

The use of the Advance 6600 Geoprobe® rig will allow RDM to advance soil boring for well construction to depths 25 to 30 feet below surface grade (bsg) using the 8-inch diameter auger capabilities. The final depth will be determined in the field based on site-specific conditions. The boring will be completed as monitoring well MW-12. The location of the proposed monitoring well is shown on Figure 2. Field methods and procedures to be used by RDM during installation of the well are summarized in Enclosure B.

Monitoring well MW-12 will be constructed of 2-inch diameter flush threaded schedule 40 PVC casing and will be screened over the lower most 10 to 30 feet with 0.020”-slotted casing (site dependent). The annular space will be filled with No. 3 Lonestar sand to approximately 1-foot above the screen section. A 2-foot thick bentonite seal will be emplaced above the filter pack and the remaining annulus will be filled with a cement/bentonite slurry to within 12-inches of surface grade. The surface will be completed with a 12-inch traffic rated well box set in concrete. Well construction details are included in Enclosure C.

Following installation, the monitoring well will be developed and sampled during the next regularly scheduled quarterly monitoring event. The water samples collected during the quarterly monitoring event will be sent to the laboratory for analysis of BTEX, TPH as gasoline, MTBE, DIPE, ETBE, TAME and TBA using EPA Method 8260B.

Stockpile

Soil cuttings generated during drilling and well installation will be temporarily stockpiled and stored on-site as described in Enclosure B. A composite soil sample will be collected from the stockpile and analyzed for BTEX, TPHg, MTBE, DIPE, ETBE, TAME, TBA, and total lead for profiling. Once RDM has received the analytical results and completed the soil profiling, the stockpile soil will disposed of at a Tesoro approved facility.

Schedule

Schedule

Upon approval of this work plan, RDM will submit a soil boring/well permit application and right-of-entry agreement to install the proposed well. Drilling activities will be tentatively scheduled for late January 2007. A report summarizing the results of the proposed investigation will be submitted to the appropriate agencies within 60 days following completion of the work.

Remarks/Signatures

The interpretations contained in this document represent our professional opinions, and are based in part, on information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

If you have any questions regarding this project, please contact Richard D. Munsch at (916) 415-1134.

Sincerely,

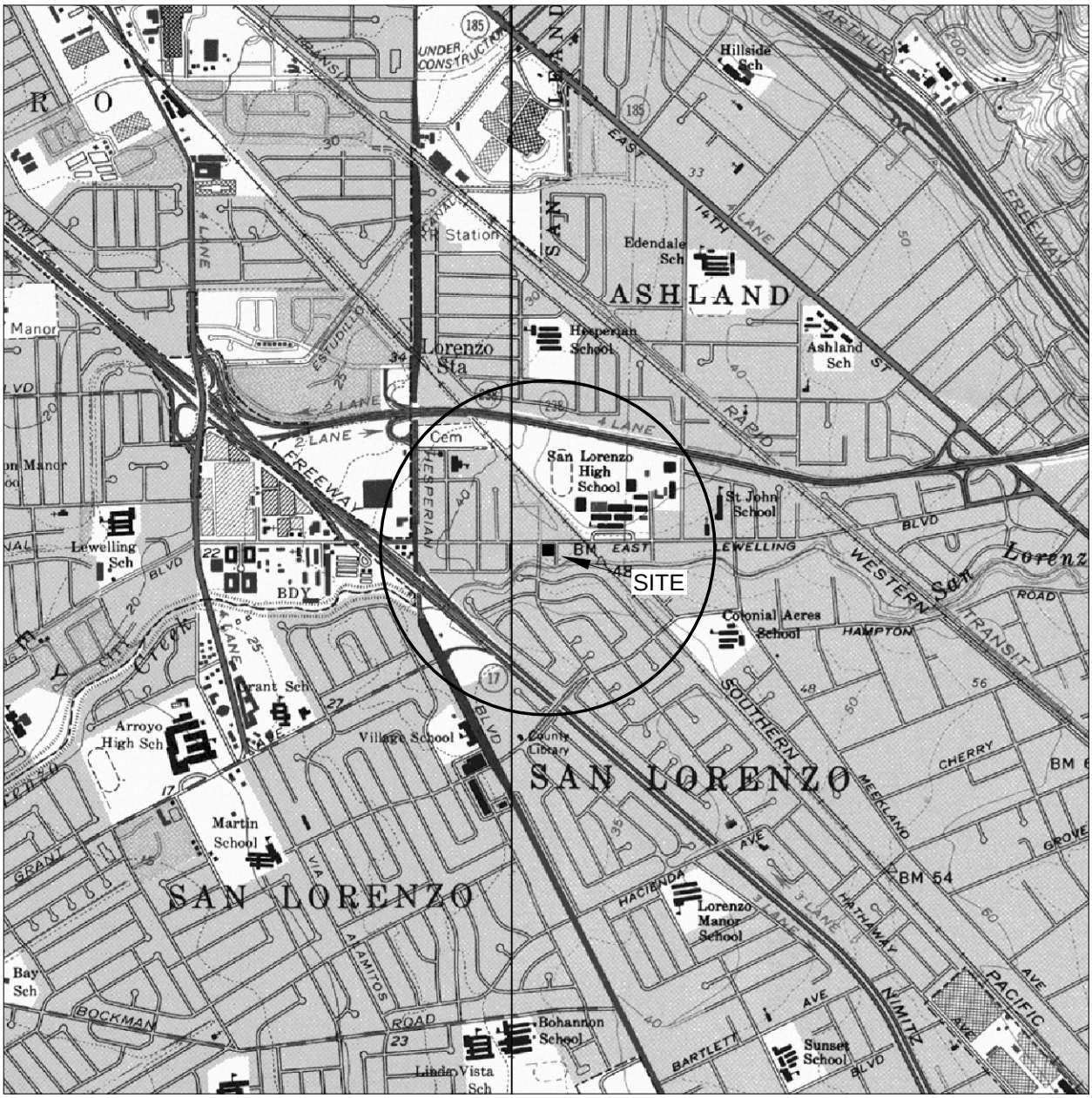
RDM ENVIRONMENTAL

Richard D. Munsch
Project Manager

Michael G. Lee, P.E.
California Registered Civil Engineer No. C055795

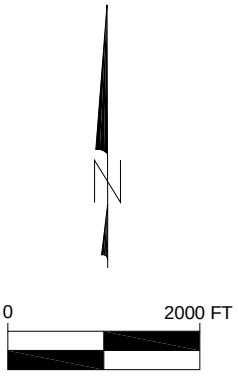
RDM (67107 Monitorng Well Installation Report 11-24-06.doc)
Enclosures

cc: Mr. Jerry T. Wickham – Alameda County Health Agency
Mr. Denis Conley - Haley & Aldrich



GENERAL NOTES:
BASE MAP FROM U.S.G.S.
HAYWARD, CA.
7.5 MINUTE TOPOGRAPHIC
PHOTOREVISED 1980

QUADRANGLE LOCATION



SCALE 1:24,000

FIGURE 1
SITE LOCATION MAP
TESORO STATION NO. 67107
(FORMER BEACON STATION NO. 3721)
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. 00-3721	DRAWN BY M.L. 12/15/00
FILE NO. 00-3721-1A	PREPARED BY RDM
REVISION NO. 1	REVIEWED BY

R D M Environmental

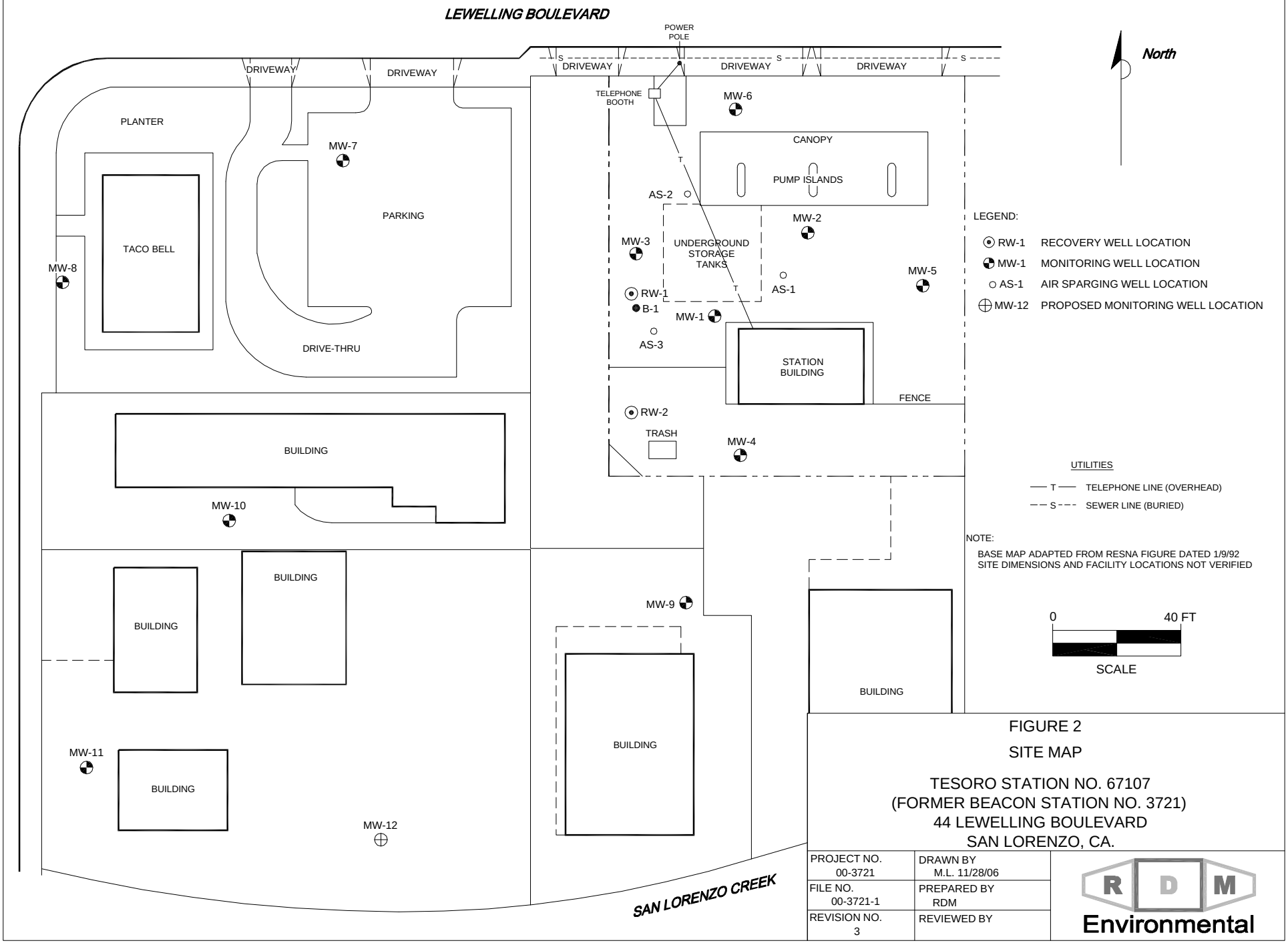


FIGURE 2

SITE MAP

TESORO STATION NO. 67107
(FORMER BEACON STATION NO. 3721)
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. 00-3721	DRAWN BY M.L. 11/28/06
FILE NO. 00-3721-1	PREPARED BY RDM
REVISION NO. 3	REVIEWED BY

R D M Environmental

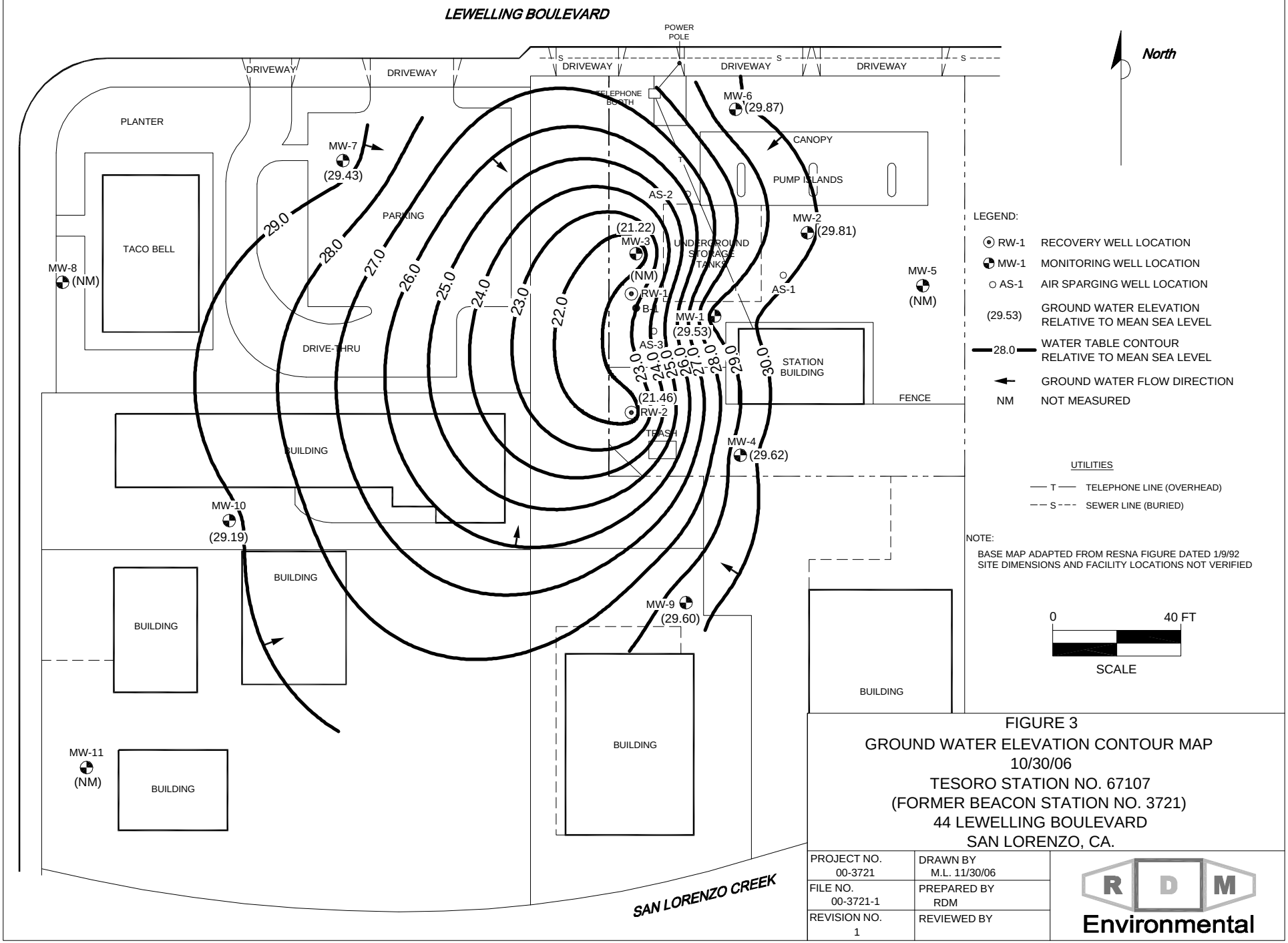


FIGURE 3
GROUND WATER ELEVATION CONTOUR MAP
10/30/06
TESORO STATION NO. 67107
(FORMER BEACON STATION NO. 3721)
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. 00-3721	DRAWN BY M.L. 11/30/06
FILE NO. 00-3721-1	PREPARED BY RDM
REVISION NO. 1	REVIEWED BY

RDM Environmental

ENCLOSURE A

The August 10, 2006 Alameda County Health Agency Request Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

August 10, 2006

Mr. Jeffrey Baker
Tesoro Petroleum Companies, Inc.
3450 S. 344th Way, Ste. 100
Auburn, WA 98001-5931

Mr. Sam Hirbod
Hirbod Enterprises
111 Deerwood Road, Suite 110
San Ramon, CA 94583

Subject: Fuel Leak Case No. RO0000498, Beacon #721, 44 Lewelling Blvd., San Lorenzo, CA

Dear Mr. Baker:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the documents entitled, "Plume Delineation Work Plan and Limited Well Survey," dated July 9, 2006 and received by ACEH on July 18, 2006 and "First Quarter 2006 Groundwater Monitoring/ Remediation Status Report," dated May 31, 2006. ACEH also reviewed the Site Conceptual Model, which is available at the Tesoro Petroleum Sharepoint web site. The "Plume Delineation Work Plan and Limited Well Survey," dated July 9, 2006 proposes to sample existing wells rather than conduct plume delineation. We disagree with this approach and request that you submit a revised Work Plan for Plume Delineation **by September 26, 2006**.

We request that you address the following technical comments, perform the proposed work, and send us the technical reports requested below.

TECHNICAL COMMENTS

1. **Proposed Delineation.** The report recommends reinstating sampling of wells MW-7, MW-8, and MW-9 to help delineate the lateral extent of the plume. Since groundwater monitoring data have been collected since 1998 for these wells and the data indicate that the wells are generally outside the plume, reinstating groundwater monitoring of these wells will not provide useful information for plume delineation. The two existing wells within the plume, MW-10 and MW-11, provide two monitoring points but it is not clear whether wells MW-10 and MW11 are directly downgradient from the source, whether the wells are within the central portion of the plume, whether there are preferential pathways such as channels to facilitate contaminant transport, and whether contaminant transport is occurring within water-bearing zones below wells MW-10 and MW-11. Therefore, plume delineation is required in order to assess the lateral and vertical extent of contamination, to assess the performance of the groundwater remediation systems, and to evaluate natural attenuation of the plume. We recommend that you use continuous logging of soil borings or cone penetrometer borings to define the soil stratigraphy and collect soil samples for laboratory analyses where necessary.

The borings should be located along transects that are approximately perpendicular or parallel to groundwater flow to define both the lateral and vertical extent of the plume. Depth-discrete groundwater sampling is recommended prior to installation of monitoring wells. The selection of intervals for depth-discrete groundwater sampling is to be based on the encountered soil stratigraphy. Please include your plans for plume delineation in the revised Work Plan requested below.

2. **Discussion of Aquitard and Direct Push Technology.** The first paragraph of the section entitled "Proposed Delineation," includes three sentences discussing an aquitard and limitations of direct push technology. It is not clear how this discussion relates to plume delineation. The possible presence of an aquitard and the limitations of direct push technology will affect but do not prevent plume delineation. The Site Conceptual Model (SCM) does not mention a homogeneous aquitard beneath the site. Please provide further information, including references, on the nature and depth of the aquitard in the revised Work Plan requested below. Also please indicate whether any borings for the site have intercepted an aquitard. Based on cross sections included in the SCM, the deepest boring at the site is RW-1, which extended to a depth of 39 feet below grade. The gravel pack for well RW-1 extends from approximately 14 to 39 feet below grade.

3. **Sampling Domestic Wells.** We concur with the proposal to sample the downgradient domestic wells located at 15800 and 15808 Via Cordoba and 246 Peach Drive. Please sample these wells on a semi-annual basis and include the results in the groundwater monitoring reports requested below. Sampling of these wells may help to assess downgradient extent of the plume but will not achieve plume delineation as discussed in technical comment 1 above.

4. **Monitored Natural Attenuation Parameters.** We have no objection to the proposal to measure monitored natural attenuation (MNA) parameters during quarterly groundwater monitoring. Measurement of the field MNA parameters is to be conducted during all quarterly monitoring events. However, monitored natural attenuation cannot be fully evaluated until plume delineation is complete. Therefore, we recommend that you delay measurement of MNA laboratory parameters until plume delineation is complete.

5. **Well Survey.** Please present the results of the well survey in the Quarterly Monitoring and Remediation Status Report for the Second Quarter 2006 requested below.

6. **Groundwater Monitoring.** Please continue quarterly groundwater monitoring and present the results in the reports requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **August 30, 2006** – Quarterly Monitoring and Remediation Status Report for the Second Quarter 2006

- **September 26, 2006** – Revised Work Plan

- **November 30, 2006** – Quarterly Monitoring and Remediation Status Report for the Third Quarter 2006

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature,

and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jerry Wickham
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Richard Munsch
RDM Environmental
6280 Brookshire Drive
Rocklin, CA 95677

Michael Nickelsen
Haley & Aldrich
200 Town Centre Drive, Suite 2
Rochester, NY 14623

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

ENCLOSURE B

Field Methods and Procedures

RDM ENVIRONMENTAL

Enclosure B

Sampling Methods

Proper sampling methods must be followed to assure that samples represent actual field conditions and that samples are labeled, preserved, and transported properly to retain sample integrity. This attachment describes procedures to be followed by RDM Environmental (RDM), during collection of samples of subsurface soil and groundwater. Sampling procedures will be based on sampling guidance documents from the American Society of Testing and materials (ASTM), U.S. Environmental protection Agency (EPA), and California Department of Health Services (DHS). Actual sampling procedures to be employed will be based on field conditions and may differ from those described here.

A. EXPLORATION BORING/SOIL SAMPLING PROCEDURES

Soil borings and soil sampling will be performed under the direction of a RDM engineer/geologist. The soil borings will be advanced using drilling techniques appropriate for each project, as specified in the project work plan.

Soil samples will be collected at maximum intervals of 5 feet. Soil sampling will be done in accordance with ASTM 1586-84. Using this procedure, three 1.06- to 2-inch-diameter, 6-inch-length, brass or stainless steel tubes are placed in a California-type-split-barrel sampler, or a slide hammer with a single 6-inch by 2-inch brass or stainless tube by tapping the tube into the soil in the backhoe bucket with a hammer. The sampler is driven into the soil by a 140-pound weight falling 30 inches or with a slide hammer on hand auger samples. After an initial set of 6 inches, the number of blows required to drive the sampler an additional 12 inches is known as penetration resistance, or the "N" value. The "N" value is used as an empirical measure of the relative density of cohesion-less soils and the consistency of cohesive soils. When collecting a soil sample from a tank excavation or line excavation, the soil sample will be collected by tapping a brass stainless steel tube into the soil in the backhoe bucket.

Upon recovery of the split-barrel sampler or slide hammer sampler, the brass or stainless steel tubes containing the soil will be removed. One tube will be sealed at the ends with plastic end caps. The end caps will be secured to the ends of the tube to prevent loss of volatile constituents. The sample will be labeled with an identification number, time, date, location, and requested laboratory analysis. The sample will then be placed in a plastic bag and stored at approximately 4 degrees Celsius in an ice chest for transport to the laboratory. Sample custody procedures outlined in Section D of this attachment will be followed. This will be performed for each sample collected.

Soil in one of the brass or stainless steel tubes from the split-barrel sampler will be extracted upon recovery, placed in a plastic bag, and sealed for later screening for organic vapors using a photo ionization detector (PID) or a flame ionization detector (FID). The remaining portion of the soil sample will be examined and a complete log of soil conditions will be recorded on a soil boring log using the Unified Soil Classification System. The soil will be examined for grain size, color, and moisture content.

The split-barrel sampler or slide hammer sampler will be cleaned to prevent contamination across sampling intervals using procedures described in Section B. Soil generated from the soil borings will be stored in 55-gallon drums (unless otherwise directed by agencies or the client) labeled with the corresponding boring number, date, and address of the facility.

B. DECONTAMINATION AND DISPOSAL PROCEDURES

All equipment that comes into contact with potentially contaminated soil, drilling fluid, air or water will be decontaminated before each use. Decontamination will consist of steam cleaning, a high-pressure, hot water rinse, or trisodium phosphate (TSP) wash and freshwater rinse, as appropriate. Drilling and sampling

equipment will be decontaminated as follows:

1. Drill rig augers, drill rods, and drill bits will be steam-cleaned prior to use and between borings. Visible soil, grease, and other impurities will be removed.

2. Soil sampling equipment will be steam-cleaned prior to use and between each boring. Prior to individual sample collection, any sampling device will also be cleaned in a TSP solution and rinsed twice in clean water. Any visible soil residue will be removed.

3. It is anticipated that disposable equipment will be used to collect water samples. If disposable equipment is not used, water sampling equipment will be decontaminated using methods described in item 2 above for soil sampling equipment.

4. Water sampling containers will be cleaned and prepared by the respective analytical laboratories.

5. Stainless steel or brass soil sampling tubes will be steam-cleaned or washed in TSP solution and rinsed with clean water.

6. Field monitoring equipment (pH, conductivity, or temperature probes) will be rinsed with clean water prior to use and between samples.

C. FIELD MEASUREMENTS

Field data will be collected during various sampling and monitoring activities; this section describes routine procedures to be followed by personnel performing field measurements. The methods presented below are intended to ensure that field measurements are consistent and reproducible when performed by various personnel.

C.1 Buried Utility Locations

Prior to commencement of work on site, RDM will contact underground service alert and appropriate utility companies to have underground utility lines located. RDM will also visually survey the site to estimate the locations of potentially unmarked underground utilities. All work associated with the borings will be preceded by hand augering to a minimum depth of 5 feet below grade to avoid damaging underground utilities.

C.2 Lithologic Logging

A log of soil conditions encountered during the drilling and sample collection will be maintained using the Unified Soil Classification System by a RDM engineer/geologist. All boring logs will be reviewed by a California registered engineer/geologist.

The collected soil samples will be examined and the following information recorded: boring location, sample interval and depth, blow counts, color, soil type, moisture content (qualitative), and depth at which ground water (if present) is first encountered. Also recorded on the soil boring logs will be the field screening results derived from the use of a portable PID or FID.

C.3 Disposal Procedures

Soils and fluids that are produced and/or used during the installation and sampling of borings, and that are known or suspected to contain potentially hazardous materials, will be contained during the above operations. These substances will be retained on site until chemical testing has been completed to determine the proper means of disposal. Handling and disposal of substances known or suspected to contain potentially hazardous materials will comply with all applicable regulations including those of DHS and the California Department of Water Resources. Soils and fluids produced and/or used during the above-described operations that are shown

to contain potentially hazardous materials will be disposed of appropriately.

Residual substances generated during cleaning procedures that are known or suspected to pose a threat to human health or the environment will be placed in appropriate containers until chemical testing has been completed to determine the proper means for their disposal.

C.4 Conductivity, Temperature, and pH

Specific conductance, water temperature, and pH measurements will be made when a water sample is collected. Regardless of the sample collection method, a representative water sample will be placed in a transfer bottle used solely for field parameter determinations. A conventional pH meter with a combination electrode or equivalent will be used for field-specific conductance measurements. Temperature measurements will be performed using standard thermometers or equivalent temperature meters. Combination instruments capable of measuring two or all three of the parameters may also be used.

All instruments will be calibrated in accordance with manufacturer's recommendations. The values for conductivity standards and pH buffers used in calibration will be recorded in a field notebook. All probes will be thoroughly cleaned and rinsed with fresh water prior to any measurements, in accordance with Section C.1

D. SAMPLE CUSTODY

This section describes standard operating procedures for sample custody and custody documentation. Sample custody procedures will be followed through sample collection, transfer, analysis, and ultimate disposal. The purpose of these procedures is to assure that (1) the integrity of samples is maintained during their collection, transportation, and storage prior to analysis and (2) post-analysis sample material is properly disposed of. Sample custody is divided into field procedures and laboratory procedures, as described below.

D.1 Field Custody Procedures

Sample quantities, types, and locations will be determined before the actual fieldwork commences. As few personnel as possible will handle samples. The field sampler is personally responsible for the care and custody of the collected samples until they are properly transferred.

D.1.1 Field Documentation

Each sample will be labeled and sealed properly immediately after collection. Sample identification documents will be carefully prepared so that identification and chain-of-custody records can be maintained and sample disposition can be controlled. Forms will be filled out with waterproof ink. The following sample identification documents will be utilized:

- Sample labels
- Field notebook
- Chain-of-custody forms

D.1.2 Sample Labels

Sample labels provide identification of samples. Preprinted sample labels will be provided. Where necessary, the label will be protected from water and solvents with clear label-protection tape. Each label

will contain the following information:

- Name of collector
- Date and time of collection
- Place of collection
- RDM project number

- Sample number
- Preservative (if any)

D.1.3 Sample Labels Field Data Sheet

Information pertinent to a field survey, measurements, and/or sampling must be recorded on field data sheets. Entries on data sheets should include the following:

- Name and title of author, date and time of entry, and physical/environmental conditions during field activity.
- Location of sampling or measurement activity.
- Name(s) and title(s) of field crew.
- Type of sampled media (e.g., soil, groundwater, air, etc.).
- Sample collection or measurement method(s).
- Number and volume of sample(s) collected.
- Description of sampling point(s).
- Description of measuring reference point(s).
- Date and time of collection or measurement.
- Sample identification number(s).
- Sample preservative (if any).
- Sample distribution (e.g., laboratory).
- Field observations/comments.
- Field measurement data (pH, etc.).

D.1.4 Chain-of-custody Record

A chain-of-custody record will be completed out for and will accompany every sample and every shipment of samples to the analytical laboratories in order to establish the documentation necessary to trace sample possession from the time of collection to disposal. The record will contain the following information:

- Station number and sample I.D.
- Signature of collector, sampler, or recorder.
- Date and time of collection.
- Place of collection.
- Sample type.
- Signatures of persons involved in the chain of possession.
- Inclusive dates of possession.

The laboratory portion of the form should be completed by laboratory personnel and will contain the following information:

- Name of person receiving the sample.
- Laboratory sample number.
- Date and time of sample receipt.
- Analyses requested.
- Sample condition and temperature.

D.1.5 Sample Transfer and Shipment

A chain-of-custody record will always accompany samples. When transferring samples, the individuals relinquishing and receiving the samples will sign, date, and note the time on the chain-of-custody record.

Samples will be packaged properly for shipment and dispatched to the appropriate laboratory for analysis.

The chain-of-custody record will accompany each shipment. The method of shipment, courier name(s), and other pertinent information will be entered in the chain-of-custody record.

D.2 Laboratory Custody Procedures

A designated sample custodian will accept custody of the shipped samples and verify that the information on the sample label matches that on the chain-of-custody record. Information regarding method of delivery and sample conditions will also be checked on the chain-of-custody record. The custodian will then enter the appropriate data into the laboratory sample tracking system. The laboratory custodian may use the sample number on the sample label or may assign a unique laboratory number to each sample. The custodian will then transfer the sample to the proper analyst or store the sample in the appropriate secure area.

Laboratory personnel are responsible for the care and custody of samples from the time they are received until the sample is exhausted. Once at the laboratory, the samples will be handled in accordance with U.S. Environmental Protection Agency SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods, Third Edition, for the intended analyses. All data sheets, chromatographs, and laboratory records will be filed as part of the permanent documentation.

D.3 Corrections to Documentation

Original data recorded in field notebooks, chain-of-custody records, sampling information sheets, and other forms should be written in ink. These documents should not be altered, destroyed, or discarded even if they are illegible or contain inaccuracies that require a replacement document.

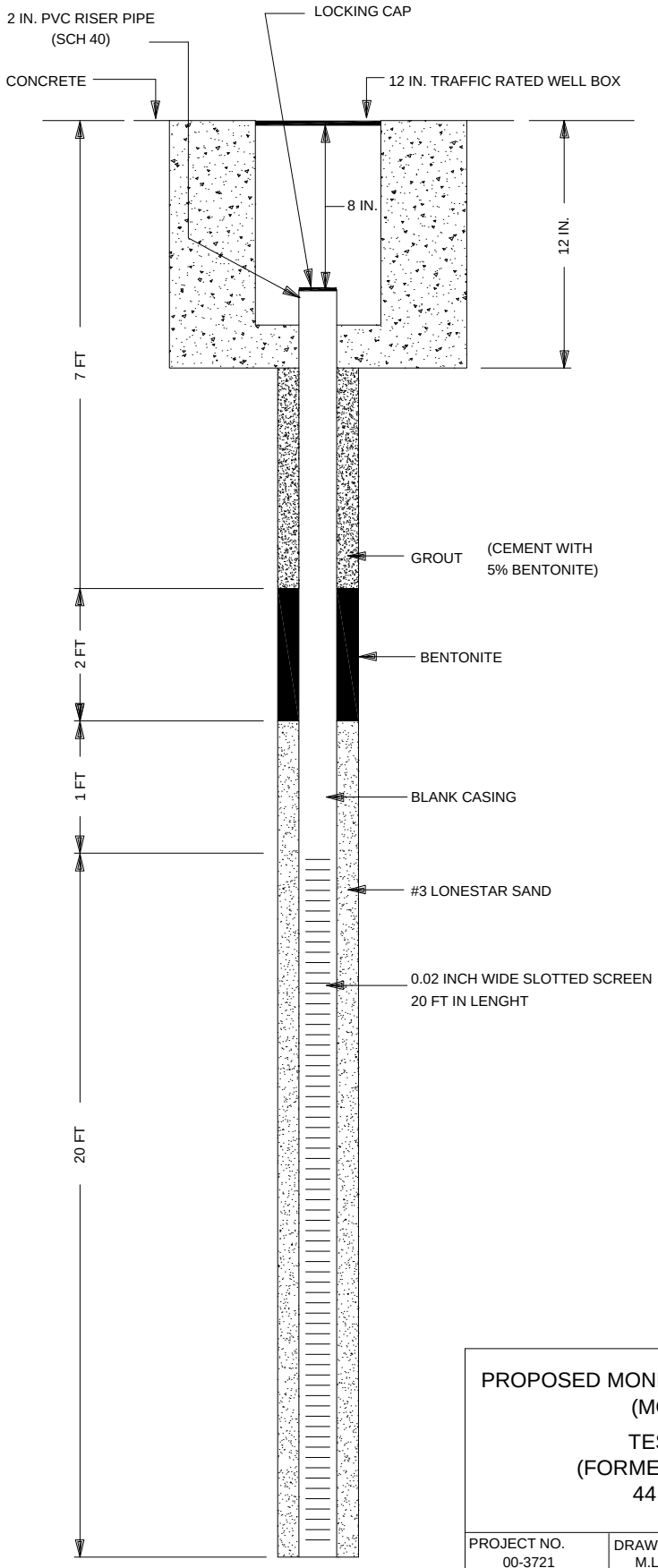
If an error is made or found on a document, the individual making the corrections will do so by crossing a single line through the error, entering the correct information, and initialing and dating the change. The erroneous information will be obliterated. Any subsequent error(s) discovered on a document will be corrected. All corrections will be initialed and dated.

D.4 Sample Storage and Disposal

The analytical laboratory should retain samples and extracts for 60 days after the laboratory issues a written report. Unless notified by the program manager, excess or unused samples should be disposed of by the laboratory in an appropriate manner consistent with applicable government regulations.

ENCLOSURE C

Well Construction Details



NOT TO SCALE

PROPOSED MONITORING WELL CONSTRUCTION DETAIL
(MONITORING WELL MW-12)

TESORO STATION NO. 67107
(FORMER BEACON STATION NO. 3721)
44 LEWELLING BOULEVARD
SAN LEANDRO, CA.

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