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August 12, 2014

BY EMAIL: [jbashaw@waterboards.ca.gov](mailto:jbashaw@waterboards.ca.gov)  
AND FIRST CLASS MAIL

State Water Resources Control Board  
Office of Chief Counsel  
Jeannette L. Bashaw, Legal Analyst  
PO Box 100  
Sacramento, CA 95812-0100

**PETITION FOR REVIEW OF  
REGIONAL WATER QUALITY CONTROL BOARD ACTION  
AND REQUEST FOR STAY**

Re: 39225 South Highway 1, Gualala  
Unocal 76 Station  
Water Board Case No. 1TMCO17

**1. Name, address, telephone number and email address of petitioner.**

Bower Limited Partnership  
P.O. Box 1000  
Gualala, CA 95445-1000  
Telephone: (707) 884-3579 / 884-3577  
Email:

John Bower: [jhbower@hotmail.com](mailto:jhbower@hotmail.com)  
David Bower: [davidbower001@gmail.com](mailto:davidbower001@gmail.com)

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(Please also transmit a copy of all communications to:

Chris Mazzia  
Anderson, Zeigler, Disharoon, Gallagher & Gray  
50 Old Courthouse Square, Fifth Floor  
Santa Rosa, CA 95404  
Telephone: (707) 545-4910  
Email: [chris.mazzia@azdgg.com](mailto:chris.mazzia@azdgg.com)

**2. The action or inaction of the Regional Water Board being petitioned, including a copy of the action being challenged.**

The decision communicated July 30, 2014, to close the above-referenced site. Attached is a copy of the RWQCB correspondence communicating that decision.

The decision communicated July 31, 2014 to abandon (close and destroy) monitoring wells installed by the responsible party. Attached is a copy of the RWQCB correspondence communicating that decision.

**3. The date the Regional Water Board acted, refused to act, or was requested to act.**

July 30, 2014: the decision to close the above-referenced site. Attached is a copy of the RWQCB correspondence communicating that decision.

July 31, 2014: the decision to abandon (close and destroy) monitoring wells installed by the responsible party. Attached is a copy of the RWQCB correspondence communicating that decision.

**4. A statement of the reasons the action or inaction was inappropriate or improper.**

The Bower Limited Partnership (BLP) owns two properties directly impacted by the contamination and investigation – 39200 Highway 1 South, and 39250 Highway 1 South.

The closure runs counter to the responsible party's own opinion and statements in its 2011 Site Conceptual Model, in which it stated (among other things) that a vapor intrusion study should be completed before case closure might even be considered. A vapor intrusion study has not been completed; case closure should not be considered.

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The responsible party has not completed the investigative work that has been directed to date by the Water Board; the policy criteria for closure have not been met; and the site is not adequately characterized. The MTBE contamination has not been addressed; the failure to sample groundwater to the west means that an adequate investigation has not been performed (groundwater may be channelized in this area; the groundwater should be located and tested).

The Water Board's own LTCP Checklist makes it clear that the NFA request should not be granted (the LTCP Checklist is attached).

The continuing contamination is causing harm to the petitioner. Allowing the responsible party to 'close' the site will cause further-harm to petitioner.

4.a. The Responsible Party has Not Completed Investigative Work that has been directed by the Water Board

On August 20, 2013, the Water Board responded to the June 10, 2013 Subsurface Investigation Report prepared by Cardno ATC. The Board concurred with the recommendations made *by the responsible party* to conduct further drilling using a sonic rig to find and sample groundwater (obtaining groundwater samples has been problematic), and to conduct a soil vapor intrusion study to evaluate the potential risk to indoor air.

On October 2, 2013, the responsible party submitted a Subsurface Investigation Workplan to install soil vapor points, to advance one soil boring, to collect groundwater and vapor samples, and to report on the results of these activities.

On December 2, 2013, the Board concurred with that scope of work.

Instead of doing this work, the responsible party now seeks to close the site. This is simply a delay tactic, and the NFA request should be rejected so that the appropriate and approved work will proceed without further delay.

4.b. The policy criteria for closure have not been met

There are significant areas in which the policy criteria have not been met:

4.b.1. The Groundwater Assessment is Incomplete -- the Areal Extent of Contamination has not been defined

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4.b.2. A current, reliable site conceptual model that assesses the nature, extent, and mobility of the release has NOT been developed (General Criteria E).

4.b.3. It is questionable whether free product has been removed.

4.b.4. Groundwater-specific criteria have not been met.

We would also assert that the responsible party has also NOT demonstrated that there is not a nuisance related to this site.

These are outlined further below.

4.b.1. ~~The Groundwater Assessment is Incomplete – the Areal Extent of Contamination has not been defined~~

This site reflects a history of sporadic testing, recalcitrance by the responsible party, and incomplete data. It is premature to consider closure.

In particular, there is incomplete information regarding groundwater contamination.

The investigation performed to date to the west of the existing building (at 39250 S Highway 1) is inadequate. Two borings installed in 1994 (B-5 and B-6) did not produce groundwater sample results, but did reflect soil contamination. Two borings installed in 2013 (B-8 and B-9) did not produce groundwater sample results. Groundwater west of the existing buildings still has not been sampled; any potential soil contamination has not been further investigated in the 20 years since the borings were first installed.

Additional investigation is indicated to the South of B-11 (as stated in the responsible party's Report, dated June 5, 2013, at page 5). The groundwater sample for B-11 contained petroleum hydrocarbons, MTBE, and Benzene. The responsible party's consultant acknowledged that the "(i)mpacted groundwater to the west of B-7 and south of B-11 does not appear to be defined". The samples for B-7 and B-11 contained MTBE in excess of the MCL for that constituent. The MTBE must be coming from the east side of Highway 1 (Unocal or a Chevron station).

The work proposed by the consultant (additional drilling to obtain groundwater samples, and a soil vapor intrusion study) have not been performed.

On August 20, 2013, the Board concurred with the recommendations of the responsible party's consultant to drill into bedrock using a sonic rig in the area of B-6 and B-9 to find and sample groundwater. The Board also agreed with the recommendation to conduct a soil vapor intrusion study due to the finding of MTBE in groundwater at boring location B-7, to evaluate the potential risk to indoor air. This concurrence was repeated in December, 2013. The work has not been done.

It should also be noted that MW-4, MW-5, and MW-6 (sampled in February, 2013) continue to show petroleum hydrocarbon contamination, and (as for MW 5 and MW 6) MTBE contamination (which did not originate at the BLP property).

4.b.2. A current, reliable site conceptual model that assesses the nature, extent, and mobility of the release has NOT been developed (General Criteria E).

A Site Conceptual Model was prepared in August 2011.

That Model is not complete, current or reliable.

The extent and mobility of the release have not been determined.

All affected media (specifically, soil vapor) have not been described and assessed. As earlier noted, on August 20, 2013, the Board concurred with the recommendations of the responsible party's consultant to conduct a soil vapor intrusion study due to the finding of MTBE in groundwater at boring location B-7, to evaluate the potential risk to indoor air. This concurrence was repeated in December, 2013. This work has not been done.

The physical site characteristics that affect contaminant environmental fate and transport have not been assessed. There has been a significant amount of trenching and other work (related to utilities replacement) in the area of the site in recent years (including the summer of 2012), that affect fate and transport. That includes trenching and installation for phone lines and utility lines. We know that there is significant infiltration to utilities by stormwater (and presumably groundwater). These conditions have not been described or assessed by the responsible party.

The 2011 Site Conceptual Model itself acknowledged that a vapor intrusion study had not been performed (Section 6.2 page 9). Rather than conduct this study *as proposed by the responsible party*, the responsible party is delaying its work by submitting a NFA request.

The 2011 Site Conceptual Model referred to assessing underground utilities (which can be preferential pathways) in November, 2010. There has been a significant amount of underground utility work in the nearly four years since the responsible party assessed underground utilities.

The responsible party identified Data Gaps (Section 10, page 11), and specifically stated that:

Identified data gaps associated with the site includes the completion of a vapor intrusion study. The vapor intrusion study *should be completed* prior to obtaining case closure...

Data gaps associated with groundwater monitoring and sampling activities have also been identified...

(emphasis added)

The NFA request runs counter to the responsible party's own documented opinions and recommendations, and should be denied.

4.b.3. It is questionable whether free product has been removed.

A seven thousand gallon release occurred at the site in or about June, 1993. Shortly afterward (November, 1993), floating product was identified about 100 feet south of the site (in front of the post office) in connection with trenching that was being performed. The responsible party's remediation has consisted of excavation that did not reach the observed boundaries of floating product.

4.b.4. Groundwater-specific criteria have not been met.

According to the Low-Threat Underground Storage Tank Case Closure Policy, candidates for closure must satisfy all three of the media-specific criteria (groundwater, vapor intrusion to indoor air, direct contact and outdoor air exposure).

The site does not satisfy the vapor intrusion to indoor air criteria for off-site structures, as pointed out above.

The site also does not satisfy the groundwater criteria.

Even if we take the most permissive criteria (contaminant plume is less than 100 feet in length), that plume must be more than 250 feet from the nearest surface water body. According to the materials submitted by the responsible party, the plume is within 200 feet of the Gualala River.

4.c. Potential nuisance and other issues.

Water Code Section 13050 defines a 'nuisance' as follows:

(m) "Nuisance" means anything which meets all of the following requirements:

(1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

(2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

(3) Occurs during, or as a result of, the treatment or disposal of wastes.

The potential threat to indoor air quality may be a nuisance.

The responsible party's failure to obtain required Coastal Development Permits for wells it has installed may be a nuisance.

The continued presence of contamination in the levels detected to date may be a nuisance.

If there is free product that may be a nuisance.

The conditions created by the Responsible party may adversely impact the highest and best use of the BLP property, which may be a nuisance. It is undetermined whether the conditions adversely affect the Gualala River, which has been included on the Clean Water Act 303(d) list for impairments associated with excessive sediment and high temperatures, which may be a nuisance.

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**5. How Petitioner is Aggrieved.**

This is outlined above, and in the attached declaration of John Bower.

Petitioner owns adjoining properties, which have proven, documented contamination arising from the subject site.

This contamination has not been adequately characterized.

This contamination threatens a coastal property.

This contamination adversely affects the current and future use of the site.

The discharger released thousands of gallons of fuel into the environment. In the 20 years since that spill, the discharger has taken no steps to remediate contamination at the BLP site, which is adjacent to and downgradient from the spill. The recently-installed monitoring wells confirm contamination at the BLP site; the discharger's 'conceptual models' reflect extensive contamination at the BLP site; the discharger has not adequately characterized contamination at the BLP site.

The BLP site is a very active site, with a grocery store and other businesses, and is likely to be undergoing grading, paving and related work (due to Streetscape and other work). The site must be characterized and remediated now, to avoid the problems that are very likely to occur when the future sitework is performed and contamination is exposed during construction at that time.

**6. The action the petitioner requests the State Water Board to take.**

Direct the Regional Water Quality Control Board to order the responsible party to conduct the vapor intrusion study and the investigative work that has been directed to date by the Water Board; and to not consider closure until the policy criteria for closure have potentially been met, and the site has been adequately characterized.

Direct the Regional Water Quality Control Board to NOT allow destruction, abandonment, closing, or other steps that would adversely affect to use or integrity of monitoring wells (specifically including, but not limited to, MW 4, 5, and 6) until reliable water sample results have been obtained for an appropriate period of time confirming either no contamination or no contamination above action levels.

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**7. A statement of points and authorities for any legal issues raised in the petition.**

Outlined above. The Water Board's own LTCP Checklist makes it clear that the NFA request should not be granted (the LTCP Checklist is attached).

**8. A copy of the petition has been sent to the Regional Water Board and to the discharger (as outlined below).**

A copy of this Petition (and attachments) has been sent to:

Janice M. Goebel  
North Coast Regional Water Quality Control Board  
5550 Skylane Blvd., Suite A  
Santa Rosa CA 95403-1072  
Email: [JGoebel@waterboards.ca.gov](mailto:JGoebel@waterboards.ca.gov)

**Consultant for Discharger:**

ATC Associates, Inc.  
1117 Lone Palm Avenue, Suite 201  
Modesto, CA 95351  
Attn: Jeanne Homsey, PE  
Email: [jeanne.homsey@cardno.com](mailto:jeanne.homsey@cardno.com)

**Legal Counsel for Discharger:**

Mark S. Pollock, Esq.  
Pollock & James, LLP  
1792 Second Street  
Napa, CA 94559  
Email: [mpollock@pollockandjames.com](mailto:mpollock@pollockandjames.com)

Irv Piotrkowski, Esq.  
35 Fifth Street  
P.O. Box 2624  
Petaluma, CA 94953  
Email: [irvp@pacbell.net](mailto:irvp@pacbell.net)

(note: BLP and the discharger are adverse parties in pending litigation and communicate with each other through consultants or counsel; if the discharger's

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consultant or counsel request that a copy of this petition be sent directly to the discharger, they can provide BLP with the name and address to use for the discharger).

**9. The issues raised in the petition were presented to the regional board before the regional board acted.**

In May, 2014, the BLP presented the issues raised in this petition to the Board. The Board then took the action that is the subject of this petition.

**10. Request for Stay of Action**

Petitioner has requested that the discharger allow petitioner to sample the monitoring wells on petitioner's property, at petitioner's expense. The discharger has **refused** petitioner access to wells on petitioner's own property for sampling purposes.

That is inherently unfair and counter to the public interest. The wells must be sampled. They haven't been sampled in nearly 18 months.

Petitioner requests that the decision communicated July 31, 2014 to abandon (close and destroy) monitoring wells installed by the responsible party be stayed, and that monitoring wells 2 through 6 not be destroyed, closed or abandoned pending determination of this petition (petitioner is informed that MW 1 was destroyed in 1997 during overexcavation of the site; reference: ATC Subsurface Investigation Report dated June 5, 2013, page 21, and Table 2). Pertinent portions of the Investigation report are attached to this petition.

As outlined in the attached declaration of John Bower, the basis for this stay request is:

10.1. There will be substantial harm to the petitioner or to the public interest if a stay is not granted.

The discharger has installed a total of six monitoring wells: three on the discharger's property (MW 1, 2 and 3); three on petitioner's property (MW 4, 5, 6).

MW 1, 2 and 3: MW 1 and MW 2 were installed in 1992. MW 3 was installed in 1993. MW 1 was destroyed during overexcavation activities in 1997.

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MW 4, 5 and 6: MW 4, 5 and 6 were installed on petitioner's property in 2010.

It is petitioner's understanding from the ATC reports that constituents of concern have been detected in MW 4, MW 5, and MW 6. Those monitoring wells were last sampled in February, 2013, and they continued to show petroleum hydrocarbon contamination, and (as for MW 5 and MW 6) MTBE contamination.

If these monitoring wells are destroyed, there will be no available means to sample known contamination at petitioner's property. The discharger will have contaminated the petitioner's property, and will have left petitioner with no available means to have groundwater sampled.

This would force petitioner to install a new set of monitoring wells, which is costly (most likely well over \$12,000) and counter-productive. Installing new wells may require a coastal permit. (Petitioner is informed that the discharger did not obtain a coastal permit or confirm that the wells were exempt from coastal permit requirements before the wells were installed in 2010.)

Petitioner's site is in the coastal zone, and is bordered by the Gualala River. The site should be adequately characterized (which has not happened).

10.2. There will be no substantial harm to other interested persons and to the public interest if a stay is granted.

There will be no detriment to other parties if a stay is granted. The wells have been in place for about 20 years (MW 2 and 3), or 4 years (MW 4, 5, and 6). Keeping the wells in place for a further period of time will not harm the discharger or others.

If the wells are sampled and there is cause to keep them 'open', then there is no harm to the discharger – the discharger would only be doing what the discharger should do in any event. The only 'harm' that at this time the petitioner may be potentially applicable would be the inconvenience of closing wells later, rather than sooner. Given the public and private interests, this potential appears to be justified.

10.3. There are substantial questions of fact or law regarding the disputed action.

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It is not disputed that the discharger released thousands of gallons of fuel into the environment. It is not disputed (to our knowledge) that the discharger has contaminated the petitioner's property.

It is not disputed that the discharger has not conducted a vapor intrusion study, or that the discharger has not conducted the testing that the discharger itself (and the Board) had proposed.

There is a pending lawsuit between the discharger and the petitioner. Petitioner has served a formal discovery request in that lawsuit to allow petitioner to sample the wells at petitioner's expense. If the wells are destroyed before the sampling is completed (which is scheduled at this time for mid-September), and further action determined, then that would in effect be making relevant evidence unavailable (similar to destroying evidence) – it would in effect deprive petitioner of being able to assess the condition of petitioner's own property. The evidence – the condition of groundwater as sampled by means of existing monitoring wells – should not be destroyed or made unavailable.

In short, the discharger should not be allowed to destroy wells on either its own property, and certainly not on the petitioner's property, until further sampling is completed, and further technical assessments can be made.

Respectfully submitted,

  
Christopher M. Mazza

CMM/m

**Attachments:**

July 30, 2014 Correspondence from RWQCB

July 31, 2014 Correspondence from RWQCB re well abandonment

LTCP Checklist (Impediments to NFA as per Water Quality Control Board)

ATC Subsurface Investigation Report dated June 5, 2013 (portions)

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Declaration of John Bower in support of stay request

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IMPEDIMENTS TO NFA AS PER RWQCB:

**IMPEDIMENT 1:**

General Criteria E: A conceptual site model that assesses the nature, extent, and mobility of the release has NOT been developed

**Step to Resolve Impediment 1 - Step 1:**

A workplan to assess the extent of soil and determine if groundwater is contamination has been requested

| COMPLETION DATE                 |                              |
|---------------------------------|------------------------------|
| <u>PROJECTED</u><br><u>DATE</u> | <u>ACTUAL</u><br><u>DATE</u> |
| 3/15/2013                       |                              |

**IMPEDIMENT 2:**

Media-Specific Criteria: Groundwater: The contaminant plume that exceeds water quality objectives is NOT stable or decreasing in areal extent, and does NOT meet all of the additional characteristics of one of the five classes of sites.

**Conditions that do not meet the policy criteria:**

Plume Length (That Exceeds Water Quality Objectives): Unknown  
Free Product in Groundwater: No  
Free Product Has Been Removed to the Maximum Extent Practicable: Unknown  
Benzene Concentration: Unknown  
MTBE Concentration: Unknown  
Nearest Supply Well (From Plume Boundary): Unknown  
Nearest Surface Water Body (From Plume Boundary): > 250 Feet and ≤ 1,000 Feet

**Step to Resolve Impediment 2 - Step 1:**

The USTs were removed and no additional work has been conducted yet to determine the extent of soil and if groundwater is contaminated

| COMPLETION DATE                 |                              |
|---------------------------------|------------------------------|
| <u>PROJECTED</u><br><u>DATE</u> | <u>ACTUAL</u><br><u>DATE</u> |
| 7/31/2013                       |                              |

**IMPEDIMENT 3:**

Media Specific Criteria: Petroleum Vapor Intrusion to Indoor Air: The site is NOT considered low-threat for the vapor-intrusion-to-air pathway and site-specific conditions do NOT satisfy items 2a, 2b, or 2c .

**Conditions that do not meet the policy criteria:**

Soil Gas Samples: No Soil Gas Samples  
Exposure Type: Commercial  
Free Product: Unknown

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TPH in the Bioattenuation Zone: Unknown  
 Bioattenuation Zone Thickness: Unknown  
 O2 Data in Bioattenuation Zone: No O<sub>2</sub> Data  
 Benzene in Groundwater: Unknown  
 Soil Gas Benzene: Unknown  
 Soil Gas EthylBenzene: Unknown  
 Soil Gas Naphthalene: Unknown

**Step to Resolve Impediment 3 - Step 1:**

Soil gas sampling will be required to determine if vapor intrusion to indoor air is an issue at this site. The USTs were located next to commercial buildings

| COMPLETION DATE                 |                              |
|---------------------------------|------------------------------|
| <u>PROJECTED</u><br><u>DATE</u> | <u>ACTUAL</u><br><u>DATE</u> |
| 10/31/2013                      |                              |

**IMPEDIMENT 4:**

Media Specific Criteria: Direct Contact and Outdoor Air Exposure: The site is NOT considered low-threat for direct contact and outdoor air exposure as it does NOT meet 1, 2, or 3.

**Conditions that do not meet the policy criteria:**

Exposure Type: Commercial  
 Petroleum Constituents in Soil: Unknown  
 Soil Concentrations of Benzene: Unknown  
 Soil Concentrations of EthylBenzene: Unknown  
 Soil Concentrations of Naphthalene: Unknown  
 Soil Concentrations of PAH: Unknown  
 Area of Impacted Soil: Unknown

**Step to Resolve Impediment 4 - Step 1:**

The soil sampling data from removal of the USTs was limited. Additional sampling will be required to characterize the site

| COMPLETION DATE                 |                              |
|---------------------------------|------------------------------|
| <u>PROJECTED</u><br><u>DATE</u> | <u>ACTUAL</u><br><u>DATE</u> |
| 10/31/2013                      |                              |



North Coast Regional Water Quality Control Board

July 30, 2014

Mr. Chris Mazzia  
Anderson, Zeigler, Disharoon, Gallagher & Gray  
P. O. Box 1498  
Santa Rosa, CA 95402-1498  
[chris.mazzia@azdgg.com](mailto:chris.mazzia@azdgg.com)

Dear Mr. Mazzia:

Subject: Response to May 12, 2014, Letter

File: Unocal Service Station, 39225 Highway 1 South, Gualala, CA  
Case No. 1TMC017

Thank you for your letter dated May 12, 2014, regarding the proposed no further action for the Unocal Service Station located at 39225 Highway 1 South in Gualala. As you know, the Regional Water Board staff is proposing to issue a no further action status for this site, and solicited comments regarding the proposed action. During the public comment period, Regional Water Board staff received your letter providing comments and objections to the proposed closure. The comments you raise have already been identified and considered in the proposal for the no further action finding.

The site is being proposed for closure under the State Water Resources Control Board's Low-Threat Underground Storage Tank Closure Policy. That Policy outlines criteria to compare underground storage tank sites' data in order to determine whether a site can be closed. You can view the most recent Low-Threat Closure Policy evaluation (checklist) at the following link:

[http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0604500016&cmd=lt\\_cpreport&ltcp\\_id=102214](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0604500016&cmd=lt_cpreport&ltcp_id=102214)

Again, thank you for your comments. If you have any questions, please contact me at [Janice.Goebel@waterboards.ca.gov](mailto:Janice.Goebel@waterboards.ca.gov) or at (707) 576-2676.

Sincerely,

Original signed by Craig Hunt for:

Janice M. Goebel  
Sanitary Engineering Associate

140730\_JMG\_or\_Mazzia

cc: Will Nalty, Mendocino County Environmental Health, [Naltyw@co.mendocino.ca.us](mailto:Naltyw@co.mendocino.ca.us)  
Irv Piotrkowski, P.O. Box 2624, Petaluma, CA 94953  
Jeanne Homsey, ATC Associates, [jeanne.homsey@atcassociates.com](mailto:jeanne.homsey@atcassociates.com)  
Francine Temple, [francine@volcano.net](mailto:francine@volcano.net)  
Paul Nelson, EBA Engineering, [pnelson@ebagroup.com](mailto:pnelson@ebagroup.com)  
Jack Gregg, California Coastal Commission, [jgregg@coastal.ca.gov](mailto:jgregg@coastal.ca.gov)  
Tamara Gedik, California Coastal Commission, [Tamara.Gedik@coastal.ca.gov](mailto:Tamara.Gedik@coastal.ca.gov)  
Matthew Kelly, Mendocino County Planning & Building Services,  
[kellym@co.mendocino.ca.us](mailto:kellym@co.mendocino.ca.us)  
John Pinches, Mendocino County Board of Supervisors,  
[Pinchesj@co.mendocino.ca.us](mailto:Pinchesj@co.mendocino.ca.us)  
Dan Hamburg, Mendocino County Board of Supervisors,  
[Hamburgd@co.mendocino.ca.us](mailto:Hamburgd@co.mendocino.ca.us)  
Dan Hamburg, [vote@pacific.net](mailto:vote@pacific.net)  
Robert Juengling, [robert@oceanicland.com](mailto:robert@oceanicland.com)  
Phil Dow, [dowp@dow-associates.com](mailto:dowp@dow-associates.com)  
Jeff Watts, [mendoman@mcn.org](mailto:mendoman@mcn.org)



**North Coast Regional Water Quality Control Board**

July 31, 2014

Mrs. Roberta Sundstrom  
P.O. Box 424  
Gualala, CA 95445

Dear Mrs. Sundstrom:

**Subject: Request for a Workplan to Destroy Groundwater Monitoring Wells**

**File: Unocal Service Station, 39225 Highway 1 South, Gualala, CA  
Case No. 1TMC017**

On July 7, 2014, the public comment period ended for consideration of no further action status on the Unocal Gualala gasoline service station located at 39225 Highway 1 South in Gualala. Comments on the proposed closure were received; however, there were no new substantial comments raised during the public comment period. Enclosed for your information are the two comment letters.

Accordingly, a workplan proposing the destruction of the groundwater monitoring wells is requested by August 15, 2014.

If you have any questions, please contact me at (707) 576-2676 or via e-mail at [Janice.Goebel@waterboards.ca.gov](mailto:Janice.Goebel@waterboards.ca.gov).

Sincerely,

Original signed by:

Janice M. Goebel  
Sanitary Engineering Associate

140731\_IMC\_ar\_Wlqinwellstation

Enclosure: Comment Letters

cc: Will Nalty, Mendocino County Environmental Health, [Naltyw@co.mendocino.ca.us](mailto:Naltyw@co.mendocino.ca.us)  
Christopher Mazzia, Anderson, Zeigler, Disharoon, Gallagher & Gray,  
[chris.mazzia@azdgg.com](mailto:chris.mazzia@azdgg.com)  
Irv Piotrkowski, P.O. Box 2624, Petaluma, CA 94953  
Jeanne Homsey, ATC Associates, [jeanne.homsey@atcassociates.com](mailto:jeanne.homsey@atcassociates.com)  
Francine Temple, [francine@volcano.net](mailto:francine@volcano.net)  
Paul Nelson, EBA Engineering, [pnelson@ebagroup.com](mailto:pnelson@ebagroup.com)  
Jack Gregg, California Coastal Commission, [jgregg@coastal.ca.gov](mailto:jgregg@coastal.ca.gov)  
Tamara Gedik, California Coastal Commission, [Tamara.Gedik@coastal.ca.gov](mailto:Tamara.Gedik@coastal.ca.gov)  
Matthew Kelly, Mendocino County Planning & Building Services,  
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Robert Juengling, [robert@oceanicland.com](mailto:robert@oceanicland.com)  
Phil Dow, [dowp@dow-associates.com](mailto:dowp@dow-associates.com)  
Jeff Watts, [mendoman@mcn.org](mailto:mendoman@mcn.org)

IMPEDIMENTS TO NFA AS PER RWQCB:

**IMPEDIMENT 1:**

General Criteria E: A conceptual site model that assesses the nature, extent, and mobility of the release has NOT been developed

**Step to Resolve Impediment 1 - Step 1:**

A workplan to assess the extent of soil and determine if groundwater is contamination has been requested

| COMPLETION DATE                 |                              |
|---------------------------------|------------------------------|
| <u>PROJECTED</u><br><u>DATE</u> | <u>ACTUAL</u><br><u>DATE</u> |
| 3/15/2013                       |                              |

**IMPEDIMENT 2:**

Media-Specific Criteria: Groundwater: The contaminant plume that exceeds water quality objectives is NOT stable or decreasing in areal extent, and does NOT meet all of the additional characteristics of one of the five classes of sites.

**Conditions that do not meet the policy criteria:**

- Plume Length (That Exceeds Water Quality Objectives): Unknown
- Free Product in Groundwater: No
- Free Product Has Been Removed to the Maximum Extent Practicable: Unknown
- Benzene Concentration: Unknown
- MTBE Concentration: Unknown
- Nearest Supply Well (From Plume Boundary): Unknown
- Nearest Surface Water Body (From Plume Boundary): > 250 Feet and ≤ 1,000 Feet

**Step to Resolve Impediment 2 - Step 1:**

The USTs were removed and no additional work has been conducted yet to determine the extent of soil and if groundwater is contaminated

| COMPLETION DATE                 |                              |
|---------------------------------|------------------------------|
| <u>PROJECTED</u><br><u>DATE</u> | <u>ACTUAL</u><br><u>DATE</u> |
| 7/31/2013                       |                              |

**IMPEDIMENT 3:**

Media Specific Criteria: Petroleum Vapor Intrusion to Indoor Air: The site is NOT considered low-threat for the vapor-intrusion-to-air pathway and site-specific conditions do NOT satisfy items 2a, 2b, or 2c .

**Conditions that do not meet the policy criteria:**

Soil Gas Samples: No Soil Gas Samples  
 Exposure Type: Commercial  
 Free Product: Unknown  
 TPH in the Bioattenuation Zone: Unknown  
 Bioattenuation Zone Thickness: Unknown  
 O2 Data in Bioattenuation Zone: No O<sub>2</sub> Data  
 Benzene in Groundwater: Unknown  
 Soil Gas Benzene: Unknown  
 Soil Gas EthylBenzene: Unknown  
 Soil Gas Naphthalene: Unknown

**Step to Resolve Impediment 3 - Step 1:**

Soil gas sampling will be required to determine if vapor intrusion to indoor air is an issue at this site. The USTs were located next to commercial buildings

| COMPLETION DATE                 |                              |
|---------------------------------|------------------------------|
| <u>PROJECTED</u><br><u>DATE</u> | <u>ACTUAL</u><br><u>DATE</u> |
| 10/31/2013                      |                              |

**IMPEDIMENT 4:**

Media Specific Criteria: Direct Contact and Outdoor Air Exposure: The site is NOT considered low-threat for direct contact and outdoor air exposure as it does NOT meet 1, 2, or 3.

**Conditions that do not meet the policy criteria:**

Exposure Type: Commercial  
 Petroleum Constituents in Soil: Unknown  
 Soil Concentrations of Benzene: Unknown  
 Soil Concentrations of EthylBenzene: Unknown  
 Soil Concentrations of Naphthalene: Unknown  
 Soil Concentrations of PAH: Unknown  
 Area of Impacted Soil: Unknown

**Step to Resolve Impediment 4 - Step 1:**

The soil sampling data from removal of the USTs was limited. Additional sampling will be required to characterize the site

| COMPLETION DATE                 |                              |
|---------------------------------|------------------------------|
| <u>PROJECTED</u><br><u>DATE</u> | <u>ACTUAL</u><br><u>DATE</u> |
| 10/31/2013                      |                              |



1117 Lone Palm Avenue, Suite 201  
Modesto, California 95351  
209-579-2221  
Fax: 209-579-2225

---

California Regional Water Quality Control Board  
Central Valley Region  
5550 Skylane Boulevard, Suite A  
Santa Rosa, California 95403

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## **Subsurface Investigation Report**

UNOCAL 76 Station  
39225 South Highway 1  
Gualala, California  
ATC Project No. 54.39220.0001

Prepared on Behalf of:

Ms. Roberta Sundstrom

June 5, 2013



1117 Lone Palm Avenue, Suite 201  
Modesto, California 95351  
209-579-2221  
Fax: 209-579-2225

June 5, 2013

Ms. Janice Goebel  
Regional Water Quality Control Board  
North Coast Region  
5550 Skylane Boulevard, Suite A  
Santa Rosa, California 95403

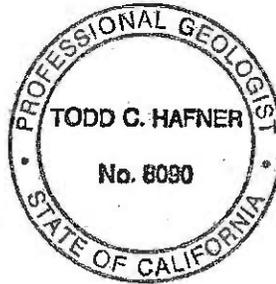
Subject: Subsurface Investigation Report, Unocal 76 Station, 39225 S. Highway 1, Gualala,  
California, Case No. 1TMC017

Dear Ms. Goebel:

Cardno ATC has conducted subsurface investigation activities associated with the above referenced site. The attached report summarizes our activities and findings. If you have questions or comments regarding this report, please call us at your convenience at (209) 579-2221.

Respectfully submitted,  
Cardno ATC

Todd Hafner, P.G.  
CA Professional Geologist No. 8090



Jeanne Homsey, P.E.  
CA Registered Civil Engineer No. 47410

cc: Ms. Roberta Sundstrom



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- Appendix A: Boring Logs  
 Appendix B: Laboratory Data Report  
 Appendix C: Laboratory Chromatograms  
 Appendix D: Geotracker Data Upload

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## Subsurface Investigation Report

Unocal 76 Station  
39225 S. Highway 1  
Gualala, California  
Cardno ATC Project No. 54.39220.0001

### 1.0 INTRODUCTION

Cardno ATC [formerly doing business as ATC Associates Inc. (ATC)] has prepared this Subsurface Investigation Report on behalf of Ms. Roberta Sundstrom to summarize the results of subsurface investigation activities that were performed off-site of the above referenced site. The purpose of the subsurface investigation was to evaluate the lateral extent of petroleum hydrocarbon impacted groundwater that may have migrated off-site toward the southwest. The subsurface investigation activities were completed in general accordance with ATC's *Subsurface Investigation Workplan for Groundwater Monitoring Well Installation Activities*, dated September 11, 2012, and Cardno ATC's *Workplan Addendum*, dated March 14, 2013.

### 1.1 Site Location

The site is located east of Highway 1 and south of Baptist Church Road in Gualala, California, as shown on **Figure 1**. Land use in the vicinity of the site is primarily characterized as commercial properties along Highway 1, surrounded by low-density residential developments. The site is currently occupied by the Unocal 76 Station located in the northwestern portion of the Sundstrom Mall shopping center. A site plan illustrating the locations of the existing groundwater monitoring wells and previously installed soil borings is shown on **Figure 2**.

### 1.2 Background Information

A 500-gallon underground storage tank (UST) used to store motor oil was excavated and removed from the site in July 1987. Although soil was reportedly observed to be impacted by a release of petroleum hydrocarbons, no soil samples were collected at the time of the UST removal. The excavated soil was disposed of at an off-site location.

Two groundwater monitoring wells (MW-1 and MW-2) were installed at the site in June 1992. The groundwater monitoring wells were screened into the first encountered water bearing zone. Groundwater monitoring and sampling activities were initiated at the site in July 1992.

A second unauthorized release was reported at the site in June 1993. The release was due to a failed product line that resulted in an estimated discharge of 7,000 gallons of gasoline into the subsurface.

Six vertical soil borings (HP-1 through HP-6) were advanced at the site in September 1993. The soil borings were advanced through the vadose zone using a hollow-stem auger equipped drill rig. Groundwater samples were collected by driving a hydropunch sampling system through the augers into the water bearing formation. Groundwater was not encountered in three of the hydropunch soil borings (HP-2, HP-3, and HP-5). These borings remained dry after a 24-hour waiting period. Groundwater monitoring well MW-3 was installed at the site in September 1993 and was screened into the first encountered water bearing zone.

Six additional vertical soil borings (B-1 through B-6) were advanced in December 1994. The soil borings were advanced west of Highway 1 to depths ranging from approximately 13.2 to 22.5 feet below ground surface (bgs) in order to evaluate the lateral extent of impacted soil and/or groundwater in the general downgradient direction from the site. Groundwater samples were collected from three of the soil borings (B-1 through B-3). Groundwater was not encountered in the remaining soil borings (B-4 through B-6).

Two 10,000-gallon USTs used to store gasoline were excavated and removed from the site in October 1997. Following the UST removal activities, over-excavation of impacted soil was conducted until December 1997 to remove residual petroleum hydrocarbons from soil beneath the site. Soil samples collected from beneath the USTs, over-excavation area, and stockpiled soil were impacted by petroleum hydrocarbons which included total petroleum hydrocarbons quantified as diesel (TPHd); total petroleum hydrocarbons quantified as gasoline (TPHg); benzene toluene, ethylbenzene, and total xylenes (BTEX); and methyl tertiary butyl ether (MTBE). Approximately 1,250 cubic yards of soil was disposed of at the Mendocino County South Coast Landfill. Groundwater that had accumulated in the excavation was discharged to the local sewer system. The volume of groundwater discharged to the sewer system was estimated to be between 4,450 and 8,950 gallons. Well MW-1 was destroyed during the over-excavation activities. The former USTs were replaced with two new 10,000-gallon USTs used to store gasoline.

A sensitive receptor survey (SRS) was conducted for the site in 2000. The SRS included a search for water supply wells, surface water bodies, drainage pathways, environmental habitats, and other human receptors located in the general vicinity of the site. The SRS identified the Gualala River and the Pacific Ocean as the nearest potential sensitive receptors. No groundwater wells were identified in the vicinity of the site.

In November of 2010, ATC supervised the installation of off-site groundwater monitoring wells MW-4, MW-5, and MW-6. Dissolved petroleum hydrocarbons have been detected in groundwater samples collected from these wells.

## **2.0 METHODS AND PROCEDURES**

Five borings (B-7 through B-11) were advanced off-site at 39200 South Highway 1 to evaluate the lateral extent of potentially impacted soil and groundwater. A drilling permit was obtained from the Mendocino County Environmental Health Department. Prior to initiating subsurface work, Cardno

ATC contracted with a private utility locating service to identify potential subsurface utilities in the vicinity of the proposed boring locations. Additionally, Underground Service Alert was notified of the work in order to identify the locations of potential subsurface utilities at the site. Field activities were performed in general accordance with the previously referenced workplan and addendum.

## 2.1 Drilling Activities

On April 18, 2013, a Cardno ATC geologist supervised drilling activities conducted by Gregg Drilling, California License C57 485165. The borings were advanced using a hollow-stem auger equipped drilling rig. B-7 and B-8 were advanced to approximately 26.5 and 26 feet bgs, respectively. B-9, B-10, and B-11 were advanced to auger refusal depths of approximately 20, 21, and 21.5 feet bgs, respectively. Saturated soils were encountered at approximately 19 feet bgs in B-10 during drilling, but were not observed in soil samples or drill cuttings associated with the remaining borings. Based on the apparent lack of groundwater in the borings, temporary 2-inch diameter Schedule 40 polyvinyl chloride (PVC) well-screen was placed in each boring and left overnight to allow time for potential groundwater accumulation. The boring locations are shown on Figure 2.

Soil samples were generally collected at five foot intervals in a split spoon sampler. The drill cuttings and soil samples were visually characterized for soil type, moisture content, and evidence of petroleum hydrocarbons. A photo ionization detector (PID) was used as a field-screening device for the detection of petroleum hydrocarbon vapors in the drill cuttings and soil samples. The Cardno ATC field geologist logged the drill cuttings and soil samples in general accordance with the Unified Soil Classification System. Descriptions of soil types encountered and PID screening results are included on the boring logs contained in Appendix A. Drill cuttings were temporarily stored in 55-gallon DOT approved steel drums pending disposal.

## 2.2 Groundwater Sampling and Analyses

On April 19, 2013, grab groundwater samples were collected from B-7, B-10, and B-11 (Figure 2) using disposable polyethylene bailers. B-8 and B-9 were dry. The depth to water in B-7 and B-10 on the morning of April 19, 2013, was approximately 24.5 and 6 feet bgs, respectively. The depth to water in B-11 was not measured, but was estimated to be roughly 17 feet bgs. The water recovered from B-7 and B-11 was turbid, while the water in B-10 was very clear.

Selected soil samples from each boring and the grab groundwater samples collected from B-7, B-10, and B-11 were submitted to BC Laboratories (Environmental Laboratory Accreditation Program Certification No. 1186) located in Bakersfield, California for chemical analyses of TPHd by California Leaking Underground Fuel Tank (LUFT) methodology (in this case, essentially EPA Method 8015B); and TPHg, BTEX, MTBE, tertiary-amyl methyl ether (TAME), 1,2-dibromoethane (EDB), 1,2-dichloroethane (1,2-DCA), di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), and tertiary-butyl alcohol (TBA) by EPA Method 8260B/5035.

### 3.0 SUBSURFACE CONDITIONS

The subsurface sediments encountered at B-7 through B-11 were similar and generally consisted of sands, silts, and clay, and combinations of these sediments with less clay relative to sand and silt. Saturated conditions indicative of groundwater were encountered at B-10 during drilling, but were not observed at the other boring locations during drilling. Groundwater accumulation took several hours (overnight) at B-7 and B-11. No groundwater was present in the most western borings of B-8 and B-9. Auger refusal was encountered at B-9, B-10, and B-11 at depths of approximately 20, 21, and 21.5 feet bgs, respectively, probably due to contact with hard bedrock.

### 4.0 ANALYTICAL RESULTS

Petroleum hydrocarbons were not detected at or above the laboratory practical quantitation limits in any of the soil samples. TPHd was reported in the grab groundwater sample collected from B-7 at a concentration of 84 micrograms per liter ( $\mu\text{g/L}$ ). The laboratory report indicates that the chromatogram associated with this sample is not typical of diesel fuel. TPHg was detected in the grab groundwater samples collected from B-7 and B-11 at concentrations of 210  $\mu\text{g/L}$  and 110  $\mu\text{g/L}$ , respectively. Benzene was detected in the grab groundwater samples collected from B-7 and B-11 at concentrations of 1.5  $\mu\text{g/L}$  and 0.63  $\mu\text{g/L}$ , respectively. Toluene, ethylbenzene, and total xylenes were detected in the grab groundwater sample collected from B-7 at concentrations of 1.1  $\mu\text{g/L}$ , 0.71  $\mu\text{g/L}$ , and 3.1  $\mu\text{g/L}$ , respectively. MTBE was detected in the grab groundwater samples collected from B-7, B-10, and B-11 at concentrations of 350  $\mu\text{g/L}$ , 5.2  $\mu\text{g/L}$ , and 190  $\mu\text{g/L}$ , respectively. TBA was detected in the grab groundwater samples collected from B-7 and B-11 at concentrations of 400  $\mu\text{g/L}$  and 89  $\mu\text{g/L}$ , respectively. ETBE, DIPE, TAME, 1,2-DCA, and EDB were not detected at or above the laboratory reported detection limits in any of the samples. Analytical results of the soil and grab groundwater samples are summarized in Tables 1 and 2, respectively. Laboratory data sheets and chain-of-custody documentation are contained in Appendix B. Chromatograms associated with the laboratory analyses are included in Appendix C. Isoconcentration maps depicting TPHg, benzene, and MTBE concentrations in the grab groundwater samples collected on April 19, 2013, are shown in Figures 4, 5, and 6, respectively.

### 5.0 GEOTRACKER DATA UPLOAD

Boring logs for B-7 through B-11 were submitted electronically to the State Water Resources Control Board (SWRCB) Geotracker database (confirmation numbers 9322793185, 8155358493, 7004409730, 4863211929, and 6250150561). The laboratory analytical data associated with the soil and groundwater samples were also submitted electronically to the SWRCB Geotracker database (confirmation number 8689378261). Documentation of the data submittal is contained in Appendix D.

## 6.0 SUMMARY

Petroleum hydrocarbons were not detected at or above the laboratory practical quantitation limits in any of the soil samples collected from B-7 through B-11. Groundwater was not encountered in the two borings advanced west of the existing buildings at 39200 South Highway 1. The laboratory analytical results of the grab groundwater samples collected from B-7, B-10, and B-11 indicate dissolved petroleum hydrocarbons were present at these locations. The grab groundwater sample collected from B-7 was the most impacted and the sample from B-10 was the least impacted. MTBE was the only analyte of interest detected in the sample collected from B-10, and the concentration reported for this sample is below the maximum contaminant level (MCL) of 13 µg/L. The concentrations of MTBE reported in the samples collected from B-7 and B-11 exceeded the MCL for this constituent. The concentration of benzene reported in the sample collected from B-7 slightly exceeded the MCL of 1.0 µg/L. The reported benzene concentration in the sample collected from B-11 was below the MCL. The reported diesel concentration in the grab groundwater sample collected from B-7 is most likely a false positive that may be attributable to weathering and degradation effects. The laboratory results associated with the grab groundwater samples collected on April 19, 2013, suggest that the extent of impacted groundwater in the vicinity of and northwest of B-10 has been adequately defined with respect to the subject site source area. Impacted groundwater to the west of B-7 and south of B-11 does not appear to be defined.

Cardno ATC recommends advancing a boring in the vicinity of B-9 utilizing a sonic drilling rig in an attempt to collect a groundwater sample downgradient from B-7. A sonic drilling rig will be able to drill deeper into the bedrock and therefore has greater potential to intercept groundwater than a hollow stem auger drilling rig. A groundwater sample from this location will provide data with regard to the extent of the MTBE plume in the hydraulically downgradient direction. Cardno ATC also recommends conducting a soil vapor intrusion study in the vicinity of B-7 to evaluate potential risk and hazard to indoor air space. Upon concurrence with these recommendations by the CRWQCB, Cardno ATC will prepare a workplan describing methodology to conduct the work.

TABLE 1  
SUMMARY OF SOIL ANALYTICAL RESULTS  
Unocal 76 Station  
39220 S. Highway 1, Gualala, California  
Page 1 of 2

| Sample ID | Sample Depth (feet) | Sample Date | (Reported in mg/Kg) |               |            |              |         |         | Total Lead |              |               |        |         |         |         |         |         |
|-----------|---------------------|-------------|---------------------|---------------|------------|--------------|---------|---------|------------|--------------|---------------|--------|---------|---------|---------|---------|---------|
|           |                     |             | Oil and Grease      | TPH Motor Oil | TPH Diesel | TPH Gasoline | Benzene | Toluene |            | Ethylbenzene | Total Xylenes | MTBE   | TBA     | DIPE    | ETBE    | TAME    | 1,2-DCA |
| MW-1      | 5                   | 06/03/92    | 74                  | <10           | <1         | <1           | <0.0025 | <0.0025 | <0.0025    | NA           | NA            | NA     | NA      | NA      | <0.002  | NA      | 6.3     |
| MW-1      | 10.5                | 06/03/92    | 62                  | <10           | 6.1        | <1           | <0.0025 | <0.0025 | <0.0025    | NA           | NA            | NA     | NA      | NA      | <0.002  | NA      | 6.9     |
| MW-2      | 4                   | 06/03/92    | 54                  | <10           | <1         | <1           | <0.0025 | <0.0025 | <0.0025    | NA           | NA            | NA     | NA      | NA      | <0.002  | NA      | 6.2     |
| MW-2      | 8                   | 06/03/92    | <50                 | <10           | <1         | <1           | <0.0025 | <0.0025 | <0.0025    | NA           | NA            | NA     | NA      | NA      | <0.002  | NA      | 5.5     |
| MW-3      | 5-6                 | 09/17/93    | 170                 | NA            | 420        | 63           | 0.080   | 6.8     | 0.710      | 31           | NA            | NA     | NA      | NA      | <0.005  | NA      | NR      |
| B-1       | 8                   | 12/12/94    | NA                  | 2.7           | 2.2        | 2.1          | 0.02    | 0.033   | 0.02       | 0.071        | NA            | NA     | NA      | NA      | NA      | NA      | NA      |
| B-2       | 7                   | 12/12/94    | NA                  | 3             | 12         | 140          | <0.01   | 0.018   | 0.032      | 1.4          | NA            | NA     | NA      | NA      | NA      | NA      | NA      |
| B-3       | 9.5                 | 12/12/94    | NA                  | <2.0          | <1         | <1           | <0.005  | <0.005  | 0.0055     | 0.0083       | NA            | NA     | NA      | NA      | NA      | NA      | NA      |
| B-4       | 9                   | 12/13/94    | NA                  | 2.6           | 1.3        | <1           | <0.005  | <0.005  | <0.005     | <0.005       | NA            | NA     | NA      | NA      | NA      | NA      | NA      |
| B-5       | 8.5                 | 12/13/94    | NA                  | 8.4           | 4.1        | <1           | <0.005  | <0.005  | <0.005     | <0.005       | NA            | NA     | NA      | NA      | NA      | NA      | NA      |
| B-6       | 13.5                | 12/13/94    | NA                  | 3.6           | 1.5        | <1           | <0.005  | <0.005  | <0.005     | <0.005       | NA            | NA     | NA      | NA      | NA      | NA      | NA      |
| MW-4      | 5                   | 11/15/10    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | <0.005     | <0.010       | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | 12      |
| MW-4      | 10                  | 11/15/10    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | <0.005     | <0.010       | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | 5.8     |
| MW-5      | 5                   | 11/15/10    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | <0.005     | <0.010       | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | 4.7     |
| MW-5      | 10                  | 11/15/10    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | 0.016      | 0.057        | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | 4.9     |
| MW-6      | 5                   | 11/16/10    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | <0.005     | <0.010       | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | 5.2     |
| MW-6      | 15                  | 11/16/10    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | <0.005     | <0.010       | 0.086         | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | 3.1     |
| 3         | 5.5                 | 10/26/11    | NA                  | NA            | <7.5       | <1.0         | <0.005  | <0.005  | <0.005     | <0.010       | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | NA      |
| 5         | 5.5                 | 10/26/11    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | <0.005     | <0.010       | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | NA      |
| 7         | 5.5                 | 10/26/11    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | 0.007      | 0.012        | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | NA      |
| 8         | 5.5                 | 10/26/11    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | <0.005     | <0.010       | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | NA      |
| 9         | 5.5                 | 10/26/11    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | <0.005     | 0.012        | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | NA      |
| 12        | 5.5                 | 10/26/11    | NA                  | NA            | <5.0       | <1.0         | <0.005  | <0.005  | <0.005     | <0.010       | <0.005        | <0.050 | <0.005  | <0.005  | <0.005  | <0.005  | NA      |
| B-7-15    | 15                  | 04/18/13    | NA                  | NA            | <10        | <0.15        | <0.0039 | <0.0039 | <0.0039    | <0.0077      | <0.0039       | <0.039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA      |
| B-7-25    | 25                  | 04/18/13    | NA                  | NA            | <10        | <0.21        | <0.0052 | <0.0052 | <0.0052    | <0.010       | <0.0052       | <0.052 | <0.0052 | <0.0052 | <0.0052 | <0.0052 | NA      |

**TABLE 1**  
**SUMMARY OF SOIL ANALYTICAL RESULTS**  
 Unocal 76 Station  
 39220 S. Highway 1, Gualala, California  
 Page 2 of 2

| Sample ID | Sample Depth (feet) | Sample Date | Oil and Grease | TPH Motor Oil | TPH Diesel | TPH Gasoline | (Reported in mg/Kg) |         |              |               |        |         |         |         |         |         |     |
|-----------|---------------------|-------------|----------------|---------------|------------|--------------|---------------------|---------|--------------|---------------|--------|---------|---------|---------|---------|---------|-----|
|           |                     |             |                |               |            |              | Benzene             | Toluene | Ethylbenzene | Total Xylenes | MTBE   | TBA     | DIPE    | ETBE    | TAME    | 1,2-DCA | EDB |
| B-8-10    | 10                  | 04/18/13    | NA             | NA            | <10        | <0.20        | <0.0050             | <0.0050 | <0.0099      | <0.0050       | <0.50  | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | NA  |
| B-8-20    | 20                  | 04/18/13    | NA             | NA            | <20        | <0.17        | <0.0042             | <0.0042 | <0.0085      | <0.0042       | <0.042 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | NA  |
| B-9-10    | 10                  | 04/18/13    | NA             | NA            | <2.0       | <0.15        | <0.0037             | <0.0037 | <0.0074      | <0.0037       | <0.037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | NA  |
| B-9-15    | 15                  | 04/18/13    | NA             | NA            | <2.0       | <0.13        | <0.0034             | <0.0034 | <0.0067      | <0.0034       | <0.034 | <0.0034 | <0.0034 | <0.0034 | <0.0034 | <0.0034 | NA  |
| B-10-6    | 6                   | 04/18/13    | NA             | NA            | <2.0       | <0.17        | <0.0041             | <0.0041 | <0.0083      | <0.0041       | <0.041 | <0.0041 | <0.0041 | <0.0041 | <0.0041 | <0.0041 | NA  |
| B-10-14   | 14                  | 04/18/13    | NA             | NA            | <20        | <0.17        | <0.0043             | <0.0043 | <0.0086      | <0.0043       | <0.043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | NA  |
| B-11-6    | 6                   | 04/18/13    | NA             | NA            | <2.0       | <0.16        | <0.0039             | <0.0039 | <0.0078      | <0.0039       | <0.039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA  |
| B-11-10   | 10                  | 04/18/13    | NA             | NA            | <2.0       | <0.17        | <0.0042             | <0.0042 | <0.0083      | <0.0042       | <0.042 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | NA  |

**Notes:**

- mg/Kg denotes milligrams per kilogram
- TPH denotes Total Petroleum Hydrocarbons
- MTBE denotes methyl tertiary butyl ether
- TBA denotes tertiary butyl alcohol
- DIPE denotes di-isopropyl ether
- ETBE denotes ethyl tertiary butyl ether
- TAME denotes tertiary amyl methyl ether
- 1,2-DCA denotes 1,2-dichloroethane
- EDB denotes 1,2-dibromoethane
- Total lead analyzed by EPA Method 6010B
- NA denotes not analyzed
- NR denotes not reported
- < denotes not detected at or above stated method detection level
- Data prior to July 2009 were transcribed from previous reports.



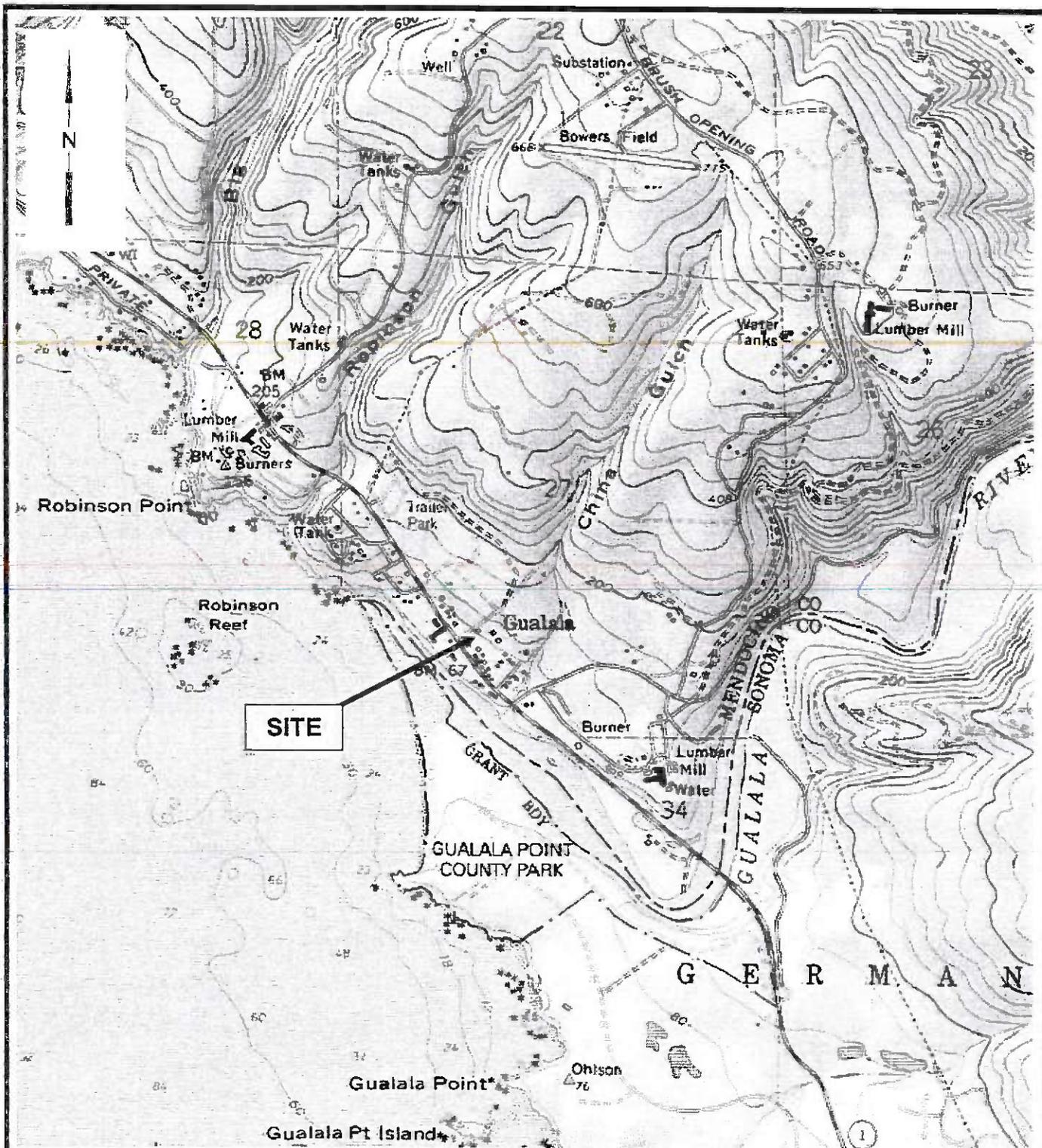


**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
 Unocal 76 Station  
 39225 S. Highway 1, Gualala, California  
 Page 3 of 3

| Sample ID | Date     | (Reported in µg/L) |               |            |              |         |         |               |               |       |     |       |       |       |         |       |                |
|-----------|----------|--------------------|---------------|------------|--------------|---------|---------|---------------|---------------|-------|-----|-------|-------|-------|---------|-------|----------------|
|           |          | Oil & Grease       | TPH Motor Oil | TPH Diesel | TPH Gasoline | Benzene | Toluene | Ethyl Benzene | Total Xylenes | MTBE  | TBA | DIPE  | ETBE  | TAME  | 1,2-DCA | EDB   | Dissolved Lead |
| B-1       | 12/12/94 | NA                 | <100          | 1,100      | 41,000       | 1,300   | 5,700   | 870           | 5,700         | NA    | NA  | NA    | NA    | NA    | NA      | NA    | NA             |
| B-2       | 12/12/94 | NA                 | 140           | 220        | 93           | 1.3     | 4.5     | <0.5          | 6.8           | NA    | NA  | NA    | NA    | NA    | NA      | NA    | NA             |
| B-3       | 12/12/94 | NA                 | 300           | 300        | 240          | 9.2     | 20      | 6.4           | 33            | NA    | NA  | NA    | NA    | NA    | NA      | NA    | NA             |
| W-1-9     | 10/22/97 | NA                 | 2,500         | 1,300      | 45,000       | 2,100   | 2,800   | 1,500         | 8,200         | 9,300 | NA  | NA    | NA    | NA    | NA      | NA    | NA             |
| B-7       | 04/19/13 | NA                 | NA            | 84         | 210          | 1.5     | 1.1     | 0.71          | 3.1           | 350   | 400 | <0.50 | <0.50 | <0.50 | <0.50   | <0.50 | NA             |
| B-8       | 04/19/13 | --                 | --            | --         | --           | --      | --      | --            | --            | --    | --  | --    | --    | --    | --      | --    | --             |
| B-9       | 04/19/13 | --                 | --            | --         | --           | --      | --      | --            | --            | --    | --  | --    | --    | --    | --      | --    | --             |
| B-10      | 04/19/13 | NA                 | NA            | <50        | <50          | <0.50   | <0.50   | <0.50         | <1.0          | 5.2   | <10 | <0.50 | <0.50 | <0.50 | <0.50   | <0.50 | NA             |
| B-11      | 04/19/13 | NA                 | NA            | <50        | 110          | 0.63    | <0.50   | <0.50         | <1.0          | 190   | 89  | <0.50 | <0.50 | <0.50 | <0.50   | <0.50 | NA             |

**Notes:**

- µg/L denotes micrograms per liter
- Oil and Grease analyzed by EPA Method 5520B
- TPH denotes total petroleum hydrocarbons
- TPH Motor Oil analyzed by EPA Method 3510/8015M
- TPH Diesel analyzed by EPA Method 3510/8015M
- TPH Gasoline analyzed by EPA Methods 5030/8015M
- Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8020/8260B
- MTBE denotes methyl tertiary butyl ether analyzed by EPA Method 8020/8260B
- DIPE denotes di-isopropyl ether analyzed by EPA Method 8260B
- TAME denotes tertiary butyl alcohol analyzed by EPA Method 8260B
- ETBE denotes ethyl tertiary butyl ether analyzed by EPA Method 8260B
- TBA denotes tertiary amyl methyl ether analyzed by EPA Method 8260B
- 1,2-DCA denotes 1,2-dichloroethane analyzed by EPA Method 602/8260B
- EDB denotes ethyl dibromide analyzed by EPA Method 8260B
- Dissolved lead analyzed by EPA Method 200.8
- NA denotes not analyzed
- < denotes not detected at or above stated method detection level
- denotes no sample collected due to insufficient amount of groundwater
- Data for samples collected previous to July 2009 were transcribed from historical analytical laboratory reports.



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP  
 GUALALA QUADRANGLE, CALIFORNIA, DATED 1977.



1117 Lone Palm Ave, Ste 201  
 Modesto, CA 95351  
 (209) 579-2221

**FIGURE 1**  
**SITE LOCATION MAP**

UNOCAL 76 STATION  
 39225 S. HIGHWAY 1  
 GUALALA, CALIFORNIA

PROJECT NO: 54.39220.0001

DESIGNED BY: NC

SCALE: 1:24,000

REVIEWED BY: JH

DRAWN BY: TH

DATE: 12/12

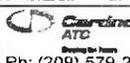
FILE: LOCATION

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

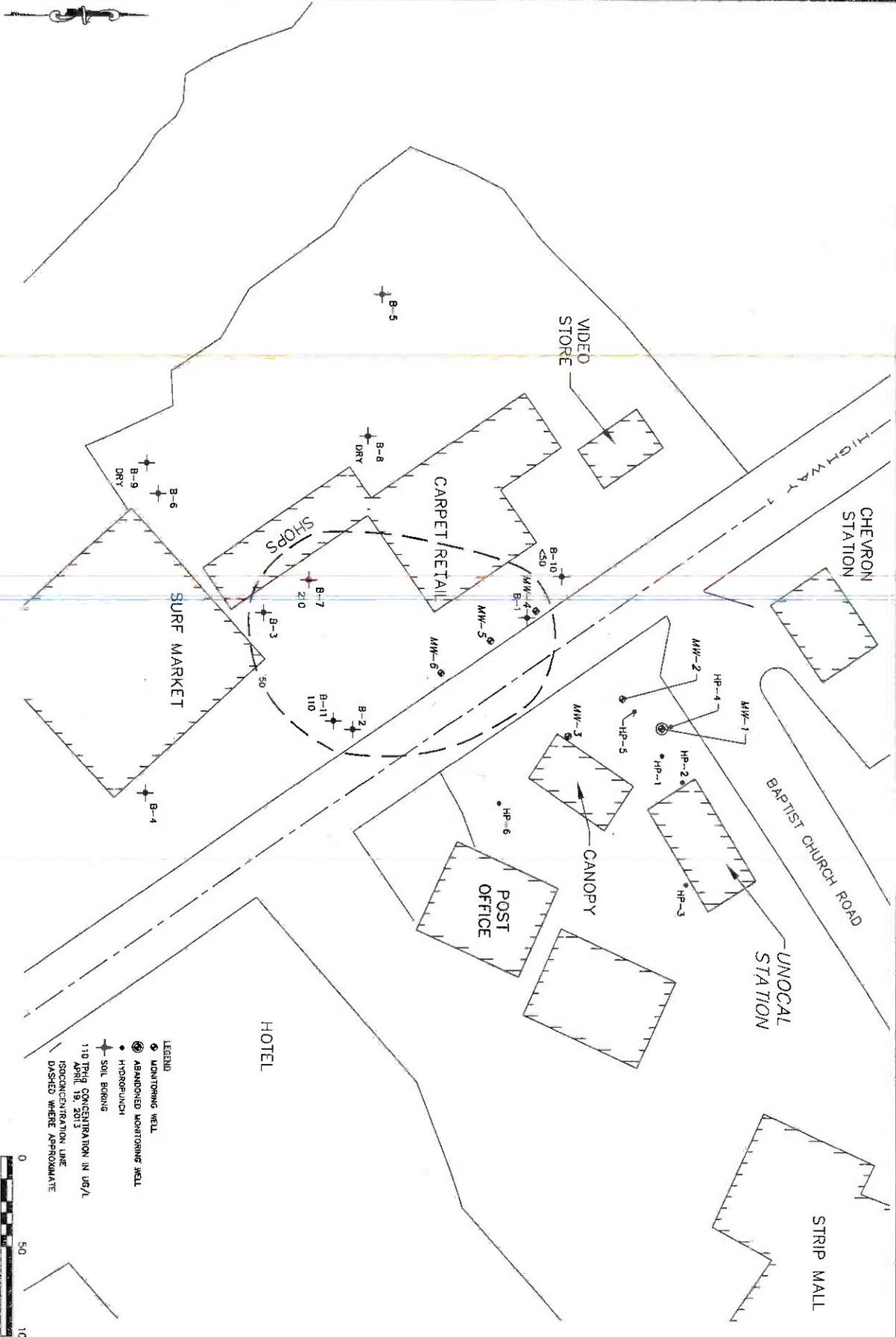


**SITE PLAN**

UNOCAL 76 STATION  
 39225 S. HIGHWAY 1  
 GUALALA, CA

|  |              |        |
|--|--------------|--------|
| PROJECT NUMBER: 54.39222.0001  | DATE: 5/9/13 | FIGURE |
| APPROVED BY: JH  | DRAWN BY: TH | 2      |
|  Carolina ATC<br>1117 Lone Palm Avenue, Ste. 201<br>Modesto, California 95351<br>Ph: (209) 579-2221 *** Fax: (209) 579-2225 |              |        |

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE



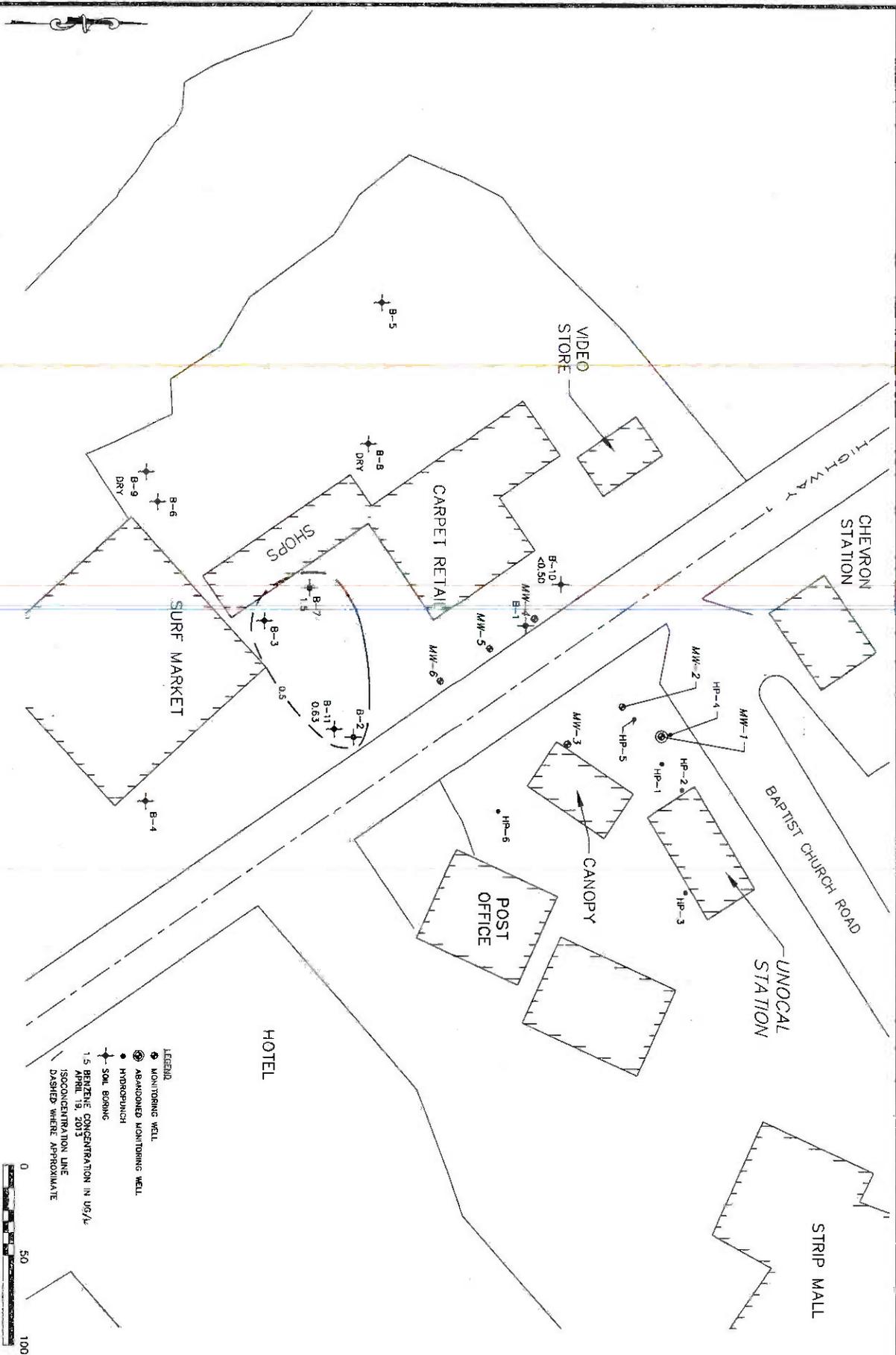
**ISOCONCENTRATION MAP  
TPHg IN GRAB GROUNDWATER SAMPLES**

UNOCAL 76 STATION  
39225 S. HIGHWAY 1  
GUALALA, CA

|                               |              |        |
|-------------------------------|--------------|--------|
| PROJECT NUMBER: 54.39226.0001 | DATE: 6/3/13 | FIGURE |
| APPROVED BY: JH               | DRAWN BY: TH | 3      |

**Cardno**  
ATD  
1117 Lone Palm Avenue, Ste. 201  
Modesto, California 95351  
Ph: (209) 579-2221 \*\*\* Fax: (209) 579-2225

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE



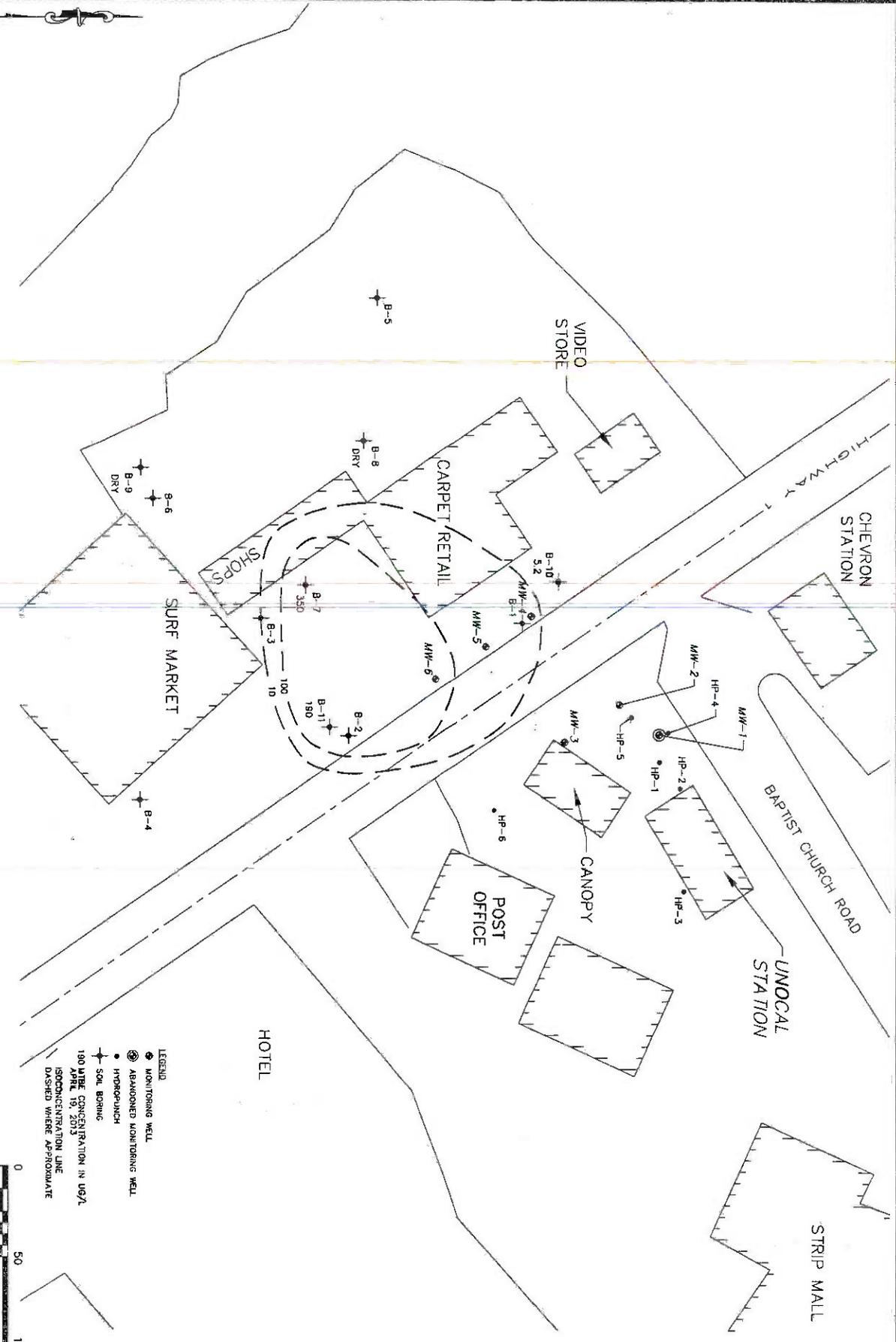
LEGEND  
 ● MONITORING WELL  
 ○ ABANDONED MONITORING WELL  
 ● HYDROPONICS  
 ⊕ SOIL BORING  
 1.5 BENZENE CONCENTRATION IN US/L  
 APRIL 19, 2013  
 ISOCOCONCENTRATION LINE  
 DASHED WHERE APPROXIMATE



**ISOCONCENTRATION MAP  
 BENZENE IN GRAB GROUNDWATER SAMPLES**  
 UNOCAL 76 STATION  
 39225 S. HIGHWAY 1  
 GUALALA, CA

|  |              |        |
|--|--------------|--------|
| PROJECT NUMBER: 54.39220.0001  | DATE: 6/9/13 | FIGURE |
| APPROVED BY: JH  | DRAWN BY: TH | 4      |
| 1117 Lone Palm Avenue, Ste. 201<br>Modesto, California 95351<br>Ph: (209) 579-2221 *** Fax: (209) 579-2225 |              |        |

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE



LEGEND  
 ● MONITORING WELL  
 ○ ABANDONED MONITORING WELL  
 ● HYDROPUNCH  
 ⊕ SOIL BORING  
 180 µg/L MTBE CONCENTRATION IN UGA  
 APRIL 18, 2013  
 ISOCONCENTRATION LINE  
 DASHED WHERE APPROXIMATE



**ISOCONCENTRATION MAP  
 MTBE IN GRAB GROUNDWATER SAMPLES**  
 UNOCAL 76 STATION  
 39225 S. HIGHWAY 1  
 GUALALA, CA

|  |               |        |
|--|---------------|--------|
| PROJECT NUMBER: 54,38220.0001  | DATE: 5/19/13 | FIGURE |
| APPROVED BY: JH  | DRAWN BY: TH  | 5      |
| 1117 Lone Palm Avenue, Ste. 201<br>Modesto, California 95351<br>Ph: (209) 579-2221 *** Fax: (209) 579-2225 |               |        |

**APPENDIX A**

**LOG OF B-7**  
SHEET 1 OF 1

Project UNOCAL 76 STATION Location 39225 S. HWY 1, GUALALA, CA  
 Client SUNDSTROM Drill Method HSA Elevation (ft amsl) --  
 Number 54.39220.0001 Drilling Started 4/18/13 Ended 4/18/13 Total Depth (ft) 26.5  
 Logged By T. HAFNER Drill Contractor GREGG DRILLING Depth To Water (ft)

| DEPTH (feet)                 | SAMPLE NO. | BLOWS/6"    | PID (ppm) | USCS           | LITHOLOGY   | DESCRIPTION                                  | DEPTH FEET |
|------------------------------|------------|-------------|-----------|----------------|---|--|------------|
|                              |            |             |           |                |   | 0-7" ASPHALT OVER CONCRETE. HAND AUGER TO 5' |            |
| 5                            | SPT        | 3<br>7<br>8 | 0.7       | CL<br>SP<br>SC | CLAY, DARK GRAY, MOIST, SOFT (CL)<br>SAND, VERY FINE-GRAINED, WELL SORTED, BROWN, DAMP (SP)<br>SAND, FINE-GRAINED, WELL SORTED, CLAYEY, MOIST, DARK GRAY (SC) | AUGER TO 9'                                  | 5          |
| 10                           | SPT        | 5<br>6<br>9 | 2.5       | SC<br>ML       | SAND, VERY FINE-GRAINED, WELL SORTED, CLAYEY BROWN, GRADING TO BROWN SILT (SC)<br>SILT, BROWN (ML)  | AUGER TO 14'                                 | 10         |
| 15                           | SPT        | 10<br>50/5" | 5.8       | ML             | SILT, BROWN, GRADING TO VERY FINE-GRAINED SILTY SAND WITH CEMENTATION (ML)  | AUGER TO 19'                                 | 15         |
| 20                           | SPT        | 50/5"       | 4.1       | SP             | MODERATELY CEMENTED SAND, VERY FINE-GRAINED, WELL SORTED, SLIGHTLY SILTY, GRAY TO BROWN, SLIGHTLY FRIABLE, DRY (SP)   | AUGER TO 24'                                 | 20         |
| 25                           | SPT        | 50/6"       | 7.2       | CL             | CLAY, PLASTIC, DAMP, GRAY (CL)  | AUGER TO 26.5'                               | 25         |
| Bottom of hole at 26.5 feet. |            |             |           |                |   |  |            |

54 LOG A EWINN05 54392200001.GPJ LOG A EWINN05.GDT 5/22/13



**Cardno**  
ATC  
Shaping the Future

1117 Lone Palm Ave., Ste 201  
Modesto, California 95351  
Phone: 209-579-2221  
Fax: 209-579-2225

Remarks: GROUNDWATER NOT ENCOUNTERED DURING DRILLING ON 4/18/13. TEMPORARY PVC SCREEN AND CASING INSTALLED ON 4/18/13. DEPTH TO WATER ON 4/19/13 WAS APPROX. 24.5'

Project UNOCAL 76 STATION

Location 39225 S. HWY 1, GUALALA, CA

**LOG OF B-8**

SHEET 1 OF 1

Client SUNDSTROM

Drill Method HSA

Elevation (ft amsl) --

Number 54.39220.0001

Drilling Started 4/18/13 Ended 4/18/13

Total Depth (ft) 26

Logged By T. HAFNER

Drill Contractor GREGG DRILLING

Depth To Water (ft)

| DEPTH (feet) | SAMPLE NO. | BLOWS/6"     | PID (ppm) | USCS | LITHOLOGY | DESCRIPTION  | DEPTH FEET |
|--------------|------------|--------------|-----------|------|-----------|--|------------|
|              |            |              |           |      |           | GRAVELLY SAND (FILL), HAND AUGER TO 5'   |            |
| 5            | SPT        | 4<br>10<br>8 | 3.9       | SC   |           | CLAY, SANDY WITH MINOR GRAVEL, BROWN, DAMP (SC)                                      | 5          |
|              |            |              |           |      |           | AUGER TO 9'  |            |
| 10           | SPT        | 6<br>8<br>6  | 4.8       | SC   |           | SAND, VERY FINE-GRAINED, WELL SORTED, VERY CLAYEY, DAMP (SC)                         | 10         |
|              |            |              |           |      |           | AUGER TO 14'   |            |
| 15           | SPT        | 6<br>8<br>8  | 3.9       | ML   |           | SILT, SLIGHTLY MICACEOUS, BROWN, DAMP (ML)   | 15         |
|              |            |              |           |      |           | AUGER TO 19'   |            |
| 20           | SPT        | 9<br>9<br>16 | 5.7       | SM   |           | SAND, VERY FINE-GRAINED, SILTY, MICACEOUS, LOW CEMENTATION, FRIABLE, BROWN, DRY (SM) | 20         |
|              |            |              |           |      |           | AUGER TO 24'   |            |
| 25           | SPT        | 50/5"        |           | SM   |           | SAND, VERY FINE-GRAINED, VERY SILTY, MICACEOUS, LOW CEMENTATION, BROWN (SM)          | 25         |
|              |            |              |           |      |           | AUGER TO 26'   |            |
|              |            |              |           |      |           | Bottom of hole at 26 feet  |            |

54 LOG A EWINN05.54392200001.GPJ LOG A EWINN05.GDT 5/22/13



1117 Lone Palm Ave., Ste 201  
 Modesto, California 95351  
 Phone: 209-579-2221  
 Fax: 209-579-2225

Shaping the Future

Remarks: GROUNDWATER NOT ENCOUNTERED DURING DRILLING ON 4/18/13. TEMPORARY PVC SCREEN AND CASING INSTALLED ON 4/18/13. NO GROUNDWATER ON 4/19/13.

Project UNOCAL 76 STATION

Location 39225 S. HWY 1, GUALALA, CA

**LOG OF B-9**

SHEET 1 OF 1

Client SUNDSTROM

Drill Method HSA

Elevation (ft amsl) —

Number 54.39220.0001

Drilling Started 4/18/13 Ended 4/18/13

Total Depth (ft) 20

Logged By T. HAFNER

Drill Contractor GREGG DRILLING

Depth To Water (ft)

| DEPTH (feet) | SAMPLE NO. | BLOWS/6"    | PID (ppm) | USCS | LITHOLOGY  | DESCRIPTION                            | DEPTH FEET |
|--------------|------------|-------------|-----------|------|--|--|------------|
|              |            |             |           |      |  | GRAVELLY SAND (FILL), HAND AUGER TO 5' |            |
| 5            | SPT        | 3<br>2<br>1 | 2.4       | CL   | CLAY, BROWN, VERY MOIST (CL)   |  | 5          |
|              |            |             |           | CL   | CLAY, BROWN & GRAY, WET (CL)   |  |            |
|              |            |             |           |      |  | AUGER TO 9'                            |            |
| 10           | SPT        | 2<br>2<br>6 | 3.4       | CL   | CLAY, SILTY, PLASTIC, DARK BROWN, MOIST, VERY FINE-GRAINED, BROWN SILTY SAND AT 10.5' (CL) |  | 10         |
|              |            |             |           |      |  | AUGER TO 14'                           |            |
| 15           | SPT        | 5<br>5<br>5 | 6.1       | CL   | SILTY & SANDY CLAY WITH GRAVEL, DARK BROWN, WET (CL)                                       |  | 15         |
|              |            |             |           |      |  | AUGER TO 19'                           |            |
| 20           | SPT        | 50/2"       |           |      |  | NO RECOVERY, REFUSAL AT 20'            | 20         |
|              |            |             |           |      |  | Bottom of hole at 20 feet              |            |

54 LOG A EWNND5 54392200001.GPJ LOG A EWNND5.GDT 5/22/13



1117 Lone Palm Ave., Ste 201  
 Modesto, California 95351  
 Phone: 209-579-2221  
 Fax: 209-579-2225

Remarks: GROUNDWATER NOT ENCOUNTERED DURING DRILLING ON 4/18/13. TEMPORARY PVC SCREEN AND CASING INSTALLED ON 4/18/13. NO GROUNDWATER ON 4/19/13.

Project UNOCAL 76 STATION

Location 39225 S. HWY 1, GUALALA, CA

**LOG OF B-10**

SHEET 1 OF 1

Client SUNDSTROM

Drill Method HSA

Elevation (ft amsl) -

Number 54.39220.0001

Drilling Started 4/18/13 Ended 4/18/13

Total Depth (ft) 21

Logged By T. HAFNER

Drill Contractor GREGG DRILLING

Depth To Water (ft)

| DEPTH (feet) | SAMPLE NO. | BLOWS/6"    | PID (ppm) | USCS | LITHOLOGY        | DESCRIPTION  | DEPTH FEET |
|--------------|------------|-------------|-----------|------|------------------|--|------------|
|              |            |             |           |      |                  | 0-6" ASPHALT OVER CONCRETE, HAND AUGER TO 5'   |            |
| 5            | SPT        | 3<br>3<br>5 | 5.6       | CL   | [Hatched]        | SANDY CLAY/CLAYEY SAND, SILTY, BROWN, VERY MOIST (CL)<br>AUGER TO 9'   | 5          |
| 10           | SPT        | 5<br>6<br>8 | 5.5       | CL   | [Hatched]        | DECOMPOSED ROCK, BROWN, VERY SANDY CLAY, SLIGHTLY SILTY, MOIST (CL)<br>AUGER TO 14'                          | 10         |
| 15           | SPT        | 50/4"       | 7.0       | ML   | [Vertical Lines] | CEMENTED SILT, GRAY, DRY (ML)<br>AUGER TO 19'  | 15         |
| 20           | SPT        | 50/5"       |           | ML   | [Vertical Lines] | SILT, SANDY & CLAYEY, MICACEOUS WITH MINOR CEMENTATION, GRAY, SATURATED, REFUSAL AT 21' (ML)<br>AUGER TO 21' | 20         |
|              |            |             |           |      |                  | Bottom of hole at 21 feet  |            |

54 LOG A EWINN05 54392200001.GPJ LOG A EWINN05.GDT 5/22/13



1117 Lone Palm Ave., Ste 201  
 Modesto, California 95351  
 Phone: 209-579-2221  
 Fax: 209-579-2225

Remarks: GROUNDWATER ENCOUNTERED AT APPROX. 19' DURING DRILLING ON 4/18/13. TEMPORARY PVC SCREEN AND CASING INSTALLED ON 4/18/13. DEPTH TO GROUNDWATER WAS APPROX. 6' ON 4/19/13.

Project UNOCAL 76 STATION

Location 39225 S. HWY 1, GUALALA, CA.

**LOG OF B-11**

SHEET 1 OF 1

Client SUNDSTROM

Drill Method HSA

Elevation (ft amsl) -

Number 54.39220.0001

Drilling Started 4/18/13 Ended 4/18/13

Total Depth (ft) 21.5

Logged By T. HAFNER

Drill Contractor GREGG DRILLING

Depth To Water (ft)

| DEPTH (feet) | SAMPLE NO. | BLOWS/6" | PID (ppm) | USCS     | LITHOLOGY | DESCRIPTION   | DEPTH FEET |
|--------------|------------|----------|-----------|----------|-----------|---|------------|
|              |            |          |           |          |           | 2" OF ASPHALT, HAND AUGER TO 5'   |            |
| 5            | SPT        | 4<br>6   | 5.5       | SM       |           | SILTY SAND, VERY FINE-GRAINED, WELL SORTED, BROWN, GRADING TO SILT & SANDY CLAY (SM)<br>AUGER TO 9'   | 5          |
| 10           | SPT        | 50/5"    | 4.7       | SM       |           | SAND, VERY FINE-GRAINED, VERY SILTY, CLAYEY, BROWN, DRY (SM)<br>AUGER TO 14'  | 10         |
| 15           | SPT        | 50/5"    | 3.5       | SM<br>ML |           | SAND, VERY FINE-GRAINED, WELL SORTED, VERY SILTY, WEAK CEMENTATION, FRIABLE, GRAY TO BROWN, DRY (SM)<br>AUGER TO 19'                                    | 15         |
| 20           | SPT        | 50/5"    | 3.9       | SM<br>ML |           | SAND, VERY FINE-GRAINED, WELL SORTED, SILTY, MINOR CEMENTATION, GRAY (SM-ML) GRADING TO BROWN CLAYEY SILT, DRY, REFUSAL AT 21.5' (ML)<br>AUGER TO 21.5' | 20         |
|              |            |          |           |          |           | Bottom of hole at 21.5 feet   |            |
| 25           |            |          |           |          |           |   | 25         |

54 LOG A EWINN05 54392200001.GPJ LOG A EWINN05.GDT 5/22/13



1117 Lone Palm Ave., Ste 201  
Modesto, California 95351  
Phone: 209-579-2221  
Fax: 209-579-2225

Remarks: GROUNDWATER NOT ENCOUNTERED DURING DRILLING ON 4/18/13. TEMPORARY PVC SCREEN AND CASING INSTALLED ON 4/18/13. DEPTH TO WATER ON 4/19/13 WAS NOT RECORDED. ESTIMATED TO BE APPROX. 17'.

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5 P.O. Box 1498  
6 Santa Rosa, CA 95402-1498  
7 Telephone: 707/545-4910  
8 Facsimile: 707/544-0260

9 Attorneys for Petitioner

10 **DECLARATION OF JOHN BOWER**  
11 **IN SUPPORT OF REQUEST FOR STAY**

12 Re: 39225 South Highway 1, Gualala  
13 Unocal 76 Station  
14 Water Board Case No. 1TMCO17

15 John Bower submits the following declaration in support of the request for  
16 stay in the accompanying Petition to State Board:

17 1. I am the general partner of the Bower Limited Partnership (BLP), the  
18 petitioner in the subject petition.

19 2. I am over the age of 60, and have been a lifelong resident of the  
20 Gualala area. I am a licensed contractor, and have performed or otherwise been  
21 involved with extensive piping, trenching, construction, and other projects in  
22 Gualala, and in the area of the discharger's property and the BLP property at issue  
23 in this petition.

24 3. It is extremely important that the BLP property be properly  
25 characterized for environmental purposes. I understand from the results of the  
26 discharger's testing, that the BLP property is contaminated. There are a number of  
27 development projects that are pending in the area, including 'Streetscape' (which  
28 will involve extensive digging and trenching in the area, in connection with re-  
configuring the pedestrian and parking areas through Gualala), and work to the

1 west of the buildings on the BLP property (in connection with bank stabilization  
2 and related work), as well as potential work in and about the existing buildings  
3 (that may require repair or other work).

4 4. The large spill (release) from the discharger's property occurred more  
5 than 20 years ago. In that 20-year timeframe, the discharger has made no effort (to  
6 our knowledge) to clean up the BLP property, despite the fact that there is an  
7 extremely active business complex on the BLP property, which includes a grocery  
8 store, video store, and other active businesses. The discharger has not obtained  
9 water samples from areas of concern on the BLP property, as outlined in the  
10 attached Petition. Closing the site, and/or abandoning and closing the monitoring  
11 wells while the contamination is still not characterized or remediated, will cause  
12 additional damage to BLP, including lost time, future work, and additional  
13 expenses for environmental and legal consultants.

14 5. I have requested that the discharger allow BLP to sample the  
15 monitoring wells on petitioner's property, at petitioner's expense. The discharger  
16 has refused petitioner access to wells on petitioner's own property for sampling  
17 purposes.

18 6. I am informed and believe that there will be substantial harm to the  
19 petitioner or to the public interest if a stay is not granted, as outlined below.

20 The discharger has installed a total of six monitoring wells: three on  
21 the discharger's property (MW 1, 2 and 3); three on petitioner's property (MW 4,  
22 5, 6).

23 Regarding MW 1, 2 and 3 - MW 1 and MW 2 were installed in 1992.  
24 MW 3 was installed in 1993. MW 1 was destroyed during overexcavation  
25 activities in 1997.

26 Regarding MW 4, 5 and 6 - MW 4, 5 and 6 were installed on  
27 petitioner's property in 2010.

28

1           It is petitioner's understanding from the ATC reports that constituents  
2 of concern have been detected in MW 4, MW 5, and MW 6. Those monitoring  
3 wells were last sampled in February, 2013, and they continued to show petroleum  
4 hydrocarbon contamination, and (as for MW 5 and MW 6) MTBE contamination.

5           If these monitoring wells are destroyed, there will be no available  
6 means to sample known contamination at petitioner's property. The discharger  
7 will have contaminated the petitioner's property, and will have left petitioner with  
8 no available means to have groundwater sampled.

9           This would force BLP to install a new set of monitoring wells, which  
10 is costly (most likely well over \$12,000) and counter-productive. Installing new  
11 wells may require a coastal permit. (Petitioner is informed that the discharger did  
12 not obtain a coastal permit or confirm that the wells were exempt from coastal  
13 permit requirements before the wells were installed in 2010.)

14           Petitioner's site is in the coastal zone, and is bordered by the Gualala  
15 River. The site should be adequately characterized (which has not happened).

16           7. I am informed and believe that there will be no substantial harm to  
17 other interested persons and to the public interest if a stay is granted.

18           The wells have been in place for about 20 years (MW 2 and 3), or 4  
19 years (MW 4, 5, and 6). Keeping the wells in place for a further period of time  
20 will not, to my knowledge, harm the discharger or others.

21           If the wells are sampled and there is cause to keep them 'open', then  
22 there is no harm to the discharger – the discharger would only be doing what the  
23 discharger should do in any event. The only 'harm' that at this time the petitioner  
24 may be potentially applicable would be the inconvenience of closing wells later,  
25 rather than sooner. Given the public and private interests, this potential appears to  
26 be justified.

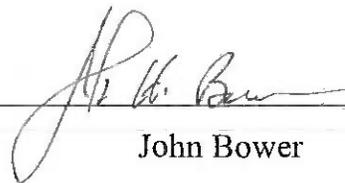
27           8. I am informed and believe that there are substantial questions of fact  
28 or law regarding the disputed action.

1           It is not disputed that the discharger released thousands of gallons of  
2 fuel into the environment. It is not disputed (to our knowledge) that the discharger  
3 has contaminated the petitioner's property.

4           There is a pending lawsuit between the discharger and the petitioner.  
5 Petitioner has served a formal discovery request in that lawsuit to allow petitioner  
6 to sample the wells at petitioner's expense. If the wells are destroyed before the  
7 sampling is completed (which is scheduled at this time for mid-September), and  
8 further action determined, then that would in effect be making relevant evidence  
9 unavailable (similar to destroying evidence) – it would in effect deprive petitioner  
10 of being able to assess the condition of petitioner's own property. The evidence –  
11 the condition of groundwater as sampled by means of existing monitoring wells –  
12 should not be destroyed or made unavailable.

13           I declare, under penalty of perjury under the laws of the State of California,  
14 that the foregoing is true and correct. Executed on August 12<sup>th</sup>, 2014, at Gualala,  
15 California.

16  
17 Signed:

  
\_\_\_\_\_  
John Bower