



Converse Consultants

Over 50 Years of Dedication in Geotechnical Engineering and Environmental Sciences

January 19, 2009

03-23551-03

Mr. Matt Denio
Dayton Land Developers, LLC
451 Lakeshore Boulevard
Incline Village, Nevada 89451

Subject: **SOIL SAMPLING**
Santa Maria Ranch Subdivision, Phase II
Dayton, Nevada

Dear Mr. Denio:

On November 7, 2008, Converse Consultants (Converse), presented a sampling plan to conduct random soil samples within the Phase II area of the Santa Maria Ranch Subdivision. The subdivision is in the area of the Carson River Mercury Site (CRMS). The CRMS is 50 miles in length within the Carson River and its floodplain beginning near Carson City, Nevada, and extending downstream to the Lahontan Valley. Contamination at the site is a legacy of the Comstock mining era of the late 1800s when mercury was imported for the processing of gold and silver ore. Based upon topography, the Phase II portion of the Santa Maria Ranch is outside the floodplain of the Carson River. However, the area in question is intersected with an irrigation ditch supplied by the Carson River and several irrigated fields. Therefore, Dayton Land Developers, LLC request that Converse develop a sampling plan to test the soil along the irrigation ditch as well as in the irrigated field. The plan identified 16 locations for soil sampling: nine along the irrigation ditch; six in the irrigated fields; and one composite sample was to be collect in the area of to historic mining addits (the composite samples were intended to evaluate the mine waste rock not to address possible mercury issues). Based upon the Dayton Land Developers, LLC., needs at this time, they requested that Converse only collected soil samples along the irrigation ditch.

Between 1993 and 1995 the Environmental Protection Agency (EPA) conducted an assessment of the area and identified four areas within the site they believed contained soil that may endanger public heath. None of the areas were within the boundaries of Santa Maria Ranch. All areas identified by EPA have been remediated, this included the removal of two feet of contaminated soil and replacement with clean soil. During the assessment, EPA established a mercury clean-up level for the Dayton area. Clean-up levels are set below the level evaluated to pose a health risk to children and pregnant women. This population is studied as a matter of course due to the fact that children and pregnant women are the most sensitive to environmental conditions. Based on extensive site specific information, as well as available toxicology studies, EPA set the clean up levels for residential soils at 80 part per million (ppm) for the Dayton area. This means that soil containing mercury levels up to 80 ppm do not require any clean up action and are safe to be used in residential applications.

On December 30, 2008, Converse mobilized to the site to collect soil samples at the nine locations along the irrigation ditch identified in the November 7, 2008, Work Plan. Before Converse's arrival, Dayton Land Developers, LLC., excavated a 2 foot deep post hole at each sample location. Converse collected two soil samples within each post hole. Samples were collected from the sides of each post hole from 0 to 1 foot and 1 to 2 feet. The samples were collected with a pre-cleaned soil spade. Samples were placed in laboratory supplied jars, sealed, placed on ice, and delivered to a Nevada Certified Laboratory¹ under proper chain of custody. The samples were analyzed for total mercury by EPA method 7471A. The analytical results are summarized in the following table:

Sample Location	Sample Depth	Results Parts Per Million (ppm)
B-1	0 to 1'	11
B-1	1'to2'	13
B-2	0 to 1'	20
B-2	1'to2'	9.3
B-3	0 to 1'	7.0
B-3	1'to2'	0.4
B-4	0 to 1'	22
B-4	1'to2'	0.09
B-5	0 to 1'	26
B-5	1'to2'	6.2
B-6	0 to 1'	25
B-6	1'to2'	0.33
B-7	0 to 1'	24
B-7	1'to2'	1.5
B-8	0 to 1'	3.0
B-8	1'to2'	1.1
B-9	0 to 1'	6.3
B-9	1'to2'	0.5

Of the eighteen samples none are approaching the EPA action level of 80 ppm. The highest value measured was 26 ppm in B-5 from 0 to 1 foot. In general, it appears the shallower soils have higher mercury levels. Based upon these results, there is no evidence that the mercury consideration along the irrigation ditch is over the EPA Action Level of 80 ppm. One might assume that if the soil along the irrigation ditch does not approach 80 ppm of mercury, then the irrigated field would not approach 80 ppm of mercury. However, without sampling Converse makes no assurance to that assumption.

It must be noted that Converse's sampling plan dated November 7, 2008, was not submitted to the Nevada Division of Environmental Protection (NDEP) for concurrence. Therefore, there is no way to ascertain if they may require additional soil sampling for subdivision acceptance. The behavior of subsurface contaminants is a complex phenomenon involving geochemistry, hydrogeology, and the geotechnical sciences. Converse's conclusions regarding the potential for subsurface contamination are based solely upon information cited in this report. The analyses and conclusions in this report are based upon data obtained from this assessment and the public well data that was reviewed for this report. The nature and extent of variations beyond this assessment may not become evident until further exploration. If variations then appear evident, it may be necessary to reevaluate the conclusions of this report. The professional services provided, and judgment rendered on this project, meet current professional standards and do not carry any other guarantee.

Converse accepts no responsibility or liability to any person or organization for any claim, for loss or damage (including attorney's fees) caused, or believed to be caused, directly or indirectly by: conditions not revealed by the laboratory analysis performed; failure to perform other chemical analyses or utilize different test methods or equipment; or failure to locate or install additional sample points, test pits, soil borings, or monitoring wells.

If you have any questions about the information presented above, please contact our office at 775-856-3833.

Respectfully submitted,

Reviewed and Approved

CONVERSE CONSULTANTS



Kathi Brandmueller, P.E., C.E.M.²
Senior Engineer

Dean Stanphill, P.E.
Vice President/Managing Officer

Enclosures: Site Map
Laboratory Results

¹ I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein.

² I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all Federal, State, and local statutes, regulations, and ordinances.



LEGEND

■ APPROXIMATE TEST PIT LOCATIONS

TEST PIT LOCATION MAP

**SANTA MARIA RANCH PHASE II
HIGHWAY 50 EAST
DAYTON, NEVADA**



CONVERSE CONSULTANTS

Over 60 Years of Dedication
in Engineering, Environmental
& Groundwater Science,
Inspection & Testing
Services

Scale	NTS	File No.	03-23551-01 test pits
Date	1/19/09	Project No.	03-23551-03
Drafted By	DAD	Figure No.	
Checked By	KIB		
Approved By			

1/15/2009

Converse Consultants
4840 Mill Street #5
Reno, NV 89502
Attn: Kathi Brandmueller

OrderID: 0812291

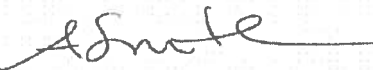
Dear: Kathi Brandmueller

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 12/30/2008. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,



Andy Smith
Laboratory Manager

Western Environmental Testing Laboratory

Report Comments

Converse Consultants - 812291

General Comments

None

Specific Comments

None

Data Qualifier Legend

- B -- Blank contamination; Analyte detected above the method reporting limit in an associated blank
- HT -- Sample held beyond the accepted holding time
- J -- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
- M -- Reported value is estimated; The sample matrix interfered with the analysis
- N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
- NC -- Not calculated due to matrix interference
- Q -- Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy
- SA -- Reported value was calculated using the method of Standard Additions.
- SC -- Spike recovery not calculated. Sample concentration >4X the spike amount; therefore, the spike could not be adequately recovered.

Western Environmental Testing Laboratory Analytical Report

Converse Consultants

4840 Mill Street #5

Reno, NV 89502

Attn: Kathi Brandmueller

Phone: (775) 856-3833 Fax: (775) 856-3513

PO\Project: Santa Maria Ranch / 03-23551-01

Date Printed: 1/15/2009

OrderID: 0812291

Customer Sample ID: B-1 6 inches

Collect Date/Time: 12/30/2008 08:45

WETLAB Sample ID: 0812291-001

Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	11	SC mg/kg	1.0	1/14/2009

Customer Sample ID: B-1 2 feet

Collect Date/Time: 12/30/2008 08:47

WETLAB Sample ID: 0812291-002

Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	13	mg/kg	1.0	1/14/2009

Customer Sample ID: B-2 6 inches

Collect Date/Time: 12/30/2008 09:00

WETLAB Sample ID: 0812291-003

Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	20	mg/kg	1.0	1/14/2009

Customer Sample ID: B-2 2 feet

Collect Date/Time: 12/30/2008 09:02

WETLAB Sample ID: 0812291-004

Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	9.3	mg/kg	1.0	1/14/2009

Customer Sample ID: B-3 6 inches

Collect Date/Time: 12/30/2008 09:07

WETLAB Sample ID: 0812291-005

Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	7.0	mg/kg	0.50	1/14/2009

Customer Sample ID: B-3 2 feet
 WETLAB Sample ID: 0812291-006

Collect Date/Time: 12/30/2008 09:09
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	0.40	mg/kg	0.050	1/14/2009

Customer Sample ID: B-4 6 inches
 WETLAB Sample ID: 0812291-007

Collect Date/Time: 12/30/2008 09:18
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	22	mg/kg	1.0	1/14/2009

Customer Sample ID: B-4 2 feet
 WETLAB Sample ID: 0812291-008

Collect Date/Time: 12/30/2008 09:20
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	0.09	mg/kg	0.050	1/14/2009

Customer Sample ID: B-5 6 inches
 WETLAB Sample ID: 0812291-009

Collect Date/Time: 12/30/2008 09:30
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	26	mg/kg	1.0	1/14/2009

Customer Sample ID: B-5 2 feet
 WETLAB Sample ID: 0812291-010

Collect Date/Time: 12/30/2008 09:32
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	6.2	mg/kg	0.10	1/14/2009

Customer Sample ID: B-6 6 inches
 WETLAB Sample ID: 0812291-011

Collect Date/Time: 12/30/2008 09:50
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	25	SC mg/kg	1.0	1/14/2009

Customer Sample ID: B-6 2 feet
 WETLAB Sample ID: 0812291-012

Collect Date/Time: 12/30/2008 09:52
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	0.33	mg/kg	0.10	1/14/2009

Customer Sample ID: B-7 6 inches
 WETLAB Sample ID: 0812291-013

Collect Date/Time: 12/30/2008 09:59
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	24	mg/kg	1.0	1/14/2009

Customer Sample ID: B-7 2 feet
 WETLAB Sample ID: 0812291-014

Collect Date/Time: 12/30/2008 10:01
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	1.5	mg/kg	0.10	1/14/2009

Customer Sample ID: B-8 6 inches
 WETLAB Sample ID: 0812291-015

Collect Date/Time: 12/30/2008 10:05
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	3.0	mg/kg	0.10	1/14/2009

Customer Sample ID: B-8 2 feet
 WETLAB Sample ID: 0812291-016

Collect Date/Time: 12/30/2008 10:07
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	1.1	mg/kg	0.10	1/14/2009

Customer Sample ID: B-9 6 inches
 WETLAB Sample ID: 0812291-017

Collect Date/Time: 12/30/2008 10:12
 Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	6.3	mg/kg	0.10	1/14/2009

Customer Sample ID: B-9 2 feet
WETLAB Sample ID: 0812291-018

Collect Date/Time: 12/30/2008 10:14
Receive Date: 12/30/2008 15:05

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	0.50	mg/kg	0.10	1/14/2009