

Holden, Anne@Waterboards

From: Kemper, Lauri@Waterboards
Sent: Wednesday, August 29, 2012 9:13 PM
To: Daron Banks
Cc: Holden, Anne@Waterboards
Subject: Re: EIR meeting

Thx for writing this down. I forwArded it to Anne. We will respond as part of final eir.

Sent from my iPhone

On Aug 29, 2012, at 8:15 PM, "Daron Banks" wrote:

> Questions on EIR better define temporary impact on wells from insitu process ie manganese and arsenic how long does it take to filter manganese and other biproducts and how much will disperse into aquifer

>

> Sent from my iPad

received 10/16/2012
to LK (from Daron Banks)

Petition by the Community of Hinkley in regards to the Environmental Impact Report to the California Regional Water Quality Control Board Lahontan

California Regional Water Quality Control Board Lahontan Region This is a petition for immediate action by the Lahontan Water Board from the Hinkley community members listed on this document. The people of Hinkley request that PG&E is ordered to clean the entire extent of their discharged chromium 6 and any other byproduct produced by their clean up procedures. As it pertains to the Environmental Impact Report the community requests that PG&E clean the plume with the least amount of impact on the environment and byproducts in the aquifer the community prefers that the plume be cleaned properly and in its entirety taking due caution not to make things worse for the community or its wildlife.

Print Name

Signature Please

1. Daron Banks
2. JEFF TURNER
3. RONALD W BROWNE
4. JOE TURNER
5. John Turner
6. NAZ AWAD
7. Amy Carson
8. RONA CARSON
9. Mike Merritt
10. Michelle Garrison
13. Joellen Aguilar
14. WALTER BY COOKE
15. Barbara Ray
16. Riba Jordan
17. Sandra Wetherington

[Signature]
Jeff Turner
Ronald W Browne
Joe Turner
John Turner
Joellen Aguilar
Amy Carson
[Signature]
Michelle Garrison
Joellen Aguilar
Walter By Cooke
Barbara Ray
Riba Jordan
Sandra Wetherington

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Print Name

Signature Please

18 Scott Haislip

Scott Haislip

19 SHARON Haislip

Sharon Haislip

20 Louie Aviles

Louie Aviles

21 Marilyn Seifert

Marilyn Seifert

22 Jim Seifert

Jim Seifert

23 JERRY VANHORN

Jerry Vanhorn

24 Rebecca Speman

Rebecca Speman

25 Patricia A. Adair

Patricia A. Adair

26 Gustavo Aguayo

Gustavo Aguayo

27 Jesus Aguayo

Jesus Aguayo

28 Ramon Aguayo

Ramon Aguayo

29 Teresa J Gonzalez

Teresa Gonzalez

30 Don Depue

Don Depue

31 Jackie Depue

Jacklyn L. Depue

32 Joelle Depue

Joelle Depue

33 Brian Depue

Brian Depue

34 amanda Volz

Amanda Volz

35 LESTER WHITE C.A.C. CHAIR

Lester White

36

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Print Name

Signature Please.

56 JAY POTTER

J Potter

57 Dana Sowards

Dana Sowards

58 Richard Green

Richard Green

59 Lucille Azenita Royce

Lucille Royce

60 Wanda S. Monk

Wanda S. Monk

61 Fredrick A. monk

Fredrick A. monk

62 Anna Aguilera

Anna Aguilera

63 Maria C. Aguilera

Maria Aguilera

64 DAVID CHENEY

David Cheney

65 TERI CHENEY

Teri Cheney

66 William Wright

William Wright

67 SERENA REEDER

Serena Reeder

68 Amy Turner

Amy Turner

69 Adam Turner

Adam Turner

70 Carolyn Abuhantash

Carolyn Abuhantash

71 Ali AbuHantash

Ali AbuHantash

72 James Nelson

James Nelson

73 William R. Boust SR

William R. Boust

74 Sabela Luna-Rodriguez

Sabela Luna-Rodriguez

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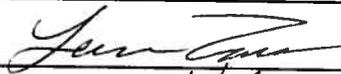
Print Name

Signature Please.

151 PAUL GREENBERG
152 Francisco Lara
153 Norman Halstead
154 Aquilla Halstead
155 ANDY MARTINEZ
156 PATT. Dickmann
157 TONY ORTIZ
158 IGNACIO ZAVAZA
159 DAN KELLEY
160 Robert L Morris
161 MOVITA HERNANDEZ
162 Henry Roberts
163 JOHN PIRTE
164 Reanna Walker-Banks
165 _____
166 _____
167 _____
168 _____
169 _____



Norman Halstead
Aquilla Halstead
Andy Martinez
P. Dickmann


Dan Kelly
Robert L Morris
Movita L. Hernandez
Henry Roberts
John Pirtle
Reanna Walker-Banks

Received
10/16/2012
DK (from Damon Banks)

75¹
total

Petition for the Community of Hinkley to the California Regional Water Quality Control Board Lahontan

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Damon Banks

Print Name

Damon Banks

Sign Name

1 Lorella Blavins

2 ~~Michelle Barnes~~

3 Lorna Roberts

4 Gabriel Roberts

5 LESTER WHITE C.A.C CHAIR

6 _____

7 _____

8 _____

9 _____

10 _____

13 _____

14 _____

15 _____

Janette Blavin

Sheilah Barnes (sorry)

Ronae Roberts

~~Phil Roberts~~

~~Robert Smith~~

Plume boundary

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34 JEFF TURNER

35 Jackie Nelson

36 Ronald W Brown

37 Richard S. Green

38 JOE TURNER

39 John Turner

40 Jacob Turner 12 yrs

41 Victoria Penny Harper

42 Essie Brewer

43 MARY JOYCE Brewer

44 JOYCE Armstrong

45 Lawana MORRIS

46 George MORRIS

47 Ruben Guadalupe

48 Smelmy Cooke

49 Jo Ellen Aguilar

50 Michelle Garrison

51 NAZ AWAD

52 Mike Merritt

ANTONIO HERNANDEZ

Jeff Turner

Jackie Nelson

Ronald W Brown

Richard S. Green

Joe Turner

John Turner

Jacob Turner

Victoria Penny Harper

Essie Brewer

Mary Joyce Brewer

Joyce Armstrong

Lawana Morris

George Morris

Ruben Guadalupe

Smelmy Cooke

Jo Ellen Aguilar

Michelle Garrison

NAZ AWAD

Mike Merritt

ANTONIO HERNANDEZ

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53. ~~Sandra Wetherington~~

Sandra Wetherington

54. ~~Scott Haistip~~

Scott Haistip

55. ~~Sharon Haistip~~

SHARON HAISTIP

56. ~~Louie Aviles~~

Louie Aviles

57. ~~MaryLou Seifert~~

MaryLou Seifert

58. ~~James Seifert~~

~~James Seifert~~

59. ~~Barbara Ray~~

Barbara Ray

60. ~~Jane A Norman~~

Jane A Norman

61. ~~Theresa Conger~~

Theresa Conger

62. ~~STEVEN D MCKAY~~

STEVEN D MCKAY

63. ~~FEL DE ANDREWS~~

~~FEL DE ANDREWS~~

64. ~~Colbert Acosta~~

Colbert Acosta

65. ~~GUSTAWO Aguayo~~

Gustawo Aguayo

66. ~~JESUS Aguayo~~

Jesus Aguayo

67. ~~Ramon Aguayo~~

Ramon Aguayo

68. ~~Brian Depue~~

Brian Depue

69. ~~Joelle Depue~~

Joelle Depue

70. ~~Jackie Depue~~

Jackie Depue

71. ~~Don Depue~~

Don Depue

72. ~~Margaret Petersen~~

Margaret Petersen

73. ~~Geraldine Simpson~~

~~Geraldine Simpson~~

74. ~~April Clark~~

April Clark

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73 Richard T. Monk

74 Wanda S. Monk

75 Fredrick A. monk

76 Lucille Aranita Royce

77 CECILIA MONTES

78 WALTER YOUNG

79 Anna Aguilera

80 Maria C. Aguilera

81 William R. Brust Sr

82 DAVID CHENEY

83 TERI CHENEY

84 William Wright

85 SERENA PEDER

86 Larry Weep

87 John Pierre

88 Norm ~~Halstead~~ Halstead

89 Aquila Halstead

90 Mark Orr

91 Jessie N. Orr

92 Robert L. Morris

Manuela Velazquez

Richard T Monk

Wanda S. Monk

Fredrick A. Monk

Lucille Aranita Royce

Cecilia Montes

Walt Young

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Maria C. Aguilera

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93 Amber C. Dodd.

AMBER C Dodd.

94 Nicolette Grill

Nicolette Grill

95 Jay B White

Jay B White

96 Francisco Lara

Cydia Lara

97 ANTONIO FERNANDEZ

FLORA HERNANDEZ

98 Charles Duff

Antonio mont

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Early Review Comments and Perspectives from the Independent Review Panel (IRP) Manager Working for the Hinkley CAC...1.

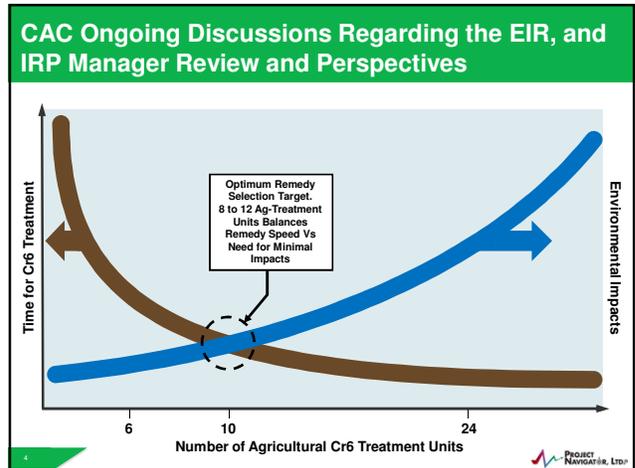
- The CAC Thanks the Water Board for the Issuing the EIR
- The 1,000-Page Document is Long-Awaited
- The CAC Fully Understands the *Critical-Path Significance of the EIR* on the Road to Final Remedy Selection and the Final Cleanup CAO...
- ...and Full Scale, *Final* Remedy Operations

PROJECT NAVIGATOR, LTD.

Early Review Comments and Perspectives from the Independent Review Panel (IRP) Manager Working for the Hinkley CAC...2.

- **The Process to Finalize the EIR, Should Take Into Consideration the Community's Grand Objectives**
 - "Clean water as soon as possible"
 - ◆ To Homes and in the Aquifer(s)
 - The CAC's Push for "Progress" → Can be Achieved via a *Flexible EIR*
 - ◆ Approval of an EIR, *now*, makes progress possible even though the final clean up methodology and goals for Cr6 are not yet established
 - ◆ A Flexible EIR allows permits to be issued and a *final, performance based, CAO issued*
 - Path-Forward Recommendations
 - ◆ CAC endorses a *Flexible WB Enforcement Approach* using EIR Amendments and CAO Amendments
 - ◆ This Approach Appears to be Consistent with *PG&E's Stated Remedy Implementation "Adaptive Management Approach"*

PROJECT NAVIGATOR, LTD.



November 5, 2012

Anne Holden
Lahontan Water Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150.
aholden@waterboards.ca.gov

Subject: Comments on the Draft Hinkley Groundwater Remediation EIR (dated August 2012). Submitted by the Hinkley Community Advisory Committee (CAC) and the Independent Review Panel (IRP) Manager

Dear Anne:

The Hinkley Community Advisory Community (CAC) thanks the Lahontan Water Board for managing the formulation of the above Draft Environmental Impact Report (EIR) and issuing the document for public comment in August, 2012. The process and debate towards its final adoption is an important and necessary milestone in the overall pathway towards an eventual cleanup of the Cr-6 impacted groundwaters in Hinkley, California. We also thank the Water Board for the numerous briefings you have prepared for the Hinkley Community during the past month describing the document, as well as extending the comment period. The extra time has allowed for improved CAC/Community understanding and improved comments.

In general, in the Independent Review Panel (IRP) Manager's opinion, the overall project requires a *comprehensive, but simultaneously flexible* EIR (which could be modified, revised and amended in the future, as appropriate, as new, EIR-relevant data comes to light). The current draft EIR provides an excellent framework, and is a high quality document.

The IRP Manager hopes that the Water Board will address the detailed comments supplied by our EIR review consultant, Environmental Audit, Inc., and use the comments, as appropriate, as the document is further discussed in the months ahead. In the IRP Manager's opinion, the document, as written, does provide a broad framework for documenting and starting to understand the effects of the proposed Hinkley groundwater remedies on the environment. In one major aspect, though, further work does seem required in the issue of secondary chemicals generation within the In Situ Reactive Zone (IRZ) and this particular topic is of such major concern to the CAC, that they wish to go on record, via these comments, of requesting that the EIR process be "suspended," and the IRZ systems "shut down" until more information is gathered.

The IRP Manager has had lengthy discussions with the CAC on this matter, and also is proposing that some major technical exchange sessions should occur, wherein all relevant data, and conversely data gaps, are reviewed.

Our comments are provided via three main **Attachments** to this cover letter, namely:

1. Detailed EIR document review comments prepared by the EIR specialist firm, Environmental Audit, Inc. of Placentia, CA. (www.envaudit.com).
2. Comments by the IRP Manager specific to the In situ Reactive Zone (IRZ) and the present generation of secondary chemicals, and
3. Data collected by CAC Member Mr. Nick Grill for manganese in the vicinity of the IRZ.

More detailed discussions on each of these topics now follows:

1. General Comments on the EIR Prepared by Environmental Audit, Inc.

Environmental Audit, Inc. (EAI) was retained by the IRP Manager on behalf of the CAC to review the EIR. Their retention by the IRP Manager was made possible via the guidelines established in the Hinkley CAC's Memorandum of Agreement (MOA) between the CAC and PG&E. This allows for specialty expertise to be retained by the IRP Manager to assist the CAC, when deemed necessary and appropriate.

EAI's comprehensive comments are provided in **Attachment A**. In particular, the CAC and IRP Manager wish to highlight the following EAI comments:

- a. **The Environmental Impacts of Remediation Activities in the IRZ Have not been Fully Evaluated.** Namely, the draft EIR only addresses the impacts associated with Cr6 contamination and cleanup. Secondary, IRZ-produced, chemicals of concern, such as manganese and arsenic require further evaluation. More on this topic is discussed by the IRP Manager in the following Section 2.
- b. **Comprehensiveness of Health Risk Assessment (HRA).** The EIR contains a HRA for diesel truck emissions and above ground construction activities related to the implementation and operations of a remedy. Related to the above comment (1.a.), no HRA computations were performed for other potential exposure pathways, such as those created by secondary chemicals.
- c. **The Relative Phasing of the EIR and the Pending Background Study Needs to be Thought Through.** The new planned background study, which is at a work plan review status by the Water Board, will generate information on naturally occurring Cr6 background levels that will ultimately be used in establishing project cleanup goals. EAI's review points out the dilemma as to which document should be completed first, strongly suggesting that background Cr6 numbers are

a precursor to the final grand approval of the EIR. The IRP Manager strikes more of a middle ground believing that the current, flexible, document (viewed as an “amendable EIR framework”) can be pushed to completion, but then subsequently amended, as necessary, when background Cr6 levels are determined, perhaps more than 2 years from present.

2. IRP Manager Comments Specific to the In situ Reactive Zone (IRZ) and the Present Generation of Secondary Chemicals.

The CAC has also become concerned about how well the operating performance of the IRZ systems are understood. It has been well documented that the reductive processes occurring within the IRZ, while immediately conducive to the reduction of Cr6 to Cr3, also liberate secondary chemicals of concern, most notably manganese and arsenic. The draft EIR discusses these processes and relevant data at pages 3.1-31 and onwards. Figure 3.1-9 shows IRZ data for arsenic, while Fig 3.1-11 shows similar information for manganese. (Both Figures appear to have been prepared by PG&E and submitted to ICF and the Water Board for the EIR. Also, the timing of collection of the IRZ’s arsenic and manganese data displayed in EIR Figures 3.1-9 and 3.1-11, respectively, is unclear. This is important since the recent As and Mn measurements made by CAC Member Mr. Nick Grill have been made within the last few months).

At page 3.1-32 of the draft EIR, the following is stated: “...the in situ remediation of the chromium plume has resulted in temporary and localized increase of arsenic in parts of the plume area. Based on experience with in-situ remediation, arsenic (and other byproducts) concentration increases in correlation to the amount of injected organic carbon, and then decreases in time as the organic carbon is consumed by microbial action. Arsenic levels in groundwater increase from less than 1 ppb to 15 ppb in areas up to 500 feet downgradient of the carbon injection point. Prior studies have indicated that after carbon amendment ceases, in-situ remedial byproducts declined back toward initial levels within several months to over a year, as organic carbon levels dropped. Current data shows arsenic as a by product only within the chromium plume, and not beyond the plume boundaries.” Later on page 3.1-33 under descriptions of the manganese and its release phenomenon, a similar statement is made; namely “Current data shows manganese as by product only within the chromium plume, and ***not beyond the plume boundaries.***”

It is this last statement which concerns the CAC. Under the leadership of CAC Member Mr. Nick Grill the CAC has now had the opportunity to review groundwater samples collected by Mr. Grill from domestic wells to the immediate west of the IRZ. Also, previously, for use in discussions between the CAC and PG&E, the IRP Manager prepared a 3D plot of manganese data at the IRZ (see **Figure 1**). Subject to the limitations of available PG&E data, the IRP Manager’s Figure 1 appears to show that the manganese is contained within the IRZ area. This is in contrast to the new manganese data from Mr. Grill which appears to show elevated manganese readings outwith and to the west of the IRZ.

The IRP Manager has reviewed Mr. Grill’s findings, and they have also been discussed at length at CAC Meetings. It this data, to a large extent, which is

driving the CAC towards their opinion that the IRZ should be “shut down,” until more comprehensive sampling occurs, and the IRZ processes and PG&E’s believed “containment” is better understood.

From an IRP Manager’s perspective, taken at face value, and with no knowledge about the accuracy of the sampling exercise, Mr. Grill’s highest magnitude data points (provided in **Figure 2**) display as the two (red colored) western data points in Figure 1. Such observations, implying a release of manganese beyond the bounds of the IRZ and the Cr6 plume boundary (also supported by anecdotal comments made by other community members at the CAC monthly meetings) causes the CAC to ask the IRP Manager to raise this issue in this EIR comments package. In addition, the IRP Manager has overlain the IRZ manganese Figure from the EIR over the aforementioned 3D data display, and the result is shown in **Figure 3**. The EIR claims that “based on available data,” there appears to be no release of Mn to the west. (Draft EIR, p.3.1-33). It should be noted, however, that EIR Figure 3.1-11 does not show any information being collected to the west side of the plume. Mr. Grill’s data appears to be one of the first manganese sampling efforts in this area. During August 2012, the Water Board also sampled some domestic wells in this area (see Figure 2), but measured manganese concentrations two to three orders of magnitude less than Mr. Grill’s measurements.

Despite the variation in manganese readings to date at domestic wells to the west of the IRZ, the CAC has asked the IRP Manager to express their concern about the ability of the IRZ to contain generated chemicals.

The CAC met on November 1, 2012 to discuss the EIR, the IRZ, and what comments should be submitted specific to the above issue. After significant discussion, which involved the IRP Manager, the IRP Manager was directed to specifically comment as follows regarding the IRZ, and its ongoing operations relevant to the EIR. ***The CAC believes that too little is understood about secondary by-product generation in the form of arsenic and manganese, and that until a better understanding of the systems operations is gained, the IRZ should be “switched off.”*** “Switching off” could also entail simply eliminating the present injection of ethanol, while at the same time attempting to use the current IRZ system for some form of hydraulic control.

In his role of providing candid technical advice, the IRP Manager has discussed with the CAC some of the ramifications of this action. These included eliminating the sole mechanism at the Cr6 plume hot spot location for treating Cr6, which could lead to downgradient releases of Cr6, and thereby possible impacts on plume shape and size.

The IRP Manager also discussed with the CAC a variety of other approaches which could be considered to address the manganese and arsenic issues. They include the following, and the IRP Manager offers these ideas to the Water Board for deliberation and discussion:

1. Consider the installation of additional new monitoring wells adjacent to the IRZ area to definitively prove and monitor containment. This could

be accomplished as part of the pending new groundwater monitoring Order.

2. Evaluate if there is an improved (lower, most likely) optimal dosing of the carbon source which would still treat Cr6, but minimize by-product formation. Consider an optimization program for the in situ reaction zone. PG&E may have already performed such work as they arrived at ethanol as the carbon source. Past work on the IRZ and its predicted performance should be dusted off and reviewed versus actual operating performance.
3. Better quantify the actual quantities of arsenic and manganese being generated relative to Cr6 being treated, and thereby assess from a risk mitigation and health risk evaluation perspective what is the appropriate decision-making regarding the IRZ (related to 1.b., above), and finally most importantly,
4. Immediately convene technical exchange meetings on the above, prior to any actions being taken, so that the right decisions can be made for the Hinkley Community as a whole. Viz: the need to balance the perceived risks of temporarily generated, and possibly contained (but not yet definitively proven in the minds of the CAC) manganese and arsenic Vs the upsides of *in situ* Cr6 plume hot spot treatment, which in the long-term appears to be the most expeditious way to remediate the entire plume to background levels.

Manganese Data Collected by Mr. Nick Grill to the West of the IRZ

The manganese monitoring data collected by Mr. Nick Grill is provided in **Attachment B**. This is the data which is shown in Figure 2, and is plotted in Figure 1. (Figure 2 also lists Water Board collected data. The Water Board measurements are significantly less than those made by Mr. Grill).

The CAC and the IRP Manager thank you for the opportunity to submit these comments on the draft EIR. Obviously the issue which is most pressing on the CAC's agenda pertaining to the completeness of the EIR, is the IRZ and its associated generation of secondary chemicals. We hope that that the Water Board can meet with the CAC soon, and involve PG&E, to immediately devise solutions and action items regarding the IRZ.

Please feel free to contact any CAC Member or me at 714-863-0483 or at iwebster@projectnavigator.com.

Respectfully submitted,



Ian A. Webster, Sc.D.
IRP Manager

Attachment A: Comments on the Draft EIR by Environmental Audit, Inc.

Attachment B: Domestic Well Manganese Measurements made by CAC Member Mr. Nick Grill

Figure 1: IRP Manager's 3D data display for Manganese at the IRZ. Monitoring data was supplied by PG&E. Data supplied by Mr. Nick Grill has been added.

Figure 2: Manganese monitoring data collected and provided by Mr. Nick Grill.

Figure 3: IRP Manager's 3D display for Manganese at the IRZ overlain with similar Manganese data displayed in a Figure from the Draft EIR.

ATTACHMENT A



November 5, 2012

Project No. 2800

Ian Webster
Project Navigator

Subject: Comments on the Draft Environmental Impact Report, Comprehensive Groundwater Cleanup Strategy for Historical Chromium Discharges from PG&E's Hinkley Compressor Station

Dear Mr. Webster:

Environmental Audit, Inc. (www.envaudit.com) was retained by Project Navigator, Ltd., in its role of Hinkley Community Advisory Committee (CAC) Independent Review Panel (IRP) Manager to assist the CAC review and comment on the above document. We have met with both the CAC and the IRP Manager in conjunction with our review of the document. We also attended a Water Board Public briefing on the EIR held in Hinkley on October 16, 2012, and participated in the regularly scheduled CAC Monthly Community Meeting held on October 25, 2012.

Environmental Audit, Inc. offers the following comments on the draft EIR:

1. Notice of Preparation/Initial Study (NOP/IS)

- The NOP, issued November 24, 2010, refers to the preparation of a Subsequent EIR. Sometime after the release of the NOP, a decision was made to change the document from a Subsequent EIR to a stand-alone EIR. The reason for this change was not discussed in the Draft EIR. An explanation should be provided as to the reasons for the change in approach relative to CEQA compliance.

2. Project Description

- The term "background level" refers to the water quality that existed before the discharge. The studies conducted to determine background levels were conducted after the PG&E release. Therefore, the accuracy of the background contaminant concentrations used in the EIR is questionable. The Water Board is requiring that PG&E conduct a new background study. We recommend that PG&E and the Water Board agree on a compliance schedule for completing the background study, as its results are important to the groundwater remediation efforts. It is difficult to determine appropriate clean-up methods, requirements, and related environmental impacts when the ultimate goal (background concentrations) is in a state of flux. The EIR's environmental setting and potential environmental impacts may need to be updated when the results of the new background study is completed. The background study is not an activity that

requires CEQA compliance, so PG&E should be required to implement the study as soon as possible (and not wait for a new Clean up and Abatement Order (CAO)).

- The Draft EIR only addresses the impacts associated with Cr(VI) contamination and cleanup. The impacts associated with cleanup of other contaminants in the aquifer (e.g. manganese, iron, arsenic and uranium) are not evaluated in the EIR. Therefore, by definition, the environmental impacts of remediation activities (both the interim actions and long-term) have not been fully evaluated and disclosed.
- Instead of describing a proposed project, the Draft EIR evaluates 6 alternatives. It thereby maintains project "flexibility," and delivers a comprehensive platform for EIR decision-making. However, the EIR needs to define the "CEQA Project."
- Page 2-6 Section 2.5.1. Affected wells "are those that do not meet federal, state, and local drinking water standards." Where no federal, state, or local standard yet exists, as is the case for Cr(VI), public health based goals (PHG) are appropriate to employ in "affected wells decision-making." The PHG for Cr(VI) is 0.02 ppb, but current technology does not allow for detection of Cr(VI) at 0.02 ppb, i.e., 0.06 ppb is the current laboratory detection limit for Cr(VI). Therefore, "affected wells" are those that contain a Cr(VI) concentrations equal to or greater than 0.06 ppb. The relationship between affected wells and background concentrations is unclear.
- Figures ES-2 and 2-2b. The figures summarize data from 4th Quarter 2011 sampling results. No information was provided to explain how the plume labeled as "approximate" 3.1 ppb level was determined in the northern portion of the plume. Sampling data are not available in this portion of the plume, so the method used to define the plume should be provided.

3. Water Resources and Water Quality

- Page 3.1-8. The term acre-feet should also be defined in terms of gallons as the general public is more familiar with gallons as a form of measurement.
- The EIR does not provide a definition for "water supply well."
- The EIR should quantify whether or not groundwater with elevated Cr(III) or Cr(VI) or other by-product concentrations are being used for showering, washing dishes, landscape watering, etc. The EIR should have included a health risk assessment that evaluates these potential exposure pathways. Page 3.1-16, second to last paragraph. The term "SCRIA project" should be defined.
- Page 3.1-13, fourth bullet, indicates that where cleanup to background is infeasible, cleanup standards will be set at the lowest concentrations for the individual pollutant that, among other things, consider cumulative risks taking into account different routes of exposure and other pollutants. Considering that contaminated groundwater has been a long-term problem in Hinkley, a discussion of health risks associated with Cr(VI) and other remediation by-products should have been included in the EIR. (The only HRA in the EIR was prepared for diesel truck emissions and ex-situ construction).
- Page 3.1-28, third paragraph. This paragraph indicates that PG&E submitted a Proposed Work Plan for Evaluation of Background Chromium in the Upper Aquifer of the Hinkley Valley, which proposes additional data to expand on the 2007 Background Study Report. The paragraph further indicates that the Water Board Staff is reviewing the proposed background study and considering the need for peer and/or expert review, so any new study will yield a valid, credible and defensible result. The results of the new background study should be incorporated into the Final EIR and the Final EIR should be revised and updated to reflect the latest data and information, as well as updating any environmental impact analysis.

- Page 3.1-33, second complete paragraph, states that current data shows manganese as a by-product only within the chromium plume and not beyond the plume boundaries. Please provide a reference for these comments. It is not clear from the data provided if samples were taken outside of the chromium plume area to verify that no elevated concentrations of manganese exist outside of the chromium plume area.
- Figure 3.1-12. The units on the figure (e.g., 8 ft/yr) appear to be incorrect as water is measured in volume.
- Page 3.1-38, under In-Situ Treatment Experience to Date, first bullet point. The document should explain why ethanol is now favored for in-situ treatment. Also, 95% ethanol is used for in-situ treatment – what component makes up the other 5%? The water quality impacts of this chemical should also be addressed, as the total amount injected over the period of all remediation activities will be substantial. Also at the last bullet point in the same paragraph, a reference or data should be provided to support the statement that “The secondary byproducts also tend to reduce over time and distance from the reducing zone when exposed to oxidizing conditions in non-treated groundwater.”
- As indicated in the EIR (Section 3.1.7 Significance Criteria) for Cr(VI), page 3.1-46, if and when an MCL is established for Cr(VI), it may not matter, because PG&E is required to cleanup Cr(VI) to background conditions, i.e., defined as 3.1 ppb Cr(VI), at this time. If the MCL for Cr(VI) is set at a concentration lower than the current background level, it suggests that the project will not require cleanup of the impacted groundwater to concentrations that are acceptable for human consumption. If, however, an MCL is established that is higher than the current background concentration, then there is no issue. PG&E is required to provide replacement water for any water supply well with a Cr(VI) concentration equal to or greater than 0.06 ppb (Section 2.5.1). However, when and if an MCL is established, the MCL will become the criterion. If an MCL is set below the background level, Cr(VI) will not be remediated to the MCL.
- Significance Criteria, pages 3.1-46 through 3.1-49. For remediation byproducts, different significance criteria and boundaries are used as compared to the chromium contamination. Impacts are considered significant when remedial actions cause an increase in concentrations of total chromium within a water supply well within 1 mile of the defined chromium plume. Yet impacts for byproducts are considered significant when remedial actions cause an increase in concentration of byproducts within one-half mile upgradient or one quarter mile cross gradient of a water supply well. It is recommended that the significance criteria for byproduct contamination should be further discussed and made consistent with chromium contamination (1 mile).
- Page 3.1-70, Alternative 4C-2. The EIR indicates that plume bulging can occur but will be mitigated as necessary. We recommend that further discussion be included to justify that the mitigation measures provided to minimize plume bulging are, in fact, adequate to control and monitor this impact. Mitigation should include monitoring outside the plume to assure that hydraulic control of the plume has, and will, continue to be maintained.
- Page 3.1-90, WTR-MM-2. This mitigation measure should identify timeframes for implementation, including implementation of the “comprehensive program” to determine adversely affected wells and implementation of alternative water supplies, if necessary.
- Pages 3.1-92 through 3.1-94, Mitigation Measure WTR-MM-2a and b, the definition of actually and potentially affected wells. New wells are currently being installed to define the plume and

additional wells may be installed as remediation progresses. It is not clear in the EIR how these mitigation measures apply to new wells where existing background data currently does not exist. In addition, a portion of these mitigation measures will rely on future water quality modeling. Also, the potential to employ different models, or updates to existing models, should also be provided.

- Mitigation Measure WTR-MM-2b, Monitoring, page 3.1-94. This mitigation measure requires initial monitoring of domestic and agricultural wells within one-mile downgradient or cross-gradient or any proposed in-situ or agricultural treatment unit. Mitigation Measure WTR-MM-2b, should also require monitoring for remedial activity byproducts in domestic and agricultural wells within one mile of any in-situ or agricultural treatment unit on a twice yearly basis (as opposed to within one-half mile down gradient and one quarter-mile cross gradient). The chromium plume has expanded, appears to have not been completely defined. This observation, in part is what is driving numerous Community complaints that the plume may not be confined, and that by-products are being detected in wells outside the IRZ. Therefore, mitigation measures in the EIR must be formulated with the objective of assuring that further degradation of water quality in wells is prevented.
- Page 3.1-96, Monitoring. PG&E should immediately conduct initial monitoring of groundwater levels and water quality in more domestic and agricultural wells. At time of writing, we understand that the Water Board has a draft Amended CAO (No. R6V-2008-0002-A4), which will require PG&E to submit a new groundwater monitoring work plan which will take into account domestic well Cr(VI) data in the siting of new groundwater monitoring wells. PG&E should not have to wait until a new Cleanup and Abatement Order is provided to complete these types of studies. There are no new environmental impacts associated with monitoring of existing wells. Delays in implementing effective remediation measures have resulted in expansion of the chromium plume and any additional delays must be minimized.
- Mitigation Measure WTR-MM-3. This measure requires the preparation of a Boundary Monitoring Plan (BMP) and a Contingency Plan for AUs but provides no information or requirements on what constitutes a BMP or Contingency Plan. In order to be considered mitigation, requirements, performance standards, and similar information needs to be provided to show how the BMP or Contingency Plan would be considered as mitigation.
- Mitigation Measure WTR-MM-8. This mitigation measure requires that the treated water be sampled on an annual basis to demonstrate that the water quality of the source is acceptable for freshwater injection. We recommend that the water be sampled more frequently because of the complex groundwater issues involved with the remediation efforts.
- Manganese Mitigation Plan. It does not appear that the environmental impacts associated with implementation of the existing Manganese Mitigation Plan have been included in the EIR. We recommend that the key elements of the mitigation measures in the Manganese Mitigation Plan should be included in the Mitigation Monitoring Program, and also included in the Cleanup and Abatement Order to assure that the requirements are ultimately enforceable.
- It is possible that increased project groundwater pumping for agricultural treatment may also result in uranium and other associated radionuclide concentrations in groundwater; but the potential for this impact to occur is currently not well understood due to limited data. Increased concentrations of these contaminants could lead to significant health risks due to exposure. We recommend that these risks should be further discussed in the EIR.
- Page 3.1-98, Mitigation Measure WTR-MM-5. There are no dates or requirements for when the investigations required under this mitigation measure would occur. There should be a

discussion added on to include enforceable compliance dates associated with implementation of the investigation on TDS, uranium, and other radionuclide levels.

4. Hazards and Hazardous Materials

- Ethanol is a flammable material. The EIR indicates that 95% ethanol is used for in-situ remediation. The potential hazards associated with ethanol storage, transportation, and use should be considered in the EIR.

5. Geology and Soils

- Page 3.4-7, Local Geology. The references to the local geology rely on references from PG&E. A better general reference for existing geology would be data from the U.S. Geological Survey or California Geologic Survey or other similar type of reference.

6. Air Quality

- Page 3.5-37, Mitigation measure AIR-MM-3. The mitigation measures should be consistent with the CARB ACTM for truck idling and idling should be limited to 5 minutes, instead of 3 minutes. Startup emissions are generally more than idling emissions. Frequent start up and shutdown of truck engines could actually result in higher emissions as opposed to reduced emissions.
- Tables 3.5-11 and 3.5-12 on page 3.5-26. For Alternatives 4C-3 and 4C-5 the emissions totals are underreported when compared to Appendix D. Since Appendix D does not contain Table numbers or page numbers to easily identify the information, the Tables referenced are identified by the title of the page and the electronic version page number. The supporting documentation to the Construction Emissions Summary in Appendix D (electronic page 13) appears to omit the paving emissions associated with the treatment facility for Alternatives 4C-3 and 4C-5. The URBEMIS Construction Emissions Associated with Offroad Equipment and Fugitive Dust Table in Appendix D (electronic page 20) quantifies paving emissions associated with the treatment facility as 4.51, 32.65, 16.96, 1.77, and 1.63 pounds per day of ROG, NOx, CO, PM10, PM2.5, and CO₂, respectively, which are not included in the Alternative 4C-3 and Alternative 4C-5 Tables (electronic pages 17 and 19, respectively). The Alternatives Tables for alternatives are consolidated into the Construction Emission Summary. Consequently, the Construction Emissions Summary does not include the paving emissions for Alternatives 4C-3 and 4C-5, which in turn, is reported in Table 3.5-11 and 3.5-12. Therefore, the construction air quality impacts from these alternatives are understated.
- Tables 3.5-17 and 3.5-18 on page 3.5-34. It is unclear in the supporting documentation to the Construction Emissions Summary in Appendix D (electronic page 13) if the CO₂e emissions have been calculated correctly. No details are presented in Appendix D detailing the CO₂e emissions conversions from pounds per day as reported in the URBEMIS Construction Emissions Associated with Offroad Equipment and Fugitive Dust Table (electronic page 20) to the No-Project and Alternatives Tables (electronic pages 14 through 19). The CO₂e emissions are summarized in the Construction Emissions Summary and in turn reported in Tables 3.5-17 and 3.5-18. Therefore, the project impacts on climate change could not be verified.

- It is unclear in the supporting documentation to the Construction Emissions Summary in Appendix D (electronic page 13) if the omission of the paving emissions that occurred for criteria pollutant emissions also occurred for CO₂e emissions. For Alternatives 4C-3 and 4C-5, the emissions totals may have been underreported when compared to Appendix D.
- It is recommended that Table and page numbers be added to the Appendix for easier referencing.

7. Noise

- Page 3.6-8, Existing Noise Levels, 2nd paragraph. The statement is made that the 60 L_{dn} contour for SR 58 is about 425 from the road and the 65 L_{dn} contour is about 200 feet from the road and references Table 3.6-9. Table 3.6-9 indicates that a 60 L_{dn} contour (28,000 ADT) would be about 790 feet. The calculation of the 60 L_{dn} and 65 L_{dn} contours for the SR 58 should be provided.
- The proposed project could result in significant construction noise impacts (see Table 3.6-15, 3.6-17, 3.6-19, 3.6-21, 3.6-23, and 3.6-25). As explained below, these noise impacts are expected to remain significant following mitigation. These noise impacts show noise levels that exceed County noise ordinance levels (55 dBA daytime) up to 4,456 feet or close to one mile away. The EIR indicates that Mitigation Measure NOI-MM-1 would minimize noise impacts to less than significant by requiring a Noise/Vibration Control Plan but there is no requirement that shows how significant noise impacts (up to 93 dBA at 50 feet) would be reduced to 55 dBA. Some homes are expected to be within 200 feet of construction activities, so construction noise impacts at these locations would be above 80 dBA. None of the suggested measures can be expected to reduce noise impacts by 25 dBA. Therefore, it appears that construction noise impacts will remain significant.

8. Biological Resources

- Page 3.7-47, paragraph. Please identify the Habitat Conservation Program referenced in this mitigation measure.

9. Cultural Resources

- Page 3.8-27, Mitigation Measures CUL-MM-1, first paragraph. Suggest that the cultural resources surveys be limited to areas proposed for construction activities. The entire project area, as defined in the project description, includes the chromium plume and the one-mile area surrounding the plume. The mitigation should not require cultural resources surveys in areas where no remediation or construction activities are proposed.

10. Other CEQA Topics

- The Cumulative Impact Analysis needs to include past, present and reasonably foreseeable future projects (CEQA Guidelines Section 15130). Therefore, the Analysis should recognize and discuss all existing and any previous Water Board Orders, and related remediation activities completed by PG&E in the Hinkley Valley.

- Page 4-46, Table 4-4. The potential impacts of “local aquifer drawdown” and “aquifer compaction” should be identified in Table 4-4 (they are blank in the Draft EIR).
Page 4-59, Identifying the Environmentally Superior Alternative. The EIR does not identify a single environmentally superior alternative; so this decision-making still needs to occur. The EIR should provide the reader more insights into the path forward beyond this document, and discuss how the Hinkley Community will have the opportunity for input.

11. General Mitigation Issues

- In order to ensure that the mitigation measures and project revision identified in the EIR are implemented, the Water Board is required to adopt a mitigation monitoring program (MMP) (CEQA Guidelines Section 15097). The public should be allowed to review and comment on the MMP. Most optimally, the MMP needs to establish and enforce mitigation measures, and set compliance timeframes, which will further help in the implementation of future remediation activities.
- Mitigation measures should be considered for inclusion in the Final Cleanup and Abatement Order issued by the Water Board to ensure the mitigation measures are enforced.

In conclusion, we thank the CAC and the IRP Manager for selecting and allowing Environmental Audit to be of assistance to the CAC and Hinkley Community, and prepare these comments on the Draft EIR. Should you require further assistance or have questions, please do not hesitate to contact me at

Respectfully submitted,

ENVIRONMENTAL AUDIT, INC.



Debbie Bright Stevens
Senior Vice President

ATTACHMENT B



Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 1 of 3
Project Name: No Project
Project Number: --PAID--Cr

Work Order Number: B2I2778

Report Date: 08-Oct-2012

Received on Ice (Y/N): No Temp: 24°C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

Sample Identification

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>By</u>	<u>Date Submitted</u>	<u>By</u>
B2I2778-01	#1 Flower St.	Water	09/26/12 13:30	Client	09/26/12 15:50	Nick
B2I2778-02	#2 Flower St.	Water	09/26/12 13:30	Client	09/26/12 15:50	Nick
B2I2778-03	21876 Pioneer Rd., Hinkley	Water	09/26/12 13:30	Client	09/26/12 15:50	Nick

Client Name: Terawatt Construction Inc.
 Contact: Nick Grill

Analytical Report: Page 2 of 3
 Project Name: No Project
 Project Number: --PAID--Cr

Work Order Number: B2I2778

Report Date: 08-Oct-2012

Received on Ice (Y/N): No Temp: 24°C

	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
B2I2778-01 <i>Sampled: 09/26/12 13:30</i>							
#1 Flower St.							
Arsenic	6.6	2.0	ug/L	EPA 200.8	10/01/12 23:01	AAV	
Manganese	29	20	ug/L	EPA 200.8	10/01/12 23:01	AAV	
B2I2778-02 <i>Sampled: 09/26/12 13:30</i>							
#2 Flower St.							
Arsenic	54	1.0	ug/L	EPA 200.8	10/05/12 11:15	AAV	Nconf
Manganese	1300	40	ug/L	EPA 200.8	10/01/12 23:44	AAV	
B2I2778-03 <i>Sampled: 09/26/12 13:30</i>							
21876 Pioneer Rd., Hinkley							
Arsenic	19	4.0	ug/L	EPA 200.8	10/01/12 23:45	AAV	Nconf
Manganese	5600	250	ug/L	EPA 200.8	10/05/12 13:27	AAV	

Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 3 of 3
Project Name: No Project
Project Number: --PAID--Cr

Work Order Number: B2I2778

Report Date: 08-Oct-2012

Received on Ice (Y/N): No Temp: 24°C

Notes and Definitions

Nconf Result(s) confirmed by re-analysis.

- ND: Analyte NOT DETECTED at or above the Method Detection Limit (**if MDL is reported**), otherwise at or above the Reportable Detection Limit (RDL)
- NR: Not Reported
- RDL: Reportable Detection Limit
- MDL: Method Detection Limit
- * / " : NELAP does not offer accreditation for this analyte/method/matrix combination

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



E.S. BABCOCK & Sons, Inc. Environmental Laboratories est 1906

Client Name: Terawatt Construction Inc. Contact: Nick Grill

Analytical Report: Page 1 of 1 Project Name: No Project Project Number: --PAID--Cr

Work Order Number: B2I2778

Report Date: 08-Oct-2012

Received on Ice (Y/N): No Temp: 24°C

E.S. Babcock & Sons, Inc.

Project Reference _____ Lab No. B2I 2778 AB SEP 26 2012

Sample Receipt Form

Client: Terawatt Const. Submitted By: Nick Date: 9/26/12 Time: 15:50

Per Credit card \$90.00 Prepaid

Sample Condition

Number of Containers: 3 qts Temperature: 24 °C

- Were Samples Submitted on Ice? No
Were Samples Received Intact? Yes
Were Samples in Proper Containers? Yes
Were Sample Custody Seals Intact? No
Chain of Custody Received? No
Submitted within Reg. Holding Times? Yes
Is there Sufficient Volume? Yes

Comments: #1 Flower St. 9/26/12 @ 13:30

AS < #2 Flower St. 21876 Pioneer Rd, Hinkley 9/26/12 @ 13:30

Sample(s) Received By: Angie Brown

Problem Contact Information: Person Contacted: Date/Init.:

Permission to Continue? Yes No

* Run AS Received (Do not Filter) per client. AB



E.S.BABCOCK & Sons Inc.
Environmental Laboratories

Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 2 of 3
Project Name: No Project
Project Number: --PAID--Ck/Cr

Report Date: 30-Jul-2012

Work Order Number: B2G1632
Received on Ice (Y/N): No Temp: 24°C

	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
B2G1632-01 <i>Sampled: 07/16/12 13:00</i>							
Roberts							
Uranium	ND	1.0	pCi/L	EPA 200.8	07/25/12 12:44	KRV	
Arsenic	9.7	2.0	ug/L	EPA 200.8	07/23/12 19:54	KRV	Nconf
Hexavalent Chromium	ND	0.060	ug/L	EPA 218.6	07/18/12 03:20	AAV	
Manganese	77	20	ug/L	EPA 200.8	07/23/12 19:54	KRV	Nconf

B2G1632-02 *Sampled: 07/16/12 13:00*

22280 Lower

Uranium	7.8	1.0	pCi/L	EPA 200.8	07/25/12 12:45	KRV	
Arsenic	6.7	2.0	ug/L	EPA 200.8	07/23/12 19:57	KRV	
Hexavalent Chromium	1.1	0.060	ug/L	EPA 218.6	07/18/12 03:35	AAV	
Manganese	ND	20	ug/L	EPA 200.8	07/23/12 19:57	KRV	



E.S.BABCOCK & Sons Inc.
Environmental Laboratories

Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 1 of 3
Project Name: No Project
Project Number: --PAID--Ck/Cr

Work Order Number: B2G1632

Report Date: 30-Jul-2012

Received on Ice (Y/N): No Temp: 24°C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

Sample Identification

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>By</u>	<u>Date Submitted</u>	<u>By</u>
B2G1632-01	Roberts	Water	07/16/12 13:00	Client	07/16/12 15:52	Nick
B2G1632-02	22280 Lower	Water	07/16/12 13:00	Client	07/16/12 15:52	Nick

The following samples were split from an unpreserved container at the laboratory after submittal and preserved appropriately. Federal guidelines (40CFR Parts 136 and 141) instruct preservation be performed on a separate container collected at site:

- B2G1632-01
- B2G1632-02

Included in this Data Package please find an amended report for the laboratory number(s) referenced below.

Laboratory Number: B2G1632

Reason for Amendment: Due to laboratory error, sample bottles were not labeled properly.

This report supersedes the report issued on 27-Jul-2012.



E.S. BABCOCK & Sons, Inc.
Environmental Laboratories

Client Name: Terawatt Construction Inc.
Contact: Nick Grilli

Analytical Report: Page 3 of 3
Project Name: No Project
Project Number: --PAID--CK/CR

Report Date: 30-Jul-2012

Work Order Number: B2G1632
Received on Ice (Y/N): No Temp: 24°C

Notes and Definitions

Nconf Result(s) confirmed by re-analysis.

ND: Analyte NOT DETECTED at or above the Method Detection Limit (If MDL is reported), otherwise at or above the Reportable Detection Limit (RDL)

NR: Not Reported

RDL: Reportable Detection Limit

MDL: Method Detection Limit

* / " : NELAP does not offer accreditation for this analyte/method/matrix combination

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



Lauren Lynen, Project Manager

cc:

e-Tab_Summary.rpt



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories, P.O. Box 1000

Title 22 Drinking Water Requirements Regulated Chemicals Maximum Contaminant Levels

Analyte	MCL
Nitrate	45 mg/L
Nitrate + Nitrite as N	10 mg/L
Nitrite as N	1 mg/L
Cyanide	0.15 mg/L
MBAS	0.5 mg/L
Asbestos	7 MFL
Fluoride	2 mg/L
Perchlorate	6 ug/L
Aluminum	1000 ug/L
Antimony	6 ug/L
Arsenic	10 ug/L
Barium	1000 ug/L
Beryllium	4 ug/L
Cadmium	5 ug/L
Chromium	50 ug/L
Copper	1000 ug/L
Iron	300 ug/L
Lead	15 ug/L
Manganese	50 ug/L
Mercury	2 ug/L
Nickel	100 ug/L
Selenium	50 ug/L
Silver	100 ug/L
Thallium	2 ug/L
Zinc	5000 ug/L

Clinical Laboratory of San Bernardino, Inc.



Terawatt Construction	Project: Routine	Work Order: 12H0245
	Sub Project:	Received: 08/02/12 17:00
	Project Manager: Nick Grill	Reported: 08/16/12

35375 Tamarack Rd	12H0245-01 (Water)	Sample Date: 08/02/12 15:05	Sampler: Not Listed						
Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier

Metals									
Manganese (Mn)	EPA 200.7	ND	ug/L	20	50	08/09/12	08/09/12	1232208	

35784 Mountain View Rd	12H0245-02 (Water)	Sample Date: 08/02/12 15:05	Sampler: Not Listed						
Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier

Metals									
Manganese (Mn)	EPA 200.7	ND	ug/L	20	50	08/07/12	08/08/12	1232032	

35838 Mountain View Rd	12H0245-03 (Water)	Sample Date: 08/02/12 15:05	Sampler: Not Listed						
Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier

Metals									
Manganese (Mn)	EPA 200.7	99000	ug/L	1000	50	08/13/12	08/14/12	1232422	

36325 Mountain View Rd	12H0245-04 (Water)	Sample Date: 08/02/12 15:05	Sampler: Not Listed						
Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier

Metals									
Manganese (Mn)	EPA 200.7	30	ug/L	20	50	08/07/12	08/08/12	1232032	
ND	Analyte NOT DETECTED at or above the reporting limit								

Bob Glaubig

Bob Glaubig
Laboratory Director

Geo-Monitor, Inc.

17152 Darwin Ave Hesperia, CA 92340 (760) 244-3481

Chain of Custody

Paid check # 1466 \$160 12H0245

Client		Terawatt Construction		Client Job No.		Analysis Requested										Turn Around Time												
Phone No.				G20518		<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> Management </div>																						
Contact		Nick Grill Cell No.		Destination Laboratory																								
System No.				<input type="checkbox"/> Geo-Monitor, Inc <input type="checkbox"/> Other:																								
Project Name																												
Sampled By																												
Comments				Please email Results																								
Date	Time	Sample Identification	Matrix	No.	Pres.												Type											
8/2/12	3:05	35375 TAMARACK Rd																/										
8/2/12	3:05	35784 Mountain View rd																/										
8/2/12	3:05	35832 Mountain View rd															/											
8/2/12	3:05	36325 Mountain View rd					/																					
Preservatives: (1) Na ₂ S ₂ O ₃ (3) Cold (2) H ₂ SO ₄ /HNO ₃ (4)				Sample Types: (1) Routine (2) Repeat (3) Replacement (4) Special (W) Well (D) Distribution																								
All turn around times are expressed as working days / Not all analyses can be processed as rush																												
Relinquished By (Sign)		Print Name / Company		Date / Time		Received By (Sign)		Print Name / Company																				
<i>Nicolette Grill</i>		Nicolette Grill TM Geo Monitor		8/2/12 3:10 8-2-12 17:00		<i>[Signature]</i>		Kristol Rodriguez / G.M.I.																				
Rec'd at Lab By:				Rec'd Date / Time:				Comments:																				
Rec'd on Ice Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Rec'd Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Receipt Temperature: 6.7° C																								
Shipped Via				<input type="checkbox"/> Fed X <input type="checkbox"/> Golden State <input type="checkbox"/> UPS <input type="checkbox"/> Client <input type="checkbox"/> Other																								

1A
2A
3A
4A

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Date of Report: 06/10/26

Sample ID No. G60782-1A

Laboratory

Signature Lab

Name: CLINICAL LABORATORIES OF SAN BERNARDINO Director: _____

Employed By: N.G.

Name of Sampler: NICK GRILL

Date/Time Sample

Date/Time Sample

Date Analyses

Collected: 06/10/16/1400

Received @ Lab: 06/10/16/1640

Completed: 06/10/24

System

System

Name: NICK GRILL

Number: 36CXX54

Name or Number of Sample Source: EAST WELL

 * User ID: 36C Station Number: *
 * Date/Time of Sample: |06|10|16|1400| Laboratory Code: 3761 *
 * YY MM DD TTTT YY MM DD *
 * Date Analysis completed: |06|10|24| *
 * Submitted by: _____ Phone #: _____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	290	5.0
	mg/L	Calcium (Ca) (mg/L)	00916	95	1.0
	mg/L	Magnesium (Mg) (mg/L)	00927	15	1.0
	mg/L	Sodium (Na) (mg/L)	00929	80	1.0
	mg/L	Potassium (K) (mg/L)	00937	2.7	1.0

Total Cations Meq/L Value: 9.52

	mg/L	Total Alkalinity (as CaCO3) (mg/L)	00410	160	5.0
	mg/L	Hydroxide (OH) (mg/L)	71830	ND	5.0
	mg/L	Carbonate (CO3) (mg/L)	00445	ND	5.0
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	190	5.0
*	mg/L+	Sulfate (SO4) (mg/L)	00945	100	0.50
*	mg/L+	Chloride (Cl) (mg/L)	00940	150	1.0
45	mg/L	Nitrate (as NO3) (mg/L)	71850	4.2	2.0
2.0	mg/L	Fluoride (F) (Natural-Source)	00951	0.50	0.10

Total Anions Meq/L Value: 9.52

	Std.Units+	PH (Laboratory) (Std.Units)	00403	7.6	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	940	2.0
****	mg/L+	Total Filterable Residue@180C (TDS) (mg/L)	70300	570	5.0
15	Units	Apparent Color (Unfiltered) (Units)	00081		3
3	TON	Odor Threshold at 60 C (TON)	00086		1
5	NTU	Lab Turbidity (NTU)	82079		0.1
0.5	mg/L+	MBAS (mg/L)	38260	ND	0.10

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

INORGANIC CHEMICALS

G60782-1A

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
1000	ug/L	Aluminum (Al) (ug/L)	01105	ND	50
6	ug/L	Antimony (ug/L)	01097	ND	6.0
10	ug/L	Arsenic (As) (ug/L)	01002	ND	2.0
1000	ug/L	Barium (Ba) (ug/L)	01007	150	100
4	ug/L	Beryllium (ug/L)	01012	ND	1.0
5	ug/L	Cadmium (Cd) (ug/L)	01027	ND	1.0
50	ug/L	Chromium (Total Cr) (ug/L)	01034	ND	10
1000	ug/L+	Copper (Cu) (ug/L)	01042	ND	50
300	ug/L+	Iron (Fe) (ug/L)	01045	ND	100
	ug/L	Lead (Pb) (ug/L)	01051	ND	5.0
50	ug/L+	Manganese (Mn) (ug/L)	01055	ND	20
2	ug/L	Mercury (Hg) (ug/L)	71900	ND	1.0
100	ug/L	Nickel (ug/L)	01067	ND	10
50	ug/L	Selenium (Se) (ug/L)	01147	ND	5.0
100	ug/L+	Silver (Ag) (ug/L)	01077	ND	10
2	ug/L	Thallium (ug/L)	01059	ND	1.0
5000	ug/L+	Zinc (Zn) (ug/L)	01092	ND	50

ADDITIONAL ANALYSES

	ug/L	Boron (ug/L)	01020	140	100
10000	ug/L	Nitrate + Nitrite as Nitrogen(N) (ug/L)	A-029	940	400
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	ND	400
150	ug/L	Cyanide (ug/L)	01291	ND	100
	ug/L	Vanadium (ug/L)	01087	8.7	3.0
	ug/L	Chromium, hexavalent (CrVI) (ug/L)	01032	1.9	1.0

+ Indicates Secondary Drinking Water Standards

GENERAL MINERAL & PHYSICAL & INORGANIC ANALYSIS (9/99)

Sample ID No. G60782-2A

Date of Report: 06/10/26

Signature Lab

Laboratory

Name: CLINICAL LABORATORIES OF SAN BERNARDINO

Director: _____

Name of Sampler: NICK GRILL

Employed By: N.G.

Date/Time Sample

Date/Time Sample

Date Analyses

Collected: 06/10/16/1405

Received @ Lab: 06/10/16/1640

Completed: 06/10/24

System

System

Number: 36CXX54

Name: NICK GRILL

Name or Number of Sample Source: WEST WELL

Station Number: _____

* User ID: 36C

Laboratory Code: 3761 *

* Date/Time of Sample: |06|10|16|1405|
YY MM DD TTTT

YY MM DD *

Date Analysis completed: |06|10|24| *

* Submitted by: _____

Phone #: _____ *

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
	mg/L	Total Hardness (as CaCO3) (mg/L)	00900	110	5.0
	mg/L	Calcium (Ca) (mg/L)	00916	32	1.0
	mg/L	Magnesium (Mg) (mg/L)	00927	7.3	1.0
	mg/L	Sodium (Na) (mg/L)	00929	61	1.0
	mg/L	Potassium (K) (mg/L)	00937	2.0	1.0
Total Cations		Meq/L Value: 4.90			
	mg/L	Total Alkalinity (as CaCO3) (mg/L)	00410	150	5.0
	mg/L	Hydroxide (OH) (mg/L)	71830	ND	5.0
	mg/L	Carbonate (CO3) (mg/L)	00445	ND	5.0
	mg/L	Bicarbonate (HCO3) (mg/L)	00440	180	5.0
*	mg/L+	Sulfate (SO4) (mg/L)	00945	40	0.50
*	mg/L+	Chloride (Cl) (mg/L)	00940	38	1.0
45	mg/L	Nitrate (as NO3) (mg/L)	71850	ND	2.0
2.0	mg/L	Fluoride (F) (Natural-Source)	00951	0.63	0.10
Total Anions		Meq/L Value: 4.89			
	Std.Units+	PH (Laboratory) (Std.Units)	00403	8.1	
***	umho/cm+	Specific Conductance (E.C.) (umhos/cm)	00095	470	2.0
****	mg/L+	Total Filterable Residue@180C(TDS) (mg/L)	70300	320	5.0
15	Units	Apparent Color (Unfiltered) (Units)	00081		3
3	TON	Odor Threshold at 60 C (TON)	00086		1
5	NTU	Lab Turbidity (NTU)	82079		0.1
0.5	mg/L+	MEAS (mg/L)	38260	ND	0.10

* 250-500-600 ** 0.6-1.7 *** 900-1600-2200 **** 500-1000-1500

INORGANIC CHEMICALS

G60782-2A

MCL	REPORTING UNITS	CHEMICAL	ENTRY #	ANALYSES RESULTS	DLR
			01105	ND	50
1000	ug/L	Aluminum (Al) (ug/L)	01097	ND	6.0
6	ug/L	Antimony (ug/L)	01002	9.4	2.0
10	ug/L	Arsenic (As) (ug/L)	01007	ND	100
1000	ug/L	Barium (Ba) (ug/L)	01012	ND	1.0
4	ug/L	Beryllium (ug/L)	01027	ND	1.0
5	ug/L	Cadmium (Cd) (ug/L)	01034	ND	10
50	ug/L	Chromium (Total Cr) (ug/L)	01042	ND	50
1000	ug/L+	Copper (Cu) (ug/L)	01045	ND	100
300	ug/L+	Iron (Fe) (ug/L)	01051	ND	5.0
	ug/L	Lead (Pb) (ug/L)	01055	ND	20
50	ug/L+	Manganese (Mn) (ug/L)	71900	ND	1.0
2	ug/L	Mercury (Hg) (ug/L)	01067	ND	10
100	ug/L	Nickel (ug/L)	01147	ND	5.0
50	ug/L	Selenium (Se) (ug/L)	01077	ND	10
100	ug/L+	Silver (Ag) (ug/L)	01059	ND	1.0
2	ug/L	Thallium (ug/L)	01092	ND	50
5000	ug/L+	Zinc (Zn) (ug/L)			

ADDITIONAL ANALYSES

	ug/L	Boron (ug/L)	01020	130	100
10000	ug/L	Nitrate + Nitrite as Nitrogen(N) (ug/L)	A-029	ND	400
1000	ug/L	Nitrite as Nitrogen(N) (ug/L)	00620	ND	400
150	ug/L	Cyanide (ug/L)	01291	ND	100
	ug/L	Vanadium (ug/L)	01087	25	3.0
	ug/L	Chromium, hexavalent (CrVI) (ug/L)	01032	1.2	1.0

+ Indicates Secondary Drinking Water Standards



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories

Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 1 of 3
Project Name: No Project
Project Number: -PAID-Cr

Report Date: 08-Oct-2012

Work Order Number: B2I2778
Received on Ice (Y/N): No Temp: 24°C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

Sample Identification

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>By</u>	<u>Date Submitted</u>	<u>By</u>
B2I2778-01	#1 Flower St.	Water	09/26/12 13:30	Client	09/26/12 15:50	Nick
B2I2778-02	#2 Flower St.	Water	09/26/12 13:30	Client	09/26/12 15:50	Nick
B2I2778-03	21876 Pioneer Rd., Hinkley	Water	09/26/12 13:30	Client	09/26/12 15:50	Nick



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories EST/ISS

Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 2 of 3
Project Name: No Project
Project Number: -PAID-Cr

Work Order Number: B2I2778

Report Date: 08-Oct-2012

Received on Ice (Y/N): No Temp: 24°C

	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
B2I2778-01 <i>Sampled: 09/26/12 13:30</i>							
#1 Flower St.							
Arsenic	6.6	2.0	ug/L	EPA 200.8	10/01/12 23:01	AAV	
Manganese	29	20	ug/L	EPA 200.8	10/01/12 23:01	AAV	
B2I2778-02 <i>Sampled: 09/26/12 13:30</i>							
#2 Flower St.							
Arsenic	54	1.0	ug/L	EPA 200.8	10/05/12 11:15	AAV	Nconf
Manganese	1300	40	ug/L	EPA 200.8	10/01/12 23:44	AAV	
B2I2778-03 <i>Sampled: 09/26/12 13:30</i>							
21876 Pioneer Rd., Hinkley							
Arsenic	19	4.0	ug/L	EPA 200.8	10/01/12 23:45	AAV	Nconf
Manganese	5600	250	ug/L	EPA 200.8	10/05/12 13:27	AAV	



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories, Inc. / I & W

Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 3 of 3
Project Name: No Project
Project Number: -PAID-Cr

Work Order Number: B212778

Report Date: 08-Oct-2012

Received on Ice (Y/N): No Temp: 24°C

Notes and Definitions

Nconf Result(s) confirmed by re-analysis.

ND: Analyte NOT DETECTED at or above the Method Detection Limit (if MDL is reported), otherwise at or above the Reportable Detection Limit (RDL)

NR: Not Reported

RDL: Reportable Detection Limit

MDL: Method Detection Limit

* / ** : NELAP does not offer accreditation for this analyte/method/matrix combination

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



E.S. BABCOCK & Sons, Inc.
Environmental Laboratories

Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 1 of 1
Project Name: No Project
Project Number: -PAID-Cr

Work Order Number: B2I2778

Report Date: 08-Oct-2012

Received on Ice (Y/N): No Temp: 24°C

E.S. Babcock & Sons, Inc.

Project Reference _____ Lab No. B2I 2778 AB
Sample Receipt Form SEP 26 2012

Client: Terawatt Const.
Submitted By: Nick
Date: 9/26/12
Time: 15:50

Per Credit card
\$90.00
Prepaid

Sample Condition

Number of Containers: 3 pts
Temperature: 24 °C

- Were Samples Submitted on Ice? No Yes
- Were Samples Received Intact? No Yes
- Were Samples in Proper Containers? No Yes
- Were Sample Custody Seals Intact? No Yes N/A
- Chain of Custody Received? No Yes
- Submitted within Reg. Holding Times? No Yes
- Is there Sufficient Volume? No Yes

Comments: #1 Flower St. 9/26/12 @ 13:30
#2 Flower St. ↓ ↓
21876 Pioneer Rd, Hinkley 9/24/12 @ 13:30
Sample(s) Received By: Angie Brown

MN
AS

Problem Contact Information: Person Contacted: _____ Date/Init.: _____

Permission to Continue? Yes No

* Run As Received (Do not filter) per client. AB



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories an AEC

Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 1 of 3
Project Name: No Project
Project Number: 36325 Mountain View Rd., Hinkley

Report Date: 15-Oct-2012

Work Order Number: B2J0295
Received on Ice (Y/N): Yes Temp: 11 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

Sample Identification

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>By</u>	<u>Date Submitted</u>	<u>By</u>
B2J0295-01	2nd Higher	Liquid	10/02/12 10:50	Nicolette	10/02/12 16:15	Nick
B2J0295-02	3rd Lower	Liquid	10/02/12 10:50	Nicolette	10/02/12 16:15	Nick



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories of PA, NY

Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 2 of 3
Project Name: No Project
Project Number: 36325 Mountain View Rd., Hinkley

Report Date: 15-Oct-2012

Work Order Number: B2J0295
Received on Ice (Y/N): Yes Temp: 11°C

	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
B2J0295-01 <i>Sampled: 10/02/12 10:50</i>							
2nd Higher							
Arsenic	100	5.0	ug/L	EPA 200.8	10/09/12 18:56	AAV	
Total Chromium	37	20	ug/L	EPA 200.8	10/09/12 18:56	AAV	
Hexavalent Chromium	ND	1.0	ug/L	EPA 218.6	10/04/12 15:14	AAV	
Manganese	7600	100	ug/L	EPA 200.8	10/12/12 14:07	AAV	
B2J0295-02 <i>Sampled: 10/02/12 10:50</i>							
3rd Lower							
Arsenic	52	5.0	ug/L	EPA 200.8	10/09/12 18:59	AAV	
Total Chromium	22	20	ug/L	EPA 200.8	10/09/12 18:59	AAV	
Hexavalent Chromium	ND	1.0	ug/L	EPA 218.6	10/04/12 15:29	AAV	
Manganese	1600	10	ug/L	EPA 200.8	10/09/12 18:59	AAV	



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories EST. 1950

Client Name: Terawatt Construction Inc.
Contact: Nick Grill

Analytical Report: Page 3 of 3
Project Name: No Project
Project Number: 36325 Mountain View Rd., Hinkley

Work Order Number: B2J0295

Report Date: 15-Oct-2012

Received on Ice (Y/N): Yes Temp: 11°C

Notes and Definitions

- ND: Analyte NOT DETECTED at or above the Method Detection Limit (**if MDL is reported**), otherwise at or above the Reportable Detection Limit (RDL)
- NR: Not Reported
- RDL: Reportable Detection Limit
- MDL: Method Detection Limit
- * / ** : NELAP does not offer accreditation for this analyte/method/matrix combination

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.

cc:

e-Tab_Summary.rpt



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories INVT

Client Name: Terawatt Construction Inc,
Contact: Nick Grill

Analytical Report: Page 1 of 1
Project Name: No Project
Project Number: 36325 Mountain View Rd., Hinkley

Work Order Number: B2J0295

Report Date: 15-Oct-2012

Received on Ice (Y/N): Yes Temp: 11°C

E.S. Babcock & Sons, Inc.

10.2.12

Project Reference _____ Lab No. B2J0295

Sample Receipt Form

Client: Terawatt Construction

Submitted By: Nick

Date: 10.2.12

Time: 1615

PAID
\$270.-
C.C.

Sample Condition

Number of Containers: 2 Qt.

Temperature: 11 °C

Were Samples Submitted on Ice? No Yes

Were Samples Received Intact? No Yes

Were Samples in Proper Containers? No Yes

Were Sample Custody Seals Intact? No Yes

N/A

Chain of Custody Received? No Yes

Submitted within Reg. Holding Times? No Yes

Is there Sufficient Volume? No Yes

Comments: 36325 Mountain View Rd. Hinkley

Cr 6 28.6 2nd Higher 10.2.12 1050 by Nicolette

AS 3rd Lower " 1050 by "

Mn
Cr
Sample(s) Received By: De

Problem Contact Information: Person Contacted: _____ Date/Init.: _____

Permission to Continue? Yes No



E.S.BABCOCK & Sons, Inc.
 Environmental Laboratories and more

Client Name: Morris, Bobby
 Contact: Bobby Morris

Analytical Report: Page 1 of 4
 Project Name: No Project
 Project Number: --PAID--Cr

Work Order Number: B2J1452

Report Date: 23-Oct-2012

Received on Ice (Y/N): No Temp: 20°C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

Sample Identification

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>By</u>	<u>Date Submitted</u>	<u>By</u>
B2J1452-01	#1 049428202	Water	10/11/12 10:30	Client	10/11/12 15:37	R.J. Morris
B2J1452-02	#2 049428202	Water	10/11/12 10:30	Client	10/11/12 15:37	R.J. Morris
B2J1452-03	#3 049428202	Water	10/11/12 10:30	Client	10/11/12 15:37	R.J. Morris
B2J1452-04	C.C. Matthiesen 36771 Hidden River Rd., Hinkley CA 92347	Water	10/11/12 08:00	Client	10/11/12 15:37	R.J. Morris
B2J1452-05	Roberts 22275 Granada, Hinkley Ca 92347	Water	10/11/12 11:00	Client	10/11/12 15:37	R.J. Morris
B2J1452-06	37414 Mulberry, Hinkley	Water	10/11/12 08:30	Client	10/11/12 15:37	R.J. Morris



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories and AAV

Client Name: Morris, Bobby
Contact: Bobby Morris

Analytical Report: Page 2 of 4
Project Name: No Project
Project Number: -PAID-Cr

Work Order Number: **B2J1452**
Received on Ice (Y/N): No Temp: 20°C

Report Date: 23-Oct-2012

	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
B2J1452-01 <i>Sampled: 10/11/12 10:30</i>							
#1 049428202							
Arsenic	170	40	ug/L	EPA 200.8	10/19/12 17:01	AAV	N_noH, Nconf
Manganese	140000	5000	ug/L	EPA 200.8	10/19/12 15:15	AAV	
B2J1452-02 <i>Sampled: 10/11/12 10:30</i>							
#2 049428202							
Arsenic	71	2.0	ug/L	EPA 200.8	10/19/12 15:37	AAV	Nconf
Manganese	320	20	ug/L	EPA 200.8	10/17/12 15:17	AAV	
B2J1452-03 <i>Sampled: 10/11/12 10:30</i>							
#3 049428202							
Arsenic	5.6	2.0	ug/L	EPA 200.8	10/17/12 15:20	AAV	
Manganese	66	20	ug/L	EPA 200.8	10/17/12 15:20	AAV	
B2J1452-04 <i>Sampled: 10/11/12 08:00</i>							
C.C. Matthiesen 36771 Hidden River Rd., Hinkley CA 92347							
Arsenic	22	2.0	ug/L	EPA 200.8	10/19/12 15:39	AAV	Nconf
Manganese	320	20	ug/L	EPA 200.8	10/17/12 15:22	AAV	
B2J1452-05 <i>Sampled: 10/11/12 11:00</i>							
Roberts 22275 Granada, Hinkley Ca 92347							
Arsenic	11	2.0	ug/L	EPA 200.8	10/16/12 16:54	AAV	Nconf
Manganese	87	20	ug/L	EPA 200.8	10/16/12 12:48	AAV	



E.S.BABCOCK & Sons, Inc.

Environmental Laboratories est. 1935

Client Name: Morris, Bobby
Contact: Bobby Morris

Analytical Report: Page 3 of 4
Project Name: No Project
Project Number: --PAID--Cr

Work Order Number: B2J1452

Received on Ice (Y/N): No Temp: 20°C

Report Date: 23-Oct-2012

	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
B2J1452-06 <i>Sampled: 10/11/12 08:30</i>							
37414 Mulberry, Hinkley							
Arsenic	24	2.0	ug/L	EPA 200.8	10/19/12 15:40	AAV	Nconf
Manganese	ND	20	ug/L	EPA 200.8	10/17/12 15:24	AAV	



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories division

Client Name: Morris, Bobby
Contact: Bobby Morris

Analytical Report: Page 4 of 4
Project Name: No Project
Project Number: --PAID--Cr

Work Order Number: B2J1452

Report Date: 23-Oct-2012

Received on Ice (Y/N): No Temp: 20°C

Notes and Definitions

N_noH Sample was non-homogeneous.

Nconf Result(s) confirmed by re-analysis.

ND: Analyte NOT DETECTED at or above the Method Detection Limit (if MDL is reported), otherwise at or above the Reportable Detection Limit (RDL)

NR: Not Reported

RDL: Reportable Detection Limit

MDL: Method Detection Limit

* / m : NELAP does not offer accreditation for this analyte/method/matrix combination

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.

cc:

e-Tab_Summary.rpt



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories *of ACO*

Client Name: Morris, Bobby
Contact: Bobby Morris

Analytical Report: Page 1 of 1
Project Name: No Project
Project Number: --PAID--Cr

Work Order Number: B2J1452

Received on Ice (Y/N): No Temp: 20°C

Report Date: 23-Oct-2012



E.S.BABCOCK & Sons, Inc.
Environmental Laboratories *of ACO*

6100 Quail Valley Court Riverside, CA 92507
(951) 653-3351 • FAX (951) 653-1662
www.babcocklabs.com

Chain of Custody & Sample Information Record

Client: <u>Morris, Bobby</u>		Contact:		Fax No.		Additional Reporting Requests	
Phone No. _____		email: _____				Include GC Data Package: <input type="checkbox"/> Yes <input type="checkbox"/> No FAX Results: <input type="checkbox"/> Yes <input type="checkbox"/> No Email Results: <input type="checkbox"/> Yes <input type="checkbox"/> No State EDT: <input type="checkbox"/> Yes <input type="checkbox"/> No (Include Source Number in Notes)	
Project Name: _____		Turn Around Time: Routine *72 Hour Rush *48 Hour Rush *24 Hour Rush					
Project Location: _____		*Lab TAT Approval: _____		By: _____		*Additional Charges Apply	
Sampler Information		# of Containers & Preservatives		Sample Type		Analysis Requested	
Name: _____		Unpreserved		Routine		Matrix	
Employer: _____		HCl		Resample		DW = Drinking Water	
Signature: _____		HNO ₃		Special		WW = Waste Water	
		Na ₂ S ₂ O ₈				GW = Ground Water	
		NaOH				S = Source	
		NaOH/Zn Acetate				SQ = Sludge	
		NH ₄ Cl				L = Liquid	
		MCAA				M = Miscellaneous	
Sample ID		Date		Time		Notes	
① 0494 28202 #1		10/11/12		10:30		Pre paid per credit card \$180.00	
↓ ↓ #2		↓ ↓		↓ ↓			
↓ ↓ #3		↓ ↓		↓ ↓			
② C.C. Matthiesen		10/11/12		8:00			
36771 Hidden River Rd							
Hinkley, CA 92347							
③ Roberts - 22275 Grand		10/11/12		11:00			
Hinkley, CA 92347							
④ 37414 Mulberry		10/11/12		8:30			
Relinquished By (sign) <u>[Signature]</u>		Print Name / Company		Date / Time		Received By (sign) <u>[Signature]</u>	
				10/11/12 16:37		Angie Brown / ESB	

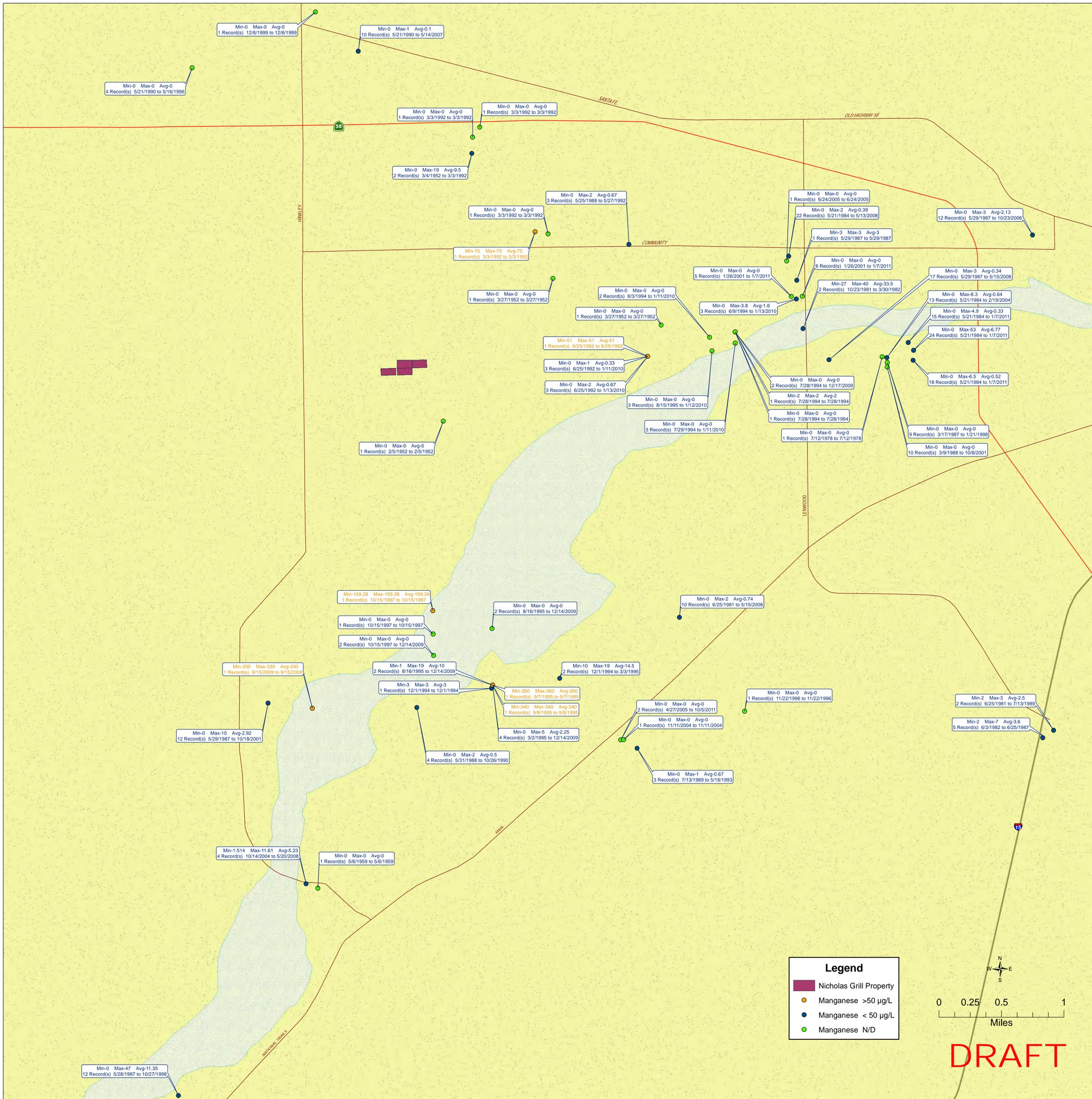
(For Lab Use Only) Sample Integrity Upon Receipt/Acceptance Criteria

Sample(s) Submitted on ice?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Sample meets laboratory acceptance criteria?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Custody Seal(s) intact?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Permission to continue:	Yes <input type="checkbox"/> No <input type="checkbox"/>
Sample(s) intact?	20 Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Deviation/Notes:	
Temperature: 20 °C <input type="checkbox"/> Cooler Blank <input type="checkbox"/>		Signature/Date:	

Lab No: B2J1452

Logged In By/Date: OCT 18 2012 AB

Page 1 of 1



Min-0 Max-0 Avg-0
4 Record(s) 5/21/1990 to 5/16/1996

Min-0 Max-0 Avg-0
1 Record(s) 12/6/1999 to 12/6/1999

Min-0 Max-1 Avg-0.1
10 Record(s) 5/21/1990 to 5/14/2007

Min-0 Max-0 Avg-0
1 Record(s) 3/3/1992 to 3/3/1992

Min-0 Max-0 Avg-0
1 Record(s) 3/3/1992 to 3/3/1992

Min-0 Max-19 Avg-9.5
2 Record(s) 3/4/1952 to 3/3/1992

Min-0 Max-0 Avg-0
1 Record(s) 3/3/1992 to 3/3/1992

Min-0 Max-2 Avg-0.67
3 Record(s) 5/25/1988 to 5/27/1992

Min-75 Max-75 Avg-75
1 Record(s) 3/3/1992 to 3/3/1992

Min-0 Max-0 Avg-0
1 Record(s) 3/27/1952 to 3/27/1952

Min-0 Max-0 Avg-0
2 Record(s) 8/3/1994 to 1/11/2010

Min-0 Max-0 Avg-0
1 Record(s) 3/27/1952 to 3/27/1952

Min-51 Max-51 Avg-51
1 Record(s) 6/25/1992 to 6/25/1992

Min-0 Max-1 Avg-0.33
3 Record(s) 6/25/1992 to 1/11/2010

Min-0 Max-2 Avg-0.67
3 Record(s) 6/25/1992 to 1/13/2010

Min-0 Max-0 Avg-0
3 Record(s) 8/15/1995 to 1/12/2010

Min-0 Max-3.8 Avg-1.6
3 Record(s) 6/9/1994 to 1/13/2010

Min-0 Max-0 Avg-0
5 Record(s) 1/26/2001 to 1/7/2011

Min-0 Max-0 Avg-0
1 Record(s) 6/24/2005 to 6/24/2005

Min-0 Max-2 Avg-0.39
22 Record(s) 5/21/1984 to 5/13/2008

Min-3 Max-3 Avg-3
1 Record(s) 5/29/1987 to 5/29/1987

Min-0 Max-0 Avg-0
6 Record(s) 1/26/2001 to 1/7/2011

Min-27 Max-40 Avg-33.5
2 Record(s) 10/23/1981 to 3/30/1982

Min-0 Max-3 Avg-2.13
12 Record(s) 5/29/1987 to 10/23/2006

Min-0 Max-3 Avg-0.34
17 Record(s) 5/29/1987 to 5/15/2008

Min-0 Max-8.3 Avg-0.64
13 Record(s) 5/21/1984 to 2/19/2004

Min-0 Max-4.9 Avg-0.33
15 Record(s) 5/21/1984 to 1/7/2011

Min-0 Max-53 Avg-6.77
24 Record(s) 5/21/1984 to 1/7/2011

Min-0 Max-6.5 Avg-0.52
18 Record(s) 5/21/1984 to 1/7/2011

Min-0 Max-0 Avg-0
1 Record(s) 2/5/1952 to 2/5/1952

Min-0 Max-0 Avg-0
3 Record(s) 7/29/1994 to 1/11/2010

Min-0 Max-0 Avg-0
2 Record(s) 7/28/1994 to 12/17/2009

Min-2 Max-2 Avg-2
1 Record(s) 7/28/1994 to 7/28/1994

Min-0 Max-0 Avg-0
1 Record(s) 7/28/1994 to 7/28/1994

Min-0 Max-0 Avg-0
1 Record(s) 7/12/1978 to 7/12/1978

Min-0 Max-0 Avg-0
9 Record(s) 3/17/1987 to 1/21/1988

Min-0 Max-0 Avg-0
10 Record(s) 3/9/1988 to 10/8/2001

Min-159.28 Max-159.28 Avg-159.28
1 Record(s) 10/15/1997 to 10/15/1997

Min-0 Max-0 Avg-0
1 Record(s) 10/15/1997 to 10/15/1997

Min-0 Max-0 Avg-0
2 Record(s) 10/15/1997 to 12/14/2009

Min-0 Max-0 Avg-0
2 Record(s) 8/16/1995 to 12/14/2009

Min-0 Max-2 Avg-0.74
10 Record(s) 6/25/1981 to 5/15/2008

Min-330 Max-330 Avg-330
1 Record(s) 9/15/2009 to 9/15/2009

Min-1 Max-19 Avg-10
2 Record(s) 8/16/1995 to 12/14/2009

Min-3 Max-3 Avg-3
1 Record(s) 12/1/1994 to 12/1/1994

Min-260 Max-260 Avg-260
1 Record(s) 9/7/1995 to 9/7/1995

Min-340 Max-340 Avg-340
1 Record(s) 9/8/1995 to 9/8/1995

Min-0 Max-5 Avg-2.25
4 Record(s) 3/2/1995 to 12/14/2009

Min-0 Max-2 Avg-0.5
4 Record(s) 5/31/1988 to 10/26/1990

Min-0 Max-0 Avg-0
2 Record(s) 4/27/2005 to 10/5/2011

Min-0 Max-0 Avg-0
1 Record(s) 11/11/2004 to 11/11/2004

Min-0 Max-0 Avg-0
1 Record(s) 11/22/1996 to 11/22/1996

Min-2 Max-3 Avg-2.5
2 Record(s) 6/25/1981 to 7/13/1989

Min-2 Max-7 Avg-3.6
5 Record(s) 6/3/1982 to 6/25/1987

Min-0 Max-10 Avg-2.92
12 Record(s) 5/29/1987 to 10/18/2001

Min-1.514 Max-11.61 Avg-5.23
4 Record(s) 10/14/2004 to 5/20/2008

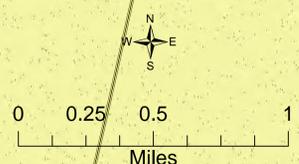
Min-0 Max-0 Avg-0
1 Record(s) 5/6/1959 to 5/6/1959

Min-0 Max-1 Avg-0.67
3 Record(s) 7/13/1989 to 5/18/1993

Min-0 Max-47 Avg-11.35
12 Record(s) 5/28/1987 to 10/27/1998

Legend

- Nicholas Grill Property
- Manganese >50 µg/L
- Manganese < 50 µg/L
- Manganese N/D



DRAFT

From : "Bergen, Brianna@Waterboards"
To : "terawatt@juno.com"
Subject : Sample Results
Date : Fri, Oct 12, 2012 04:34 PM
Attachment(s) : 5 file(s)/document(s) | Total File Size: 616K

Nick,

Attached are sample results from last month's sampling effort.

Well 1 is Lorna Roberts' well (22275 Granada) – well 34-58

Well 2 is Joel Valenzuela's well closest to Mt View – well 34-01

Well 3 is Joel's well to the west – well 34-64

Well 4 is Ignacio Zavala's well (36325 Mt. View) – well 35-04

Well 5 is Pablo Huerta's well (35838 Mt. View) – well 03-01A

Well 6 is Carlos Tapia's well (35605 Fairview)

Thank you for all of your help.

If you have any questions, please let me know.

Brianna Bergen, P.G.
Engineering Geologist

California Water Quality Control Board
Lahontan Region

Files & Documents



Open this File

Well1.pdf
(122KB)



Open this File

Well 5.pdf
(122KB)



Open this File

Wells2-3.pdf
(131KB)



Open this File

Well6.pdf
(121KB)



Open this File

Well4.pdf
(122KB)

Attachments Scanned - No Virus Detected ([Learn More](#))

Excelchem Environmental Labs

Lahontan RWQCB

Project: Hinkley
 Project Number: [none]
 Project Manager: Brianna Bergen

Date Reported:
 09/25/12 11:07

**Well 1
 1208398-01 (Drinking Water)**

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
---------	--------	-----------------	-------	-------	---------------	---------------	--------	-------

Ion Chromatography

Hexavalent Chromium	ND	1.0	ug/l	AVH0369	08/30/12	08/30/12	EPA 7199	
---------------------	----	-----	------	---------	----------	----------	----------	--

Total Recoverable Metals

Aluminum	ND	50.0	ug/l	AVH0381	08/31/12	09/04/12	EPA 200.7	
Antimony	ND	10.0	"	"	"	"	"	"
Arsenic	ND	10.0	"	"	"	"	"	"
Barium	106	5.0	"	"	"	"	"	"
Beryllium	ND	5.0	"	"	"	"	"	"
Boron	191	50.0	"	"	"	"	"	"
Cadmium	ND	5.0	"	"	"	"	"	"
Calcium	23100	100	"	"	"	"	"	"
Chromium	ND	5.0	"	"	"	"	"	"
Cobalt	ND	5.0	"	"	"	"	"	"
Copper	ND	5.0	"	"	"	"	"	"
Iron	ND	20.0	"	"	"	"	"	"
Lead	ND	5.0	"	"	"	"	"	"
Magnesium	6400	50.0	"	"	"	"	"	"
Manganese	94.0	10.0	"	"	"	"	"	"
Mercury	ND	0.200	"	AV10009	09/04/12	09/04/12	EPA 245.1	
Molybdenum	7.2	5.0	"	AV10381	08/31/12	09/04/12	EPA 200.7	
Nickel	ND	5.0	"	"	"	"	"	"
Potassium	2810	100	"	"	"	"	"	"
Selenium	ND	20.0	"	"	"	"	"	"
Silver	ND	5.0	"	"	"	"	"	"
Sodium	50900	200	"	"	"	"	"	"
Thallium	ND	20.0	"	"	"	"	"	"
Vanadium	ND	5.0	"	"	"	"	"	"
Zinc	ND	10.0	"	"	"	"	"	"

Excelchem Environmental Lab.



Laboratory Representative

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

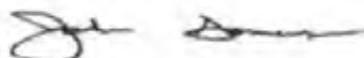
Excelchem Environmental Labs

Lahontan RWQCB	Project:	Hinkley	Date Reported: 09/25/12 11:07
	Project Number:	[none]	
	Project Manager:	Brianna Bergen	

Well 1
1208398-01 (Drinking Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
EPA 200.8								
Uranium	ND	1	ug/L	[none]	09/04/12	09/04/12	EPA 200.8	

Excelchem Environmental Lab.



Laboratory Representative

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Lahontan RWQCB	Project:	Hinkley	Date Reported: 09/25/12 11:07
	Project Number:	[none]	
	Project Manager:	Brianna Bergen	

**Well 2
1208398-02 (Water)**

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
---------	--------	-----------------	-------	-------	---------------	---------------	--------	-------

Ion Chromatography

Hexavalent Chromium	ND	1.0	ug/l	AV10369	08/30/12	08/30/12	EPA 7199	
---------------------	----	-----	------	---------	----------	----------	----------	--

Total Recoverable Metals

Aluminum	ND	50.0	ug/l	AV10381	08/31/12	09/04/12	EPA 200.7	
Antimony	ND	10.0	"	"	"	"	"	
Arsenic	ND	10.0	"	"	"	"	"	
Barium	132	5.0	"	"	"	"	"	
Beryllium	ND	5.0	"	"	"	"	"	
Boron	171	50.0	"	"	"	"	"	
Cadmium	ND	5.0	"	"	"	"	"	
Calcium	31700	100	"	"	"	"	"	
Chromium	ND	5.0	"	"	"	"	"	
Cobalt	ND	5.0	"	"	"	"	"	
Copper	ND	5.0	"	"	"	"	"	
Iron	ND	20.0	"	"	"	"	"	
Lead	ND	5.0	"	"	"	"	"	
Magnesium	7270	50.0	"	"	"	"	"	
Manganese	54.9	10.0	"	"	"	"	"	
Mercury	ND	0.200	"	AV10009	09/04/12	09/04/12	EPA 245.1	
Molybdenum	5.6	5.0	"	AV10381	08/31/12	09/04/12	EPA 200.7	
Nickel	ND	5.0	"	"	"	"	"	
Potassium	3900	100	"	"	"	"	"	
Selenium	ND	20.0	"	"	"	"	"	
Silver	ND	5.0	"	"	"	"	"	
Sodium	49000	200	"	"	"	"	"	
Thallium	ND	20.0	"	"	"	"	"	
Vanadium	ND	5.0	"	"	"	"	"	
Zinc	13.7	10.0	"	"	"	"	"	

Excelchem Environmental Lab.



Laboratory Representative

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

Excelchem Environmental Labs

Labontan RWQCB

Project: Hinkley
Project Number: [none]
Project Manager: Brianna Bergen

Date Reported:
09/25/12 11:07

**Well 2
1208398-02 (Water)**

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
---------	--------	-----------------	-------	-------	---------------	---------------	--------	-------

EPA 200.8

Uranium	3.9	1	ug/L	[none]	09/04/12	09/04/12	EPA 200.8	
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Laboratory Representative

Excelchem Environmental Labs

Lahontan RWQCB	Project:	Hinkley	Date Reported: 09/25/12 11:07
	Project Number:	[none]	
	Project Manager:	Brianna Bergen	

**Well 3
1208398-03 (Water)**

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
---------	--------	-----------------	-------	-------	---------------	---------------	--------	-------

Ion Chromatography

Hexavalent Chromium	1.3	1.0	ug/l	AV10369	08/30/12	08/30/12	EPA 7199	
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Total Recoverable Metals

Aluminum	299	50.0	ug/l	AV10381	08/31/12	09/04/12	EPA 200.7	
Antimony	ND	10.0	"	"	"	"	"	"
Arsenic	ND	10.0	"	"	"	"	"	"
Barium	87.5	5.0	"	"	"	"	"	"
Beryllium	ND	5.0	"	"	"	"	"	"
Boron	125	50.0	"	"	"	"	"	"
Cadmium	ND	5.0	"	"	"	"	"	"
Calcium	41100	100	"	"	"	"	"	"
Chromium	ND	5.0	"	"	"	"	"	"
Cobalt	ND	5.0	"	"	"	"	"	"
Copper	10.3	5.0	"	"	"	"	"	"
Iron	297	20.0	"	"	"	"	"	"
Lead	ND	5.0	"	"	"	"	"	"
Magnesium	7520	50.0	"	"	"	"	"	"
Manganese	12.3	10.0	"	"	"	"	"	"
Mercury	ND	0.200	"	AV10009	09/04/12	09/04/12	EPA 245.1	
Molybdenum	ND	5.0	"	AV10381	08/31/12	09/04/12	EPA 200.7	
Nickel	ND	5.0	"	"	"	"	"	"
Potassium	2800	100	"	"	"	"	"	"
Selenium	ND	20.0	"	"	"	"	"	"
Silver	ND	5.0	"	"	"	"	"	"
Sodium	55400	200	"	"	"	"	"	"
Thallium	ND	20.0	"	"	"	"	"	"
Vanadium	7.3	5.0	"	"	"	"	"	"
Zinc	128	10.0	"	"	"	"	"	"

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Excelchem Environmental Labs

Lahontan RWQCB

Project: Hinkley
Project Number: [none]
Project Manager: Brianna Bergen

Date Reported:
09/25/12 11:07

Well 3
1208398-03 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
EPA 200.8								
Uranium	9.3	1	ug/L	[none]	09/04/12	09/04/12	EPA 200.8	

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Laboratory Representative

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Excelchem Environmental Labs

Lahontan RWQCB

Project: Hinkley
 Project Number: [none]
 Project Manager: Brianna Bergen

Date Reported:
 09/25/12 11:07

**Well 4
 1208398-04 (Water)**

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
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Ion Chromatography

Hexavalent Chromium	ND	1.0	ug/l	AVH0369	08/30/12	08/30/12	EPA 7199	
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Total Recoverable Metals

Aluminum	ND	50.0	ug/l	AVH0381	08/31/12	09/04/12	EPA 200.7	
Antimony	ND	10.0	"	"	"	"	"	
Arsenic	13.7	10.0	"	"	"	"	"	
Barium	108	5.0	"	"	"	"	"	
Beryllium	ND	5.0	"	"	"	"	"	
Boron	169	50.0	"	"	"	"	"	
Cadmium	ND	5.0	"	"	"	"	"	
Calcium	25100	100	"	"	"	"	"	
Chromium	ND	5.0	"	"	"	"	"	
Cobalt	ND	5.0	"	"	"	"	"	
Copper	ND	5.0	"	"	"	"	"	
Iron	68.9	20.0	"	"	"	"	"	
Lead	ND	5.0	"	"	"	"	"	
Magnesium	5970	50.0	"	"	"	"	"	
Manganese	27.4	10.0	"	"	"	"	"	
Mercury	ND	0.200	"	AV10009	09/04/12	09/04/12	EPA 245.1	
Molybdenum	5.5	5.0	"	AVH0381	08/31/12	09/04/12	EPA 200.7	
Nickel	ND	5.0	"	"	"	"	"	
Potassium	2580	100	"	"	"	"	"	
Selenium	ND	20.0	"	"	"	"	"	
Silver	ND	5.0	"	"	"	"	"	
Sodium	44200	200	"	"	"	"	"	
Thallium	ND	20.0	"	"	"	"	"	
Vanadium	55.6	5.0	"	"	"	"	"	
Zinc	ND	10.0	"	"	"	"	"	

Excelchem Environmental Lab.

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Laboratory Representative

Excelchem Environmental Labs

Lahontan RWQCB	Project:	Hinkley	
	Project Number:	[none]	Date Reported:
	Project Manager:	Brianna Bergen	09/25/12 11:07

Well 4
1208398-04 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
---------	--------	-----------------	-------	-------	---------------	---------------	--------	-------

EPA 200.8

Uranium	1.5	1	ug/L	[none]	09/04/12	09/04/12	EPA 200.8	
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Laboratory Representative

Excelchem Environmental Labs

Lahontan RWQCB	Project:	Hinkley	Date Reported: 09/25/12 11:07
	Project Number:	[none]	
	Project Manager:	Brianna Bergen	

**Well 5
1208398-05 (Water)**

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
---------	--------	-----------------	-------	-------	---------------	---------------	--------	-------

Ion Chromatography

Hexavalent Chromium	ND	1.0	ug/l	AVH0369	08/30/12	08/30/12	EPA 7199	
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Total Recoverable Metals

Aluminum	ND	50.0	ug/l	AVH0381	08/31/12	09/04/12	EPA 200.7	
Antimony	ND	10.0	"	"	"	"	"	
Arsenic	15.8	10.0	"	"	"	"	"	
Barium	106	5.0	"	"	"	"	"	
Beryllium	ND	5.0	"	"	"	"	"	
Boron	159	50.0	"	"	"	"	"	
Cadmium	ND	5.0	"	"	"	"	"	
Calcium	34300	100	"	"	"	"	"	
Chromium	ND	5.0	"	"	"	"	"	
Cobalt	ND	5.0	"	"	"	"	"	
Copper	ND	5.0	"	"	"	"	"	
Iron	22.5	20.0	"	"	"	"	"	
Lead	ND	5.0	"	"	"	"	"	
Magnesium	7500	50.0	"	"	"	"	"	
Manganese	86.9	10.0	"	"	"	"	"	
Mercury	ND	0.200	"	AVH0009	09/04/12	09/04/12	EPA 245.1	
Molybdenum	5.4	5.0	"	AVH0381	08/31/12	09/04/12	EPA 200.7	
Nickel	ND	5.0	"	"	"	"	"	
Potassium	2220	100	"	"	"	"	"	
Selenium	ND	20.0	"	"	"	"	"	
Silver	ND	5.0	"	"	"	"	"	
Sodium	51000	200	"	"	"	"	"	
Thallium	ND	20.0	"	"	"	"	"	
Vanadium	6.1	5.0	"	"	"	"	"	
Zinc	ND	10.0	"	"	"	"	"	

Excelchem Environmental Lab.



Laboratory Representative

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

Excelchem Environmental Labs

Lahontan RWQCB

Project: Hinkley
Project Number: [none]
Project Manager: Brianna Bergen

Date Reported:
09/25/12 11:07

**Well 5
1208398-05 (Water)**

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
EPA 200.8								
Uranium	3.0	1	ug/l.	[none]	09/04/12	09/04/12	EPA 200.8	

Excelchem Environmental Lab.



Laboratory Representative

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

Excelchem Environmental Labs

Lahontan RWQCB	Project: Hinkley Project Number: [none] Project Manager: Brianna Bergen	Date Reported: 09/25/12 11:07
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Well 6 1208398-06 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
---------	--------	-----------------	-------	-------	---------------	---------------	--------	-------

Ion Chromatography

Hexavalent Chromium	ND	1.0	ug/l	AV10369	08/30/12	08/30/12	EPA 7199	
---------------------	----	-----	------	---------	----------	----------	----------	--

Total Recoverable Metals

Aluminum	64.7	50.0	ug/l	AV10381	08/31/12	09/04/12	EPA 200.7	
Antimony	ND	10.0	"	"	"	"	"	"
Arsenic	ND	10.0	"	"	"	"	"	"
Barium	112	5.0	"	"	"	"	"	"
Beryllium	ND	5.0	"	"	"	"	"	"
Boron	102	50.0	"	"	"	"	"	"
Cadmium	ND	5.0	"	"	"	"	"	"
Calcium	37400	100	"	"	"	"	"	"
Chromium	ND	5.0	"	"	"	"	"	"
Cobalt	ND	5.0	"	"	"	"	"	"
Copper	5.0	5.0	"	"	"	"	"	"
Iron	ND	20.0	"	"	"	"	"	"
Lead	ND	5.0	"	"	"	"	"	"
Magnesium	6840	50.0	"	"	"	"	"	"
Manganese	ND	10.0	"	"	"	"	"	"
Mercury	ND	0.200	"	AV10009	09/04/12	09/04/12	EPA 245.1	
Molybdenum	ND	5.0	"	AV10381	08/31/12	09/04/12	EPA 200.7	
Nickel	ND	5.0	"	"	"	"	"	"
Potassium	1940	100	"	"	"	"	"	"
Selenium	ND	20.0	"	"	"	"	"	"
Silver	ND	5.0	"	"	"	"	"	"
Sodium	47600	200	"	"	"	"	"	"
Thallium	ND	20.0	"	"	"	"	"	"
Vanadium	ND	5.0	"	"	"	"	"	"
Zinc	14.3	10.0	"	"	"	"	"	"

Excelchem Environmental Lab.

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



Laboratory Representative

Excelchem Environmental Labs

Lahontan RWQCB	Project: Hinkley	Date Reported: 09/25/12 11:07
	Project Number: [none]	
	Project Manager: Brianna Bergen	

Well 6
1208398-06 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
---------	--------	-----------------	-------	-------	---------------	---------------	--------	-------

EPA 200.8								
Uranium	5.1	1	ug/l.	[none]	09/04/12	09/04/12	EPA 200.8	

Excelchem Environmental Lab,



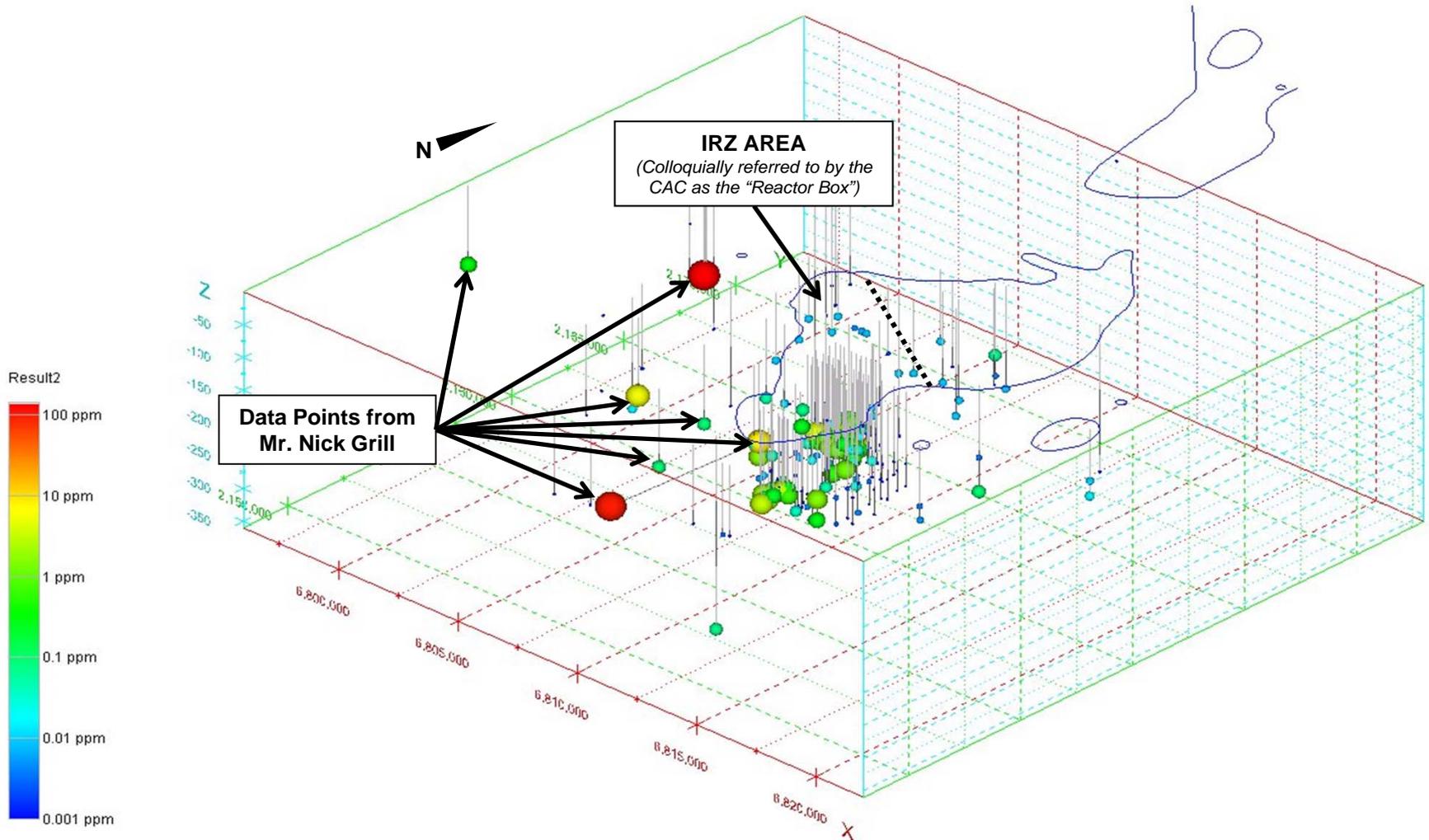
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Laboratory Representative

FIGURE 1

IRZ Manganese Data Distribution

(Displayed data was obtained from 3 different sources: PG&E, Nick Grill et al. and Water Board)



Note: All information shown in this Figure was derived from Google Earth topography. Groundwater sampling data was supplied to PNL by PG&E in PNL's role as IRP Manager. Data independently collected by CAC Member Mr. Nick Grill, and separately by the Water Board is also included (see Figure 2 for this raw data.)

FIGURE 2

Manganese Data Collected Separately in the Vicinity of the IRZ by Mr. Nick Grill and the Water Board

LocID	SampleDate	AnalyteLC	UnitsCode	Result2	BotOfPerf	Address	Data_Origi
34-64	8/30/2012	Manganese, dissolved	mg/L	0.0123	120	Joel's well to the west	Water Board
34-01	8/30/2012	Manganese, dissolved	mg/L	0.0549	120	Joel Valenzuela's well closest to Mt View	Water Board
35-04	8/30/2012	Manganese, dissolved	mg/L	0.0274	120	Ignacio Zavala Well	Water Board
03-01A	8/30/2012	Manganese, dissolved	mg/L	0.0869	120	Pablo Huerta's Well	Water Board
Carlos	8/30/2012	Manganese, dissolved	mg/L	0	120	Carlos Tapa's Well	Water Board
34-58	8/30/2012	Manganese, dissolved	mg/L	0.094	120	2275 Granada - Lorna Roberts' Well	Nick et al.
12H0245-01	8/2/2012	Manganese, dissolved	mg/L	0	120	35375 Tamarack Rd	Water Board
12H0245-02	8/2/2012	Manganese, dissolved	mg/L	0	120	35784 Mountain View	Nick et al.
12H0245-03	8/2/2012	Manganese, dissolved	mg/L	99	120	35838 Mountain View Rd	Nick et al.
B2J0295-01	10/2/2012	Manganese, dissolved	mg/L	7.6	120	36325 Mountain View -@ 120 ft	Nick et al.
B2J2778-03	9/26/2012	Manganese, dissolved	mg/L	5.6	120	21876 Pioneer Rd	Nick et al.
Flower-1	9/26/2012	Manganese, dissolved	mg/L	0.029	120	Flower #1	Nick et al.
Flower-1	10/11/2012	Manganese, dissolved	mg/L	0.32	120	Flower #1	Nick et al.
Flower-2	9/26/2012	Manganese, dissolved	mg/L	1.3	120	Flower #2	Nick et al.
Flower-3	10/11/2012	Manganese, dissolved	mg/L	0.066	120	Flower #3	Nick et al.
Flower-2	10/11/2012	Manganese, dissolved	mg/L	140	120	Flower #2	Nick et al.
12H0245-03	8/2/2012	Manganese, dissolved	mg/L	0.03	120	36325 Mountain View Rd.	Nick et al.
B2J0295-02	10/2/2012	Manganese, dissolved	mg/L	1.6	142	36325 Mountain View -@ 142 ft	Nick et al.
B2j11452-04	10/11/2012	Manganese, dissolved	mg/L	0.32	120	36771 Hidden River	Nick et al.
B2J1452-05	10/11/2012	Manganese, dissolved	mg/L	0.087	120	22275 Granada	Nick et al.
B2j1452-06	10/11/2012	Manganese, dissolved	mg/L	0	120	37414 Mulberry	Nick et al.

Note: PNL was simply provided with the above numbers. PNL has plotted the data in accompanying Figure 1. Since PNL was not involved in the Nick Grill or separate Water Board sampling events. We therefore do not know if the data was collected in accordance with an SOP per a Work Plan. PNL renders no judgement as to the accuracy of the information and data. Nick Grill provided data for specific domestic wells and Water Board results during October 2012.

FIGURE 3

IRZ Manganese Data Distribution

The upper image, taken from the EIR, shows only Mn data located within the 3.1 ppb Cr6 plume and OU1 areas. Recent data collection by Mr. Nick Grill, (which is of interest to the CAC), suggests that Mn measurements also occur beyond the above boundaries.

Existing Dissolved Manganese within the Project Area

Upper image: Extracted from the Draft EIR's Figure 3.1-11

(Figure 3.1-11, Draft Environmental Impact Report, Comprehensive Groundwater Cleanup Strategy for Historical Chromium Discharger from PG&E's Hinkley Compressor Station, San Bernardino County, prepared by ICF International August 2012)



- LEGEND**
- Approximate outline of Cr(VI) or Cr(T) in Upper Aquifer exceeding values of 3.1 and 3.2 µg/L, respectively, Fourth Quarter 2011
 - One-mile buffer from the contiguous portions of the approximate outline of Cr(VI) or Cr(T) in Upper Aquifer exceeding values of 3.1 and 3.2 µg/L, respectively, Fourth Quarter 2011
 - Study Area
 - OU1
 - OU2
 - OU3
 - County Parcel Boundary

- Dissolved Manganese Concentrations in mg/L**
- 0.00-0.01
 - 0.01-0.05
 - 0.05-0.10
 - 0.10-1.00
 - >1

Notes:
As requested by the Water Board for use in the EIR, Fourth Quarter 2011 laboratory-measured Manganese data is shown. If Manganese data were not collected in a well within Fourth Quarter 2011, but were collected within First Quarter 2012, then First Quarter 2012 data are shown.

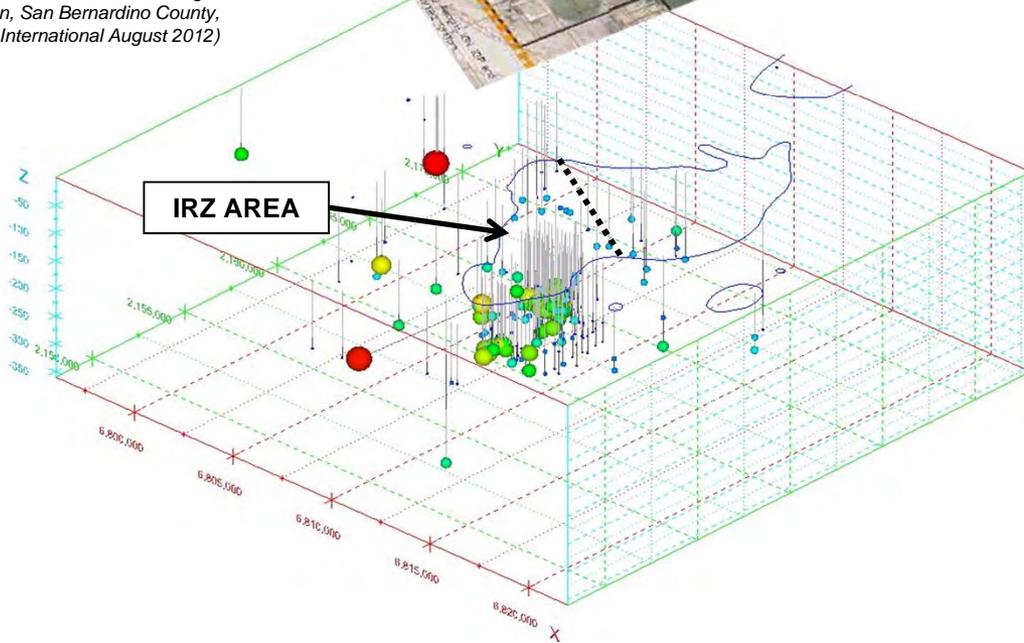
Data shown are from private supply (e.g. domestic) and PG&E monitoring and extraction wells, where available.

Source: Prepared by PG&E, 2012 for the EIR using recent monitoring data.

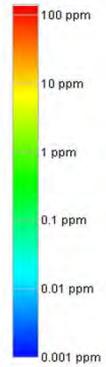
Dissolved Manganese Distribution

Lower image: Also shown in Figure 1, was prepared by the IRP Manager, and includes Mr. Nick Gill's Mn data points

(PG&E + Nick et al. and Water Board)



Result2



Note: All information shown in this Figure was derived from Google Earth topography. Groundwater sampling data was supplied to PNL by Nick Grill and PG&E. PNL was not present during Nick Grill's sampling of groundwater in the southwest area adjacent to the IRZ. Nick Grill provided data for specific domestic wells and Water Board results during October 2012.

Holden, Anne@Waterboards

From: Dave Cheney
Sent: Wednesday, September 19, 2012 10:20 AM
To: Holden, Anne@Waterboards
Cc: Dernbach, Lisa@Waterboards; Dave Cheney
Subject: Comment on Draft E I R Comprehensive Groundwater Cleanup Strategy/Hinkley/PGE

Dear Ms. Holden,

The following are strong concerns that I feel should be addressed.

1.) Education.

The presentation of the Draft E I R is not sufficient. Hinkley residents and others cannot get an understanding of a 1000 page document in a few hours of presentation. There seems to be a lack of interest in educating the public to a level of understanding. The following are suggestions to help remedy the lack of project understanding.

1.a) I propose that there be an ongoing educational(outreach) workshop. This workshop would be staffed by Water Board personnel full time for the purpose of educating the public and answering questions. This provides an opportunity to go over the project section by section at convenient times. This also provides a means of training the public how to respond to documents etc. This needs to be staffed and managed by the Lahontan Water Board as a resource for the public and the CAC. An onsite expert could go over documents such as this EIR on more of a one on one basis. This provides the opportunity for better understanding and can be a training tool for responses. People are most generally afraid of things that they do not understand.

1.b) EIR presentations and education sessions need to be separated from comment sessions. More time needs to be implemented for questions and answers rather than comments and complaints.

2.) Onsite Management.

The Lahontan Water Board needs to maintain a full time onsite manager. A project of this magnitude demands full time onsite,day to day management. This manager and staff should have an open door policy with the residents of Hinkley and the public. Remote management is unacceptable.This manager should be the direct liaison with the CAC.

3.) Terminology.

Many of the remediation efforts and techniques are experimental. They have the potential for unexpected and unwanted results. These need to be labeled as such. The water filtration systems are experimental, injection of foreign substances into the water table etc. are not addressed as experimental technologies. All unproven remediation technologies need to be termed "experimental" for the purpose of identifying them as what they are. This gives the residents and public the opportunity to further scrutinize such actions if need be.

4.) Wildlife Impact.

The biological impact of the buyout program is inadequate. Any source of water in a desert area is subject to becoming a wildlife habitat. I do not believe that PG&E is performing adequate evaluation of properties before tearing them down and leveling the properties. Year long studies are required to evaluate impact to migratory species. If there is a viable program in place then where is the information? How many species have been identified? What action has been taken? Where are the reports to the Dept. of Fish and Game showing game loss due to loss of habitat ? All of this information should be available to the public at a resource/information center staffed by Water Board personnel. I contest that not one more property be compromised until the biological impact is identified and mitigated !!! Have there been any studies on the effect of Ch-6 on the local wildlife???

5.) Human Impact

The impact to human life and health has been grossly overlooked. The people that are focused on money are being dealt with but what about everyone else?? The entire remediation/buyout program has had adverse mental and physical effect on the residents of Hinkley. My neighbor suffered a panic attack from trying to decide to sell his home. Deadlines are being put on people and stress levels increase. Another neighbor is on the verge of divorce due to the stress of the buyout program. The mental and physical effect of having byproduct of the remediation contaminate your well, being told you have to sell or accept experimental filtration that produces hazardous waste is high stress in any household. PG&E forcing buyout participants to sign an agreement to never live in the Hinkley Zip code again is more compounding stress. Being told that you can never live near your friends and family again and that your children must go to another school. There needs to be free counseling provided for the residents of Hinkley. PG&E should have to pay for medical issues resulting from this project. Where does the pain and suffering stop for Hinkley residents ???????

6.) Plume identification.

It is very obvious that PG&E has as continues to lie about the plume. Why does the Water Board accept this information as viable?? Bring in an outside source to identify the plume area accurately and fine PG&E for each acre foot of contaminated water that they failed to identify. USGS needs to be involved. Lahontan has evidence of c-6 4 miles Northeast of the plume and is not acting on that data. WHY ???

7.) Stop Remediation and abandon current plan until fresh clean water is supplied to Hinkley.

Remediation experimentation has proven a hazard to wildlife and human life. Not one of the methods had the desired results. Some methods are causing further contamination to water via remediation(experimentation) methods. Stop all effort and provide pipe line clean water. Efforts should be redirected toward first removing hazard by getting clean water to the residents. Then remediation can resume. Water filtration cannot be considered as a method of clean water as it is still in the experimental stages and should be defined as such.

In Summary I feel that the entire cleanup has been grossly mismanaged by the Lahontan Water Board to this point. They have allowed PG&E to experiment on the residents of Hinkley. Poor and unstudied remediation experiments have been allowed to go forward. Human and wildlife have been impacted on a large scale as a result. Mr. Haefele has demonstrated with hard evidence that the Lahontan Water Board has covered up evidence of groundwater contamination in Hinkley. I feel that the coverup continues as the Water Board refuses to identify the true perimeter of the contamination

plume. It is time for Lahontan to take control of the situation. Lahontan has the skills and backing to do this right. Let's get management on site and in gear and everybody wins!

Thank You,

David G. Cheney

Dear Ms. Holden,

In response to the EIR pertaining to the Hinkley/PG&E cleanup.

Appendix A Groundwater and Remediation Supporting Documentation;

A.2.1)

I believe that A.2.1 needs further review. A.2.1's assessment of the Manganese migration is not accurate. Manganese migration has been severely underestimated and is a much larger problem than stated in this EIR.

A.2.2) Groundwater elevation monitoring is inadequate and possibly inaccurate. Elevation monitoring needs to be done with automated real time logging equipment.

3.2.3.3) Census data is from the year 2000. Most recent census was within the last 3 years.

3.3-12 line 41 you state that Manganese is not considered toxic and does not meet the definition of a hazardous waste. Please refer to the EPA study on Manganese.

http://www.epa.gov/ogwdw/ccl/pdfs/reg_determine1/support_cc1_magnese_dwreport.pdf. It is known to cause severe neurological problems in humans and animals. Especially when inhaled. Infants and young animals are at higher risks. Why are residents and workers not being informed of this remediation produced toxin?

I am still working on reading and understanding the EIR. At this point I believe much of it to be insufficient.

Please halt all remediation. Deal with human and animal issues first. Return only to remediation when it can be done safely.

Thank You,

David G. Cheney

From: Teri
Sent: Tuesday, October 16, 2012 3:48 PM
To: Holden, Anne@Waterboards
Cc: Dave; Teri
Subject: EIR Pertaining to the Hinkley/PG&E Cleanup

Dear Ms. Holden,

This is in response to the EIR pertaining to the Hinkley/PG&E cleanup.

Appendix A Groundwater and Remediation Supporting Documentation;

A.2.1)

I believe that A.2.1 needs further review. A.2.1's assessment of the Manganese migration is not accurate. Manganese migration has been severely underestimated and is a much larger problem than stated in this EIR.

There are currently high levels of Maganese in wells close to my home which is very close to the PG&E plant. I live on Highcrest Rd. My well has non detect Maganese at this point, my neighbors haven'r been so lucky.

A.2.2) Groundwater elevation monitoring is inadequate and possibly inaccurate. Elevation monitoring needs to be done with automated real time logging equipment. The technicians seem to forget that we're talking about water, "tides" come and go out, rain fills up the water tables, etc. There needs to be a substantial amount of time studying the water and monitoring it.

3.2.3.3) Census data is from the year 2000. Most recent census was within the last 3 years.

Let's not forget that Hinkley used to be a bustling farm town. A lot of people have died and moved away from the original C6 contamination so the population has become sparse but not because no one wanted to live here. The few people that are left are just as important as a big city like San Bernardino. Maybe an independant census should be taken to get an accurate account of residents.

3.3-12 line 41 you state that Manganese is not considered toxic and does not meet the definition of a hazardous waste. Please refer to the EPA study on Manganese. http://www.epa.gov/ogwdw/ccl/pdfs/reg_determine1/support_cc1_magnese_dwrep_ort.pdf. It is known to cause severe neurological problems in humans and animals. Especially when inhaled. Infants and young animals are at higher risks. Why are residents and workers not being informed of this remediation produced toxin? We didn't know what the remediation entailed and the black water was a mystery. PG&E never told us what could happen nor did LaHontan water district and I blame them both for their lack of concern and for poisoning the water...again

Has anyone thought of the wildlife that lives in our area besides the desert tortoise? At my home we have hundreds of birds, mammals, snakes and what have you feeding and getting water from our place. We are a registered wildlife habitat and I see more and more animals showing up because of the people moving and their homes being bulldozed or being empty and water shut off. What about the displacement of the wildlife? Where is the study? They are important to our environment as well.

I am still working on reading and understanding the EIR. At this point I believe much of it to be insufficient.

Please halt all remediation. Deal with human and animal issues first. Return only to remediation when it can be done safely.

Thank You,

Teri A. Cheney

"Happiness is a Choice" 

Oct 16th, 2012

Edward Duitsman

Stop remediation and A.U. watering.

- manganese is Not contained within the boundaries of the plume.
- Manganese is not "unavoidable."
- Creating Manganese is Not acceptable or restoring the water to its "Natural State"

Edward Duitsman

- The Black water and high levels of Manganese + arsenic outside the "box" / boundaries is still being denied by PG+E.
- Stop all remediation until this mystery is solved.

Holden, Anne@Waterboards

From: Edward Duitsman
Sent: Saturday, October 20, 2012 4:52 PM
To: Holden, Anne@Waterboards; Dernbach, Lisa@Waterboards
Subject: Hinkley

RE: October 16th, 2012 presentation page 11.

25% of screen depth?
please explain and give an example.

Thanks,

Edward Duitsman

Holden, Anne@Waterboards

From: Edward Duitsman
Sent: Saturday, October 20, 2012 9:28 PM
To: Holden, Anne@Waterboards; Dernbach, Lisa@Waterboards; Plaziak, Mike@Waterboards
Cc: Dave Cheney; Martha
Subject: Hinkley

Attn: Anne Holden, Lisa Dernbach, Kevin Sullivan, Mike Plaziak and Ian Webster

As you all know the concern now most of us have is the "**unavoidable byproducts**".

I do not like the use of this phrase because they are avoidable, you are producing them.

Many of us feel strongly that with all the assumptions, confusion and conflicting old/bad data the subsurface treatment by injecting ethanol into the groundwater should be **halted immediately**.

I have been unable to find a complete list of all the "**ingredients**" that have been dumped into our water. (help please)

I understand that 70,000 gallons of **vegetable oil** is on the list.

This might explain why the Manganese is **not contained** within your boundaries?

Could it be that the manganese is suspended in 70,000 gallons of Vegetable oil?

Could this be why it is not in the solid form at the water table as it states in your fact sheet August 2012 page 2.

Could this explain why this black water sometimes appears slimy and oily?

When I mentioned Manganese in our wells on Mountainview, Kevin Sullivan at the Hinkley meeting looked me in the eye and said "**impossible !**"

He said it cannot get through his "**picket fence**" flow up hill and over the fault line.

Ian Webster said the same thing.

Kevin is so blinded with old/bad data he is not open to possible explanations.

2010 had sustained river flow and months of flooding.

This increased water flow and raised water table levels in the aquifers.

Could this have caused the flow up hill and over or around that fault line to the west-side?

Like an underground tide rising pushing north and returning back south as it settles? Over the fault line? Around

?

Just some ideas, I do not know either.

The fact is that it is **not contained** within the boundaries as you state in the handouts.(page 2. par 3)

Kevin insists that "**any Manganese outside the picket fence on Mountianview is not from PG&E.**"

Kevin says it was already there or **background.**

What is the background level for vegetable oil?

That might be a good test? I think I will order that on Monday?

Can I please be reimbursed to test 8 wells outside of the **boundaries** for **vegetable oil**?

Thanks,

Edward Duitsman

Holden, Anne@Waterboards

From: Edward Duitsman
Sent: Monday, November 05, 2012 11:30 PM
To: Holden, Anne@Waterboards
Subject: Comments for the EIR

RE: November 5th letter, Request for data and info on metals in domestic wells.

Thank you for listening,

At every meeting Lahonton hands out a two page flyer.

Page 2 section 3 says "Manganese concentrations are more than 100 times the secondary MCL of 50ppb **but remain within the boundaries of the chromium plume.**"

The second quarter 2012 report states that 245 domestic wells were sampled.

What did you test for in those 245 wells? Only Chromium 6?

Some of us are gathering samples outside the PG&E "Boundaries" to test for the Byproducts Manganese and Arsenic.

These tests take time and money.

We are also having to take time off work.

On Friday November 2nd 2012 we collected samples from 15 wells.

We plan to sample 15 more this week. We may not have all the results by the 26th of November.

There are many wells that need and should be tested.

I have asked PG&E to test my wells for the "unavoidable by products" manganese and arsenic. They refused, only concerned with Chromium 6.

I ask the Water Boards to do your job and quit relying only on what PG&E feeds you.

At the first sign of escaping byproducts you should have been all over it.

Why is the burden on us to have to test and produce data?

This is costing me and others thousands of dollars in lost time at our jobs and lab fees.

You get over here and test these 245 wells and give us the results by November 26th. (where did that date come from?)

It appears that the byproducts are outside the boundaries.

PG&E project manager Kevin Sullivan says impossible.

Maybe he is right. I think that this should be very simple to prove or disprove.

Until you prove one way or another all PG&E's pumping, injecting, ethanol remediation should be halted immediately.

Edward Duitsman

Anne Holden

10/10/12

John Duitsman

Hold / postpone injecting ethanol until Nick's Grill's data is studied in regard to "unavoidable byproducts" - manganese.

Why wait ^{years} to do tracing of water flow when we have a perfect tracing element in place in manganese.

Using compressors to raise pressure in the aquifer will not move chromium 6 or ethanol + its byproducts in a predictable way - because of irregularities in the strata + fault lines + ...

Because of these and other concerns - please ^{over} →
HALT the compression/injection process - now

Provide other comments:

I have read the EIR. I believe that the EIR supports the fact that there is no safe way to perform any remediation.

I call for an immediate halt to all remediation until a community water system is installed and completed.

Martha Duitman

Name (optional)

Nov 5th

ALL COMMENTS ARE DUE TO THE WATER BOARD BY ~~OCTOBER 19~~, 2012.

For questions, contact Anne Holden at (530) 542-5450 or aholden@waterboards.ca.gov.

Fax No. (530) 544-2271

PG & E GAVE US 3 OPTIONS = Deeper well, FILTRATION OR PROPERTY PURCHASE. THEY ALSO HAD A DEADLINE FOR AUG 31. Then moved it TO OCT 15.

"THERE SHOULD BE NO DEADLINE AT ALL." NONE!
IF THEY WANT A DEADLINE, IT SHOULD BE AFTER THE WATER IS SAFE AND DRINKABLE

WE SHOULD BE OFFERED ALL 3 OPTIONS,

1. PG & E DIGS A Deeper well
2. PG & E INSTALL FILTER SYSTEM
3. PG & E OFFERS PROPERTY PURCHASE

ALAN J FLETCHER