Summary Report

Soil Gas Hydrocarbon Geochemical Survey

in the Bell Lake Area

Northwestern Ontario

May 11th – May 21st, 2011

Prepared for:

Ministry of Northern Development and Mines

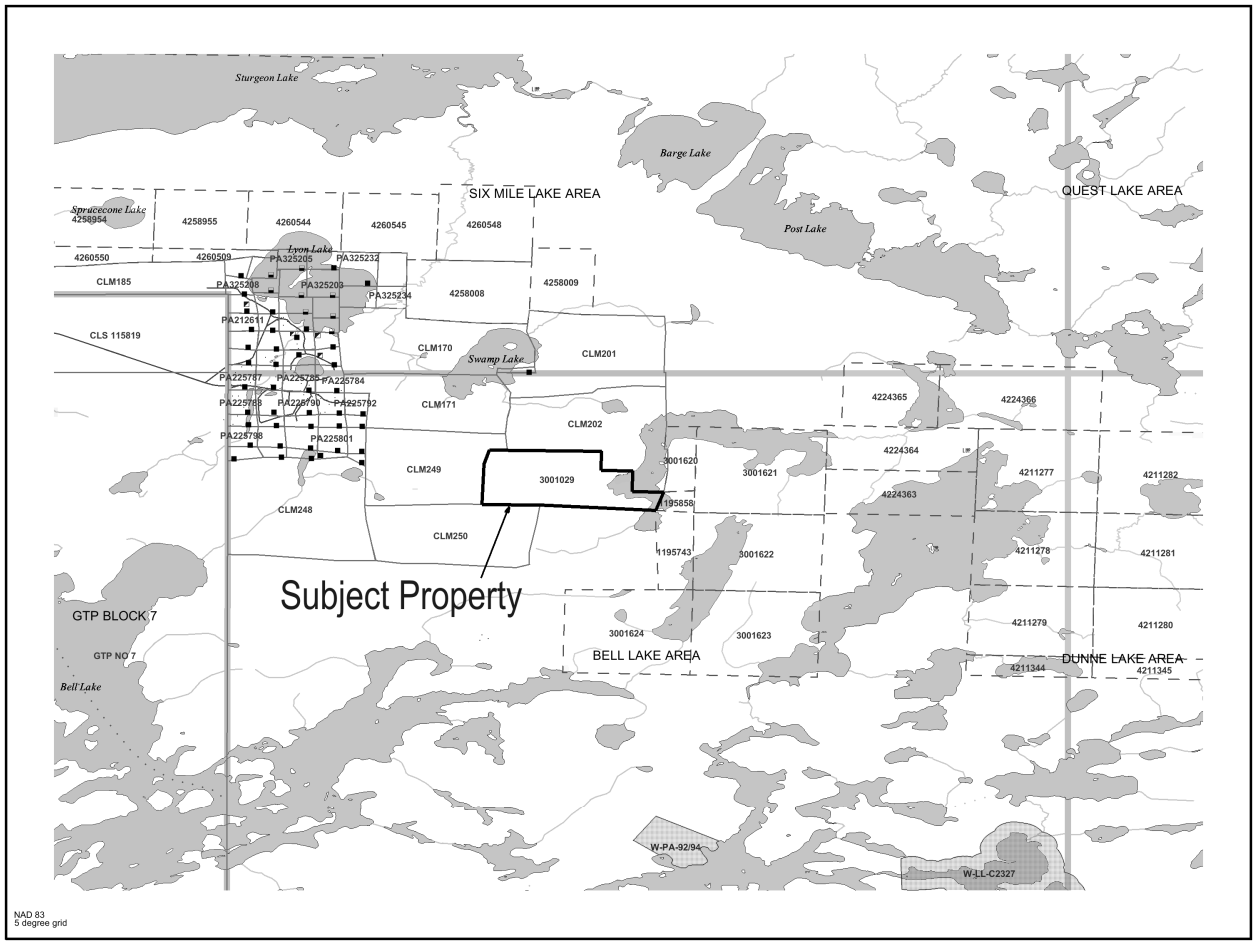
Submitted by:

3936449 Canada Incorporated

August, 2011

Table of Contents

0.5 KEY PLAN



1.0 INTRODUCTION

A Soil Gas Hydrocarbon geochemical soil survey undertaken on part of claim number 3001029 held by 3936449 Canada Incorporated in the Sturgeon Lake greenstone belt during the period of April 17 to April 19, 2011. All of the work was done on claim # 3001029.

2.0 LOCATION AND ACCESS

The claims (approx 49.855° north / 90.839° west) are located approximately 25 kilometers east of Provincial Road 599, south of Sturgeon Lake and west of Claw Lake. Access from the provincial highway was via the Mattabi Mine road system, and access to such was granted by Xstratzinc. From the paved and gravel road system the site itself was accessed by amphibious all terrain vehicle on two separate days.

3.0 PERSONNEL

For the entire period of the program in the field, Michael Bulatovich (MB), the company's Chief Operations Officer, was assisted by Hunter Fassett (HF) who acted as helper.

4.0 REGIONAL GEOLOGY – Claw Lake Area

The Claw Lake area is located with the Archean greenstone belt of the Wabigoon Subprovince. The rocks have been subject to greenschist to lower-amphibolite facies metamorphism and as such are referred to as metavolcanic and metasedimentary units. The area of the survey is underlain by altered felsic fragmentals, volcanics, tuffs and cherts. The balance of the claim is underlain by metavolcanic flows.

5.0 RATIONALE FOR THE WORK PERFORMED

1. Previous exploration, including drilling, on the property has indicated the presence of copper, zinc, gold and silver in the felsic rock units.
2. There is limited to no outcrop on the claim.
3. Modern geochemistry is capable of indicating mineralized zones with good edge definition and without being subject to the confusing intervention of glacial drift.

6.0 DAILY LOG

Wednesday May 11th, 2011

The author (MB) flew from Toronto to Thunder Bay, arriving at approximately 11 a.m. and, with a rented truck, gathered tools from the company's storage facility there and drove to accommodations at Cobb Bay Lodge ("the lodge"). MB arrived at the lodge around 5 p.m. local time.

Thursday May 12th- Monday May 16th, 2011

The crew worked on other properties not covered by this report.

Tuesday May 17th, 2011

The crew left the lodge at 8:00 a.m. with a conventional 6-wheel ATV on a trailer. The mine site gate was found locked, and the crew had to wait for someone to come along and open it, despite the fact that access had been prearranged. Past the gate, the crew progressed as far as it could with the truck, which was to a fork in the trail just west of Swamp Lake and approximately 2.5 kilometers from the claim boundary. The crew had been advised that the trail from that point on was going to be difficult to traverse so the crew walked along the trail for a distance of over 1.5 kilometer before concluding that the conventional ATV would not be able to get to the claim.

The crew packed up and withdrew from the area and travelled to Ignace where a 6-wheel amphibious ATV (Argo) was found for hire. The Argo was outfitted with tracks, put on a trailer, and the trailer was left at the side of the Mattabi Mine road just west of highway 599 overnight.

The crew then returned to the lodge by boat by 5:00 p.m.

Wednesday May 18th, 2011

The crew left the lodge at 8:00 a.m. by truck and picked up the Argo on the way to the site. A key had been provided to the gate, and the crew arrived at the northern boundary of the claim by 10:00 a.m. A total of 29 samples were collected 100 meters apart on two lines spaced at 100 meters. Navigation to the sample locations was via handheld GPS as no lines had been cut, and the terrain was generally low and flat.

The crew left the claim at 4:30 p.m. and left the Argo at the fork in the trail at Swamp Lake after extracting it from the mud on the trail with a winch attached to the truck's trailer hitch, and returned to the lodge by ATV by 6:30 p.m.

Thursday May 19th, 2011

The crew left the lodge at 7:30 a.m. by truck and switched to the Argo at the Swamp Lake fork. The crew arrived at the third line of sampling by 9:30 a.m. A total of 53 samples were collected 100 meters apart on seven lines spaced at 100 meters. Navigation to the sample locations was via handheld GPS and the Argo was used as a moving base of operations during the day for loops of survey that began and ended at it.

The crew left the claim at 6:30 p.m. and again had to spend some time extracting the Argo from mud in the trail near Swamp Lake after using the Argo's winch. The Argo was put back on the vehicle trailer at the fork, and the crew drove out of the mine area. Before reaching highway 599, the trailer encountered a problem with one of its wheels, so the vehicle was left for its owner at the Silver Dollar a few hundred meters south along the highway and the crew returned to the lodge by ATV by 7:30 p.m.

Friday May 20th, 2011

The crew worked on other properties not covered by this report.

Saturday May 21st, 2011

Monday was spent packing up all samples and equipment and driving back to Thunder Bay. The tools were put into storage, and the samples were delivered to Activation Labs. The rental truck was returned and MB flew back to Toronto, arriving in the evening.

7.0 SUPPLIMENTAL ANALYSIS

The first analytic report on the SGH survey, Appendix A, revealed a third redox cell between two others identified as VMS anomalies. After some discussion, Actlabs was contracted to subject the data to further analysis to see if this third redox cell conformed to any of the known 'pathfinders' identified with other types of mineralization. This supplemental analytic report, performed on the same sample set, is submitted as Appendix B.

This report was completed on August 25th, 2011 by Michael Bulatovich.

APPENDIX A

"SGH SURVEYS – COBB BAY AND MATTABI PROJECTS" July 8, 2011 Report by Activation Laboratories Ltd.

(Only the Mattabi Project sections of this report pertain to this submission.)

SGH – SOIL GAS HYDROCARBON
Predictive Geochemistry

for

3936449 CANADA INC.

"SGH SURVEYS – COBB BAY AND MATTABI PROJECTS"

July 8, 2011

** Dale Sutherland, Eric Hoffman*

Activation Laboratories Ltd

(* - author)

EVALUATION OF SGH DATA FROM "SOIL & SEDIMENT SAMPLES"

EXPLORATION FOR: "GOLD and/or VMS" TARGETS

Workorder: A11-4580

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

Table Of Contents

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

PREFACE

THIS "STANDARD" SGH INTERPRETATION REPORT:

The purpose of this Soil Gas Hydrocarbon (SGH) interpretation "Standard Report" is to ensure that clients and other potential reviewers of the results have a good understanding of this organic, deep penetrating geochemistry. As SGH provides such a large data set and is not interpreted in the same way as inorganic geochemistries, this report enables the user to realize the results in a timely fashion and capitalizes on years of research and development since the inception of SGH in 1976 combined with the knowledge obtained by Activation Laboratories through the interpretation of SGH data from over hundreds of surveys for a wide variety of target types in various lithologies from many geographical locations. The report is compulsory as it is the only known organic geochemistry that, in spite of the name, uses non-gaseous semi-volatile organic compounds interpreted using a forensic signature approach It is based solely on SGH data and does not include the consideration or interpretation from any other geochemistry (inorganic), geology or geophysics that may exist related to this survey area(s). This report can also provide evidence of project maintenance. To keep the price to a minimum and to provide as short a turnaround time as practically possible, usually only one SGH Pathfinder Class map is illustrated with an applied interpretation although several other SGH Pathfinder Class maps are used and referenced.

"BASIC GIS PACKAGE": ($ 80.00 CDN or USD)

Those clients that wish to import the SGH results into their GIS software can request a "Basic GIS Package", which will include the geo-referenced image files that reflect the mapped SGH Pathfinder Class or Classes contained in the "Standard Report" and an Excel CSV file containing the associated Class Sum data.

"SUPPLEMENTAL REPORT": ($ 1,500.00 CDN or USD –after July 1,2011)

Those clients who have determined that these SGH results will add an important aspect to their exploration effort can request a "Supplemental Report". This report contains the additional SGH Pathfinder Classes and an explanation of their use in the SGH interpretation that supports the applied "Rating" for the survey as a relative comparison to the results previously obtained in case studies that were used to create the SGH template for the general target type.

"SUPPLEMENTAL GIS PACKAGE": ($ 80.00 CDN or USD)

Those clients requesting a Supplemental Report may also request a Supplemental GIS Package that contains the geo-referenced image files and Excel CSV files of the Class Sum data for all of the SGH Pathfinder Class maps contained in the Supplemental Report.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SOIL GAS HYDROCARBON (SGH) GEOCHEMISTRY - OVERVIEW

SGH is a deep penetrating geochemistry that involves the analysis of surficial samples from over potential mineral or petroleum targets. The analysis involves the testing for 162 hydrocarbon compounds in the C5-C17 carbon series range applicable to a wide variety of sample types. SGH has been successful for delineating targets found at over 500 metres in depth. Samples of various media have been successfully analyzed such as soil (any horizon), drill core, rock, peat, lake-bottom sediments and even snow. The SGH analysis incorporates a very weak leach, essentially aqueous, that only extracts the surficial bound hydrocarbon compounds and those compounds in interstitial spaces around the sample particles. These are the hydrocarbons that have been mobilized from the target depth. SGH is unique and should not be confused with other hydrocarbon tests or traditional analyses that measure C1 (Methane) to C5 (Pentane) or other gases. SGH is also different from soil hydrocarbon tests that thermally extract or desorb all of the hydrocarbons from the whole soil sample. This test is less specific as it does not separate the hydrocarbons and thus does not identify or measure the responses as precisely. These tests also do not use a forensic approach to identification. The hydrocarbons in the SGH extract are separated by high resolution capillary column gas chromatography to isolate, confirm, and measure the presence of only the individual hydrocarbons that have been found to be of interest from initial research and development and from performance testing in two Canadian Mining Industry Research Organization (CAMIRO) projects (97E04 and 01E02).

Over the past 14 years of research, Activation Laboratories Ltd. has developed an in-depth understanding of the unique SGH signatures associated with different commodity targets. Using a forensic approach we have developed target signatures or templates for identification, and the understanding of the expected geochromatography that is exhibited by each class of SGH compounds. In 2004 we began to include an SGH interpretation report delivered with the data to enable our clients to realize the complete value and understanding of the SGH results in the shortest time frame and provide the benefit from past research sponsored by Actlabs, CAMIRO, OMET and other projects.

SGH has attracted the attention of a large number of Exploration companies. In the above mentioned research projects the sponsors have included (in no order): Western Mining Corporation, BHP-Billiton, Inco, Noranda, Outokumpu, Xstrata, Cameco, Cominco, Rio Algom, Alberta Geological Survey, Ontario Geological Survey, Manitoba Geological Survey and OMET. Further, beyond this research, Activation Laboratories Ltd. has interpreted the SGH data for over 400 targets from clients since January of 2004. In both CAMIRO research projects over known mineralization and in exploration projects over unknown targets, SGH has performed exceptionally well. As an example, in the first CAMIRO research project that commenced in 1997 (Project 97E04), there were 10 study areas that were submitted blindly to Actlabs. These study sites were selected since other inorganic geochemistries were unsuccessful at illustrating anomalies related to the target.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SOIL GAS HYDROCARBONS (SGH) GEOCHEMISTRY – OVERVIEW

Although Actlabs was only provided with the samples and their coordinates, SGH was able to locate the blind mineralization with exceptional accuracy in 9 of the 10 surveys. SGH has recently been very successful in exploration and discovery of unknown targets e.g. Golden Band Resources drilled an SGH anomaly and discovered a significant vein containing "visible" gold. (www.goldenbandresources.com)

Sample Type and Survey Design: It is highly recommended that a ***minimum*** of 50 sample "locations" is preferred to obtain enough samples into background areas on both sides of small suspected targets (wet gas plays, Kimberlite pipes, Uranium Breccia pipes, veins, etc.). SGH is not interpreted in the same way as inorganic based geochemistries. SGH must have enough samples over both the target and background areas in order to fully study the dispersion patterns or geochromatography of the SGH classes of compounds. Based on our minimum recommendation of at least 50 sample locations we further suggest that all samples be evenly spaced with about one-third of the samples over the target and one-third on each side of the target in order for SGH to be used for exploration. Targets other than gas plays, pipes, dykes or veins usually require additional samples to represent both the target and background areas.

SGH has been shown to be very robust to the use of different sample types even "within" the same survey or transect. Research has illustrated that it is far more important to the ultimate interpretation of the results to take a complete sample transect or grid than to skip samples due to different sample media. The most ideal natural sample is still believed to be soil from the "Upper B-Horizon", however excellent results can also be obtained from other soil horizons, humus, peat, lake-bottom sediments, and even snow. The sampling design is suggested to use evenly spaced samples from 15 metres to 200 metres and line spacing from 50 metres to 500 metres depending on the size and type of target. A 4:1 ratio is suggested, however, larger orientation surveys have also been successful. Ideally even large grids should have one-third of the samples over the target and two-thirds of the samples into anticipated background areas. This will allow the proper assessment of the SGH geochromatographic vectoring and background site signature levels with minimal bias. Individual samples taken at significant distances from the main survey area to represent background are not of value in the SGH interpretation as SGH results are not background subtracted. Samples can be drip dried in the field and do not need special preservation for shipping and has been specifically designed to avoid common contaminants from sample handling and shipping. SGH has also been shown to be robust to cultural activities even to the point that successful results and interpretation has been obtained from roadside right-of-ways.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SOIL GAS HYDROCARBONS (SGH) GEOCHEMISTRY – OVERVIEW

Sample Preparation and Analysis: Upon receipt at Activation Laboratories the samples are air-dried in isolated and dedicated environmentally controlled rooms set to 40°C. The dried samples are then sieved. In the sieving process, it is important that compressed air is not used to clean the sieves between samples as trace amounts of compressor oils "may" poison the samples and significantly affect some target signatures. At Activation Laboratories a vacuum is used to clean the sieve between each sample. The -60 mesh sieve fraction (<250 microns, although different mesh sizes can be used at the preference of the exploration geologist) is collected and packaged in a Kraft paper envelope and transported from our sample preparation building to our analytical building on the same street in Ancaster Ontario. Each sample is then extracted, separated by gas chromatography and analyzed by mass spectrometry using customized parameters enabling the highly specific detection of the 162 targeted hydrocarbons at a reporting limit of one part-per-trillion (ppt). This trace level limit of reporting is critical to the detection of these hydrocarbons that, through research, have been found to be related at least in part to the breakdown and release of hydrocarbons from the death phase of microbes directly interacting with a deposit at depth. The hydrocarbon signatures are directly linked to the deposit type which is used as a food source. The hydrocarbons that are mobilized and metabolized by the microbes are released in the death phase of each successive generation. Very few of the hydrocarbons measured are actually due to microbe cell structure, or hydrocarbons present or formed in the genesis of the deposit or from anthropogenic contamination. The results of the SGH analysis is reported in raw data form in an Excel spreadsheet as "semi-quantitative" concentrations without any additional statistical modification.

Mobilized Inorganic Geochemical Anomalies: It is important to note that SGH is essentially "blind**"** to any inorganic content in samples as only organic compounds as hydrocarbons are measured. Thus inorganic geochemical surface anomalies that have migrated away from the mineral source, and thus may be interpreted and found to be a false target location, is not detected and does not affect SGH results. This fact is of great advantage when comparing the SGH results to inorganic geochemical results. If there is agreement in the location of the anomalies between the organic and inorganic technique, such as Actlabs' Enzyme Leach, a significant increase in confidence in the target location can be realized. If there is no agreement or a shift in the location of the anomalies between the techniques, the inorganic anomaly may have been mobilized in the surficial environment.

The Nugget Effect: As SGH is "blind" to the inorganic content in the survey samples, any concern of a "nugget effect" will not be encountered with SGH data. A "nugget effect" may be of a concern for inorganic geochemistries from surveys over copper, gold, lead, nickel, etc. type targets.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SOIL GAS HYDROCARBONS (SGH) GEOCHEMISTRY – OVERVIEW

SGH Interpretation Report: All SGH submissions must be accompanied by relative or UTM coordinates so that we may ensure that the sample survey design is appropriate for use with SGH, and to provide an SGH interpretation with the results. In our interpretation procedure, we separate the results into 19 SGH sub-classes. These classes include specific alkanes, alkenes, thiophenes, aromatic, and polyaromatic compounds. Note that none of the SGH hydrocarbons are "gaseous" at room temperature and pressure. The classes are then evaluated in terms of their geochromatography and for coincident compound class anomalies that are unique to different types of mineralization. Actlabs uses a six point scale in assigning a subjective rating of similarity of the SGH signatures found in the submitted survey to signatures previously reviewed and researched from known case studies over the same commodity type. Also factored into this rating is the appropriateness of the survey and amount of data/sample locations that is available for interpretation. This rating scale is described in detail in the following section.

SGH RATING SYSTEM - DESCRIPTION

To date SGH has been found to be successful in the depiction of buried mineralization for Gold, Nickel, VMS, SEDEX, Uranium, Polymetallic, and Copper, as well as for Kimberlites. SGH data has developed into a dual exploration tool. From the interpretation, a vertical projection of the predicted location of the target can be made as well as a statement on the rating of the comparability of the identification of the anticipated target type to that from known case studies, as an example: if the client anticipates the target to be a Gold deposit, what is the rating or comparability that the target is similar to the SGH results over a Gold deposit in Nunavut, shear hosted and sediment hosted deposits in Nevada, or Paleochannel Gold mineralization in Western Australia.

- A rating of "6" is the highest or best rating, and means that the SGH classes most important to describing a Gold related hydrocarbon signature are all present and consistently vector to the same location with well defined anomalies. To obtain this rating there also needs to be other SGH classes that when mapped lend support to the predicted location.
- A rating of "5" means that the SGH classes most important to describing a Gold signature are all present and consistently describe the same location with well defined anomalies. The SGH signatures may not be strong enough to also develop additional supporting classes.
- A rating of "4" means that the SGH classes most important to describing a Gold signature are mostly present describing the location with well defined anomalies. Supporting classes may also be present.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH RATING SYSTEM - DESCRIPTION (continued)

- A rating of "3" means that the SGH classes most important to describing a Gold signature are mostly present and describe the same location with fairly well defined anomalies. Some supporting classes may or may not be present.
- A rating of "2" means that some of the SGH classes most important to describing a Gold signature are present but a predicted location is difficult to determine. Some supporting classes may be present
- A rating of "1" is the lowest rating, and means that one of the SGH classes most important to describing a Gold signature is present but a predicted location is difficult to determine. Supporting classes are also not helpful.
- The SGH rating is directly and significantly affected by the survey design. Small data sets, especially if significantly <50 sample locations, or transects/surveys that are geographically too short will automatically receive a lower rating no matter how impressive an SGH anomaly might be. When there is not enough sample locations to adequately review the SGH class geochromatography, or when the sample spacing is inadequate, or if the spacing is highly variable such that it biases the interpretation of the results, then the confidence in the interpretation of any geochemistry is adversely affected. The SGH rating is not just a rating of the agreement between the SGH pathfinder classes for a particular target type; it is a rating of the overall confidence in the SGH results from this particular survey. The interpretation is only based on the SGH results without any information from other geochemical, geological or geophysical information unless otherwise specified.

SGH RATING SYSTEM – HISTORY & UNDERSTANDING

The subjective SGH rating system has been used since 2004 when Activation Laboratories started providing an SGH Interpretation Report with ever submission for SGH analysis to aid our clients in understanding this organic geochemistry and ensuring that they obtain the best results for their surveys. As explained in the previous section, the SGH rating is not just a rating of how definitive an SGH anomaly is, and is not based just on the map(s) provided in this report. It is a rating of "confidence in the interpreted anomaly" from the combination of (i) are the expected SGH Pathfinder Classes of compounds present from the template for this target type (one Pathfinder Class map is shown in the report, at least three must be present to adequately describe the correct signature for a particular target), (ii) how well do these SGH Pathfinder Classes agree in describing an particular area, (iii) how well does this agreement compare to SGH case studies over known targets of that type, (iv) how well is the interpreted anomaly defined by the survey (i.e. a single

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

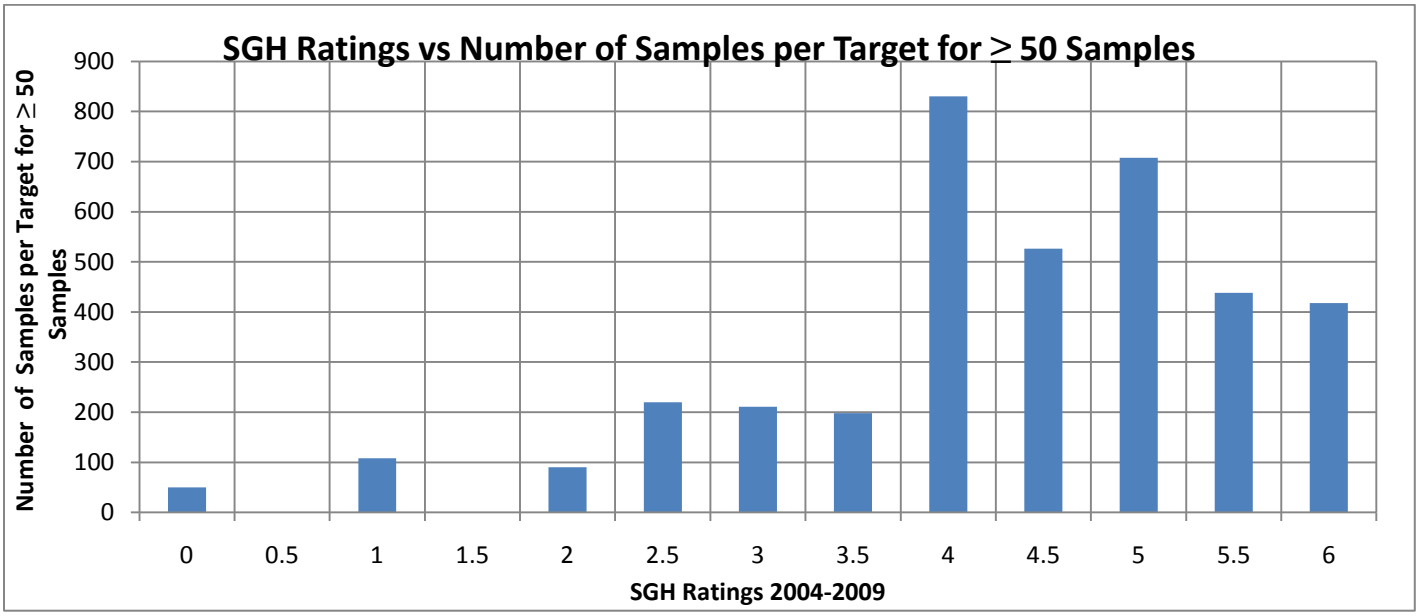
SGH RATING SYSTEM – HISTORY & UNDERSTANDING (cont.)

transect does not provide the same confidence as a complete grid of samples), and (v) is there at least a minimum of 50 sample locations in the survey so that there may be an adequate amount of data to observe the geochromatography of the different SGH Pathfinder Class of compounds.

The question often arises by clients as to the frequency of a rating, e.g. "how often is a rating of 5.0 given in an interpretation". To better understand this we present this review of the history of the SGH rating program since 2004 and some of the underlying situations that can affect the historical rating charts.

Originally it was recommended that a minimum of 35 sample location be used for small target exploration, however it was quite quickly realized that this is often insufficient and at least 50 sample locations were required. In 2007, the rating scale was refined to include increments of 0.5 units rather than just integer values from 0 to 6.

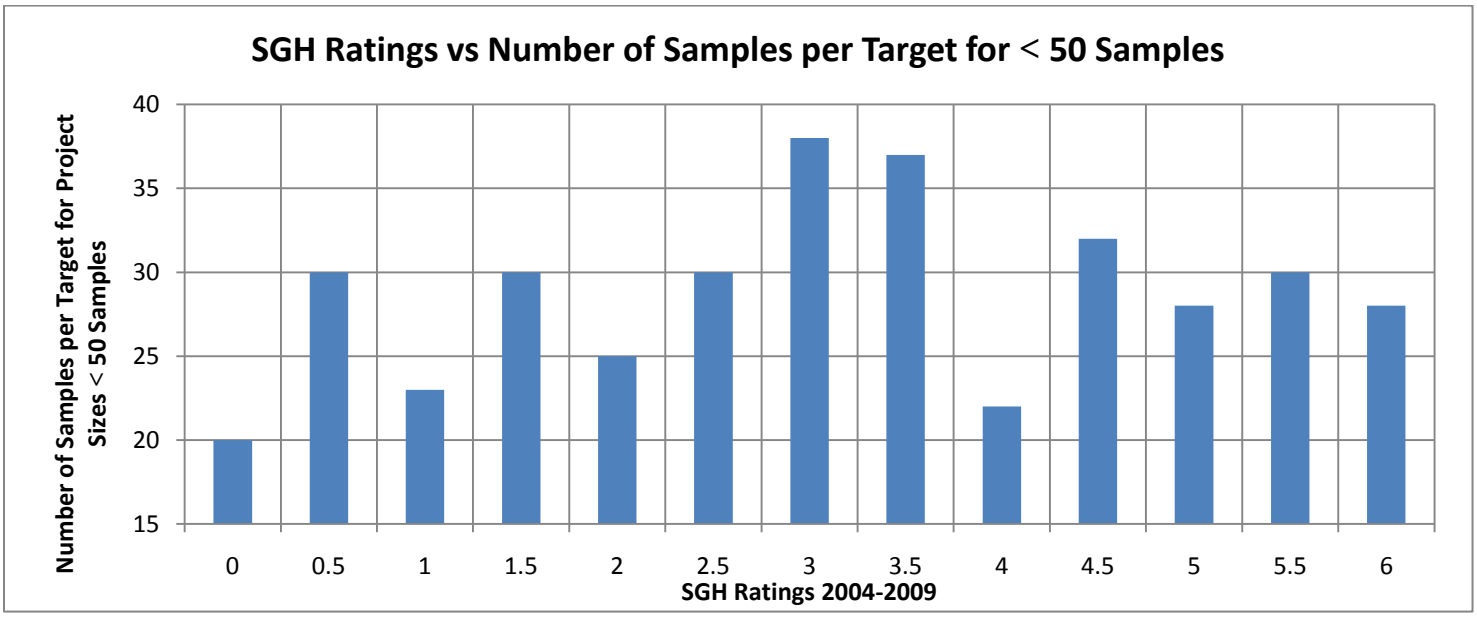
A rating frequency may be biased high as most clients conduct an orientation study over a known target, thus several of these projects result in high ratings. Note that, at this time, the rating is not said to be linked to grade of a deposit or depth to the target. Even in exploration surveys clients tend to submit samples over more promising targets due to knowledge of the geology and prior geochemical or geophysical results. As shown in the following chart, projects with SGH data from 200 or more sample locations have a higher level of confidence in the interpretation as the geochromatography of the SGH Pathfinder Classes of compounds can be more completely observed and reviewed.



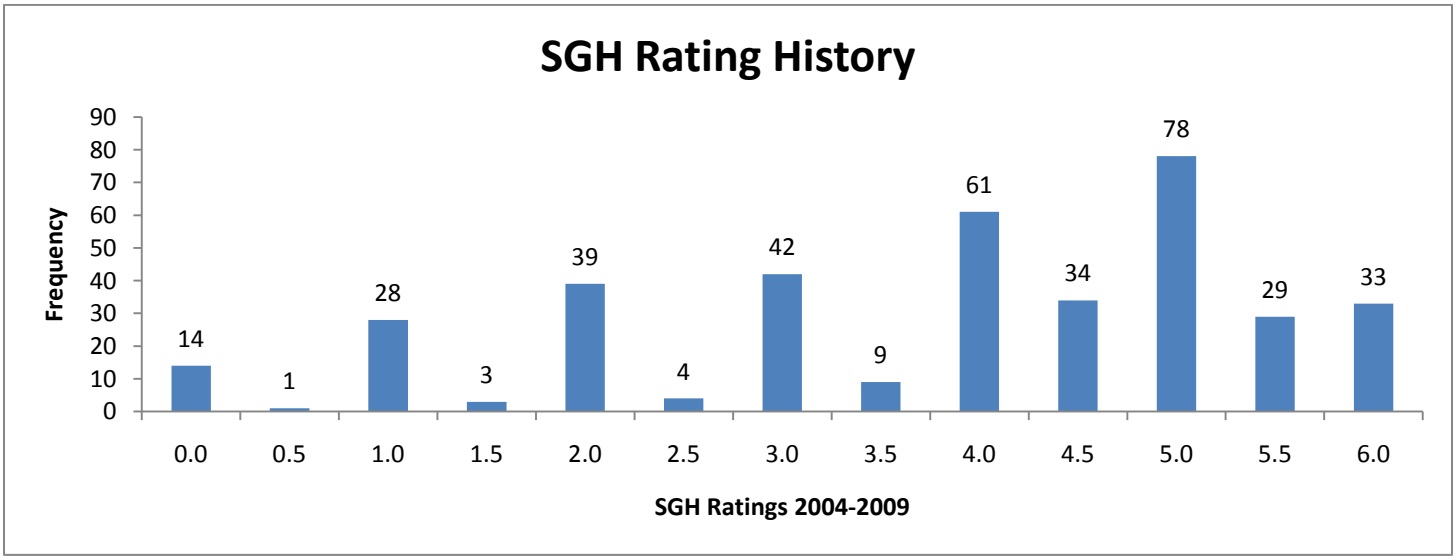
1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH RATING SYSTEM – HISTORY & UNDERSTANDING (cont.)

The rating frequency may be biased low as research projects often include a bare minimum of samples to reduce costs. Research projects may also be over targets known to be difficult to depict with geochemistry. Multiple targets in close vicinity in a survey may result in a low bias as the Pathfinder Class geochromatography is more difficult to deconvelute. Ratings may also be biased low if less than the recommended 50 sample locations is submitted as indicated by the following chart. This chart also illustrates that there is no interpretation bias to a particular rating value.



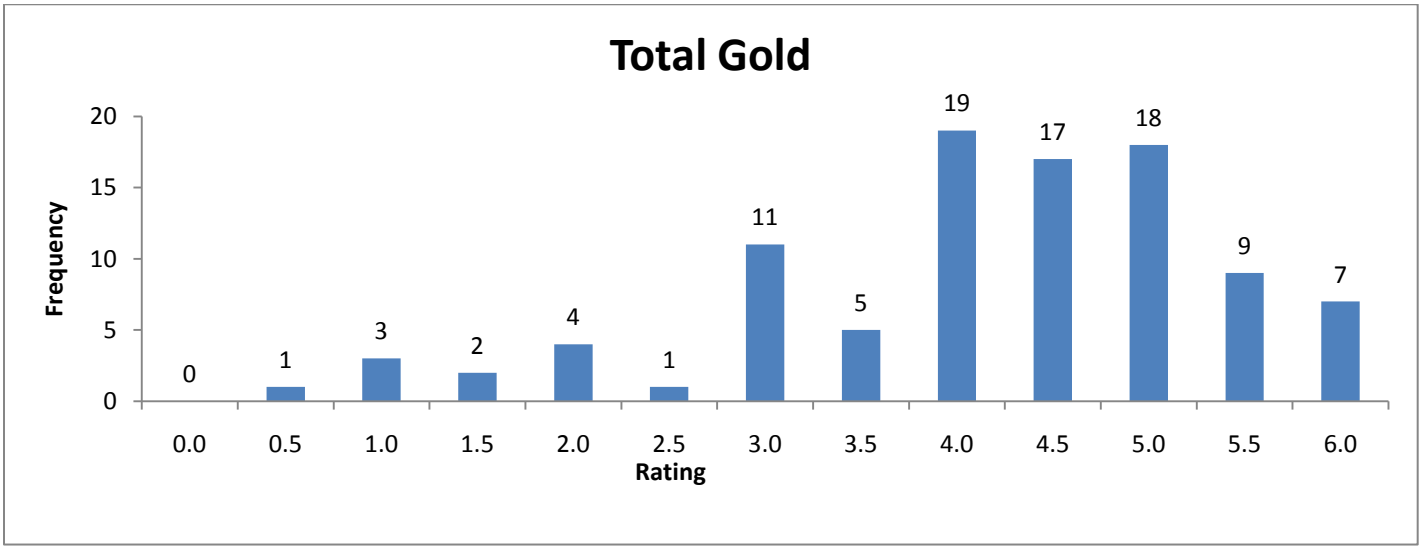
The overall rating frequency for over 400 targets from January 2004 to December 2009 is shown in the chart below illustrating that surveys over more promising targets are most often submitted for best use of research or exploration dollars. It also indicates that the 0.5 increments were less frequent as they started in 2007.



1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH RATING SYSTEM – HISTORY & UNDERSTANDING (cont.)

More specific for SGH interpretation for Gold targets, the overall rating frequency for 97 targets from January 2004 to December 2009 is shown in the chart below that also illustrates that surveys over more promising Gold targets are most often submitted for best use of research or exploration dollars.



SGH DATA QUALITY

- **Reporting Limit:** The SGH Excel spreadsheet of results contains the raw unaltered concentrations of the individual SGH compounds in units of "part-per-trillion" (ppt). The reporting of these ultra low levels is vital to the measurement of the small amounts of hydrocarbons now known to be leached/metabolized and subsequently released by dead bacteria that have been interacting with the ore at depth. To ensure that the data has a high level of confidence, a "reporting limit" is used. The reporting limit of 1 ppt actually represents a level of confidence of approximately 5 standard deviations where SGH data is assured to be "real" and non-zero. Thus in SGH the use of a reporting limit automatically removes site variability and there is no need to further background subtract any data as the reporting limit has already filtered out any site background effects. Thus we recommend that all data that is equal to or greater than 2 ppt should be used in any data review. It is important to review all SGH data as low values that may be the centre of halo anomalies and higher values as apical anomalies or as halo ridges are all important.

- **Laboratory Replicate Analysis:** A laboratory replicate is a sample taken randomly from the submitted survey being analyzed and are not unrelated samples taken from some large stockpile of bulk material. In the Organics laboratory an equal portion of this sieved sample, or pulp, is taken and analyzed in the same manner using the Gas Chromatography/Mass Spectrometer. The comparison of laboratory replicate and field duplicate results for chemical tests in the parts-per-million or even parts-per-billion range has typically

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH DATA QUALITY (continued)

been done using an absolute "relative percent difference (RPD)" statistic which is an easy proxy for error estimation rather than a more complete analysis of precision as specified by Thompson and Howarth. An RPD statistic is not appropriate for SGH results as the reporting limit for SGH is 1 part-per-trillion. Further, SGH is a semi-quantitative technique and was not designed to have the same level of precision as other less sensitive geochemistry's as it is only used as an exploration tool and not for any assay work. SGH is also designed to cover a wide range of organic compounds with an unprecedented 162 compounds being measured for each sample. In order to analyze such a wide molecular weight range of compounds, sacrifices were made to the variability especially in the low molecular weight range of the SGH analysis. The result is that the first fifteen SGH compounds in the Excel spreadsheet is expected to exhibit more imprecision than the other 147 compounds. An SGH laboratory replicate is a large set of data for comparison even for just a few pairs of analyses. Precision calculations using a Thompson and Howarth approach should only be used for estimating error in individual measurements, and not for describing the average error in a larger data set. In geochemical exploration geochemists seek concentration patterns to interpret and thus rigorous precision in individual samples is not required because the concentrations of many samples are interpreted collectively. For these reasons recent and independent research at Acadia University in Canada promote that a percent Coefficient of Variation (%CV) should be used as a universal measurement of relative error in all geochemical applications. As SGH results are a relatively large data set for nearly all submissions, %CV is a better statistic for use with SGH. By using %CV, the concentration of duplicate pairs is irrelevant because the units of concentration cancel out in the formation of the coefficient of variation ratio. For SGH, the %CV is calculated on all values ≥ 2 ppt. These values are averaged and represent a value for each pair of replicate analysis of the sample. All of the %CV values for the replicates are then averaged to report one %CV value to represent the overall estimate of the relative error in the laboratory sub-sampling from the prepared samples, and any instrumental variability, in the SGH data set for the survey. Actlabs' has successfully addressed the analytical challenge to minimize analytical variability for such a large list of compounds. Thus as SGH is also interpreted as a signature and is solely used for exploration and not assay measurement, the data from SGH is **"fit for purpose"** as a geochemical exploration tool.

- **Historical SGH Precision:** In the general history of geochemistry, studies indicate that a large component of total measurement error is introduced during the collection of the initial sample and in sub-sampling, and that only a subordinate amount of error in the result is introduced during preparation and analysis. A historical record encompassing many projects for SGH, including a wide variety of sample

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH DATA QUALITY (continued)

types, geology and geography, shows that the consistency and precision for the analysis of SGH is excellent with an overall precision of 6.8% Coefficient of Variation (%CV). When last calculated, this number has a range having a maximum of 12.4% CV, a minimum of 3.0% CV, with a standard deviation of 1.6%, in a population made up of over 400 targets (over 45,000 samples) interpreted since June of 2004. Again the precision of 6.8% CV included all of the sample types as soil from different horizons, peat, till, humus, lake-bottom sediments, ocean-bottom sediments, and even snow. When field duplicates have been revealed to us, we have found that the precision of the field duplicates are in the range of about 9 to 12 %CV. As SGH is interpreted using a combination of compounds as a chemical "class" or signature, the affect of a few concentrations that may be imprecise in a direct comparison of duplicates is not significant. Further, projects that have been re-sampled at different times or seasons are expected to have different SGH concentrations. The SGH anomalies may not be in exactly the same position or of the same intensity due to variable conditions that may have affected the dispersion of different pathfinder classes. However, the SGH "signature" as to the presence of the specific mix of SGH pathfinder classes will definitely still exist, and will retain the ability to identify the deposit type and vector to the same target location.

- **LABORATORY MATERIALS BLANK – QUALITY ASSURANCE (LMB-QA):**

The Laboratory Materials Blank Quality Assurance measurements (LMB-QA) shown in the SGH spreadsheet of results are matrix free blanks analyzed for SGH. These blanks are not standard laboratory blanks as they do not accurately reflect an amount expected to be from laboratory handling or laboratory conditions that may be present and affect the sample analysis result. The LMB-QA measurements are a pre-warning system to only detect any contamination originating from laboratory glassware, vials or caps. As there is no substrate to emulate the sample matrix, the full solvating power of the SGH leaching solution, effectively a water leach, is fully directed at the small surface area of the glassware, vials or caps. In a sample analysis the solvating power of the SGH leaching solution is distributed between the large sample surface area (from soil, humus, sediments, peat, till, etc.) and the relatively small contribution from the laboratory materials surfaces. The sample matrix also buffers the solvating or leaching effect in the sample versus the more vigourous leaching of the laboratory materials which do not experience this buffering effect. Thus the level of the LMB-QA reported is biased high relative to the sample concentration and the actual contribution of the laboratory reagents, equipment, handling, etc. to the values in samples is significantly lower. This situation in organic laboratory analysis only occurs at such extremely low part-per-trillion (ppt) measurement levels. This is one of the reasons that SGH uses a reporting limit and not a detection limit. The 1 ppt reporting limit used in the SGH spreadsheet of raw concentration data is 3 to 5

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH DATA QUALITY (continued)

times greater than a detection limit. The reporting limit automatically filters out analytical noise, the actual LMB-QA, and most of the sample survey site background. This has been proven as SGH values of 1 to 3 parts-per-trillion (ppt) have very often illustrated the outline of anomalies directly related to mineral targets. Thus all SGH values greater than or equal to 1 or 2 ppt should be used as reliable values for interpretations.

The LMB-QA values thus should not be used to background subtract any SGH data. The LMB-QA values are only an early warning as a quality assurance procedure to indicate the relative cleanliness of laboratory glassware, vials, caps, and the laboratory water supply at the ppt concentration level. Do not subtract the LMB-QA values from SGH sample data.

SGH DATA INTERPRETATION

- **GEOCHEMICAL ANOMALY THRESHOLD VALUE:**

In the interpretation of "inorganic" geochemical data one of the determinations to be made is to calculate a "Threshold" value above which data is considered anomalous. This is done on an element by element basis. In the interpretation of this "organic" geochemical data this determination is done differently. The determination of a threshold value is not calculated for each hydrocarbon compound. The determination of a threshold value is also a concentration below which geochemical data is considered as "noise" for the purposes of geochemical interpretation. As discussed on page 10, SGH uses a "Reporting Limit" instead of some type of Detection Limit. The amount of noise that is already eliminated in the data, as below the Reporting Limit of 1 part-per-trillion (shown in the data spreadsheet as "-1" as "not-detected at a Reporting Limit of 1 ppt") is equivalent to approximately 5 standard deviations of variability. To thus calculate an additional Threshold Value is a loss of real and valuable data. Further, in the interpretation of SGH data, individual compounds are not considered (unless explicitly mentioned in the report). The interpretation of SGH data is exclusively conducted by "compound chemical class" which is the sum of four to fourteen individual hydrocarbons in the same organic chemical class as these compounds naturally have the same chemical properties that ultimately define their spatial dispersion characteristics in their rise from a mineral target through the overburden. This combined class is more reliable than the measurement of any one compound. SGH also eliminates the need for a Threshold value determination above the Reporting Limit due to the "high specificity" of the specific hydrocarbons and the classes they form. Each of the hydrocarbons has been hand selected due to their lower probability of being found in general surface soils. Further, only those classes where the majority of the compounds are detected above the Reporting Limit are considered in the interpretation. This defines the SGH geochemistry as having less

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH DATA INTERPRETATION (continued)

GEOCHEMICAL ANOMALY THRESHOLD VALUE: (continued)

geochemical noise due to the use of a reporting limit and as having higher confidence in the use of groups (classes) of data instead of individual compounds. However the most important aspect of interpretation is the use of a forensic signature. At least three specific "Pathfinder" classes, based on the combinations or template of classes we have developed, must be present to define the hydrocarbon signature to confidently predict the presence of a specific type of mineral target. Do not calculate another Threshold value. FACT: It has been proven many times that important chemical anomalies can exist even at 5 ppt.

- **SGH PATHFINDER CLASS MAGNITUDE**:

  The magnitude of any individual concentration or that of a hydrocarbon class does not imply that the data is of more importance or that mineralization is of higher quantity or grade. SGH interpretation must use the review of the combination of specific hydrocarbon classes to make any interpretation.

- **SGH DATA LEVELING:**

  The combination of SGH data from different field sampling events has rarely required leveling in order to combine survey grids. The only circumstances that have occasionally required leveling has been the combination of samples that are very fine in texture, thus having a combined large surface area to samples of peat that may be in nearby areas. Even after maceration of the peat and in using the maximum size of sample amenable to this test method, peat samples have a significantly lower surface area. Peat samples have only required leveling in one survey in the last 500 SGH interpretations.

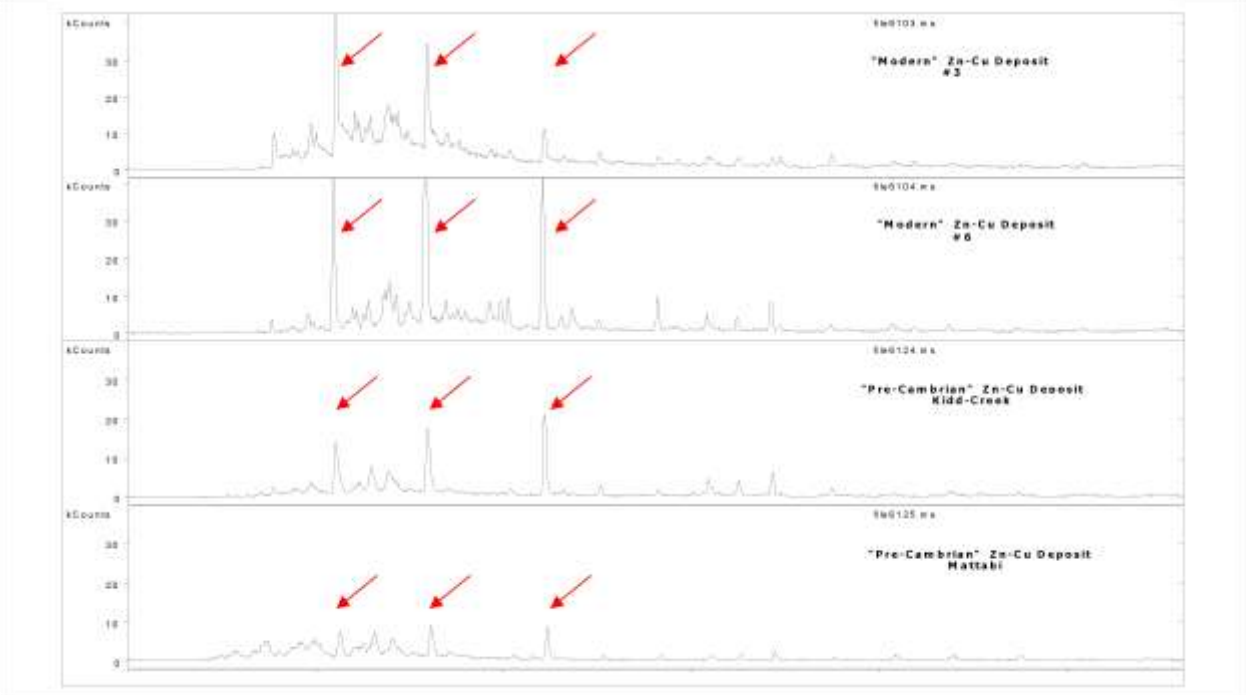
  In only the last year it has been observed that SGH data **may** require leveling when different field sampling events have significantly different soil temperature. It has been documented that only when "soil" samples are taken from "frozen" ground that data leveling may be required as frozen sample act as a frozen cap to the hydrocarbon flux and may collect a higher concentration of hydrocarbon compounds compared to sampling during seasons where the samples are not frozen. Only two surveys have required leveling in the last 500 SGH interpretations.

  The author has taken introductory training in the leveling of geochemical data. If leveling is required, both data sets are reviewed in terms of maximum, minimum and average values for each SGH Pathfinder Class intended for use in the interpretation. Data in sectioned into quartiles and each section is assigned specific leveling factors that is then applied to one data set. It should be noted that any type of data leveling is an approximation.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH – FORENSIC GEOCHEMICAL SIGNATURES

- One of the first experiments in 1996 in the development of the SGH analysis was to observe if an SGH response could be obtained directly from an ore sample. From office shelf specimens, small rock chips were obtained which were then crushed and milled. The fine pulp obtained was then subjected to the SGH analysis. These shelf specimen samples were from well known Volcanic Massive Sulphide deposits of the Mattabi deposit from the Archean Sturgeon Lake Camp in Northwestern Ontario and from the Kidd Creek Archean volcanic-hosted copper-zinc deposit. Even these specimen samples contain a geochemical record of the hydrocarbons produced by the bacteria that had been feeding on these deposits at depth. As a comparison, SGH analysis were similarly conducted on modern-day VMS ore samples taken from a "black smoker" hydrothermal volcanic vent from the deep sea bed of the Juan de Fuca Ridge where high concentrations of microbial growth was also known to exist. The raw data profiles as GC/MS Total Ion Chromatograms are shown below to illustrate the "visible" portion of the VMS signature obtained from the SGH analysis.

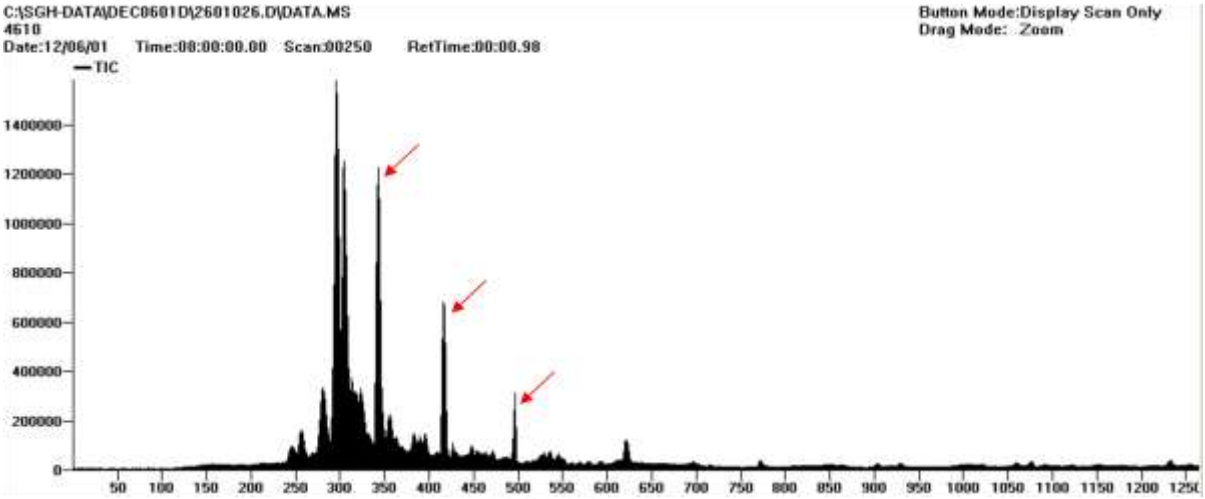


The top two profiles were obtained from two samples of the modern day "black smokers". The third and fourth chromatograms in the above image were obtained from the Pre-Cambrian Zn-Cu Kidd Creek and Mattabi deposits. The red arrows point to three compounds that are a portion of the SGH signature for VMS type deposits. This visible portion of the VMS signature of hydrocarbons can easily be seen in the analysis of each of these four samples.

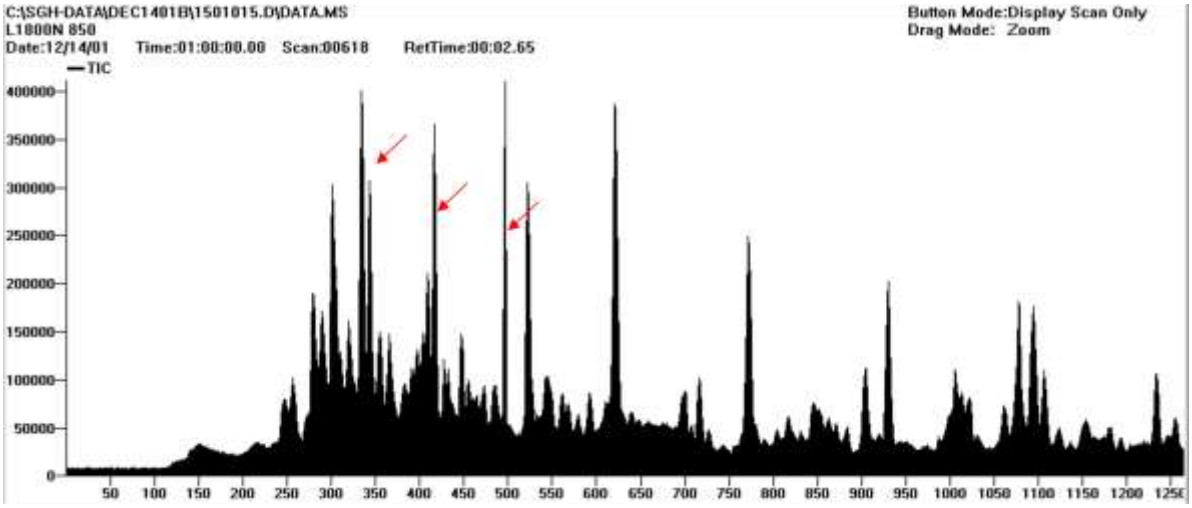
1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH – FORENSIC GEOCHEMICAL SIGNATURES (cont.)

The next question in our early objectives was to see if this SGH signature could also be observed in surficial soil samples that had been taken over VMS deposits. Through our research projects, soil samples were obtained from over the Ruttan Cu-Zn VMS deposit near Leaf Rapids, Manitoba and located in the Paleoproterozoic Rusty Lake greenstone belt. The profile obtained, as observed in the raw GC/MS chromatogram, is shown in this next image below:



The three compounds indicated by the red arrows represent the same visible portion of the VMS signature observed from the modern day black smoker samples and the ore samples taken from the Mattabi and Kidd Creek, even though this soil was taken from over a different VMS deposit in a geographically different area. Is this coincidence? Another soil sample was obtained from Noranda's Gilmour South base-metal occurrence in the Bathurst Mining camp in northern New Brunswick. As shown below, this sample contained a very complex SGH signature, however the visible portion of the VMS signature as indicated by the red arrows is still observed as in the black smoker, Mattabi and Kidd Creek ore samples.

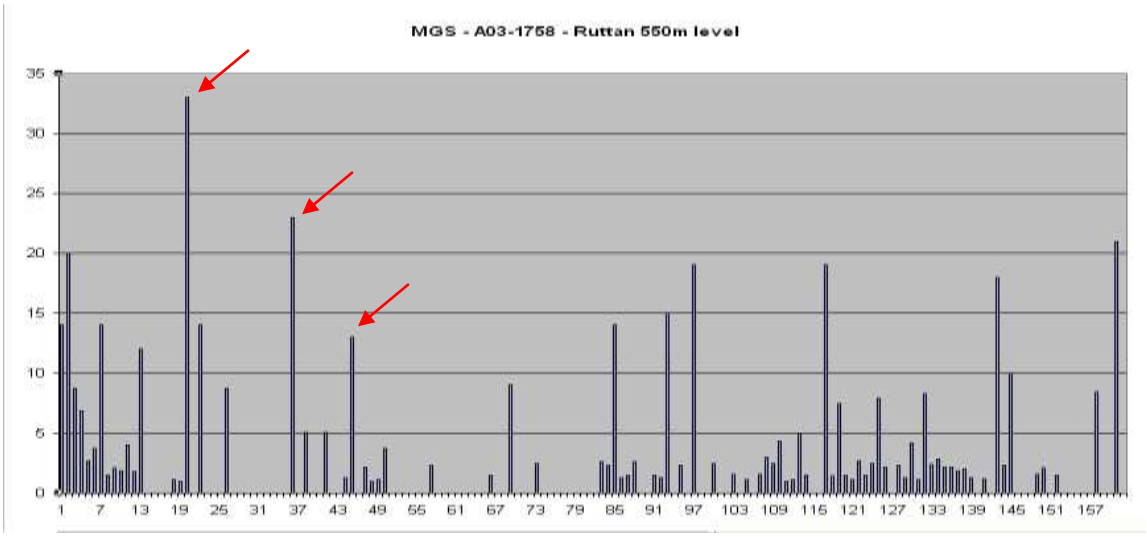


1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH – FORENSIC GEOCHEMICAL SIGNATURES (cont.)

In research conducted by the Ontario Geological Survey, this same portion of the SGH signature was also observed over the VMS deposit at Cross Lake in Ontario. Note that the visible signature shown as the three compounds indicated by the red arrows is only a small portion of the complete SGH VMS signature. The full VMS signature is made up of at least three groups, as three organic chemical classes, that together contain at least 35 of the individual SGH hydrocarbons.

The chromatograms shown on the preceding page from the GC/MS analysis are not used directly in the interpretation of SGH data. As we are only interested in a specific list of 162 hydrocarbons, the mass spectrometer and associated software programs specifically identifies the hydrocarbons of interest, runs calculations using relative responses to a short list of hydrocarbons used as standards, and develops an Excel spreadsheet of semi-quantitative concentration data to represent the sample. Thus the SGH results for a sample, like that observed in ore from the Ruttan, are filtered to obtain the concentrations for the specific 162 hydrocarbons. A simple bar graph drawn from the Excel spreadsheet of the hydrocarbons and their concentrations results in a DNA like **forensic SGH signature** as shown below. The portion discussed hear as the "visible" SGH VMS signature in the GC/MS chromatograms, is again shown by the red arrows.

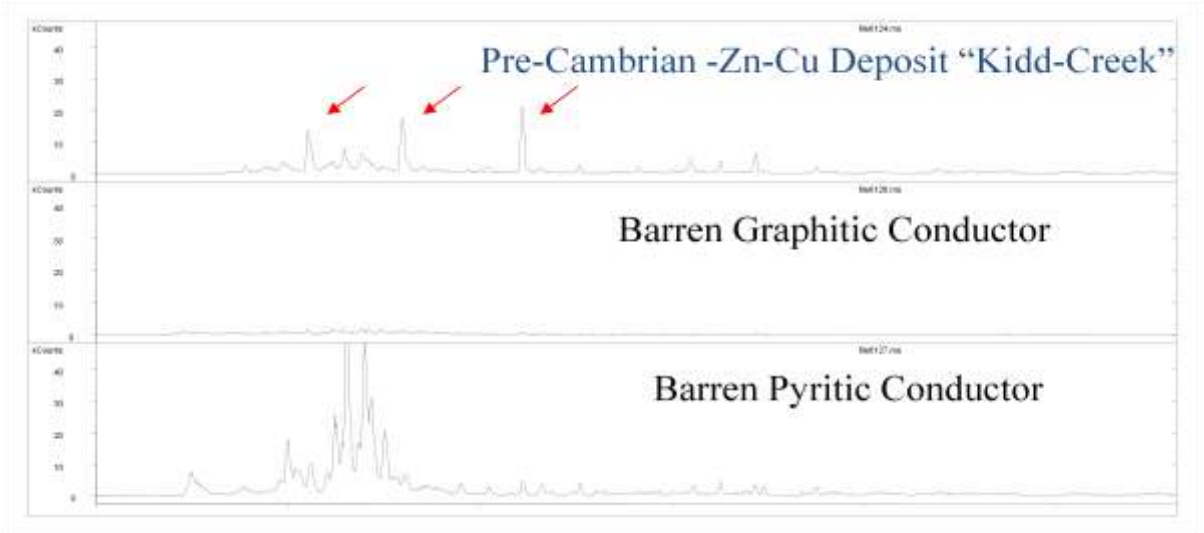


Through the work done in the SGH CAMIRO research projects, it was observed that the hydrocarbon signature produced by the SGH technique appeared to also be able to be used to differentiate barren from ore-bearing conductors. This was explored further through the submission and analysis of specific specimen samples that represented a barren pyritic conductor and a barren graphitic conductor.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH – FORENSIC GEOCHEMICAL SIGNATURES (cont.)

The GC/MS chromatograms from these two specimens are compared to that obtained from the Kidd-Creek ore as shown below. This diagram conclusively shows that the SGH signatures obtained from the two types of barren conductors are completely different than that obtained by SGH over VMS type ore. SGH is thus able to differentiate between ore-bearing conductors and barren conductors as the Forensic SGH Geochemical signature is different.



- SGH has been described by the Ontario Geological Survey of Canada (OGS) as a "REDOX cell locator". Many SGH surveys for Gold and other mineral targets can result in multiple types of anomalies, depending on the class of SGH compounds, even over the same target and in the same set of samples. Thus "Apical", "Nested-Halo", and "Rabbit-Ear" or "Halo" type SGH anomalies are all typically observed from the effect of REDOX cells that have developed over deposits. REDOX cells are also related to the presence of bacteriological activity.
- The VMS template of SGH Pathfinder Classes uses low and medium weight classes of hydrocarbon compounds. Again, at least three Pathfinder Class group maps, associated with the SGH signature for VMS, must be present to begin to be considered for assignment of a good rating. The Pathfinder Class anomalies in these maps must logically concur and support a consistent interpretation in relation to the expected geochromatographic characteristics of the Pathfinder Class, for a specific area.
- The interpretation development history shown here on pages 16-19 for VMS SGH Pathfinder Class map(s) shown in this report is similar to the development history for other target types. The reader should not draw a conclusion that SGH is used only for sulphide based mineralization as some of the most intense SGH anomaly have been associated with Kimberlites where sulphides are essentially not present.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH DATA INTERPRETATION

DISCLAIMER

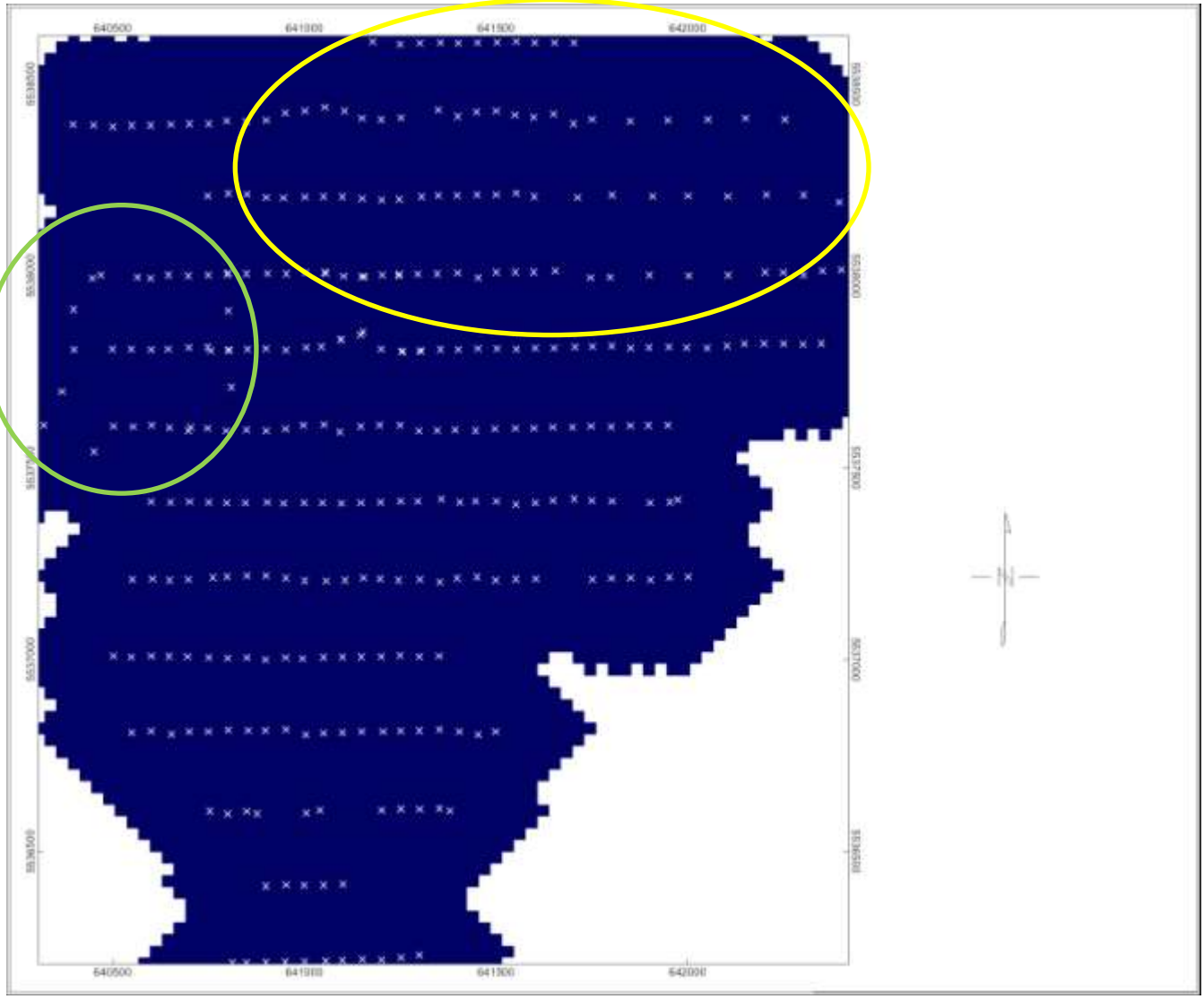
This "SGH Interpretation Report" has been prepared to assist the user in understanding the development and capabilities of this Organic based Geochemistry. The interpretation of the Soil Gas Hydrocarbon (SGH) data is in reference to a template or group of SGH classes of compounds specific to a type of mineralization or target that is chosen by the client (i.e. the template for gold, copper, VMS, uranium, etc.). Although the template of SGH Pathfinder Classes that has been developed through research and review of case studies has proven to be able to address many lithologies, Activation Laboratories Ltd. cannot guarantee that the template is applicable to every type of target in every type of environment. The interpretation in this report attempts to identify an anomaly that has the best SGH signature in the survey for the type of mineralization or target chosen by the client. However, this interpretation is not exhaustive and there may be additional SGH anomalies that may warrant interest and interpretation. It should not be viewed due to the generation of this SGH report, that Activation Laboratories Ltd. has the expertise or is in the business of interpreting geochemical data as a general service. As the author is the originator of the SGH geochemistry, has researched and developed this exploration tool since 1996, and has produced similar interpretations using SGH data for over 500 surveys, he is the best qualified to prepare this interpretation as assistance to clients who wish to use SGH. Also, any mention of a "drill target" is to help the reader focus on the specific anomaly or specific area of the survey where the SGH geochemical data vectors to and implies the best spatial location as a vertical projection over the centre of the mineralization if present. The author and/or Activation Laboratories has no professional expertise in drilling techniques to explore and drill any of the targets or anomalies mentioned. Activation Laboratories Ltd. can offer assistance in general suggestions for sampling protocols and in initial sample grid location design; however we accept no responsibility to the appropriateness of the samples taken. Activation Laboratories Ltd. has made every attempt to ensure the accuracy and reliability of the information provided in this report. Activation Laboratories Ltd. or its employees, does not accept any responsibility or liability for the accuracy, content, completeness, legality, or reliability of the information or description of processes contained in this report. The information is provided "as is" without a guarantee of any kind in the interpretation or use of the results of the SGH geochemistry. The client or user accepts all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly form using any information or material contained in this report.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH SURVEY INTERPRETATION

- This report is based on the SGH results from the analysis of 35 samples (27 infill samples plus 8 samples taken for potential leveling purposes) that were received on May 27th in our Ancaster, Ontario labs. These additional infill samples, within the green oval area, were combined with 42 lake-bottom sediment infill samples reported on May 9, 2011 (our workorder A11-2779) from within the yellow oval area, which have been combined with the 233 samples (our workorder A10-7405) previously analyzed from locations at the Cobb Bay survey (map shown below) which were originally reported on November 23, 2010. About 12 parallel east-west trending sample lines or transects were used to survey this area. Transects were about 200 metres apart with samples spaced at approximately 50 metres.



1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

- The number of samples submitted for this project is adequate to use SGH as an exploration tool. Note that the SGH data is only reviewed for the particular target deposit type requested, in this case for the presence of VMS and Gold based mineralization. It is also assumed that there are no overlapping targets. To obtain the best interpretation the client should indicate if there are geographically very close multiple targets, say from geophysical data. The possibility of multiple targets "in close proximity" should be known due to potential overlap and increased complexity of resulting geochromatographic anomalies which could alter the interpretation.

- Note that the associated SGH results for these 35 additional infill samples are presented in a separate Excel spreadsheet. This raw data is semi-quantitative and is presented in units of picograms/ gram (pg/g) or parts-per-trillion (ppt) as the concentration of specific hydrocarbons in each sample and was combined without any leveling factors with the original data from the 233 + 42 samples reported on May 9, 2011.

SGH SURVEY INTERPRETATION

- **The overall precision of the SGH analysis for these 35 Cobb Bay samples was excellent** as demonstrated by 3 samples used for laboratory replicate analysis. The average Coefficient of Variation (%CV) of the replicate results was 4.5% CV. This represents an excellent level of analytical performance especially at the low parts-per-trillion (ppt) scale of measurements in the SGH geochemistry. Field duplicates were not identified in this project.

- SGH has been observed to reflect the presence of a REDOX cell. SGH is described by the Ontario Geological Survey of Canada (OGS) as a "REDOX cell locator". Many SGH surveys for Gold and other mineral targets can result in multiple types of anomalies, depending on the class of SGH compounds, even over the same target and in the same set of samples. Thus "Apical", "Nested-Halo", and "Rabbit-Ear" or "Halo" type anomalies are all typically observed from the effect of REDOX cells that have developed over deposits. REDOX cells are also related to the presence of bacteriological activity.

- Note that SGH is "blind" to the presence of inorganic elements that may represent mobilized anomalies.

- SGH results have also been shown to correlate well with geophysical anomalies such as magnetic anomalies and those of CSAMT.

- The client provided the UTM coordinates in WGS84 datum and verified the complete survey orientation prior to the original report.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH SURVEY INTERPRETATION – VMS PATHFINDER CLASS MAPS – Pages 24 and 25

- The maps shown on page 25 in plan view and page 26 in 3D view, represent the results obtained from the original Cobb Bay samples combined with the two sets of infill samples, and are SGH "Pathfinder Class maps" for targeting **VMS** mineralization. Each SGH Pathfinder Class map represents the simple summation of several individual hydrocarbon compound concentrations, which are grouped from within the same organic chemical class, that have been associated with VMS mineralization from several years of case study research. This VMS Pathfinder Class map is different than the Pathfinder Class map associated with Gold mineralization that is shown on pages 30 and 31. SGH Pathfinder Class maps have been shown to be robust as they are each described using from 4 to 14 (unless otherwise stated) chemically related SGH compounds which are simply summed to create each class map. Thus each map has a higher level of confidence as it is not illustrating just one compound response. A legend of the compound classes appears at the bottom of the SGH data spreadsheet.

- The overall SGH interpretation Rating has even a higher level of confidence as it further relies on the consensus between at least two additional SGH VMS Pathfinder classes (not shown in this report) that together make the signature of the target at depth.

- The VMS template of SGH Pathfinder Classes uses low and medium weight classes of hydrocarbon compounds. At least three Pathfinder Class maps, associated with the SGH signature for VMS must be present to begin to be considered for assignment of a good rating. Only one SGH VMS Pathfinder Class map has been shown in this report to keep the SGH price as reasonable as possible. The Pathfinder Class anomalies must also concur and support a consistent interpretation, in relation to the expected geochromatographic characteristics of the Pathfinder Class, for a specific area. This map is part of the general SGH VMS template that has been shown to be applicable to Kuroko type massive sulphide, and other VMS related types of deposits. The Pathfinder Class map on page 25 is just one map that is diagnostic for the presence of VMS based mineralization.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH SURVEY "VMS" INTERPRETATION

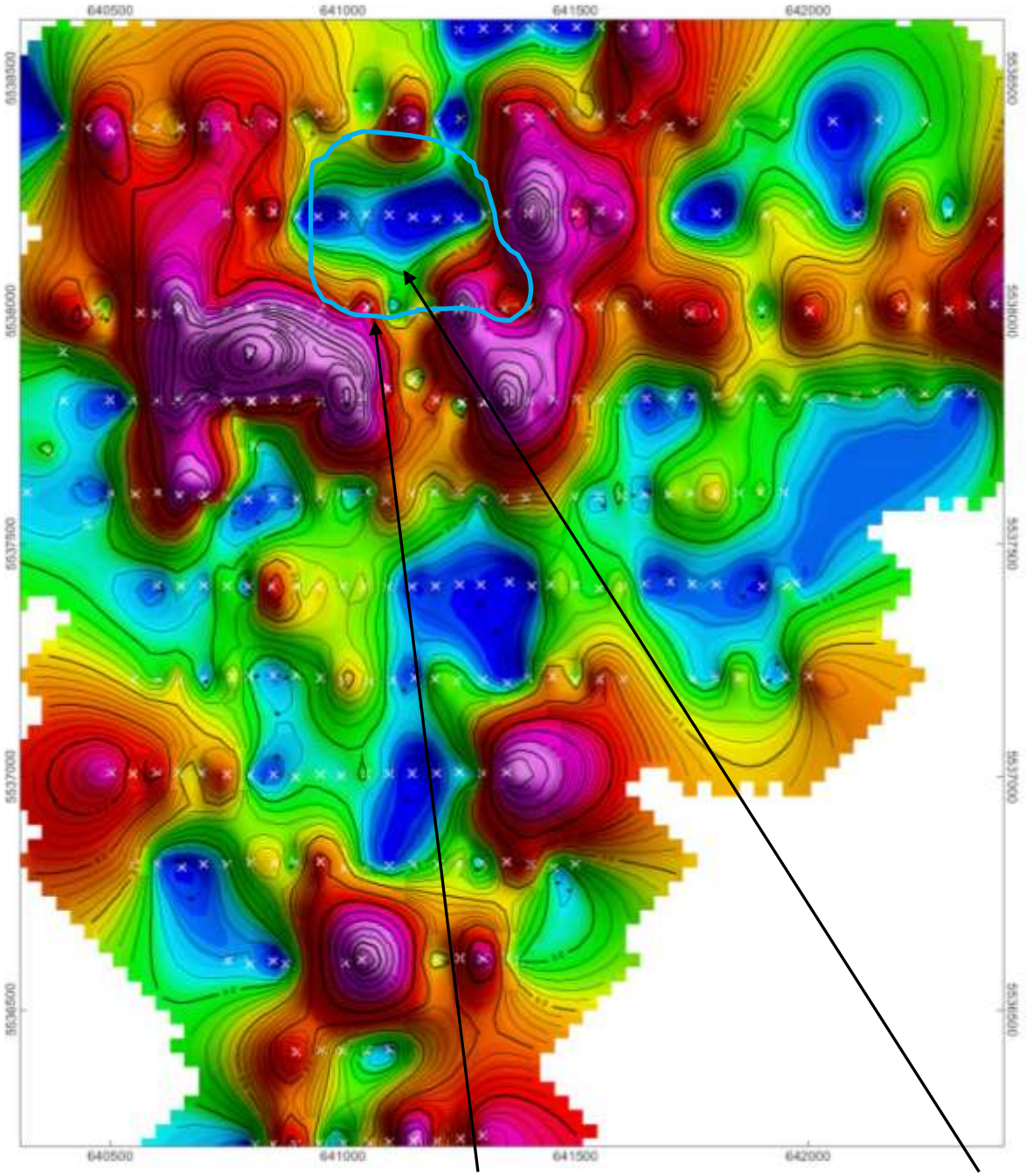
- SGH responses are affected by the presence of REDOX cell conditions in the overburden and are related to bacteriological activity as biofilms in contact with the deposit. In the case of VMS deposits the theory is that sulphide reducing bacteria thrive on the ore body and these processes develop strong REDOX conditions that are formed in the overburden. Note that SGH is not specifically a sulphide detector as some of the strongest SGH responses have shown REDOX conditions over Kimberlite Pipes that are not associated with the presence of sulphides. The SGH VMS Pathfinder map on page 25 is of a class of compounds that is reliable and expected to form a halo type anomaly over VMS mineralization. This is the same class of compounds as was used in the original report. This map appeared to again illustrate an excellent halo anomaly as in the original report of November 23, 2010. The blue outline as the interpretation of the boundary of the REDOX conditions in the overburden is applied to the SGH Pathfinder Class map on page 25. This outline also encircled an area where no samples were originally collected. The two sets of infill samples have not resulted in a change to the interpretation but has increased the confidence in the interpretation. As previously mentioned, other SGH Pathfinder Classes (not shown in these reports) together define the VMS SGH signature and confirm the possible presence of VMS style mineralization "***within***" the light blue oval as the inner edge of a REDOX cell in the overburden. Again, each SGH Pathfinder Class map is the plot of the simple summation of several of the hydrocarbons in one of the chemical classes, from the Excel spreadsheet of results, which have been associated with VMS deposits.

- This infill data was reviewed as to whether data leveling was required as the method of sample collection was slightly different. It was found that the data for these in-fill samples was slightly different as expected. As the interpretation of a signature using multiple compounds that make up the pathfinder class of compound, these differences were smoothed out. A review of the combined data indicated that data leveling was not required as it did not appreciably affect the anomalies previously reported. Thus all data, including those samples potentially for use in leveling was included in the mapping routine. The 8 samples for leveling were automatically averaged by the GeoSoft mapping algorithms. These additional infill samples have extended the data to the east and have slightly modified the SGH interpretation for Gold to be discussed next.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH "VMS" PATHFINDER CLASS MAP

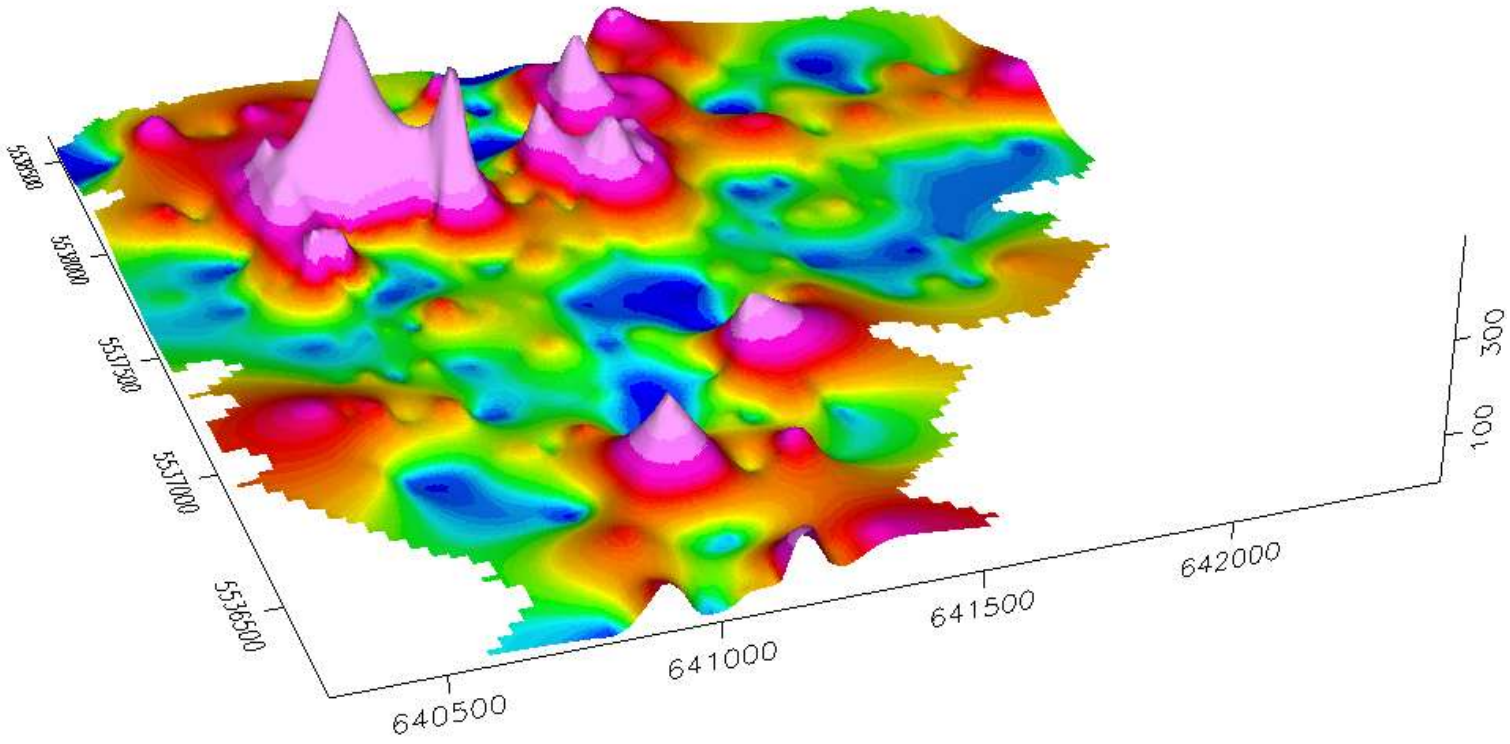


GEOSOFT.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH "VMS" PATHFINDER CLASS MAP



GEOSOFT.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH SURVEY INTERPRETATION RATING FOR PRESENCE OF "VMS" MINERALIZATION

- After review of all of the SGH Pathfinder Class maps developed from the samples collected in October 2010 combined with both sets of infill samples, the SGH results continues to suggest a **"rating of 6.0"** for the area within the solid blue oval outline in relation to the presence of a VMS based target. This rating is subjective and is based on a scale of 6.0, in increments of 0.5, with a value of 6.0 being the best. This rating represents the similarity of these SGH results with case studies over Volcanic Massive Sulphide (VMS) type targets from SGH case studies conducted at the Hanson Lake VMS deposit in Saskatchewan, the South Gilmour VMS deposit in New Brunswick and the Cross Lake VMS deposit in Ontario. The degree of confidence in the rating only starts to be "good" at a level of 4.0.

- The location shown as a drill target on the map on page 24 that has been moved slightly to the south due to the effect of these infill samples is the centre of the halo anomaly illustrating the REDOX cell response. As per the previous report, this represents the best vertical spatial projection of the location of potentially a VMS mineral deposit at some unknown depth, as a drill target at this "Cobb Bay" survey. This REDOX outline is still believed to be a valid estimation however the drill target location has been slightly altered. The interpretation is now better confirmed based on these additional infill samples and a review of the survey as a whole.

- The identification of a drill target is not an explicit recommendation to drill test the associated SGH anomaly. A drill target is indicated to ensure that the reader is aware of the location having the highest confidence of being the centre of a REDOX cell and thus the vertical projection of the portion of the target that has the most effect of creating the strongest oxidation-reduction conditions in the overburden. We believe that, as a vertical projection, it is the location of the highest confidence in intersecting the target mineralization. This location is identified only through the use of SGH data. Other geological, geochemical and/or geophysical information should always be considered. This is also not a recommendation for vertical drilling or that vertical drilling would be the best approach to explore this mineralization at this location. Activation Laboratories Ltd. has no experience in actual exploration drilling.

- Again, this interpretation is based only on the interpretation of this SGH data.

- The client should use a combination of these SGH results and its report with additional geochemical, geophysical, and geological information to possibly obtain a more confident and precise target location.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH SURVEY INTERPRETATION – GOLD PATHFINDER CLASS MAPS – Pages 29 and 30

- The map shown on page 30 in plan view, and on page 31 in 3D view, represent the results obtained from the Cobb Bay samples and are SGH "Pathfinder Class maps" for targeting **Gold** mineralization. Each SGH Pathfinder Class map represents the simple summation of several individual hydrocarbon compound concentrations, which are grouped from within the same organic chemical class, which has been associated with Gold mineralization from several years of case study research. This Gold Pathfinder Class map is different than the Pathfinder Class map associated with VMS mineralization that is shown on pages 25 and 26. It is the same pathfinder class as has been previously reported. SGH Pathfinder Class maps have been shown to be robust as they are each described using from 4 to 14 (unless otherwise stated) chemically related SGH compounds which are simply summed to create each class map. Thus each map has a higher level of confidence as it is not illustrating just one compound response. A legend of the compound classes appears at the bottom of the SGH data spreadsheet.
- The overall SGH interpretation Rating has even a higher level of confidence as it further relies on the consensus between at least two additional SGH Gold Pathfinder classes (not shown in this report) that together make the signature of the target at depth.
- The Gold template of SGH Pathfinder Classes also uses low and medium weight classes of hydrocarbon compounds. At least three Pathfinder Class maps, associated with the SGH signature for Gold must be present to begin to be considered for assignment of a good rating. Only one SGH Gold Pathfinder Class map has been shown in this report to keep the SGH price as reasonable as possible. The Pathfinder Class anomalies must also concur and support a consistent interpretation, in relation to the expected geochromatographic characteristics of the Pathfinder Class, for a specific area. This map is part of the general SGH Gold template that has been shown to be applicable to a very wide range of lithologies of Gold based deposits. The Pathfinder Class map on page 30 is just one map that is diagnostic for the presence of Gold based mineralization.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH SURVEY "GOLD" INTERPRETATION

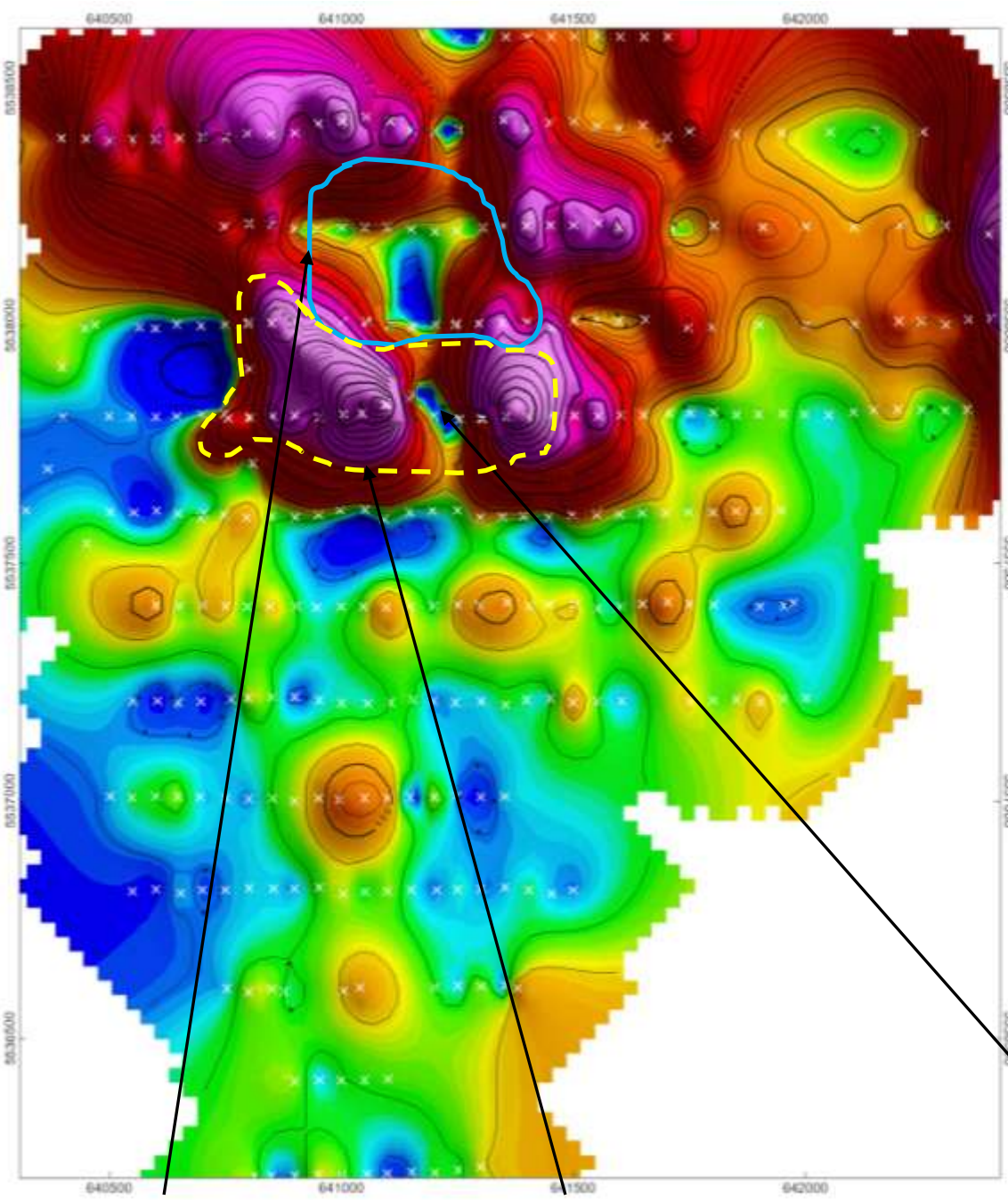
- SGH responses are affected by the presence of REDOX cell conditions in the overburden and are related to bacteriological activity as biofilms in contact with the deposit. In the case of Gold deposits the theory is that sulphide reducing bacteria thrive on the ore body and synthesize specific organic hydrocarbons that define a signature associated with the gold deposit. It has been found that the most prominent compounds that are synthesized by bacteria feeding on Gold deposits are easily transported through the overburden and develop apical SGH anomalies. The SGH Gold Pathfinder Class map on page 30 is the class of compounds that is reliable and expected to form this apical type anomaly for over Gold mineralization. This pathfinder class map is the same one as previously reported to illustrate an excellent apical anomaly. The additional two sets of infill samples submitted have been valuable and have modified the interpretation of the SGH data relative to the presence of Gold. The outlined boundary of this apical anomaly has been shown with the same dashed yellow outline on the SGH Pathfinder Class map on page 30 as previously reported. Note that SGH data does not exhibit "platform" type apical anomalies. This anomaly is now shown to be slightly large from the inclusion of the latest submission of infill samples. Other SGH Pathfinder Classes (not shown in this report) also illustrate this split nature which reduces the confidence in the interpretation as to the possible presence of Gold style mineralization "***within***" the yellow dashed outline. Again, each SGH Pathfinder Class map is the plot of the simple summation of several of the hydrocarbons in one of the chemical classes, from the Excel spreadsheet of results, which have been associated with Gold mineralization.

- The interpretation for the presence of an SGH Gold signature is shown on the SGH Pathfinder Class map on page 30 which is based on previous case studies for Gold. This Pathfinder Class map is expected to illustrate apical anomalies over Gold mineralization. The apical response on page 30, encircled with a dashed yellow outline, flanks the southern portion of the VMS dispersion halo anomaly shown on page 25. It is still believed that any Gold mineralization may be very deep. This type of flanking mineralization has been documented before in a similar fashion using this SGH geochemistry. Note that the positioning of these interpreted areas is approximate and is directly influenced by the sample survey design.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH *"GOLD"* PATHFINDER CLASS MAP

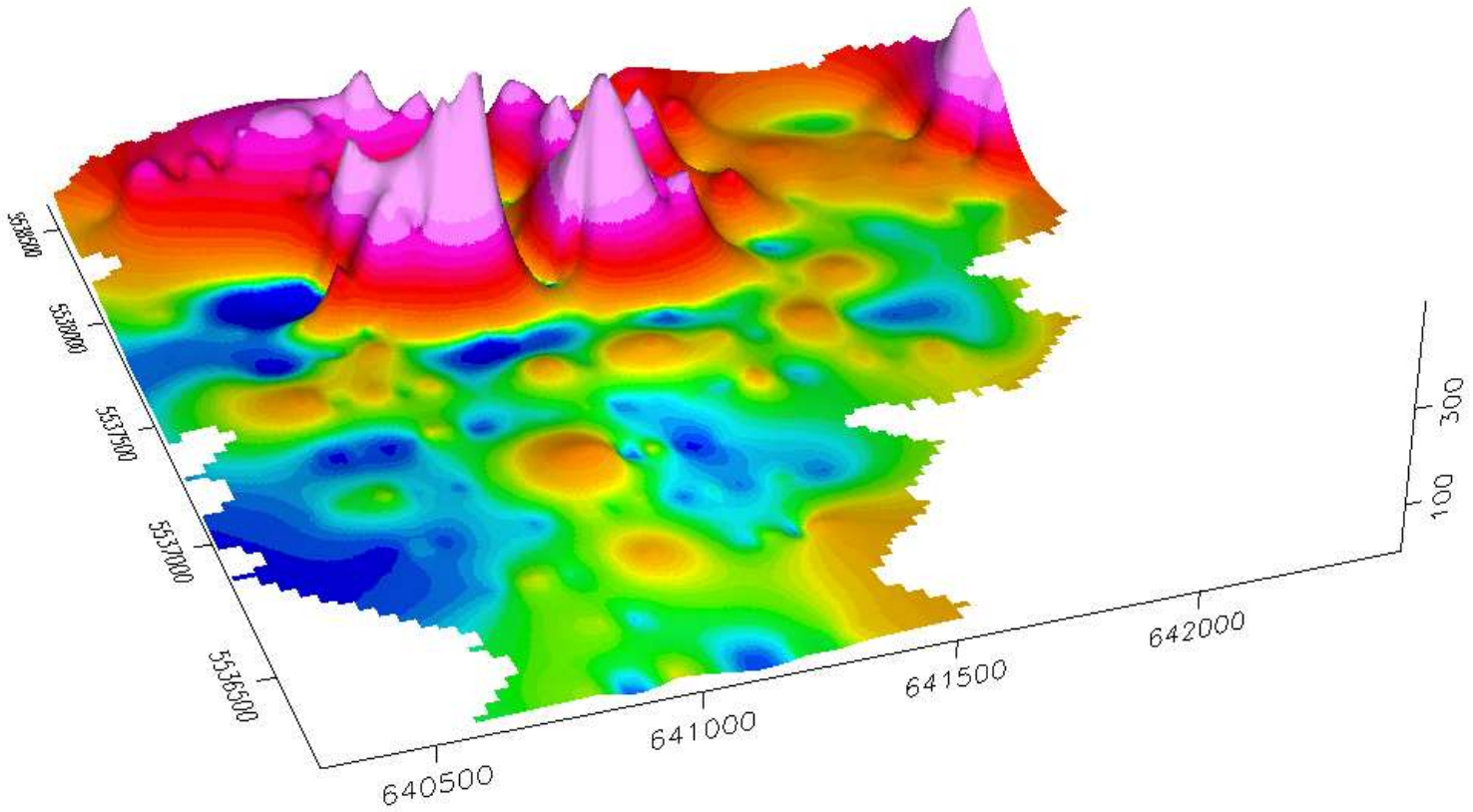


SGH VMS – Halo Anomaly **SGH GOLD – Apical Anomaly** **Potential SGH GOLD – Drill Target**

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH *"GOLD"* PATHFINDER CLASS MAP



GEOSOFT.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – COMPLETE COBB BAY SGH SURVEY

SGH SURVEY INTERPRETATION RATING

- After review of all of the SGH Pathfinder Class maps developed from the samples collected in October 2010 combined with the infill samples in this work order, the SGH results now suggest a reduced **"rating of 3.5"** for the area within the dashed yellow outline in relation to the presence of a Gold based target. This rating is subjective and is based on a scale of 6.0, in increments of 0.5, with a value of 6.0 being the best. This rating represents for this site, the similarity of these SGH results primarily to case studies for Gold in Nunavut, shear hosted as well as sediment hosted deposits in Nevada, and Paleochannel Gold deposits in Australia. The degree of confidence in these ratings only starts to be "good" at a level of 4.0. This interpretation is based only on the interpretation of this SGH data.

- The location shown on the map on page 30, as the central area between the split anomaly, or now effectively a rabbit ear anomaly, would represent the best vertical spatial projection of the location for a drill target at this "Cobb Bay" survey to possibly encounter Gold mineralization. It is believed that with the data obtained from the two sets of infill samples, the anomaly within the dashed yellow outline is still believed to be part of the VMS halo anomaly than related to the presence of Gold mineralization. The identification of a drill target is not an explicit recommendation to drill test the associated SGH anomaly. A drill target is indicated to ensure that the reader is aware of the location having the highest confidence of being the centre of a REDOX cell and thus the vertical projection of the portion of the target that has the most effect of creating the strongest oxidation-reduction conditions in the overburden. We believe that, as a vertical projection, it is the location of the highest confidence in intersecting the target mineralization. This location is identified only through the use of SGH data. Other geological, geochemical and/or geophysical information should always be considered. This is also not a recommendation for vertical drilling or that vertical drilling would be the best approach to explore this mineralization at this location. Activation Laboratories Ltd. has no experience in actual exploration drilling.

SGH SURVEY - RECOMMENDATIONS

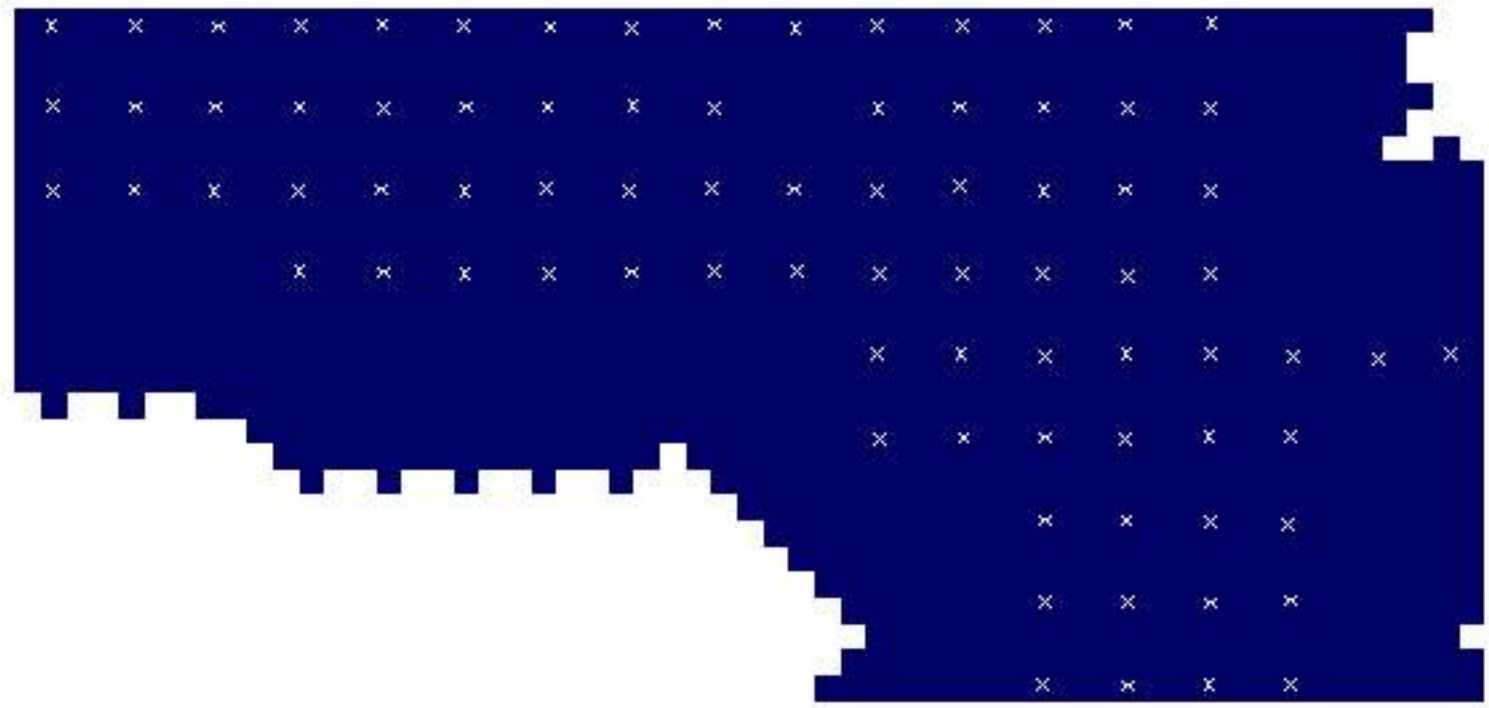
- The in-fill sampling previously recommended has been conducted and has proven to be valuable in the interpretation of the Cobb Bay survey. There are no further SGH recommendations for this Cobb Bay survey area.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH SURVEY INTERPRETATION

- This report is based on the SGH results from the analysis of a total of 85 soil samples submitted on May 27, 2011 from locations at the Mattabi survey (map shown below). About 12 parallel east-west trending sample lines or transects were used to survey this area. This grid of samples had spacing of about 100 meters.



1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

- The number of samples submitted for this project is adequate to use SGH as an exploration tool. Note that the SGH data is only reviewed for the particular target deposit type requested, in this case for the presence of VMS and Gold based mineralization. It is also assumed that there is only one potential target. To obtain the best interpretation the client should indicate if there are possible multiple targets, say from geophysical data. The possibility of multiple targets "in close proximity" should be known due to potential overlap and increased complexity of resulting geochromatographic anomalies which could alter the interpretation.

- Note that the associated SGH results for these 84 samples are presented in a separate Excel spreadsheet. This raw data is semi-quantitative and is presented in units of picograms/ gram (pg/g) or parts-per-trillion (ppt) as the concentration of specific hydrocarbons in each sample.

SGH SURVEY INTERPRETATION

- **The overall precision of the SGH analysis for these 84 Mattabi samples was excellent** as demonstrated by 5 samples used for laboratory replicate analysis. The average Coefficient of Variation (%CV) of the replicate results was 4.2% CV. This represents an excellent level of analytical performance especially at the low parts-per-trillion (ppt) scale of measurements in the SGH geochemistry. Field duplicates were not identified in this project.

- SGH has been observed to reflect the presence of a REDOX cell. SGH is described by the Ontario Geological Survey of Canada (OGS) as a "REDOX cell locator". Many SGH surveys for Gold and other mineral targets can result in multiple types of anomalies, depending on the class of SGH compounds, even over the same target and in the same set of samples. Thus "Apical", "Nested-Halo", and "Rabbit-Ear" or "Halo" type anomalies are all typically observed from the effect of REDOX cells that have developed over deposits. REDOX cells are also related to the presence of bacteriological activity.

- Note that SGH is "blind" to the presence of inorganic elements that may represent mobilized anomalies.

- SGH results have also been shown to correlate well with geophysical anomalies such as magnetic anomalies and those of CSAMT.

- The client provided the UTM coordinates in WGS84 datum and verified the complete survey orientation prior to the original report.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH SURVEY INTERPRETATION – VMS PATHFINDER CLASS MAPS – Pages 24 and 25

- The maps shown on page 37 in plan view and page 38 in 3D view, represent the results obtained from the original Mattabi samples combined with the new infill samples, and are SGH "Pathfinder Class maps" for targeting **VMS** mineralization. Each SGH Pathfinder Class map represents the simple summation of several individual hydrocarbon compound concentrations, which are grouped from within the same organic chemical class, that have been associated with VMS mineralization from several years of case study research. This VMS Pathfinder Class map is different than the Pathfinder Class map associated with Gold mineralization that is shown on pages 30 and 31. SGH Pathfinder Class maps have been shown to be robust as they are each described using from 4 to 14 (unless otherwise stated) chemically related SGH compounds which are simply summed to create each class map. Thus each map has a higher level of confidence as it is not illustrating just one compound response. A legend of the compound classes appears at the bottom of the SGH data spreadsheet.

- The overall SGH interpretation Rating has even a higher level of confidence as it further relies on the consensus between at least two additional SGH VMS Pathfinder classes (not shown in this report) that together make the signature of the target at depth.

- The VMS template of SGH Pathfinder Classes uses low and medium weight classes of hydrocarbon compounds. At least three Pathfinder Class maps, associated with the SGH signature for VMS must be present to begin to be considered for assignment of a good rating. Only one SGH VMS Pathfinder Class map has been shown in this report to keep the SGH price as reasonable as possible. The Pathfinder Class anomalies must also concur and support a consistent interpretation, in relation to the expected geochromatographic characteristics of the Pathfinder Class, for a specific area. This map is part of the general SGH VMS template that has been shown to be applicable to Kuroko type massive sulphide, and other VMS related types of deposits. The Pathfinder Class map on page 37 is just one map that is diagnostic for the presence of VMS based mineralization.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH SURVEY "VMS" INTERPRETATION

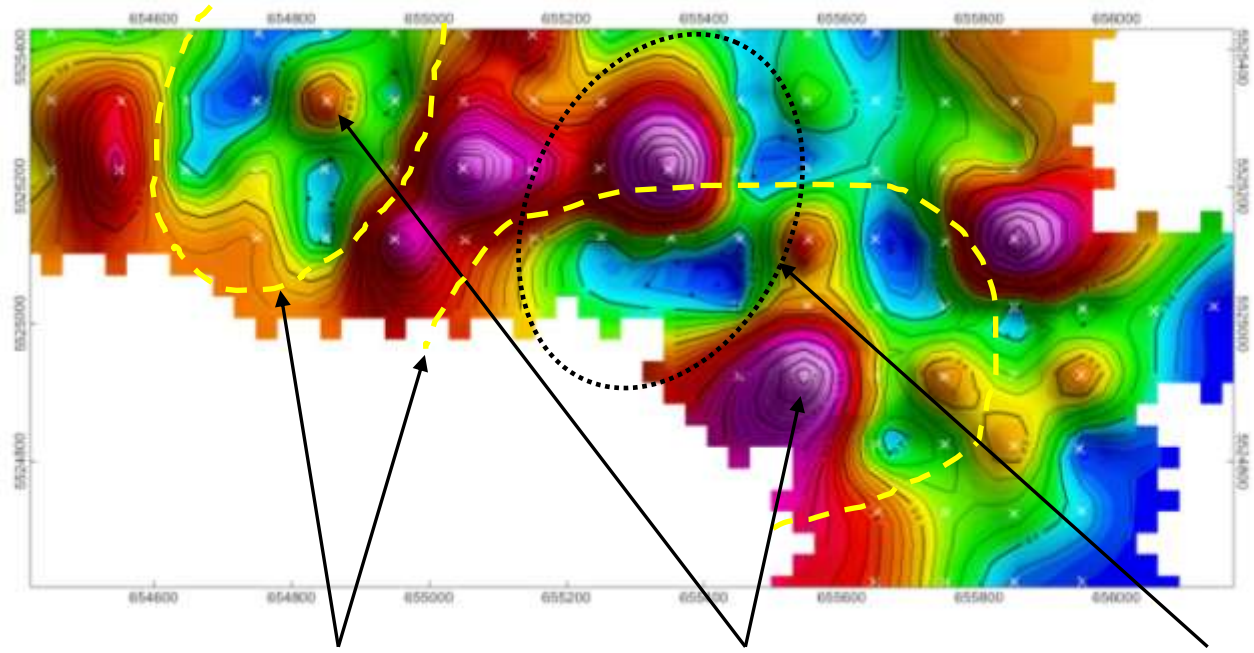
- SGH responses are affected by the presence of REDOX cell conditions in the overburden and are related to bacteriological activity as biofilms in contact with the deposit. In the case of VMS deposits the theory is that sulphide reducing bacteria thrive on the ore body and these processes develop strong REDOX conditions that are formed in the overburden. Note that SGH is not a sulphide detector as some of the strongest SGH responses have shown REDOX conditions over Kimberlite Pipes that are not associated with the presence of sulphides. The SGH VMS Pathfinder map on page 37 is of a class of compounds that is reliable and expected to form a halo type anomaly for VMS. The SGH signature in the Mattabi survey were very complex as it appears from the data that there are multiple, closely spaced, Redox cells in the overburden. The resultant mixture of dispersal patterns makes the interpretations much more complex, just as in Forensic analysis and interpretations. This map appeared to illustrate two halo anomalies. The yellow dashed outlines applied to the SGH Pathfinder Class map on page 37 are the interpretations of the boundaries of potentially two REDOX cell conditions in the overburden. As previously mentioned, other SGH Pathfinder Classes (not shown in these reports) together define the VMS SGH signature and confirm the possible presence of VMS style mineralization "***within***" the two dashed yellow ovals as the inner edge of REDOX cells having the SGH signature of potential VMS type mineralization. Again, each SGH Pathfinder Class map is the plot of the simple summation of several of the hydrocarbons in one of the chemical classes, from the Excel spreadsheet of results, which have been associated with VMS deposits.

- Note that a third Redox cell has also been detected which is outlined by a dotted black halo on the map on page 37. This has further complexed the interpretation of the SGH Compound Class dispersion patterns. The signature of potential mineralization relative to this third Redox cell has not been interpreted at this time.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH "VMS" PATHFINDER CLASS MAP

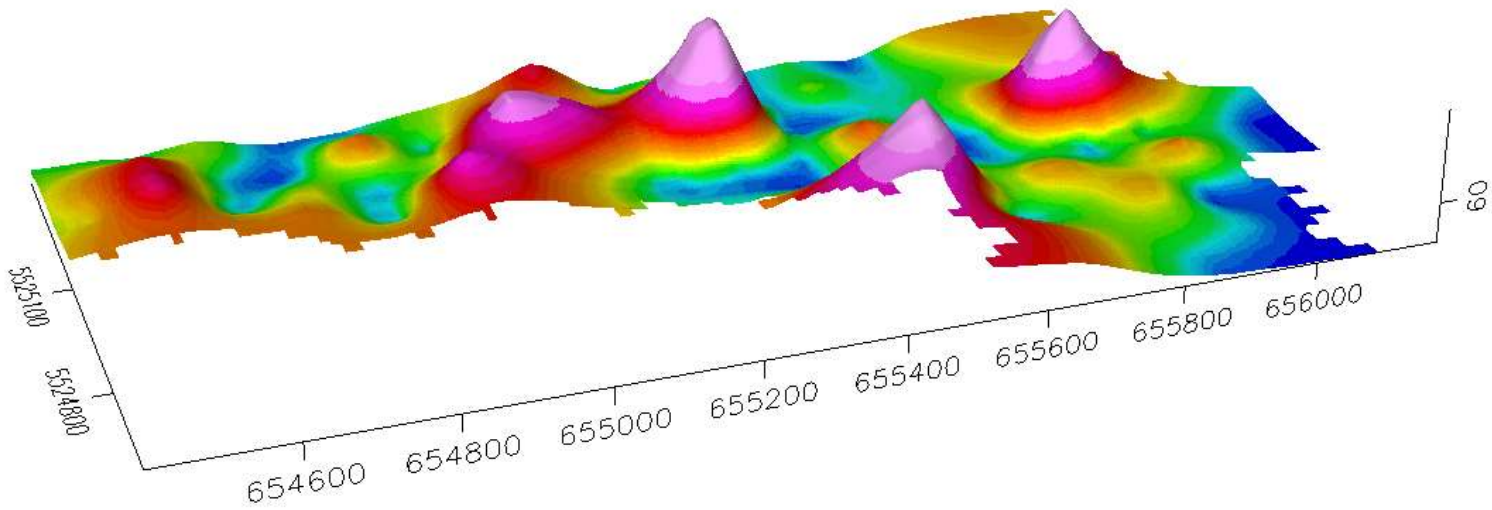


SGH VMS – HALO Anomaly Outlines **Potential SGH VMS – Drill Targets** **Additional Redox Cell**

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH "VMS" PATHFINDER CLASS MAP



1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH SURVEY INTERPRETATION RATING FOR PRESENCE OF "VMS" MINERALIZATION

- After review of all of the SGH Pathfinder Class maps, the SGH results suggest a **"rating of 5.0"** for the area within the solid blue oval outline in relation to the presence of a VMS based target in this Mattabi survey. This rating is subjective and is based on a scale of 6.0, in increments of 0.5, with a value of 6.0 being the best. This rating represents the similarity of these SGH results with case studies over Volcanic Massive Sulphide (VMS) type targets from SGH case studies conducted at the Hanson Lake VMS deposit in Saskatchewan, the South Gilmour VMS deposit in New Brunswick and the Cross Lake VMS deposit in Ontario. The degree of confidence in the rating only starts to be "good" at a level of 4.0.

- The locations shown as a drill targets on the map on page 37 represent the best vertical spatial projections of the locations of potential VMS mineral deposits at some unknown depth, as drill targets at this "Mattabi" survey. This REDOX outline is still believed to be a valid estimation however the drill target location has been slightly altered. The interpretation is now better confirmed based on these additional infill samples and a review of the survey as a whole.

- The identification of a drill target is not an explicit recommendation to drill test the associated SGH anomaly. A drill target is indicated to ensure that the reader is aware of the location having the highest confidence of being the centre of a REDOX cell and thus the vertical projection of the portion of the target that has the most effect of creating the strongest oxidation-reduction conditions in the overburden. We believe that, as a vertical projection, it is the location of the highest confidence in intersecting the target mineralization. This location is identified only through the use of SGH data. Other geological, geochemical and/or geophysical information should always be considered. This is also not a recommendation for vertical drilling or that vertical drilling would be the best approach to explore this mineralization at this location. Activation Laboratories Ltd. has no experience in actual exploration drilling.

- Again, this interpretation is based only on the interpretation of this SGH data.

- The client should use a combination of these SGH results and its report with additional geochemical, geophysical, and geological information to possibly obtain a more confident and precise target location.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH SURVEY INTERPRETATION – GOLD PATHFINDER CLASS MAPS – Pages 29 and 30

- The map shown on page 42 in plan view, and on page 43 in 3D view, represent the results obtained from the Mattabi samples and are SGH "Pathfinder Class maps" for targeting **Gold** mineralization. Each SGH Pathfinder Class map represents the simple summation of several individual hydrocarbon compound concentrations, that are grouped from within the same organic chemical class, which has been associated with GOLD mineralization from several years of case study research. This Gold Pathfinder Class map is different than the Pathfinder Class map associated with VMS mineralization that is shown on pages 37 and 38. SGH Pathfinder Class maps have been shown to be robust as they are each described using from 4 to 14 (unless otherwise stated) chemically related SGH compounds which are simply summed to create each class map. Thus each map has a higher level of confidence as it is not illustrating just one compound response. A legend of the compound classes appears at the bottom of the SGH data spreadsheet.

- The overall SGH interpretation Rating has even a higher level of confidence as it further relies on the consensus between at least two additional SGH Gold Pathfinder classes (not shown in this report) that together make the signature of the target at depth.

- The Gold template of SGH Pathfinder Classes also uses low and medium weight classes of hydrocarbon compounds. At least three Pathfinder Class maps, associated with the SGH signature for Gold must be present to begin to be considered for assignment of a good rating. Only one SGH Gold Pathfinder Class map has been shown in this report to keep the SGH price as reasonable as possible. The Pathfinder Class anomalies must also concur and support a consistent interpretation, in relation to the expected geochromatographic characteristics of the Pathfinder Class, for a specific area. This map is part of the general SGH Gold template that has been shown to be applicable to a very wide range of lithologies of Gold based deposits. The Pathfinder Class map on page 42 is just one map that is diagnostic for the presence of Gold based mineralization.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

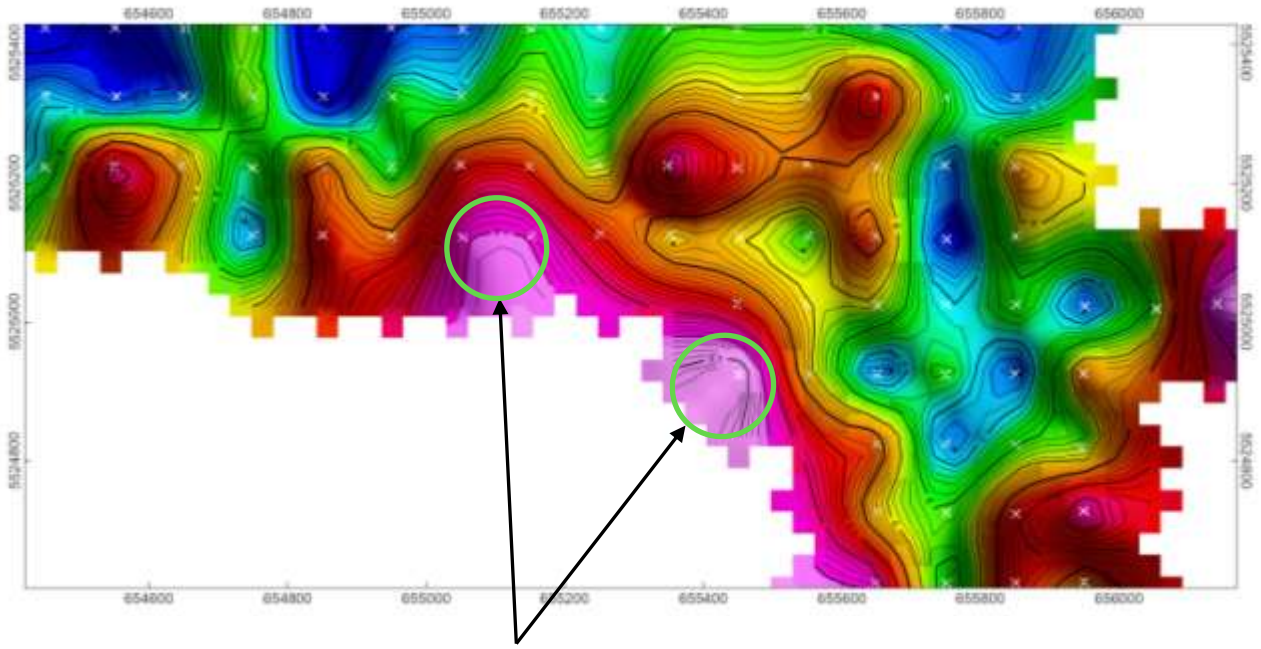
SGH SURVEY "GOLD" INTERPRETATION

- SGH responses are affected by the presence of REDOX cell conditions in the overburden and are related to bacteriological activity as biofilms in contact with the deposit. In the case of GOLD deposits the theory is that sulphide reducing bacteria thrive on the ore body and synthesize specific organic hydrocarbons that define a signature associated with the gold deposit. It has been found that the most prominent compounds that are synthesized by bacteria feeding on Gold deposits are easily transported through the overburden and develop apical SGH anomalies. The SGH Gold Pathfinder Class map on page 29 is the class of compounds that is reliable and expected to form this apical type anomaly for over Gold mineralization. Note that SGH data does not exhibit "platform" type apical anomalies. Again, each SGH Pathfinder Class map is the plot of the simple summation of several of the hydrocarbons in one of the chemical classes, from the Excel spreadsheet of results, which have been associated with Gold mineralization.
- The interpretation for the presence of a SGH Gold signature is shown on the SGH Pathfinder Class map on page 42 which is based on previous case studies for Gold. This Pathfinder Class map is expected to illustrate apical anomalies over Gold mineralization. The two small apical responses on page 42, encircled with a green circle outline, are only represented by one or two samples for each anomalous area and thus have an associated low level of confidence.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH *"GOLD"* PATHFINDER CLASS MAP

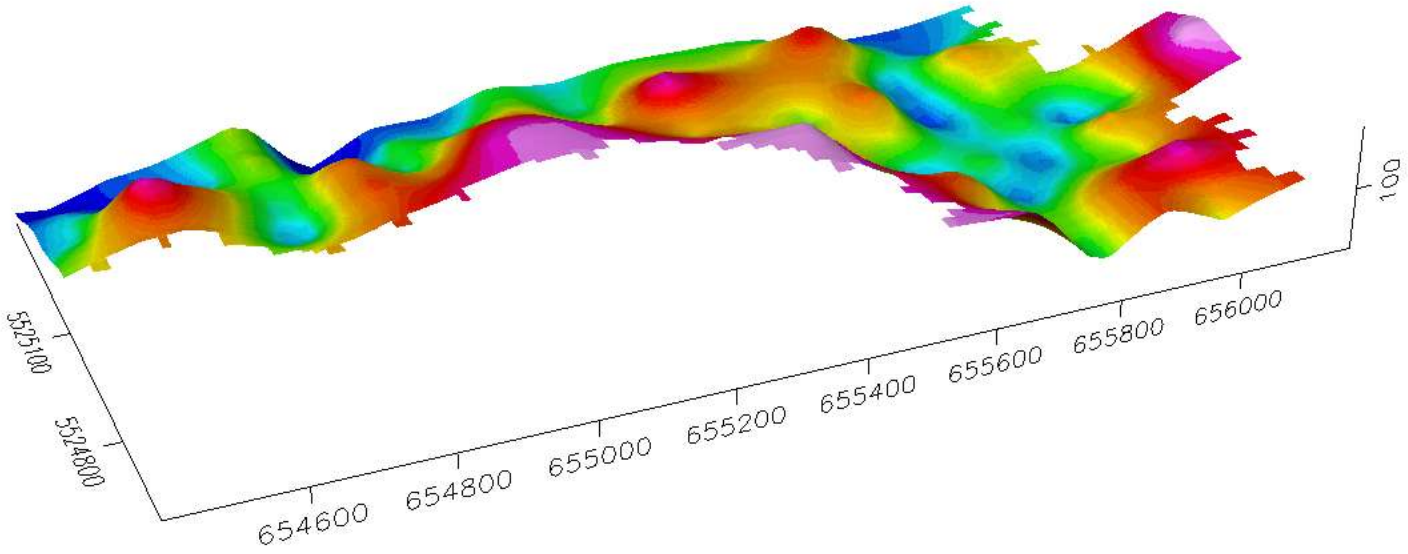


SGH GOLD – Apical Anomaly

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH *"GOLD"* PATHFINDER CLASS MAP



1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH SURVEY INTERPRETATION RATING

- After review of all of the SGH Pathfinder Class maps developed from the samples collected in October 2010 combined with the infill samples in this work order, the SGH results now suggest a reduced **"rating of 1.5"** for each of the two anomalous areas within the small green circular outlines in relation to the presence of a Gold based target. This rating is subjective and is based on a scale of 6.0, in increments of 0.5, with a value of 6.0 being the best. This rating represents for this site, the similarity of these SGH results primarily to case studies for Gold in Nunavut, shear hosted as well as sediment hosted deposits in Nevada, and Paleochannel Gold deposits in Australia. The degree of confidence in these ratings only starts to be "good" at a level of 4.0. This interpretation is based only on the interpretation of this SGH data.

- As these two anomalous areas are only defined by one or two samples there is not sufficient confidence to imply any drill target locations. The identification of a drill target is not an explicit recommendation to drill test the associated SGH anomaly. A drill target is indicated to ensure that the reader is aware of the location having the highest confidence of being the centre of a REDOX cell and thus the vertical projection of the portion of the target that has the most effect of creating the strongest oxidation-reduction conditions in the overburden. We believe that, as a vertical projection, it is the location of the highest confidence in intersecting the target mineralization. This location is identified only through the use of SGH data. Other geological, geochemical and/or geophysical information should always be considered. This is also not a recommendation for vertical drilling or that vertical drilling would be the best approach to explore this mineralization at this location. Activation Laboratories Ltd. has no experience in actual exploration drilling.

SGH SURVEY - RECOMMENDATIONS

- Additional samples to the northwest of the grid and to the south west of the two small apical anomalies relative to possible gold mineralization would be valuable in the interpretation of the Mattabi survey and may improve the rating of these anomalies.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

IN-FILL SAMPLING RECOMMENDATIONS FOR SGH ANALYSIS

- Based on the results of this report and/or other information, the client may decide that additional sampling or infill sampling may be warranted. To obtain the best results from additional sampling for SGH it is recommended that some sample locations within, or bordering, the area of interest be re-sampled for reference rather than combining just new samples with the sample data from the initial survey. Although several SGH surveys have previously been easily and directly, combined without data leveling, it cannot be guaranteed that data leveling will not be required. It has been found that data leveling is more apt to be required should the new samples be collected under significantly different environmental conditions than during the initial sample survey, i.e. summer collection versus winter collection, or if the survey is located north of a latitude of 60°. The process of data leveling adds a minimum of 3 to 5 days of work to conduct the additional data evaluation, develop additional plots of the results, conduct new interpretations, and in additional report descriptions. Results from data leveling is also always considered "an approximation" thus having a lower level of confidence that newly re-sampled locations would have. As of September 2010, an additional cost will be invoiced should data leveling operations be required if the client requests that two SGH data sets be interpreted and reported together. Thus re-sampling locations will provide better data leveling an potentially a faster turnaround time for results. These re-sampled reference points will provide more accurate and confident surveys for evaluation and aid in deciding specific drill targets.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

Cautionary Note Regarding Assumptions and Forward Looking Statements

The statements and target rating made in the Soil Gas Hydrocarbon (SGH) interpretive report or in other communications may contain certain forward-looking information related to a target or SGH anomaly.

Statements related to the rating of a target are based on comparison of the SGH signatures derived by Activation Laboratories Ltd. through previous research on known case studies. The rating is not derived from any statistics or other formula. The rating is a subjective value on a scale of 0 to 6 relative to the similarity of the SGH signature reviewed compared to the results of previous scientific research and case studies based on the analysis of surficial samples over known ore bodies. No information on other geochemistries, geophysics, or geology is usually available as additional information for the interpretation and assignment of a rating value unless otherwise stated. The rating does not imply ore grade and is not to be used in mineral resource estimate calculations. References to the rating should be viewed as forward-looking statements to the extent that it involves a subjective comparison to known SGH case studies. As with other geochemistries, the implied rating and anticipated target characteristics may be different than that actually encountered if the target is drilled or the property developed.

Activation Laboratories Ltd. may also make a scientifically based reference in this interpretive report to an area that might be used as a drill target. Usually the nearest sample is identified as an approximation to a "possible drill target" location. This is based only on SGH results and is to be regarded as a guide based on the current state of this science.

Unless stated, Activation Laboratories Ltd. has not physically observed the exploration site and has no prior knowledge of any site description or details. Actlabs makes general recommendations for sampling and shipping of samples. Unless stated, the laboratory does not witness sampling, does not take into consideration the specific sampling procedures used, season, handling, packaging, or shipping methods. The majority of the time, Activation Laboratories Ltd. has had no input into sampling survey design. Where specified Activation Laboratories Ltd. may not have conducted sample preparation procedures as it may have been conducted at the client's assigned laboratory. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ scientifically which may impact the associated interpretation and target rating from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended.

In general, any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance are not statements of historical fact. These "scientifically based educated theories" should be viewed as "forward-looking statements".

Readers of this interpretive report are cautioned not to place undue reliance on forward-looking information. Forward looking statements are made based on scientific beliefs, estimates and opinions on the date the statements are made and the interpretive report issued. The Company undertakes no obligation to update forward-looking statements or otherwise revise previous reports if these beliefs, estimates and opinions, future scientific developments, other new information, or other circumstances should change that may affect the analytical results, rating, or interpretation.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

Date Received for this Submission: May 27, 2011

Date this Submission was Analyzed: June 14-15, 2011

Original SGH Interpretation Report: November 23, 2010

SGH Interpretation Report: with Infill Samples: May 9, 2011

SGH Interpretation Report: with Additional Infill Samples and Mattabi Survey: July 8, 2011

3936449 CANADA INC.

95 Springdale Blvd.
Toronto, Ontario

Attention: Michael Bulatovich

RE: Your Reference: COBB BAY – MORE INFILL SAMPLING; MATTABI SURVEY

CERTIFICATE OF ANALYSIS

119 Cobb Bay Infill samples & Mattabi samples were submitted for analysis.

The following sample preparation was completed: Code S4 – Drying at 40°C, Sieving -60 mesh

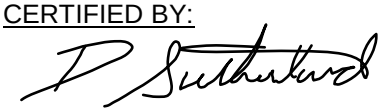
The following analytical package was requested: Code SGH – Soil Gas Hydrocarbon Geochemistry

REPORT/WORKORDER: A11-4580

Notes:
The SGH – Soil Gas Hydrocarbon Geochemistry is a semi-quantitative analytical procedure to detect and measure 162 hydrocarbon compounds as the organic signature in the sample material collected from a survey area. It is not an assay of mineralization but is a predictive geochemical tool used for exploration. This certificate pertains only to the SGH data presented in the associated Microsoft Excel spreadsheet of results.

The author of this SGH Interpretation Report, Mr. Dale Sutherland, is the creator of the SGH organic geochemistry. He is a Chartered Chemist (C.Chem.) and Forensic Scientist specializing in organic chemistry. He is not a professional geologist or geochemist.

CERTIFIED BY:



Dale Sutherland, B.Sc.,B.Sc.,B.Ed.,C.Chem.
Forensic Scientist, Organics Manager,
Director of Research
Activation Laboratories Ltd.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

APPENDIX B

"SGH SURVEY - MATTABI PROJECT AREA" August 2, 2011 Report by Activation Laboratories Ltd.

SGH – SOIL GAS HYDROCARBON
Predictive Geochemistry

for

3936449 CANADA INC.

"SGH SURVEY -
MATTABI PROJECT AREA"

August 2, 2011

** Dale Sutherland,*

Activation Laboratories Ltd

(* - author, originator)

EVALUATION OF SGH DATA FROM "SOIL / SEDIMENT SAMPLES"

INTERPRETATION OF UNKNOWN REDOX CELL TARGET

Workorder: A11-4580

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS

E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

Table Of Contents

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

PREFACE

THIS "STANDARD" SGH INTERPRETATION REPORT:

The purpose of this Soil Gas Hydrocarbon (SGH) interpretation "Standard Report" is to ensure that clients and other potential reviewers of the results have a good understanding of this organic, deep penetrating geochemistry. As SGH provides such a large data set and is not interpreted in the same way as inorganic geochemistries, this report enables the user to realize the results in a timely fashion and capitalizes on years of research and development since the inception of SGH in 1976 combined with the knowledge obtained by Activation Laboratories through the interpretation of SGH data from over hundreds of surveys for a wide variety of target types in various lithologies from many geographical locations. The report is compulsory as it is the only known organic geochemistry that, in spite of the name, uses non-gaseous semi-volatile organic compounds interpreted using a forensic signature approach It is based solely on SGH data and does not include the consideration or interpretation from any other geochemistry (inorganic), geology or geophysics that may exist related to this survey area(s). This report can also provide evidence of project maintenance. To keep the price to a minimum and to provide as short a turnaround time as practically possible, usually only one SGH Pathfinder Class map is illustrated with an applied interpretation although several other SGH Pathfinder Class maps are used and referenced.

"BASIC GIS PACKAGE": ($ 80.00 CDN or USD)

Those clients that wish to import the SGH results into their GIS software can request a "Basic GIS Package", which will include the geo-referenced image files that reflect the mapped SGH Pathfinder Class or Classes contained in the "Standard Report" and an Excel CSV file containing the associated Class Sum data.

"SUPPLEMENTAL REPORT": ($ 1,500.00 CDN or USD –after July 1, 2011)

Those clients who have determined that these SGH results will add an important aspect to their exploration effort can request a "Supplemental Report". This report contains the additional SGH Pathfinder Classes and an explanation of their use in the SGH interpretation that supports the applied "Rating" for the survey as a relative comparison to the results previously obtained in case studies that were used to create the SGH template for the general target type.

"SUPPLEMENTAL GIS PACKAGE": ($ 80.00 CDN or USD)

Those clients requesting a Supplemental Report may also request a Supplemental GIS Package that contains the geo-referenced image files and Excel CSV files of the Class Sum data for all of the SGH Pathfinder Class maps contained in the Supplemental Report.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SOIL GAS HYDROCARBON (SGH) GEOCHEMISTRY - OVERVIEW

SGH is a deep penetrating geochemistry that involves the analysis of surficial samples from over potential mineral or petroleum targets. The analysis involves the testing for 162 hydrocarbon compounds in the C5-C17 carbon series range applicable to a wide variety of sample types. SGH has been successful for delineating targets found at over 500 metres in depth. Samples of various media have been successfully analyzed such as soil (any horizon), drill core, rock, peat, lake-bottom sediments and even snow. The SGH analysis incorporates a very weak leach, essentially aqueous, that only extracts the surficial bound hydrocarbon compounds and those compounds in interstitial spaces around the sample particles. These are the hydrocarbons that have been mobilized from the target depth. SGH is unique and should not be confused with other hydrocarbon tests or traditional analyses that measure C1 (Methane) to C5 (Pentane) or other gases. SGH is also different from soil hydrocarbon tests that thermally extract or desorb all of the hydrocarbons from the whole soil sample. This test is less specific as it does not separate the hydrocarbons and thus does not identify or measure the responses as precisely. These tests also do not use a forensic approach to identification. The hydrocarbons in the SGH extract are separated by high resolution capillary column gas chromatography to isolate, confirm, and measure the presence of only the individual hydrocarbons that have been found to be of interest from initial research and development and from performance testing in two Canadian Mining Industry Research Organization (CAMIRO) projects (97E04 and 01E02).

Over the past 14 years of research, Activation Laboratories Ltd. has developed an in-depth understanding of the unique SGH signatures associated with different commodity targets. Using a forensic approach we have developed target signatures or templates for identification, and the understanding of the expected geochromatography that is exhibited by each class of SGH compounds. In 2004 we began to include an SGH interpretation report delivered with the data to enable our clients to realize the complete value and understanding of the SGH results in the shortest time frame and provide the benefit from past research sponsored by Actlabs, CAMIRO, OMET and other projects.

SGH has attracted the attention of a large number of Exploration companies. In the above mentioned research projects the sponsors have included (in no order): Western Mining Corporation, BHP-Billiton, Inco, Noranda, Outokumpu, Xstrata, Cameco, Cominco, Rio Algom, Alberta Geological Survey, Ontario Geological Survey, Manitoba Geological Survey and OMET. Further, beyond this research, Activation Laboratories Ltd. has interpreted the SGH data for over 400 targets from clients since January of 2004. In both CAMIRO research projects over known mineralization and in exploration projects over unknown targets, SGH has performed exceptionally well. As an example, in the first CAMIRO research project that commenced in 1997 (Project 97E04), there were 10 study areas that were submitted blindly to Actlabs. These study sites were selected since other inorganic geochemistries were unsuccessful at illustrating anomalies related to the target.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SOIL GAS HYDROCARBONS (SGH) GEOCHEMISTRY – OVERVIEW

Although Actlabs was only provided with the samples and their coordinates, SGH was able to locate the blind mineralization with exceptional accuracy in 9 of the 10 surveys. SGH has recently been very successful in exploration and discovery of unknown targets e.g. Golden Band Resources drilled an SGH anomaly and discovered a significant vein containing "visible" gold. (www.goldenbandresources.com)

Sample Type and Survey Design: It is highly recommended that a ***minimum*** of 50 sample "locations" is preferred to obtain enough samples into background areas on both sides of small suspected targets (wet gas plays, Kimberlite pipes, Uranium Breccia pipes, veins, etc.). SGH is not interpreted in the same way as inorganic based geochemistries. SGH must have enough samples over both the target and background areas in order to fully study the dispersion patterns or geochromatography of the SGH classes of compounds. Based on our minimum recommendation of at least 50 sample locations we further suggest that all samples be evenly spaced with about one-third of the samples over the target and one-third on each side of the target in order for SGH to be used for exploration. Targets other than gas plays, pipes, dykes or veins usually require additional samples to represent both the target and background areas.

SGH has been shown to be very robust to the use of different sample types even "within" the same survey or transect. Research has illustrated that it is far more important to the ultimate interpretation of the results to take a complete sample transect or grid than to skip samples due to different sample media. The most ideal natural sample is still believed to be soil from the "Upper B-Horizon", however excellent results can also be obtained from other soil horizons, humus, peat, lake-bottom sediments, and even snow. The sampling design is suggested to use evenly spaced samples from 15 metres to 200 metres and line spacing from 50 metres to 500 metres depending on the size and type of target. A 4:1 ratio is suggested, however, larger orientation surveys have also been successful. Ideally even large grids should have one-third of the samples over the target and two-thirds of the samples into anticipated background areas. This will allow the proper assessment of the SGH geochromatographic vectoring and background site signature levels with minimal bias. Individual samples taken at significant distances from the main survey area to represent background are not of value in the SGH interpretation as SGH results are not background subtracted. Samples can be drip dried in the field and do not need special preservation for shipping and has been specifically designed to avoid common contaminants from sample handling and shipping. SGH has also been shown to be robust to cultural activities even to the point that successful results and interpretation has been obtained from roadside right-of-ways.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SOIL GAS HYDROCARBONS (SGH) GEOCHEMISTRY – OVERVIEW

Sample Preparation and Analysis: Upon receipt at Activation Laboratories the samples are air-dried in isolated and dedicated environmentally controlled rooms set to 40°C. The dried samples are then sieved. In the sieving process, it is important that compressed air is not used to clean the sieves between samples as trace amounts of compressor oils "may" poison the samples and significantly affect some target signatures. At Activation Laboratories a vacuum is used to clean the sieve between each sample. The -60 mesh sieve fraction (<250 microns, although different mesh sizes can be used at the preference of the exploration geologist) is collected and packaged in a Kraft paper envelope and transported from our sample preparation building to our analytical building on the same street in Ancaster Ontario. Each sample is then extracted, separated by gas chromatography and analyzed by mass spectrometry using customized parameters enabling the highly specific detection of the 162 targeted hydrocarbons at a reporting limit of one part-per-trillion (ppt). This trace level limit of reporting is critical to the detection of these hydrocarbons that, through research, have been found to be related at least in part to the breakdown and release of hydrocarbons from the death phase of microbes directly interacting with a deposit at depth. The hydrocarbon signatures are directly linked to the deposit type which is used as a food source. The hydrocarbons that are mobilized and metabolized by the microbes are released in the death phase of each successive generation. Very few of the hydrocarbons measured are actually due to microbe cell structure, or hydrocarbons present or formed in the genesis of the deposit or from anthropogenic contamination. The results of the SGH analysis is reported in raw data form in an Excel spreadsheet as "semi-quantitative" concentrations without any additional statistical modification.

Mobilized Inorganic Geochemical Anomalies: It is important to note that SGH is essentially "blind" to any inorganic content in samples as only organic compounds as hydrocarbons are measured. Thus inorganic geochemical surface anomalies that have migrated away from the mineral source, and thus may be interpreted and found to be a false target location, is not detected and does not affect SGH results. This fact is of great advantage when comparing the SGH results to inorganic geochemical results. If there is agreement in the location of the anomalies between the organic and inorganic technique, such as Actlabs' Enzyme Leach, a significant increase in confidence in the target location can be realized. If there is no agreement or a shift in the location of the anomalies between the techniques, the inorganic anomaly may have been mobilized in the surficial environment.

The Nugget Effect: As SGH is "blind" to the inorganic content in the survey samples, any concern of a "nugget effect" will not be encountered with SGH data. A "nugget effect" may be of a concern for inorganic geochemistries from surveys over copper, gold, lead, nickel, etc. type targets.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SOIL GAS HYDROCARBONS (SGH) GEOCHEMISTRY – OVERVIEW

SGH Interpretation Report: All SGH submissions must be accompanied by relative or UTM coordinates so that we may ensure that the sample survey design is appropriate for use with SGH, and to provide an SGH interpretation with the results. In our interpretation procedure, we separate the results into 19 SGH sub-classes. These classes include specific alkanes, alkenes, thiophenes, aromatic, and polyaromatic compounds. Note that none of the SGH hydrocarbons are "gaseous" at room temperature and pressure. The classes are then evaluated in terms of their geochromatography and for coincident compound class anomalies that are unique to different types of mineralization. Actlabs uses a six point scale in assigning a subjective rating of similarity of the SGH signatures found in the submitted survey to signatures previously reviewed and researched from known case studies over the same commodity type. Also factored into this rating is the appropriateness of the survey and amount of data/sample locations that is available for interpretation. This rating scale is described in detail in the following section.

SGH RATING SYSTEM - DESCRIPTION

To date SGH has been found to be successful in the depiction of buried mineralization for Gold, Nickel, VMS, SEDEX, Uranium, Polymetallic, and Copper, as well as for Kimberlites. SGH data has developed into a dual exploration tool. From the interpretation, a vertical projection of the predicted location of the target can be made as well as a statement on the rating of the comparability of the identification of the anticipated target type to that from known case studies, as an example: if the client anticipates the target to be a Gold deposit, what is the rating or comparability that the target is similar to the SGH results over a Gold deposit in Nunavut, shear hosted and sediment hosted deposits in Nevada, or Paleochannel Gold mineralization in Western Australia.

- A rating of "6" is the highest or best rating, and means that the SGH classes most important to describing a Gold related hydrocarbon signature are all present and consistently vector to the same location with well defined anomalies. To obtain this rating there also needs to be other SGH classes that when mapped lend support to the predicted location.
- A rating of "5" means that the SGH classes most important to describing a Gold signature are all present and consistently describe the same location with well defined anomalies. The SGH signatures may not be strong enough to also develop additional supporting classes.
- A rating of "4" means that the SGH classes most important to describing a Gold signature are mostly present describing the location with well defined anomalies. Supporting classes may also be present.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH RATING SYSTEM - DESCRIPTION (continued)

- A rating of "3" means that the SGH classes most important to describing a Gold signature are mostly present and describe the same location with fairly well defined anomalies. Some supporting classes may or may not be present.
- A rating of "2" means that some of the SGH classes most important to describing a Gold signature are present but a predicted location is difficult to determine. Some supporting classes may be present
- A rating of "1" is the lowest rating, and means that one of the SGH classes most important to describing a Gold signature is present but a predicted location is difficult to determine. Supporting classes are also not helpful.
- The SGH rating is directly and significantly affected by the survey design. Small data sets, especially if significantly <50 sample locations, or transects/surveys that are geographically too short will automatically receive a lower rating no matter how impressive an SGH anomaly might be. When there is not enough sample locations to adequately review the SGH class geochromatography, or when the sample spacing is inadequate, or if the spacing is highly variable such that it biases the interpretation of the results, then the confidence in the interpretation of any geochemistry is adversely affected. The SGH rating is not just a rating of the agreement between the SGH pathfinder classes for a particular target type; it is a rating of the overall confidence in the SGH results from this particular survey. The interpretation is only based on the SGH results without any information from other geochemical, geological or geophysical information unless otherwise specified.

SGH RATING SYSTEM – HISTORY & UNDERSTANDING

The subjective SGH rating system has been used since 2004 when Activation Laboratories started providing an SGH Interpretation Report with ever submission for SGH analysis to aid our clients in understanding this organic geochemistry and ensuring that they obtain the best results for their surveys. As explained in the previous section, the SGH rating is not just a rating of how definitive an SGH anomaly is, and is not based just on the map(s) provided in this report. It is a rating of "confidence in the interpreted anomaly" from the combination of (i) are the expected SGH Pathfinder Classes of compounds present from the template for this target type (one Pathfinder Class map is shown in the report, at least three must be present to adequately describe the correct signature for a particular target), (ii) how well do these SGH Pathfinder Classes agree in describing an particular area, (iii) how well does this agreement compare to SGH case studies over known targets of that type, (iv) how well is the interpreted anomaly defined by the survey (i.e. a single

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

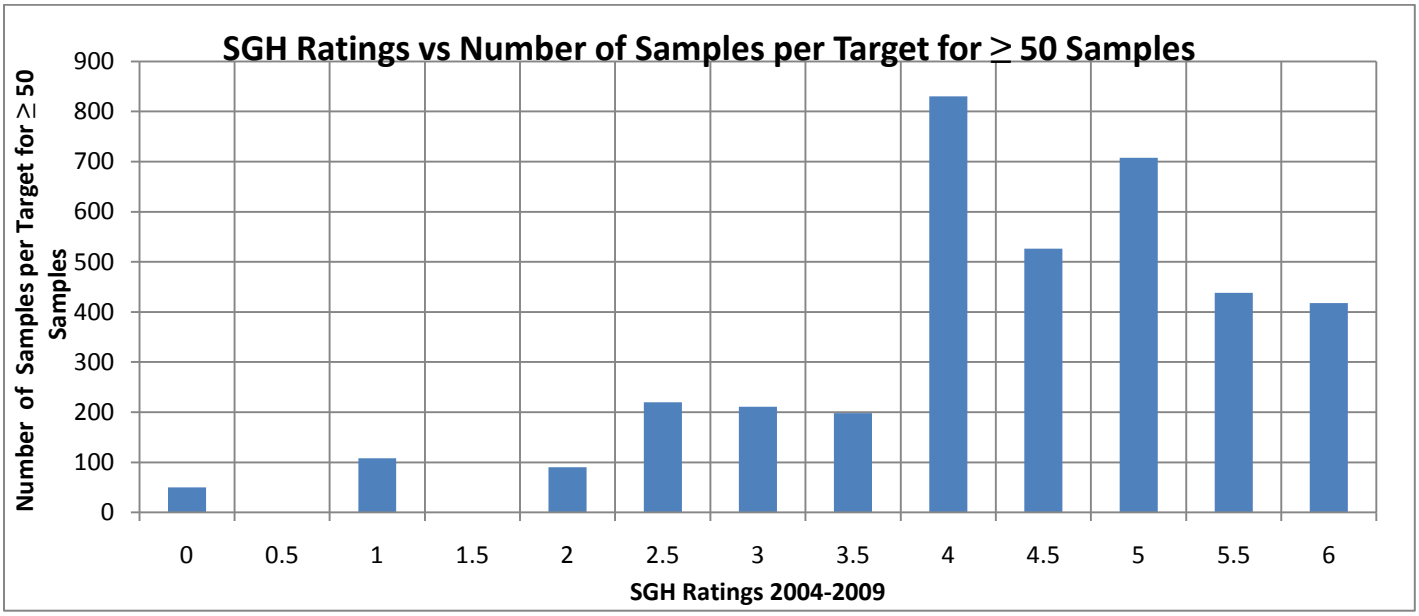
SGH RATING SYSTEM – HISTORY & UNDERSTANDING (cont.)

transect does not provide the same confidence as a complete grid of samples), and (v) is there at least a minimum of 50 sample locations in the survey so that there may be an adequate amount of data to observe the geochromatography of the different SGH Pathfinder Class of compounds.

The question often arises by clients as to the frequency of a rating, e.g. "how often is a rating of 5.0 given in an interpretation". To better understand this we present this review of the history of the SGH rating program since 2004 and some of the underlying situations that can affect the historical rating charts.

Originally it was recommended that a minimum of 35 sample location be used for small target exploration, however it was quite quickly realized that this is often insufficient and at least 50 sample locations were required. In 2007, the rating scale was refined to include increments of 0.5 units rather than just integer values from 0 to 6.

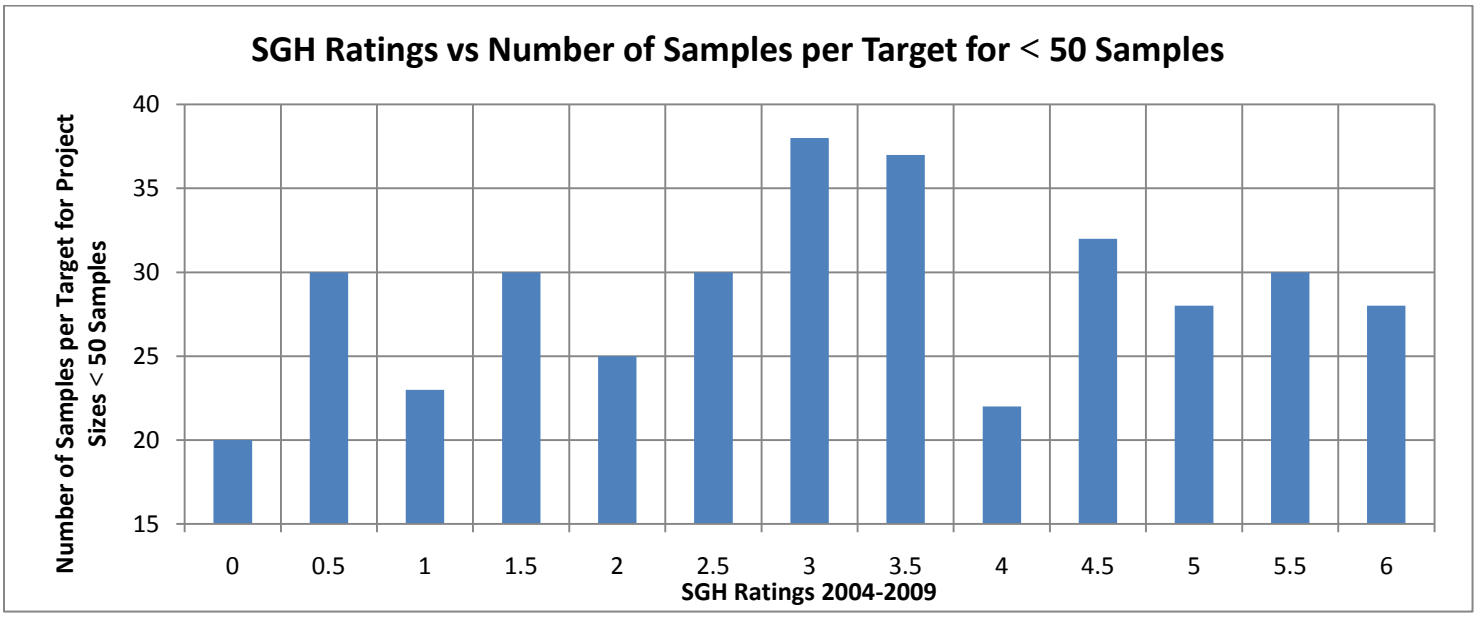
A rating frequency may be biased high as most clients conduct an orientation study over a known target, thus several of these projects result in high ratings. Note that, at this time, the rating is not said to be linked to grade of a deposit or depth to the target. Even in exploration surveys clients tend to submit samples over more promising targets due to knowledge of the geology and prior geochemical or geophysical results. As shown in the following chart, projects with SGH data from 200 or more sample locations have a higher level of confidence in the interpretation as the geochromatography of the SGH Pathfinder Classes of compounds can be more completely observed and reviewed.



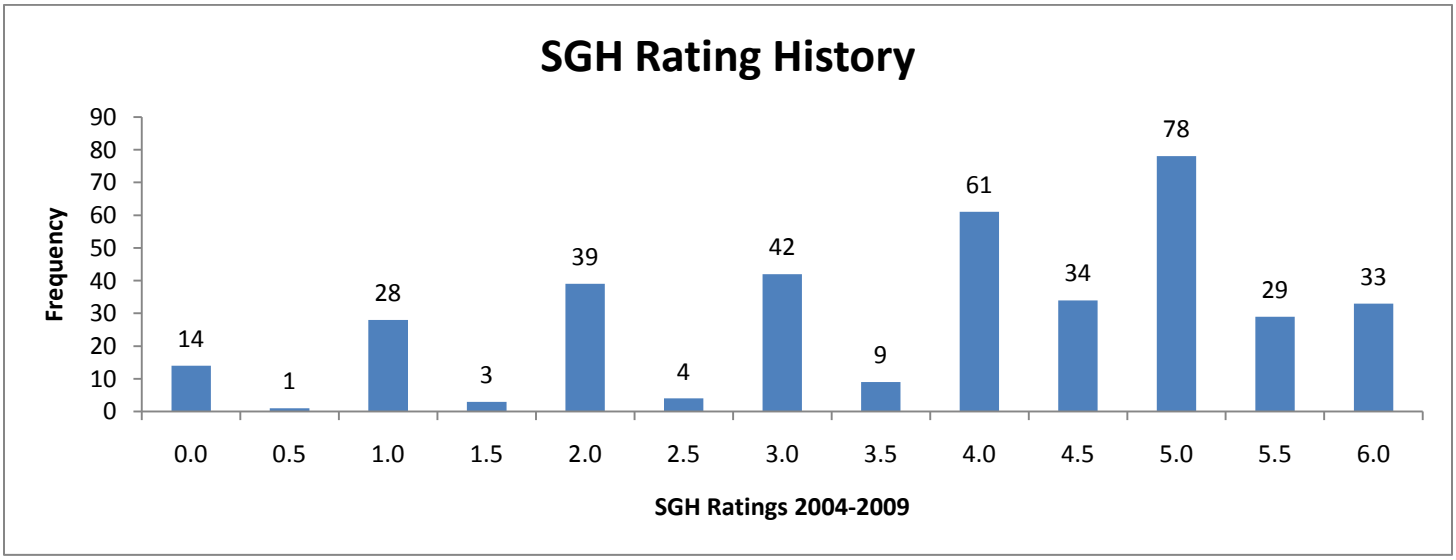
1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH RATING SYSTEM – HISTORY & UNDERSTANDING (cont.)

The rating frequency may be biased low as research projects often include a bare minimum of samples to reduce costs. Research projects may also be over targets known to be difficult to depict with geochemistry. Multiple targets in close vicinity in a survey may result in a low bias as the Pathfinder Class geochromatography is more difficult to deconvelute. Ratings may also be biased low if less than the recommended 50 sample locations is submitted as indicated by the following chart. This chart also illustrates that there is no interpretation bias to a particular rating value.



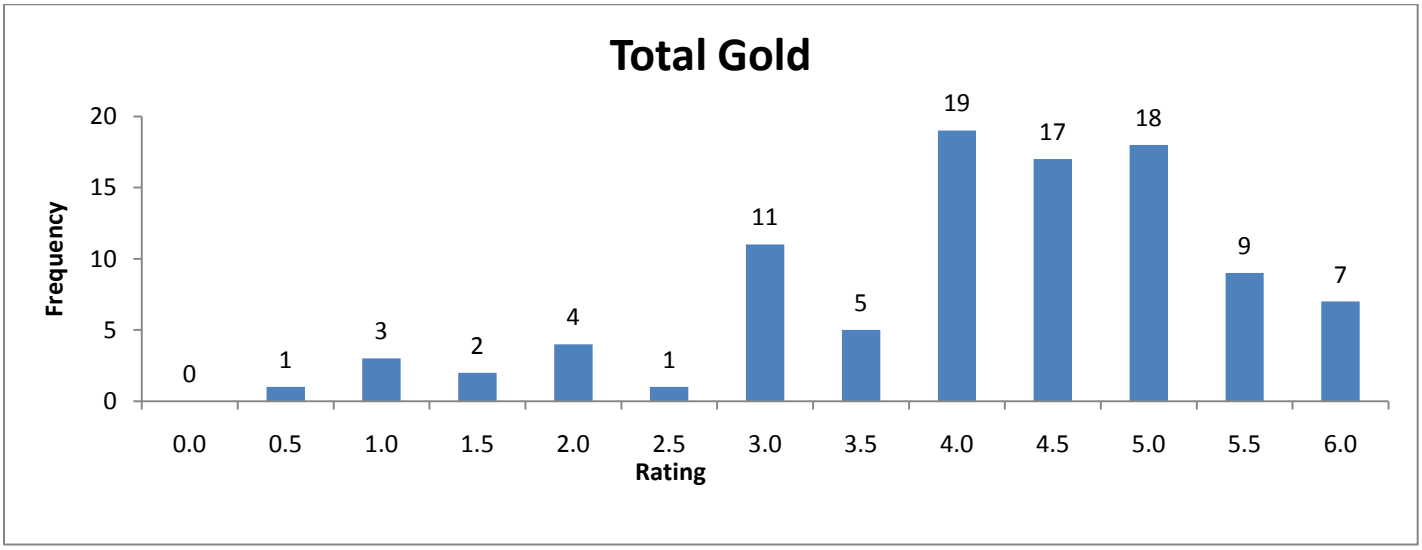
The overall rating frequency for over 400 targets from January 2004 to December 2009 is shown in the chart below illustrating that surveys over more promising targets are most often submitted for best use of research or exploration dollars. It also indicates that the 0.5 increments were less frequent as they started in 2007.



1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH RATING SYSTEM – HISTORY & UNDERSTANDING (cont.)

More specific for SGH interpretation for Gold targets, the overall rating frequency for 97 targets from January 2004 to December 2009 is shown in the chart below that also illustrates that surveys over more promising Gold targets are most often submitted for best use of research or exploration dollars.



SGH DATA QUALITY

- **Reporting Limit:** The SGH Excel spreadsheet of results contains the raw unaltered concentrations of the individual SGH compounds in units of "part-per-trillion" (ppt). The reporting of these ultra low levels is vital to the measurement of the small amounts of hydrocarbons now known to be leached/metabolized and subsequently released by dead bacteria that have been interacting with the ore at depth. To ensure that the data has a high level of confidence, a "reporting limit" is used. The reporting limit of 1 ppt actually represents a level of confidence of approximately 5 standard deviations where SGH data is assured to be "real" and non-zero. Thus in SGH the use of a reporting limit automatically removes site variability and there is no need to further background subtract any data as the reporting limit has already filtered out any site background effects. Thus we recommend that all data that is equal to or greater than 2 ppt should be used in any data review. It is important to review all SGH data as low values that may be the centre of halo anomalies and higher values as apical anomalies or as halo ridges are all important.

- **Laboratory Replicate Analysis:** A laboratory replicate is a sample taken randomly from the submitted survey being analyzed and are not unrelated samples taken from some large stockpile of bulk material. In the Organics laboratory an equal portion of this sieved sample, or pulp, is taken and analyzed in the same manner using the Gas Chromatography/Mass Spectrometer. The comparison of laboratory replicate and field duplicate results for chemical tests in the parts-per-million or even parts-per-billion range has typically

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH DATA QUALITY (continued)

been done using an absolute "relative percent difference (RPD)" statistic which is an easy proxy for error estimation rather than a more complete analysis of precision as specified by Thompson and Howarth. An RPD statistic is not appropriate for SGH results as the reporting limit for SGH is 1 part-per-trillion. Further, SGH is a semi-quantitative technique and was not designed to have the same level of precision as other less sensitive geochemistry's as it is only used as an exploration tool and not for any assay work. SGH is also designed to cover a wide range of organic compounds with an unprecedented 162 compounds being measured for each sample. In order to analyze such a wide molecular weight range of compounds, sacrifices were made to the variability especially in the low molecular weight range of the SGH analysis. The result is that the first fifteen SGH compounds in the Excel spreadsheet is expected to exhibit more imprecision than the other 147 compounds. An SGH laboratory replicate is a large set of data for comparison even for just a few pairs of analyses. Precision calculations using a Thompson and Howarth approach should only be used for estimating error in individual measurements, and not for describing the average error in a larger data set. In geochemical exploration geochemists seek concentration patterns to interpret and thus rigorous precision in individual samples is not required because the concentrations of many samples are interpreted collectively. For these reasons recent and independent research at Acadia University in Canada promote that a percent Coefficient of Variation (%CV) should be used as a universal measurement of relative error in all geochemical applications. As SGH results are a relatively large data set for nearly all submissions, %CV is a better statistic for use with SGH. By using %CV, the concentration of duplicate pairs is irrelevant because the units of concentration cancel out in the formation of the coefficient of variation ratio. For SGH, the %CV is calculated on all values ≥ 2 ppt. These values are averaged and represent a value for each pair of replicate analysis of the sample. All of the %CV values for the replicates are then averaged to report one %CV value to represent the overall estimate of the relative error in the laboratory sub-sampling from the prepared samples, and any instrumental variability, in the SGH data set for the survey. Actlabs' has successfully addressed the analytical challenge to minimize analytical variability for such a large list of compounds. Thus as SGH is also interpreted as a signature and is solely used for exploration and not assay measurement, the data from SGH is **"fit for purpose"** as a geochemical exploration tool.

- **Historical SGH Precision:** In the general history of geochemistry, studies indicate that a large component of total measurement error is introduced during the collection of the initial sample and in sub-sampling, and that only a subordinate amount of error in the result is introduced during preparation and analysis. A historical record encompassing many projects for SGH, including a wide variety of sample

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH DATA QUALITY (continued)

types, geology and geography, shows that the consistency and precision for the analysis of SGH is excellent with an overall precision of 6.8% Coefficient of Variation (%CV). When last calculated, this number has a range having a maximum of 12.4% CV, a minimum of 3.0% CV, with a standard deviation of 1.6%, in a population made up of over 400 targets (over 45,000 samples) interpreted since June of 2004. Again the precision of 6.8% CV included all of the sample types as soil from different horizons, peat, till, humus, lake-bottom sediments, ocean-bottom sediments, and even snow. When field duplicates have been revealed to us, we have found that the precision of the field duplicates are in the range of about 9 to 12 %CV. As SGH is interpreted using a combination of compounds as a chemical "class" or signature, the affect of a few concentrations that may be imprecise in a direct comparison of duplicates is not significant. Further, projects that have been re-sampled at different times or seasons are expected to have different SGH concentrations. The SGH anomalies may not be in exactly the same position or of the same intensity due to variable conditions that may have affected the dispersion of different pathfinder classes. However, the SGH "signature" as to the presence of the specific mix of SGH pathfinder classes will definitely still exist, and will retain the ability to identify the deposit type and vector to the same target location.

- **LABORATORY MATERIALS BLANK – QUALITY ASSURANCE (LMB-QA):**

The Laboratory Materials Blank Quality Assurance measurements (LMB-QA) shown in the SGH spreadsheet of results are matrix free blanks analyzed for SGH. These blanks are not standard laboratory blanks as they do not accurately reflect an amount expected to be from laboratory handling or laboratory conditions that may be present and affect the sample analysis result. The LMB-QA measurements are a pre-warning system to only detect any contamination originating from laboratory glassware, vials or caps. As there is no substrate to emulate the sample matrix, the full solvating power of the SGH leaching solution, effectively a water leach, is fully directed at the small surface area of the glassware, vials or caps. In a sample analysis the solvating power of the SGH leaching solution is distributed between the large sample surface area (from soil, humus, sediments, peat, till, etc.) and the relatively small contribution from the laboratory materials surfaces. The sample matrix also buffers the solvating or leaching effect in the sample versus the more vigourous leaching of the laboratory materials which do not experience this buffering effect. Thus the level of the LMB-QA reported is biased high relative to the sample concentration and the actual contribution of the laboratory reagents, equipment, handling, etc. to the values in samples is significantly lower. This situation in organic laboratory analysis only occurs at such extremely low part-per-trillion (ppt) measurement levels. This is one of the reasons that SGH uses a reporting limit and not a detection limit. The 1 ppt reporting limit used in the SGH spreadsheet of raw concentration data is 3 to 5

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH DATA QUALITY (continued)

times greater than a detection limit. The reporting limit automatically filters out analytical noise, the actual LMB-QA, and most of the sample survey site background. This has been proven as SGH values of 1 to 3 parts-per-trillion (ppt) have very often illustrated the outline of anomalies directly related to mineral targets. Thus all SGH values greater than or equal to 1 or 2 ppt should be used as reliable values for interpretations.

The LMB-QA values thus should not be used to background subtract any SGH data. The LMB-QA values are only an early warning as a quality assurance procedure to indicate the relative cleanliness of laboratory glassware, vials, caps, and the laboratory water supply at the ppt concentration level. Do not subtract the LMB-QA values from SGH sample data.

SGH DATA INTERPRETATION

- **GEOCHEMICAL ANOMALY THRESHOLD VALUE:**

In the interpretation of "inorganic" geochemical data one of the determinations to be made is to calculate a "Threshold" value above which data is considered anomalous. This is done on an element by element basis. In the interpretation of this "organic" geochemical data this determination is done differently. The determination of a threshold value is not calculated for each hydrocarbon compound. The determination of a threshold value is also a concentration below which geochemical data is considered as "noise" for the purposes of geochemical interpretation. As discussed on page 10, SGH uses a "Reporting Limit" instead of some type of Detection Limit. The amount of noise that is already eliminated in the data, as below the Reporting Limit of 1 part-per-trillion (shown in the data spreadsheet as "-1" as "not-detected at a Reporting Limit of 1 ppt") is equivalent to approximately 5 standard deviations of variability. To thus calculate an additional Threshold Value is a loss of real and valuable data. Further, in the interpretation of SGH data, individual compounds are not considered (unless explicitly mentioned in the report). The interpretation of SGH data is exclusively conducted by "compound chemical class" which is the sum of four to fourteen individual hydrocarbons in the same organic chemical class as these compounds naturally have the same chemical properties that ultimately define their spatial dispersion characteristics in their rise from a mineral target through the overburden. This combined class is more reliable than the measurement of any one compound. SGH also eliminates the need for a Threshold value determination above the Reporting Limit due to the "high specificity" of the specific hydrocarbons and the classes they form. Each of the hydrocarbons has been hand selected due to their lower probability of being found in general surface soils. Further, only those classes where the majority of the compounds are detected above the Reporting Limit are considered in the interpretation. This defines the SGH geochemistry as having less

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH DATA INTERPRETATION (continued)

GEOCHEMICAL ANOMALY THRESHOLD VALUE: (continued)

geochemical noise due to the use of a reporting limit and as having higher confidence in the use of groups (classes) of data instead of individual compounds. However the most important aspect of interpretation is the use of a forensic signature. At least three specific "Pathfinder" classes, based on the combinations or template of classes we have developed, must be present to define the hydrocarbon signature to confidently predict the presence of a specific type of mineral target. Do not calculate another Threshold value. FACT: It has been proven many times that important chemical anomalies can exist even at 5 ppt.

- **SGH PATHFINDER CLASS MAGNITUDE**:

  The magnitude of any individual concentration or that of a hydrocarbon class does not imply that the data is of more importance or that mineralization is of higher quantity or grade. SGH interpretation must use the review of the combination of specific hydrocarbon classes to make any interpretation.

- **SGH DATA LEVELING:**

  The combination of SGH data from different field sampling events has rarely required leveling in order to combine survey grids. The only circumstances that have occasionally required leveling has been the combination of samples that are very fine in texture, thus having a combined large surface area to samples of peat that may be in nearby areas. Even after maceration of the peat and in using the maximum size of sample amenable to this test method, peat samples have a significantly lower surface area. Peat samples have only required leveling in one survey in the last 500 SGH interpretations.

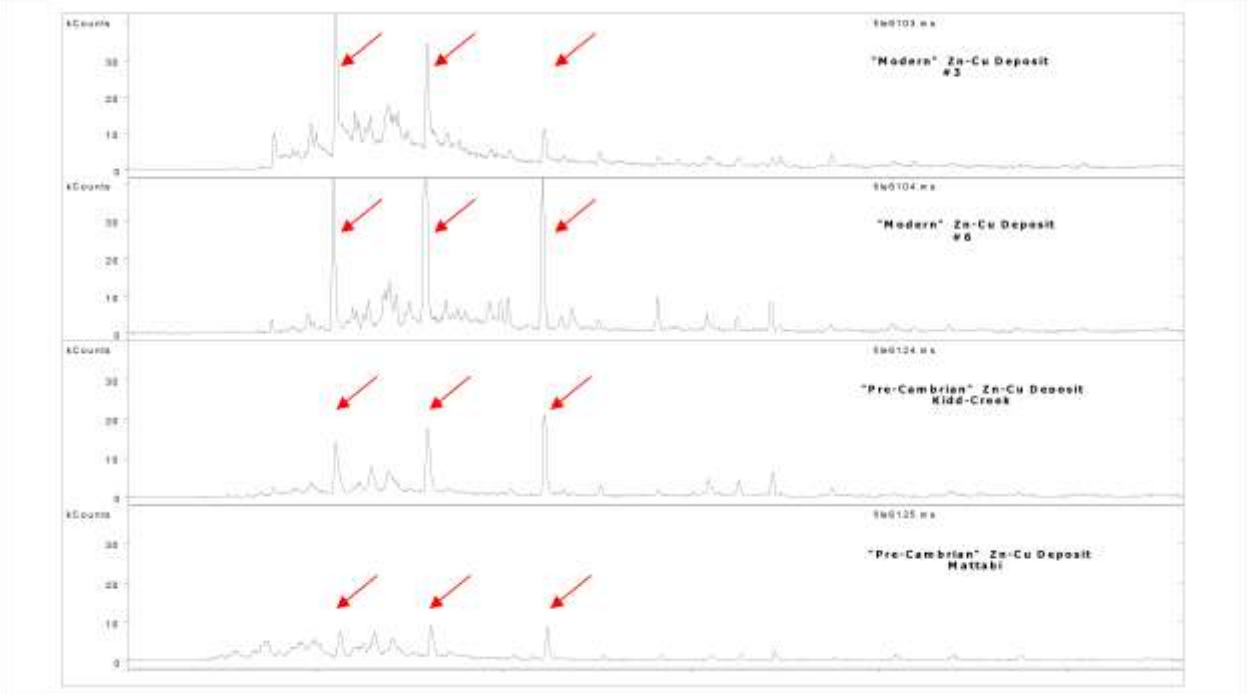
  In only the last year it has been observed that SGH data **may** require leveling when different field sampling events have significantly different soil temperature. It has been documented that only when "soil" samples are taken from "frozen" ground that data leveling may be required as frozen sample act as a frozen cap to the hydrocarbon flux and may collect a higher concentration of hydrocarbon compounds compared to sampling during seasons where the samples are not frozen. Only two surveys have required leveling in the last 500 SGH interpretations.

  The author has taken introductory training in the leveling of geochemical data. If leveling is required, both data sets are reviewed in terms of maximum, minimum and average values for each SGH Pathfinder Class intended for use in the interpretation. Data in sectioned into quartiles and each section is assigned specific leveling factors that is then applied to one data set. It should be noted that any type of data leveling is an approximation.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH – FORENSIC GEOCHEMICAL SIGNATURES

- One of the first experiments in 1996 in the development of the SGH analysis was to observe if an SGH response could be obtained directly from an ore sample. From office shelf specimens, small rock chips were obtained which were then crushed and milled. The fine pulp obtained was then subjected to the SGH analysis. These shelf specimen samples were from well known Volcanic Massive Sulphide deposits of the Mattabi deposit from the Archean Sturgeon Lake Camp in Northwestern Ontario and from the Kidd Creek Archean volcanic-hosted copper-zinc deposit. Even these specimen samples contain a geochemical record of the hydrocarbons produced by the bacteria that had been feeding on these deposits at depth. As a comparison, SGH analysis were similarly conducted on modern-day VMS ore samples taken from a "black smoker" hydrothermal volcanic vent from the deep sea bed of the Juan de Fuca Ridge where high concentrations of microbial growth was also known to exist. The raw data profiles as GC/MS Total Ion Chromatograms are shown below to illustrate the "visible" portion of the VMS signature obtained from the SGH analysis.

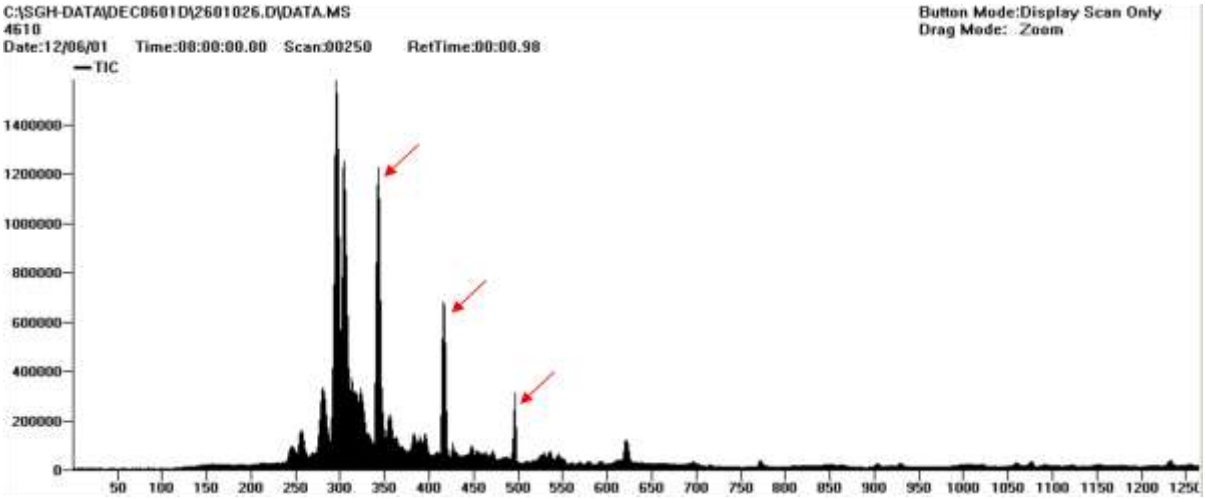


The top two profiles were obtained from two samples of the modern day "black smokers". The third and fourth chromatograms in the above image were obtained from the Pre-Cambrian Zn-Cu Kidd Creek and Mattabi deposits. The red arrows point to three compounds that are a portion of the SGH signature for VMS type deposits. This visible portion of the VMS signature of hydrocarbons can easily be seen in the analysis of each of these four samples.

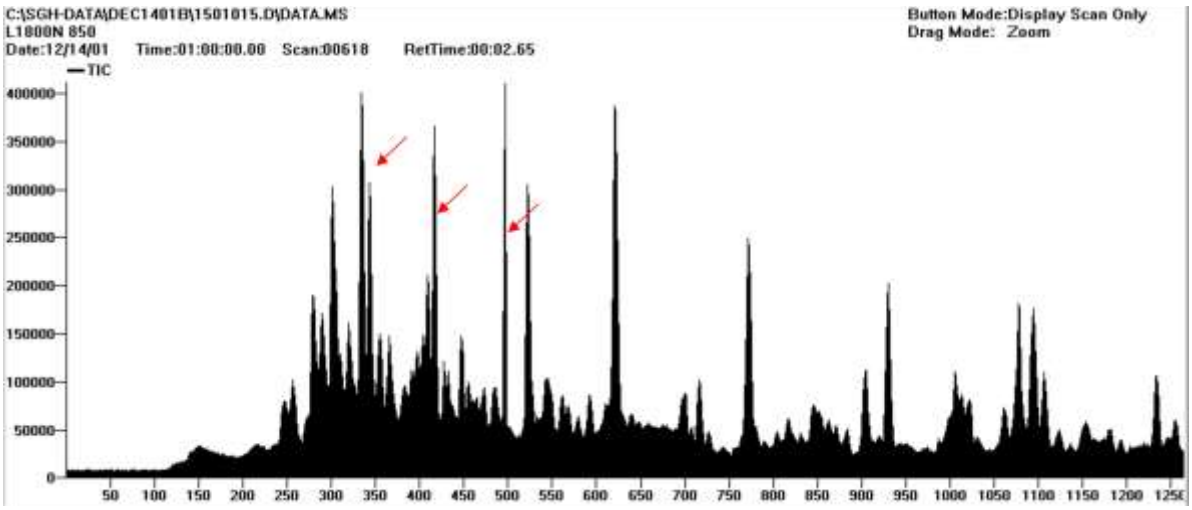
1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH – FORENSIC GEOCHEMICAL SIGNATURES (cont.)

The next question in our early objectives was to see if this SGH signature could also be observed in surficial soil samples that had been taken over VMS deposits. Through our research projects, soil samples were obtained from over the Ruttan Cu-Zn VMS deposit near Leaf Rapids, Manitoba and located in the Paleoproterozoic Rusty Lake greenstone belt. The profile obtained, as observed in the raw GC/MS chromatogram, is shown in this next image below:



The three compounds indicated by the red arrows represent the same visible portion of the VMS signature observed from the modern day black smoker samples and the ore samples taken from the Mattabi and Kidd Creek, even though this soil was taken from over a different VMS deposit in a geographically different area. Is this coincidence? Another soil sample was obtained from Noranda's Gilmour South base-metal occurrence in the Bathurst Mining camp in northern New Brunswick. As shown below, this sample contained a very complex SGH signature, however the visible portion of the VMS signature as indicated by the red arrows is still observed as in the black smoker, Mattabi and Kidd Creek ore samples.

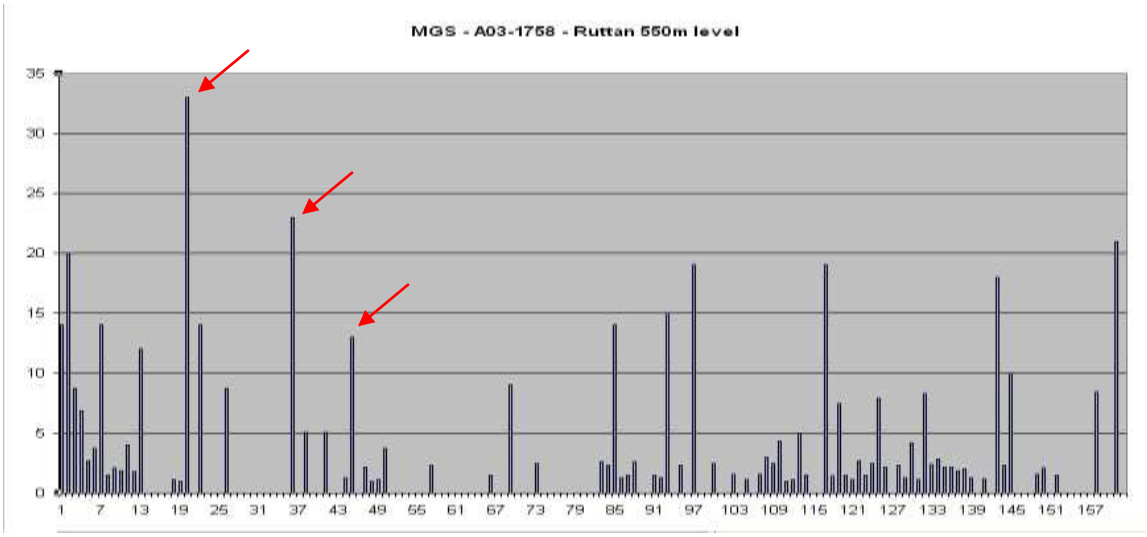


1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH – FORENSIC GEOCHEMICAL SIGNATURES (cont.)

In research conducted by the Ontario Geological Survey, this same portion of the SGH signature was also observed over the VMS deposit at Cross Lake in Ontario. Note that the visible signature shown as the three compounds indicated by the red arrows is only a small portion of the complete SGH VMS signature. The full VMS signature is made up of at least three groups, as three organic chemical classes, that together contain at least 35 of the individual SGH hydrocarbons.

The chromatograms shown on the preceding page from the GC/MS analysis are not used directly in the interpretation of SGH data. As we are only interested in a specific list of 162 hydrocarbons, the mass spectrometer and associated software programs specifically identifies the hydrocarbons of interest, runs calculations using relative responses to a short list of hydrocarbons used as standards, and develops an Excel spreadsheet of semi-quantitative concentration data to represent the sample. Thus the SGH results for a sample, like that observed in ore from the Ruttan, are filtered to obtain the concentrations for the specific 162 hydrocarbons. A simple bar graph drawn from the Excel spreadsheet of the hydrocarbons and their concentrations results in a DNA like **forensic SGH signature** as shown below. The portion discussed hear as the "visible" SGH VMS signature in the GC/MS chromatograms, is again shown by the red arrows.

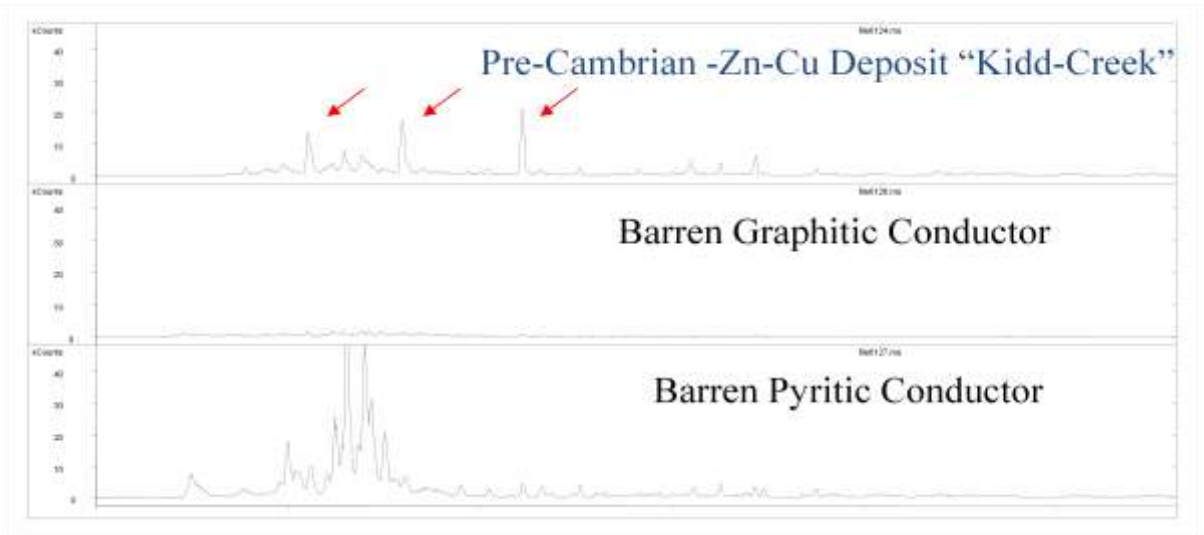


Through the work done in the SGH CAMIRO research projects, it was observed that the hydrocarbon signature produced by the SGH technique appeared to also be able to be used to differentiate barren from ore-bearing conductors. This was explored further through the submission and analysis of specific specimen samples that represented a barren pyritic conductor and a barren graphitic conductor.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH – FORENSIC GEOCHEMICAL SIGNATURES (cont.)

The GC/MS chromatograms from these two specimens are compared to that obtained from the Kidd-Creek ore as shown below. This diagram conclusively shows that the SGH signatures obtained from the two types of barren conductors are completely different than that obtained by SGH over VMS type ore. SGH is thus able to differentiate between ore-bearing conductors and barren conductors as the Forensic SGH Geochemical signature is different.



- SGH has been described by the Ontario Geological Survey of Canada (OGS) as a "REDOX cell locator". Many SGH surveys for Gold and other mineral targets can result in multiple types of anomalies, depending on the class of SGH compounds, even over the same target and in the same set of samples. Thus "Apical", "Nested-Halo", and "Rabbit-Ear" or "Halo" type SGH anomalies are all typically observed from the effect of REDOX cells that have developed over deposits. REDOX cells are also related to the presence of bacteriological activity.
- The VMS template of SGH Pathfinder Classes uses low and medium weight classes of hydrocarbon compounds. Again, at least three Pathfinder Class group maps, associated with the SGH signature for VMS, must be present to begin to be considered for assignment of a good rating. The Pathfinder Class anomalies in these maps must logically concur and support a consistent interpretation in relation to the expected geochromatographic characteristics of the Pathfinder Class, for a specific area.
- The interpretation development history shown here on pages 16-19 for VMS SGH Pathfinder Class map(s) shown in this report is similar to the development history for other target types. The reader should not draw a conclusion that SGH is used only for sulphide based mineralization as some of the most intense SGH anomaly have been associated with Kimberlites where sulphides are essentially not present.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH DATA INTERPRETATION

DISCLAIMER

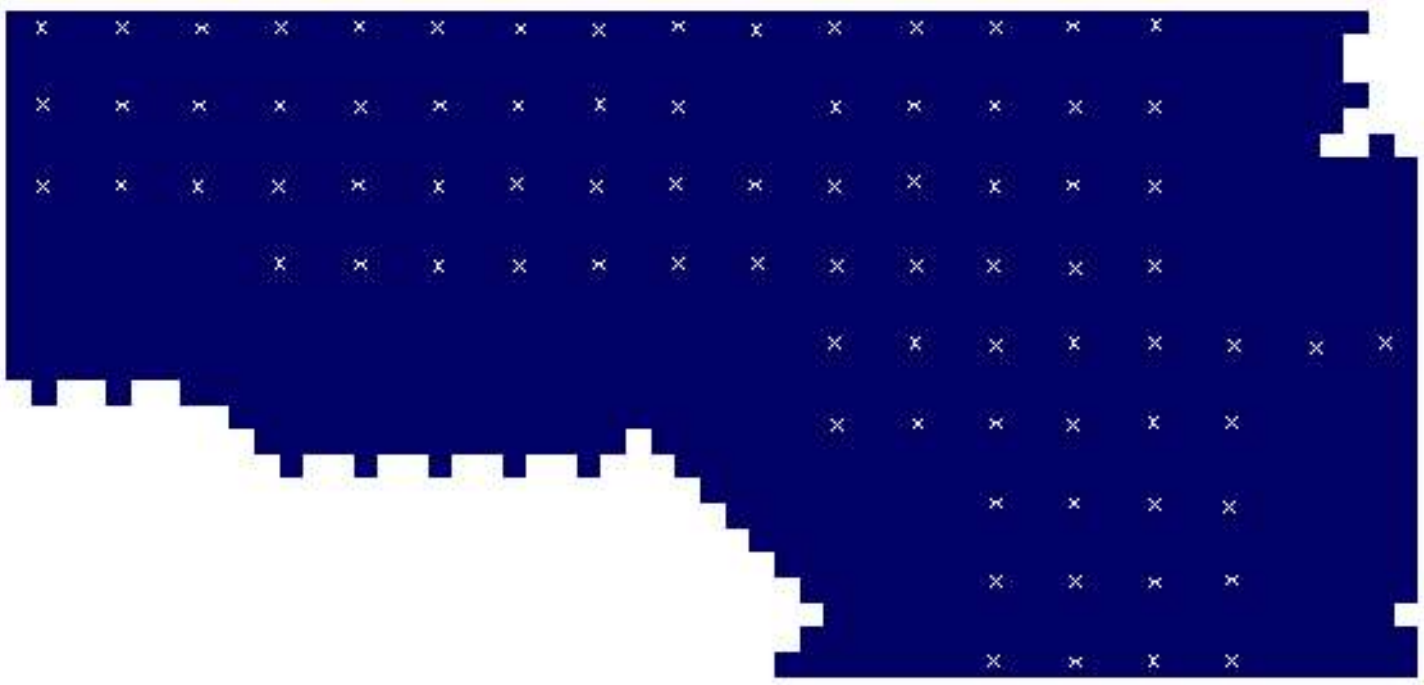
This "SGH Interpretation Report" has been prepared to assist the user in understanding the development and capabilities of this Organic based Geochemistry. The interpretation of the Soil Gas Hydrocarbon (SGH) data is in reference to a template or group of SGH classes of compounds specific to a type of mineralization or target that is chosen by the client (i.e. the template for gold, copper, VMS, uranium, etc.). Although the template of SGH Pathfinder Classes that has been developed through research and review of case studies has proven to be able to address many lithologies, Activation Laboratories Ltd. cannot guarantee that the template is applicable to every type of target in every type of environment. The interpretation in this report attempts to identify an anomaly that has the best SGH signature in the survey for the type of mineralization or target chosen by the client. However, this interpretation is not exhaustive and there may be additional SGH anomalies that may warrant interest and interpretation. It should not be viewed due to the generation of this SGH report, that Activation Laboratories Ltd. has the expertise or is in the business of interpreting geochemical data as a general service. As the author is the originator of the SGH geochemistry, has researched and developed this exploration tool since 1996, and has produced similar interpretations using SGH data for over 500 surveys, he is the best qualified to prepare this interpretation as assistance to clients who wish to use SGH. Also, any mention of a "drill target" is to help the reader focus on the specific anomaly or specific area of the survey where the SGH geochemical data vectors to and implies the best spatial location as a vertical projection over the centre of the mineralization if present. The author and/or Activation Laboratories has no professional expertise in drilling techniques to explore and drill any of the targets or anomalies mentioned. Activation Laboratories Ltd. can offer assistance in general suggestions for sampling protocols and in initial sample grid location design; however we accept no responsibility to the appropriateness of the samples taken. Activation Laboratories Ltd. has made every attempt to ensure the accuracy and reliability of the information provided in this report. Activation Laboratories Ltd. or its employees, does not accept any responsibility or liability for the accuracy, content, completeness, legality, or reliability of the information or description of processes contained in this report. The information is provided "as is" without a guarantee of any kind in the interpretation or use of the results of the SGH geochemistry. The client or user accepts all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly form using any information or material contained in this report.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH SURVEY INTERPRETATION

- This report is based on the SGH results from the analysis of a total of 85 soil samples submitted on May 27, 2011 from locations at the Mattabi survey (map shown below). About 9 parallel east-west trending sample lines or transects were used to survey this area. This grid of samples had spacing of about 100 meters.



- This report is a follow up to the initial report dated July 15, 2011, that referenced samples submitted for the Mattabi survey for SGH analysis. The initial report was interpreted for potential VMS and Gold based targets as requested. Two Redox cells potentially associates with VMS mineralization were observed. During the initial interpretation a third Redox cell was identified that most likely had an SGH signature different than the signatures in the SGH VMS and SGH Gold templates. A request was made on July 22, 2011 to attempt to interpret the SGH signature for this third Redox cell and potentially identify the type of mineralization that might be present at depth.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

- The number of samples submitted for this project is adequate to use SGH as an exploration tool. Note that the SGH data is only reviewed for the particular target deposit type requested; in this case the review is to identify an unknown SGH signature identified in a previous interpretation of the SGH data. It is usually assumed that there is only one potential target. In this case there are multiple targets as there is evidence of potentially three Redox cell zones as indicated by halo or nested-halo SGH anomalies. The close proximity and potential overlap of the SGH anomalies from multiple targets results in a more complex interpretation much like the interference patterns in water waves generated from multiple point sources.

- Note that the associated SGH results for these 84 samples are presented in a separate Excel spreadsheet. This raw data is semi-quantitative and is presented in units of picograms/ gram (pg/g) or parts-per-trillion (ppt) as the concentration of specific hydrocarbons in each sample.

SGH SURVEY INTERPRETATION

- **The overall precision of the SGH analysis for these 84 Mattabi samples was excellent** as demonstrated by 5 samples used for laboratory replicate analysis. The average Coefficient of Variation (%CV) of the replicate results was 4.2% CV. This represents an excellent level of analytical performance especially at the low parts-per-trillion (ppt) scale of measurements in the SGH geochemistry. Field duplicates were not identified in this project.

- SGH has been observed to reflect the presence of a REDOX cell. SGH is described by the Ontario Geological Survey of Canada (OGS) as a "REDOX cell locator". Many SGH surveys for Gold and other mineral targets can result in multiple types of anomalies, depending on the class of SGH compounds, even over the same target and in the same set of samples. Thus "Apical", "Nested-Halo", and "Rabbit-Ear" or "Halo" type anomalies are all typically observed from the effect of REDOX cells that have developed over deposits. REDOX cells are also related to the presence of bacteriological activity.

- Note that SGH is "blind" to the presence of inorganic elements that may represent mobilized anomalies.

- SGH results have also been shown to correlate well with geophysical anomalies such as magnetic anomalies and those of CSAMT.

- The client provided the UTM coordinates in WGS84 datum and verified the complete survey orientation prior to the original report.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

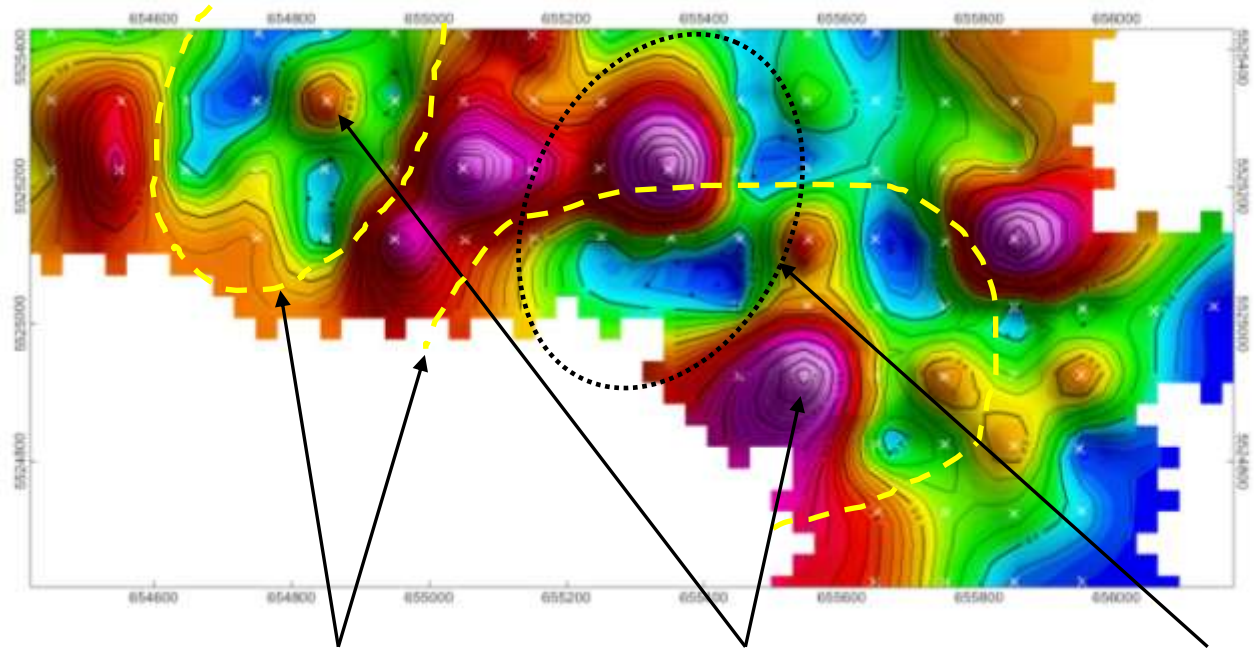
SGH SURVEY INTERPRETATION – SIGNATURE OF UNKNOWN REDOX CELL SIGNATURE

- The maps shown on page 24 and 25 in plan view and page 26 in 3D view represent the results obtained from the Mattabi samples and are SGH "Pathfinder Class maps". Page 25 illustrates the map reported in the July 15, 2011 report for the Mattabi area for targeting **VMS** mineralization. The SGH signature in the Mattabi survey was very complex as it appeared from the data that there were multiple, closely spaced, Redox cells in the overburden. The resultant mixture of dispersal patterns makes the interpretations much more complex, just as in Forensic analysis and interpretations of a mixture. The yellow dashed outlines applied to the SGH Pathfinder Class map on page 24 are the interpretations of the outer boundaries of potentially two REDOX cell conditions in the overburden potentially related to VMS mineralization. This SGH Pathfinder Class map represents the simple summation of several individual hydrocarbon compound concentrations, which are grouped from within the same organic chemical class, that have been associated with VMS mineralization from several years of case study research. This is the SGH Class map where potentially a third area outlined by a dotted black oval having Redox conditions in the overburden was identified. SGH Pathfinder Class maps have been shown to be robust as they are each described using from 4 to 14 (unless otherwise stated) chemically related SGH compounds which are simply summed to create each class map. Thus each map has a higher level of confidence as it is not illustrating just one compound response. A legend of the compound classes appears at the bottom of the SGH data spreadsheet.
- The overall SGH interpretation Rating has even a higher level of confidence as it further relies on the consensus between at least one other SGH Copper Pathfinder classes, minimum of three classes (the third class map is not shown in this report) that together make the signature of the target at depth.
- The report on July 15, 2011 discussed the results against the SGH VMS template of SGH Pathfinder Classes which identified two areas. Page 25 illustrates the SGH Class map that best illustrates the central third Redox zone within the black dotted oval as a nested halo anomaly. This Pathfinder Class map is confirmed, when combined with the SGH Pathfinder Class map on page 24 and other class maps that describe an SGH Class signature that is most often associated with Copper mineralization. The SGH Class map on page 25 that has been reported as a VMS Pathfinder Class map is also used as a support map in the interpretation of the SGH template for Copper. Again, note that there are other Pathfinder Class maps that agree and support the interpretation for the presence of Copper mineralization. The SGH Pathfinder Class map for Copper on page 25 is also shown in 3D on page 26.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH "VMS" PATHFINDER CLASS MAP

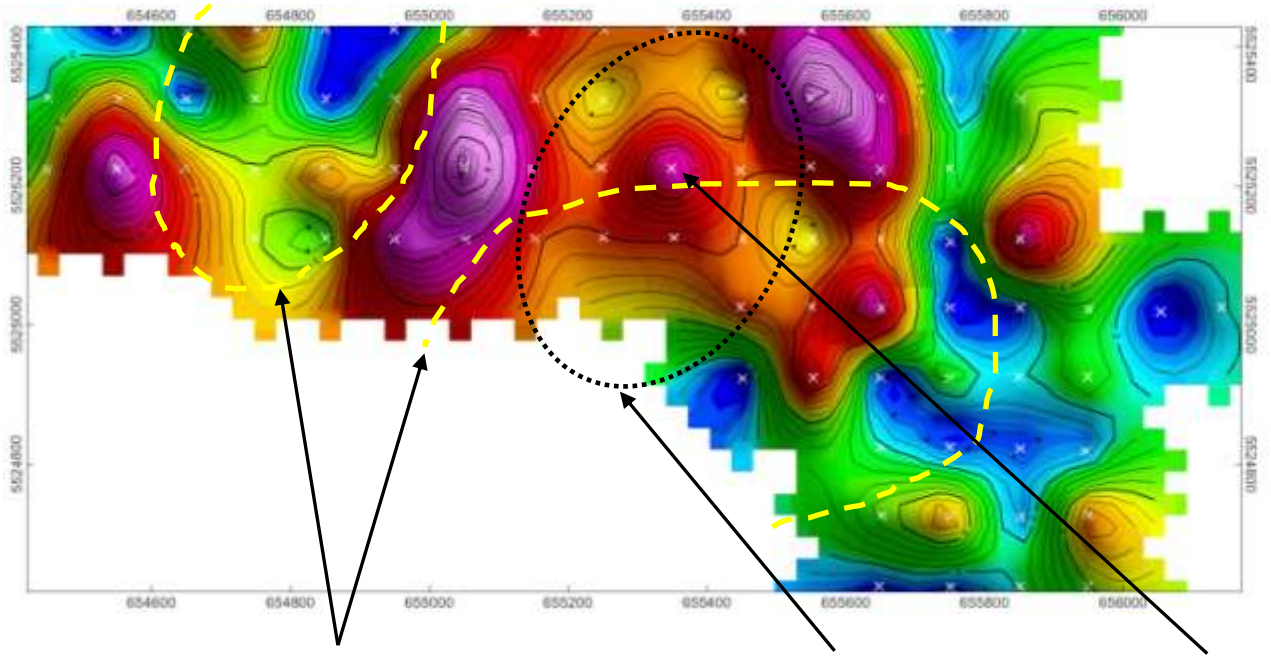


SGH VMS – HALO Anomaly Outlines **Potential SGH VMS – Drill Targets** **Additional Redox Cell**

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH PATHFINDER CLASS MAP – ADDITIONAL REDOX CELL

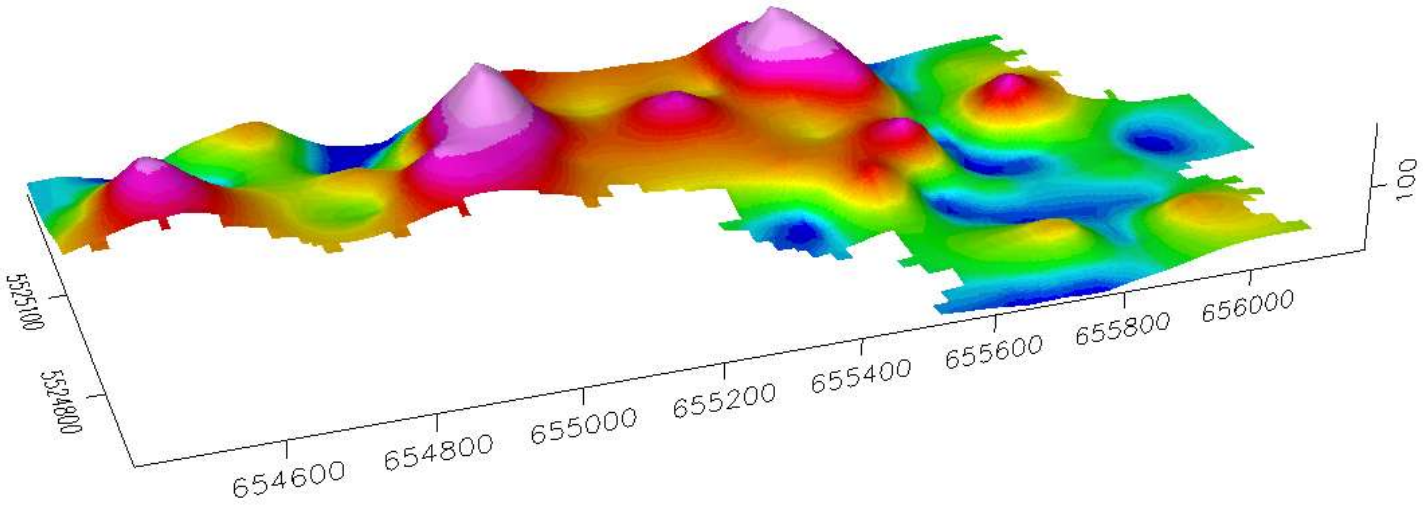


GEOSOFT.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH PATHFINDER CLASS MAP – ADDITIONAL REDOX CELL



1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

INTERPRETION OF SGH RESULTS – A11-4580
3936499 CANADA INC. – MATTABI SGH SURVEY

SGH SURVEY INTERPRETATION RATING FOR PRESENCE OF "COPPER" MINERALIZATION

- After review of all of the SGH Pathfinder Class maps, the SGH results suggest a **"rating of 4.5"** for the areas within the black dotted oval outline on page 25 in relation to the presence of Copper based mineralization in this Mattabi survey. This rating is subjective and is based on a scale of 6.0, in increments of 0.5, with a value of 6.0 being the best. This rating represents the similarity of these SGH results, and the developed SGH Pathfinder Class maps, with case studies over Copper deposits in Nunavut, shear hosted as well as sediment hosted deposits in Nevada, Paleochannel Copper mineralization in Western Australia, and the Spence deposit in the Atacama Desert in Chile. The degree of confidence in the rating only starts to be "good" at a level of 4.0.

- A location is shown as a possible drill target on the map on page 25 as the centre of a nested halo anomaly that represents the best vertical spatial projection of the centre of potential Copper mineralization at some unknown depth at this Mattabi survey.

- The identification of a drill target is not an explicit recommendation by Activation Laboratories Ltd. to drill test the associated SGH anomaly. A drill target is indicated to ensure that the reader is aware of the location having the highest confidence of being the centre of a REDOX cell and thus the vertical projection of the portion of the target that has the most effect of creating the strongest oxidation-reduction conditions in the overburden. We believe that, as a vertical projection, it is the location of the highest confidence in intersecting the target mineralization. This location is identified only through the use of SGH data. Other geological, geochemical and/or geophysical information should always be considered. This is also not a recommendation for vertical drilling or that vertical drilling would be the best approach to explore this mineralization at this location. Activation Laboratories Ltd. has no experience in actual exploration drilling.

- Again, this interpretation is based only on the interpretation of this SGH data.

- The client should use a combination of these SGH results and its report with additional geochemical, geophysical, and geological information to possibly obtain a more confident and precise target location.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

SGH SURVEY - RECOMMENDATIONS

- Additional samples to the north and south of the Redox cell associated with the black dotted oval on page 25 may be valuable in interpreting the extent of this Redox cell as well as the overlapping Redox cell associated with the SGH signature for VMS This may improve the interpretation and Rating of one or both Redox areas at the Mattabi survey.

IN-FILL SAMPLING RECOMMENDATIONS FOR SGH ANALYSIS

- Based on the results of this report and/or other information, the client may decide that additional sampling or infill sampling may be warranted. To obtain the best results from additional sampling for SGH it is recommended that some sample locations within, or bordering, the area of interest be re-sampled for reference rather than combining just new samples with the sample data from the initial survey. Although several SGH surveys have previously been easily and directly, combined without data leveling, it cannot be guaranteed that data leveling will not be required. It has been found that data leveling is more apt to be required should the new samples be collected under significantly different environmental conditions than during the initial sample survey, i.e. summer collection versus winter collection, or if the survey is located north of a latitude of 60°. The process of data leveling adds a minimum of 3 to 5 days of work to conduct the additional data evaluation, develop additional plots of the results, conduct new interpretations, and in additional report descriptions. Results from data leveling is also always considered "an approximation" thus having a lower level of confidence that newly re-sampled locations would have. As of September 2010, an additional cost will be invoiced should data leveling operations be required if the client requests that two SGH data sets be interpreted and reported together. Thus re-sampling locations will provide better data leveling an potentially a faster turnaround time for results. These re-sampled reference points will provide more accurate and confident surveys for evaluation and aid in deciding specific drill targets.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

Cautionary Note Regarding Assumptions and Forward Looking Statements

The statements and target rating made in the Soil Gas Hydrocarbon (SGH) interpretive report or in other communications may contain certain forward-looking information related to a target or SGH anomaly.

Statements related to the rating of a target are based on comparison of the SGH signatures derived by Activation Laboratories Ltd. through previous research on known case studies. The rating is not derived from any statistics or other formula. The rating is a subjective value on a scale of 0 to 6 relative to the similarity of the SGH signature reviewed compared to the results of previous scientific research and case studies based on the analysis of surficial samples over known ore bodies. No information on other geochemistries, geophysics, or geology is usually available as additional information for the interpretation and assignment of a rating value unless otherwise stated. The rating does not imply ore grade and is not to be used in mineral resource estimate calculations. References to the rating should be viewed as forward-looking statements to the extent that it involves a subjective comparison to known SGH case studies. As with other geochemistries, the implied rating and anticipated target characteristics may be different than that actually encountered if the target is drilled or the property developed.

Activation Laboratories Ltd. may also make a scientifically based reference in this interpretive report to an area that might be used as a drill target. Usually the nearest sample is identified as an approximation to a "possible drill target" location. This is based only on SGH results and is to be regarded as a guide based on the current state of this science.

Unless stated, Activation Laboratories Ltd. has not physically observed the exploration site and has no prior knowledge of any site description or details. Actlabs makes general recommendations for sampling and shipping of samples. Unless stated, the laboratory does not witness sampling, does not take into consideration the specific sampling procedures used, season, handling, packaging, or shipping methods. The majority of the time, Activation Laboratories Ltd. has had no input into sampling survey design. Where specified Activation Laboratories Ltd. may not have conducted sample preparation procedures as it may have been conducted at the client's assigned laboratory. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ scientifically which may impact the associated interpretation and target rating from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended.

In general, any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance are not statements of historical fact. These "scientifically based educated theories" should be viewed as "forward-looking statements".

Readers of this interpretive report are cautioned not to place undue reliance on forward-looking information. Forward looking statements are made based on scientific beliefs, estimates and opinions on the date the statements are made and the interpretive report issued. The Company undertakes no obligation to update forward-looking statements or otherwise revise previous reports if these beliefs, estimates and opinions, future scientific developments, other new information, or other circumstances should change that may affect the analytical results, rating, or interpretation.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

Date Received for this Submission: May 27, 2011

Date this Submission was Analyzed: June 14-15, 2011

SGH Interpretation Report: Mattabi Survey: July 8, 2011, Revised – July 15, 2011

SGH Interpretation Report: Mattabi Survey – Interpretation of additional Redox Cell – August 2, 2011

3936449 CANADA INC.

95 Springdale Blvd.
Toronto, Ontario

Attention: Michael Bulatovich

RE: Your Reference: MATTABI SURVEY

CERTIFICATE OF ANALYSIS

85 Mattabi samples were submitted for analysis.

The following sample preparation was completed: Code S4 – Drying at 40°C, Sieving -60 mesh

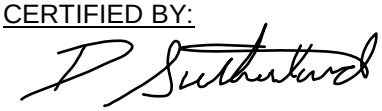
The following analytical package was requested: Code SGH – Soil Gas Hydrocarbon Geochemistry

REPORT/WORKORDER: A11-4580

Notes:
The SGH – Soil Gas Hydrocarbon Geochemistry is a semi-quantitative analytical procedure to detect and measure 162 hydrocarbon compounds as the organic signature in the sample material collected from a survey area. It is not an assay of mineralization but is a predictive geochemical tool used for exploration. This certificate pertains only to the SGH data presented in the associated Microsoft Excel spreadsheet of results.

The author of this SGH Interpretation Report, Mr. Dale Sutherland, is the creator of the SGH organic geochemistry. He is a Chartered Chemist (C.Chem.) and Forensic Scientist specializing in organic chemistry. He is not a professional geologist or geochemist.

CERTIFIED BY:



Dale Sutherland, B.Sc.,B.Sc.,B.Ed.,C.Chem.
Forensic Scientist, Organics Manager,
Director of Research
Activation Laboratories Ltd.

1336 Sandhill Drive ● Ancaster, ON ● L9G 4V5 ● Tel: (905) 648-9611 ● Fax: (905) 648-9613 ● Toll Free: 1-888-ACTLABS
E-mail: dalesutherland@actlabsint.com ● Web Site: www.actlabs.com

APPENDIX C

Map of Claim 3001029 and Sampling Plan

AUR LAKE EXPLORATION INC.

Map of Claim 3001029 & SGH Survey Plan

0m 50m 100m 150m 200m 250m

1:5000 Scale

Revision Date: August 24, 2011
File Name: MattabiSGH.cdr
View Name: keymap

Legend

- CLAIM BOUNDARY
- SGH SURVEY LINE
- SGH SAMPLE SITE

Sample numbers start with the line's letter name followed by the sample's number.

Sample numbers on a line are derived from the last four digits of their UTM position. Add the prefix "65" to the number to get the easting of the sample.

Sample lines follow UTM northing lines with Line A starting at 5525425m N and the other lines spaced equally at 100 meters.

Sample names indicate the intended position of the samples. Actual positions can vary a few meters due to site conditions. For accurate positions see sample list.

Line A (5525425m N) 4450 4550 4650 4750 4850 4950 5050 5150 5250 5350 5450 5550 5650 5750 5850
Line B (5525325m N)
Line C (5525225m N)
Line D (5525125m N)
Line E (5525025m N) 5950 6050 6150
Line F (5524925m N)
Line G (5524825m N)
Line H (5524725m N)
Line I (5524625m N)

SGH Survey line (Typ.)

CLAIM 3001029
CLAIM 3001620
CLAIM 3001621
CLAIM 3001622

Swamp Lake
Claw Lake
Glitter Lake
Telephone Lake
Parked Truck
Trail

N Astr.

653000E 654000E 655000E 656000E 657000E 658000E 659000E 660000E 661000E
5527000N 5526000N 5525000N 5524000N 5523000N 5522000N

APPENDIX D

SGH Sample Location List

Mattabi SGH Sample Location List	Zone U15 (WGS84)	
Sample Number	Easting	Northing
A4450	654449.66 m E	5525424.62 m N
A4550	654550.30 m E	5525423.94 m N
A4650	654651.25 m E	5525422.62 m N
A4750	654751.55 m E	5525423.83 m N
A4850	654849.54 m E	5525425.20 m N
A4950	654948.39 m E	5525424.37 m N
A5050	655052.39 m E	5525421.80 m N
A5150	655150.07 m E	5525421.72 m N
A5250	655251.01 m E	5525425.64 m N
A5350	655349.23 m E	5525421.79 m N
A5450	655449.00 m E	5525423.67 m N
A5550	655550.50 m E	5525423.38 m N
A5650	655650.09 m E	5525424.25 m N
A5750	655748.88 m E	5525425.55 m N
A5850	655852.47 m E	5525427.32 m N
B4450	654450.55 m E	5525326.07 m N
B4550	654552.07 m E	5525324.97 m N
B4650	654648.73 m E	5525325.19 m N
B4750	654749.20 m E	5525325.52 m N
B4850	654851.06 m E	5525324.77 m N
B4950	654950.32 m E	5525324.85 m N
B5050	655049.29 m E	5525324.81 m N
B5150	655152.62 m E	5525325.78 m N
B5250	655250.31 m E	5525322.81 m N
B5450	655449.87 m E	5525324.12 m N
B5550	655548.52 m E	5525325.19 m N
B5650	655649.29 m E	5525324.98 m N
B5750	655750.10 m E	5525323.67 m N
B5850	655851.99 m E	5525324.51 m N
C4450	654449.89 m E	5525223.69 m N
C4550	654549.26 m E	5525224.76 m N
C4650	654646.52 m E	5525224.21 m N
C4750	654748.48 m E	5525222.69 m N
C4850	654848.03 m E	5525225.22 m N
C4950	654949.55 m E	5525224.02 m N
C5050	655049.09 m E	5525227.00 m N

C5150	655147.70 m E	5525224.50 m N
C5250	655247.77 m E	5525226.38 m N
C5350	655348.50 m E	5525225.17 m N
C5450	655447.90 m E	5525222.81 m N
C5550	655548.57 m E	5525228.72 m N
C5650	655649.86 m E	5525223.20 m N
C5750	655748.34 m E	5525225.15 m N
C5850	655850.15 m E	5525224.20 m N
D4750	654749.63 m E	5525125.37 m N
D4850	654849.97 m E	5525125.14 m N
D4950	654949.22 m E	5525123.21 m N
D5050	655052.16 m E	5525122.84 m N
D5150	655151.51 m E	5525124.70 m N
D5250	655249.99 m E	5525126.87 m N
D5350	655352.02 m E	5525125.58 m N
D5450	655451.11 m E	5525124.11 m N
D5550	655551.45 m E	5525124.00 m N
D5650	655648.92 m E	5525123.92 m N
D5750	655750.26 m E	5525119.18 m N
D5850	655850.55 m E	5525123.41 m N
E5450	655447.61 m E	5525026.09 m N
E5550	655549.89 m E	5525026.27 m N
E5650	655650.29 m E	5525024.16 m N
E5750	655749.94 m E	5525025.71 m N
E5850	655850.80 m E	5525025.18 m N
E5950	655950.28 m E	5525022.72 m N
E6050	656053.53 m E	5525019.25 m N
E6150	656140.60 m E	5525025.56 m N
F5450	655450.86 m E	5524923.38 m N
F5550	655552.68 m E	5524924.65 m N
F5650	655650.08 m E	5524924.46 m N
F5750	655748.93 m E	5524923.76 m N
F5850	655849.22 m E	5524925.77 m N
F5950	655948.47 m E	5524926.20 m N
G5650	655650.67 m E	5524824.46 m N
G5750	655749.22 m E	5524824.53 m N
G5850	655850.77 m E	5524822.68 m N
G5950	655945.33 m E	5524818.74 m N
H5650	655651.12 m E	5524726.56 m N
H5750	655750.71 m E	5524725.55 m N
H5850	655850.67 m E	5524724.10 m N
H5950	655948.62 m E	5524727.49 m N
I5650	655647.30 m E	5524625.09 m N

I5750	655750.12 m E	5524624.06 m N
I5850	655849.95 m E	5524624.72 m N
I5950	655949.06 m E	5524625.37 m N

APPENDIX E

SGH Sample Analysis

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	001 - LA	002 - LA	003 - LB	004 - LA	005 - LB	006 - LB	007 - LA	008 - LB	009 - LB	010 - LB	011 - LA	012 - LB	013 - LBA	014 - LB
D1050	22	34	10	2	2	2	4	4	-1	-1	1	-1	-1	-1
D1150	28	50	11	7	4	5	5	-1	-1	-1	2	2	2	1
D1250	23	6	7	2	2	2	5	7	-1	-1	2	-1	8	2
DD400	32	53	22	21	5	5	5	17	-1	-1	1	9	-1	3
DD800	26	42	10	16	4	5	8	9	-1	1	4	-1	14	3
DD800-R	28	45	13	16	6	7	8	10	-1	1	4	3	14	3
E1100	31	48	15	9	5	6	4	5	-1	-1	1	-1	1	-1
E1150X	26	33	8	9	1	-1	4	2	-1	-1	-1	-1	-1	-1
E1200	28	46	11	10	2	3	5	5	-1	-1	1	-1	5	-1
E1250	23	10	8	8	1	1	3	4	-1	-1	-1	-1	2	-1
E1300	27	48	8	9	2	1	5	7	-1	-1	2	-1	10	1
E400	27	45	15	10	6	7	4	2	-1	-1	1	1	2	1
E500	28	39	19	7	5	6	-1	4	-1	-1	-1	2	-1	-1
E550	30	54	19	13	5	6	2	9	-1	-1	1	2	-1	-1
E600	23	7	8	7	2	1	5	6	-1	-1	-1	-1	5	-1
E650	21	8	12	9	2	3	5	4	-1	-1	1	-1	3	2
E700	32	58	18	11	5	5	4	4	-1	-1	2	-1	-1	1
E750	26	38	8	5	2	2	4	6	-1	-1	2	-1	2	-1
E800	26	8	9	-1	2	3	4	2	-1	-1	2	1	-1	-1
EE400	26	8	17	11	5	5	3	5	-1	-1	1	1	1	-1
EE800	39	58	17	12	6	7	5	8	-1	-1	2	2	1	-1
EE800-R	36	62	17	15	5	6	5	7	-1	-1	2	2	2	1
Ex-W	25	40	8	3	2	2	4	7	-1	-1	2	1	5	2
F400	34	54	18	10	5	5	4	7	-1	-1	1	3	2	1
F450	32	52	37	8	4	4	4	9	-1	-1	1	6	2	2
F500	28	46	17	3	4	5	3	7	-1	-1	-1	6	-1	1
F550	25	38	11	3	2	2	3	4	-1	-1	1	-1	-1	-1
F600	24	7	9	4	2	2	4	4	-1	-1	-1	-1	4	-1
F650	26	41	9	11	3	4	5	6	-1	-1	2	-1	4	2
F700	28	36	11	10	3	4	5	7	-1	-1	3	-1	7	2
W100	24	42	11	11	2	2	-1	3	-1	-1	1	-1	4	-1
W150	27	43	9	14	3	4	6	7	-1	-1	3	-1	10	2
W200	17	6	9	1	1	1	-1	2	-1	-1	-1	-1	2	1
W235	25	37	10	3	3	3	5	2	-1	-1	2	2	2	2
W325	27	70	26	21	7	8	5	11	-1	-1	1	5	2	1
W325-R	26	67	26	20	7	8	5	12	-1	-1	1	5	1	-1
W350	41	90	20	30	6	7	8	1	-1	-1	3	3	4	5
W50	26	39	9	9	3	3	3	5	-1	-1	1	2	4	-1
A4450	29	42	16	9	3	1	4	5	-1	-1	1	1	-1	1
A4550	27	43	14	8	3	3	2	5	-1	-1	-1	2	5	2
A4650	27	44	13	9	3	4	-1	6	-1	-1	2	-1	3	1
A4750	34	54	18	14	4	5	4	6	-1	-1	2	3	-1	4
A4850	29	42	14	8	2	1	3	5	-1	-1	-1	1	2	1
A4950	25	34	12	7	3	3	2	5	-1	-1	-1	-1	-1	-1
A5050	25	35	9	3	3	3	4	6	-1	-1	2	-1	1	-1
A5150	28	32	10	10	4	4	5	7	-1	-1	3	-1	2	1
A5250	43	51	11	13	3	4	-1	6	-1	-1	2	-1	-1	-1
A5350	35	44	13	9	4	4	5	6	-1	-1	2	-1	2	-1
A5450	39	61	14	14	4	4	5	8	-1	-1	2	5	2	1
A5550	32	55	16	10	4	4	5	8	-1	-1	3	4	-1	1
A5550-R	25	52	15	11	4	4	5	8	-1	-1	3	3	3	1
A5650	23	62	12	13	3	4	5	8	-1	-1	2	3	2	1
A5750	21	49	12	12	3	3	6	4	-1	-1	1	-1	8	1
A5850	20	48	15	15	3	3	6	7	-1	-1	1	-1	1	2

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	001 - LA	002 - LA	003 - LB	004 - LA	005 - LB	006 - LB	007 - LA	008 - LB	009 - LB	010 - LB	011 - LA	012 - LB	013 - LBA	014 - LB
B4450	4	46	12	12	3	4	6	4	-1	-1	1	-1	3	1
B4550	14	41	10	12	3	2	6	6	-1	-1	2	-1	9	2
B4650	32	62	13	12	3	3	4	5	-1	-1	-1	1	1	-1
B4750	25	64	22	27	4	5	5	11	-1	-1	1	4	2	2
B4850	4	39	10	7	2	2	4	5	-1	-1	-1	1	10	1
B4950	15	50	15	25	4	4	4	9	-1	-1	1	7	1	1
B5050	15	50	11	13	3	4	7	9	-1	-1	3	-1	7	2
B5150	27	57	13	15	4	5	7	9	-1	-1	2	-1	6	2
B5250	17	47	12	14	3	4	9	9	-1	-1	2	2	2	2
B5450	31	62	21	16	4	5	6	9	-1	-1	1	6	3	1
B5550	31	52	15	13	4	5	7	7	-1	-1	3	2	3	1
B5650	32	115	27	81	5	6	7	5	-1	-1	4	5	4	-1
B5650-R	30	132	26	105	6	7	7	9	-1	-1	4	5	5	-1
B5750	9	50	14	12	4	4	5	5	-1	-1	-1	-1	3	1
B5850	26	49	10	12	3	3	7	6	-1	-1	1	-1	4	2
C4450	19	50	11	12	3	4	1	-1	-1	-1	2	3	9	1
C4550	8	52	14	19	6	7	7	13	-1	1	4	-1	15	3
C4650	34	102	19	41	5	5	6	12	-1	-1	2	5	3	1
C4750	17	51	15	15	3	4	5	5	-1	-1	1	-1	2	1
C4850	49	40	17	50	5	6	4	11	-1	-1	2	5	3	2
C4950	14	54	15	18	3	4	3	5	-1	-1	1	-1	3	1
C5050	18	47	11	22	5	6	4	9	-1	1	5	-1	1	3
C5150	19	46	17	20	5	6	-1	8	-1	-1	3	-1	-1	2
C5250	17	45	11	13	4	4	5	5	-1	-1	2	-1	5	1
C5350	16	34	20	31	6	7	3	6	-1	1	4	6	9	5
C5450	36	92	23	30	6	6	-1	9	-1	-1	2	5	3	1
C5550	26	54	16	18	5	5	4	4	1	1	2	4	1	-1
C5650	36	103	26	40	5	5	6	11	-1	1	3	7	4	1
C5650-R	34	107	26	39	4	5	7	11	-1	-1	3	8	2	1
C5750	21	63	17	22	3	3	6	5	-1	-1	1	-1	3	1
C5850	20	90	23	63	5	5	7	7	-1	-1	1	5	2	1
D4750	3	42	11	12	3	3	5	-1	-1	-1	2	-1	4	1
D4850	12	50	23	20	5	6	4	7	-1	-1	2	4	2	2
D4950	18	40	17	29	6	4	10	10	1	2	-1	-1	-1	4
D5050	10	60	17	21	6	7	9	9	1	2	3	5	-1	4
D5150	22	51	18	14	6	7	1	2	-1	-1	3	10	-1	3
D5250	25	29	17	19	5	6	-1	2	-1	-1	2	5	1	3
D5350	22	48	14	21	4	5	5	7	-1	-1	2	-1	-1	1
D5450	19	62	19	52	4	5	5	4	-1	-1	2	5	-1	1
D5550	4	41	11	3	4	4	5	4	-1	-1	2	5	12	2
D5650	17	60	23	61	5	6	5	7	-1	-1	2	5	2	-1
D5750	16	50	11	12	2	3	3	4	-1	-1	-1	-1	-1	-1
D5850	10	36	12	16	4	5	6	8	-1	-1	3	-1	1	2
E5450	20	62	23	19	6	6	6	1	-1	-1	2	5	1	-1
E5450-R	20	61	22	17	4	6	5	8	-1	-1	2	5	2	1
E5550	5	45	12	14	4	5	5	5	-1	-1	2	-1	4	2
E5650	23	82	16	18	4	5	5	-1	-1	-1	3	5	-1	1
E5750	4	44	15	16	3	4	4	5	-1	-1	-1	1	6	1
E5850	16	54	14	14	4	4	3	4	-1	-1	1	-1	2	-1
E5950	33	48	12	14	3	3	6	-1	-1	-1	-1	-1	-1	-1
E6050	19	46	13	12	4	4	2	7	-1	-1	-1	-1	-1	-1
E6150	24	53	27	20	7	7	4	7	-1	-1	1	3	-1	-1
F5450	11	24	12	15	7	8	-1	5	-1	-1	-1	-1	-1	2
F5550	4	35	12	8	4	5	6	6	-1	1	3	1	8	2

	001 - LA	002 - LA	003 - LB	004 - LA	005 - LB	006 - LB	007 - LA	008 - LB	009 - LB	010 - LB	011 - LA	012 - LB	013 - LBA	014 - LB
F5650	22	46	12	2	3	3	3	5	-1	-1	-1	-1	2	-1
F5750	17	46	12	15	4	4	6	1	-1	-1	2	5	-1	2
F5850	18	45	11	12	3	3	4	3	-1	-1	1	1	-1	1
F5950	6	48	15	13	5	5	1	5	-1	-1	-1	1	-1	1
G5650	7	53	19	17	5	6	4	8	-1	-1	1	5	2	-1
G5750	4	38	13	3	3	2	3	2	-1	-1	1	2	2	1
G5750-R	13	35	14	9	3	4	3	2	-1	-1	-1	2	2	-1
G5850	5	52	13	16	4	4	-1	3	-1	-1	1	4	6	2
G5950	40	45	19	29	4	4	4	3	-1	-1	-1	7	2	-1
H5650	23	56	13	17	4	5	8	2	-1	-1	2	5	7	2
H5750	7	54	13	15	4	4	7	7	-1	-1	2	-1	-1	1
H5850	19	71	19	16	5	6	5	5	-1	-1	1	5	5	2
H5950	33	113	34	130	6	7	8	4	-1	-1	2	5	3	-1
I5650	14	53	18	20	6	7	1	6	-1	-1	-1	3	-1	2
I5750	21	50	13	13	3	4	-1	8	-1	-1	1	3	3	1
I5850	20	59	20	55	5	6	5	3	-1	-1	1	7	-1	1
I5950	32	85	24	42	4	5	4	8	-1	-1	2	3	2	-1
D1100	18	60	14	14	5	6	4	2	-1	-1	2	3	-1	-1
D1200	8	30	9	10	2	2	4	4	-1	-1	-1	1	-1	-1
LMB-QA	2	7	5	5	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	10	30	6	5	-1	1	1	-1	-1	-1	-1	-1	-1	1
LMB-QA	11	30	8	5	-1	-1	1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	10	29	7	2	-1	-1	2	-1	-1	-1	-1	-1	-1	1

SOIL GAS HYDROCARBONS (SGH) by GC/MS

A11-4580 - Date: June 13, 2011 - Activation Laboratories Ltd.
Results represent only the material tested. Actlabs is not liable for any claim/damage from use of this report in excess of the test cost. Unless requested samples are discarded in 90 days
This report is only to be reproduced in full.

3936449 - Michael Bulatovich
Cobb Bay\Mattabi Project Sites

R=Replicate Sample
-1=Reporting Limit of 1pg/g (ppt=parts per trillion)
LMB-QA = Laboratory Materials Blank - Quality Assurance

LEGEND FOR COLUMN HEADINGS - SGH COMPOUND CLASSES

LA, HA, LBA, HBA = ALKYL-ALKANES
LB, HB, LPB, HPB = ALKYL-BENZENES
LAR, MAR, HAR = ALKYL-AROMATICS
LBI, MBI, HBI, LPH, MPH, HPH = ALKYL-POLYAROMATICS
THI = ALKYL-DIVINYLENE SULPHIDES
ALK = ALKYL-ALKENES

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	015 - LAR	016 - LB	017 - LB	018 - LB	019 - LB	020 - LA	021 - LPH	022 - LBA	023 - LAR	024 - LB	025 - LAR	026 - LBA	027 - LB	028 - ALK
D1050	-1	-1	-1	1	1	-1	-1	1	3	-1	-1	3	6	2
D1150	-1	-1	-1	4	4	3	-1	-1	-1	-1	1	2	3	1
D1250	-1	3	3	1	1	2	-1	2	8	-1	3	4	28	5
DD400	-1	2	4	4	2	2	-1	-1	-1	-1	-1	1	-1	-1
DD800	1	6	6	3	3	2	-1	2	25	-1	12	7	58	10
DD800-R	1	5	5	2	2	3	-1	1	18	-1	8	6	53	9
E1100	-1	1	2	2	-1	2	-1	-1	-1	-1	-1	1	1	-1
E1150X	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	-1
E1200	-1	1	1	2	1	2	-1	1	3	-1	-1	3	3	2
E1250	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	-1
E1300	-1	2	2	2	-1	2	-1	2	7	-1	2	2	7	3
E400	-1	-1	2	2	-1	2	-1	-1	-1	-1	-1	2	-1	-1
E500	-1	1	2	1	-1	-1	-1	-1	-1	-1	-1	2	-1	-1
E550	-1	-1	-1	-1	1	1	-1	-1	-1	-1	-1	-1	-1	-1
E600	-1	-1	1	1	2	-1	-1	1	2	-1	-1	9	4	2
E650	-1	2	-1	2	2	2	-1	1	7	-1	2	5	5	3
E700	-1	-1	2	3	2	2	-1	-1	10	-1	3	2	8	3
E750	-1	1	1	2	1	1	-1	2	4	-1	1	9	7	3
E800	-1	-1	-1	-1	1	3	-1	-1	4	-1	1	4	3	2
EE400	-1	-1	-1	1	-1	1	-1	1	-1	-1	-1	1	-1	-1
EE800	-1	-1	2	2	-1	2	-1	-1	-1	-1	-1	1	-1	-1
EE800-R	-1	2	2	3	1	2	-1	1	-1	-1	-1	1	-1	-1
Ex-W	-1	2	-1	-1	2	2	-1	1	5	-1	2	3	16	3
F400	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1
F450	-1	-1	2	3	2	1	-1	-1	-1	-1	-1	-1	-1	-1
F500	-1	-1	2	3	3	1	-1	-1	-1	-1	-1	-1	-1	-1
F550	-1	-1	1	2	1	-1	-1	-1	2	-1	-1	2	3	1
F600	-1	-1	1	1	-1	-1	-1	-1	2	-1	-1	2	2	1
F650	-1	1	-1	2	2	2	-1	-1	8	-1	2	3	19	5
F700	-1	2	2	3	2	3	-1	2	4	-1	1	6	7	3
W100	-1	-1	1	2	1	1	-1	1	4	-1	1	4	7	2
W150	-1	-1	-1	2	3	2	-1	1	-1	-1	3	4	16	6
W200	-1	-1	1	-1	-1	1	-1	-1	6	-1	1	-1	4	3
W235	-1	-1	-1	2	2	1	-1	-1	5	-1	2	3	9	3
W325	-1	-1	-1	2	2	1	-1	-1	-1	-1	-1	-1	-1	-1
W325-R	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1
W350	-1	2	5	6	5	2	-1	2	3	-1	1	3	5	2
W50	-1	-1	1	1	1	-1	-1	-1	3	-1	-1	2	7	2
A4450	-1	-1	-1	-1	1	1	-1	-1	2	-1	-1	2	2	2
A4550	-1	-1	2	2	1	-1	-1	1	2	-1	-1	2	3	1
A4650	-1	-1	2	2	1	1	-1	1	4	-1	-1	3	4	2
A4750	-1	-1	-1	2	1	2	-1	-1	-1	-1	-1	1	-1	-1
A4850	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	1	-1	-1
A4950	-1	-1	-1	-1	-1	-1	-1	1	2	-1	-1	2	2	2
A5050	-1	-1	1	1	-1	1	-1	-1	3	-1	-1	4	6	2
A5150	-1	2	2	2	1	2	-1	2	5	-1	1	8	7	3
A5250	-1	1	1	2	-1	2	-1	1	3	-1	-1	2	2	2
A5350	-1	1	1	-1	-1	2	-1	1	5	-1	-1	3	5	3
A5450	-1	-1	-1	2	1	2	-1	-1	-1	-1	-1	1	-1	-1
A5550	-1	-1	-1	-1	1	3	-1	-1	1	-1	-1	2	-1	1
A5550-R	-1	-1	-1	-1	-1	3	-1	-1	-1	-1	-1	2	-1	1
A5650	-1	-1	-1	-1	1	1	-1	-1	-1	-1	-1	-1	-1	-1
A5750	-1	2	1	2	2	-1	-1	-1	9	-1	3	2	14	4
A5850	-1	2	2	-1	-1	1	-1	-1	6	-1	2	2	7	3

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	015 - LAR	016 - LB	017 - LB	018 - LB	019 - LB	020 - LA	021 - LPH	022 - LBA	023 - LAR	024 - LB	025 - LAR	026 - LBA	027 - LB	028 - ALK
B4450	-1	-1	2	2	2	1	-1	1	6	-1	1	1	7	3
B4550	-1	2	2	2	2	2	-1	2	4	-1	-1	6	6	3
B4650	-1	-1	-1	2	2	-1	-1	-1	2	-1	-1	-1	2	1
B4750	-1	1	1	1	1	2	-1	-1	-1	-1	-1	-1	-1	-1
B4850	-1	1	-1	1	1	-1	-1	1	5	-1	1	6	7	2
B4950	-1	-1	2	1	-1	2	-1	-1	-1	-1	-1	-1	-1	-1
B5050	-1	3	2	2	1	4	-1	3	11	-1	2	2	10	5
B5150	-1	2	3	3	2	2	-1	2	5	-1	1	4	8	3
B5250	-1	2	2	2	1	1	-1	2	7	-1	1	4	10	4
B5450	-1	-1	-1	-1	-1	2	-1	-1	-1	-1	-1	1	-1	-1
B5550	-1	1	2	3	2	6	-1	1	1	-1	-1	3	-1	1
B5650	-1	-1	2	2	-1	2	-1	1	1	-1	-1	-1	1	1
B5650-R	-1	-1	2	2	1	2	-1	-1	1	-1	-1	-1	1	1
B5750	-1	1	1	2	1	1	-1	1	3	-1	-1	3	2	2
B5850	-1	2	2	2	1	2	-1	1	6	-1	1	4	5	3
C4450	-1	1	-1	2	2	1	-1	-1	6	-1	2	3	6	3
C4550	-1	4	4	4	2	3	-1	3	15	-1	4	4	21	6
C4650	-1	1	-1	-1	-1	2	-1	-1	-1	-1	-1	-1	-1	-1
C4750	-1	-1	-1	1	1	2	-1	-1	4	-1	-1	4	3	2
C4850	-1	-1	2	2	1	2	-1	-1	-1	-1	-1	-1	-1	-1
C4950	-1	-1	-1	2	2	2	-1	1	4	-1	-1	3	3	2
C5050	-1	4	3	3	2	5	-1	2	11	-1	2	8	13	7
C5150	-1	2	3	3	2	2	-1	1	14	-1	3	5	19	7
C5250	-1	2	2	-1	-1	2	-1	1	5	-1	-1	5	5	3
C5350	1	7	5	5	3	2	-1	-1	29	-1	11	7	51	13
C5450	-1	-1	-1	-1	-1	2	-1	-1	-1	-1	-1	-1	-1	-1
C5550	-1	-1	-1	-1	-1	2	-1	-1	-1	-1	-1	-1	-1	-1
C5650	-1	-1	1	3	2	3	-1	-1	1	-1	-1	-1	-1	1
C5650-R	-1	-1	-1	2	2	3	-1	-1	2	-1	-1	2	-1	1
C5750	-1	-1	1	2	1	1	-1	1	4	-1	-1	3	3	2
C5850	-1	1	2	2	1	2	-1	-1	2	-1	-1	2	2	2
D4750	-1	-1	1	-1	-1	1	-1	1	4	-1	-1	4	4	3
D4850	-1	-1	1	2	2	-1	-1	-1	1	-1	-1	1	-1	-1
D4950	-1	4	3	3	2	6	-1	2	17	-1	4	5	12	8
D5050	-1	4	4	4	3	3	-1	-1	11	-1	3	3	12	4
D5150	-1	2	2	4	4	1	-1	-1	19	-1	6	3	20	7
D5250	-1	1	3	4	3	2	-1	-1	1	-1	-1	-1	2	1
D5350	-1	-1	-1	2	-1	2	-1	1	8	-1	1	2	7	4
D5450	-1	-1	1	1	-1	2	-1	-1	-1	-1	-1	-1	-1	-1
D5550	-1	2	2	4	4	1	-1	1	19	-1	5	3	16	6
D5650	-1	1	2	2	-1	2	-1	-1	-1	-1	-1	-1	-1	-1
D5750	-1	-1	-1	-1	-1	-1	-1	-1	4	-1	-1	3	3	2
D5850	-1	3	1	2	3	3	-1	1	12	-1	2	10	15	6
E5450	-1	-1	-1	-1	-1	2	-1	-1	-1	-1	-1	-1	-1	-1
E5450-R	-1	-1	-1	-1	1	2	-1	-1	-1	-1	-1	-1	-1	-1
E5550	-1	1	2	2	1	2	-1	1	10	-1	2	5	7	4
E5650	-1	-1	1	2	1	3	-1	-1	1	-1	-1	-1	1	1
E5750	-1	-1	-1	-1	-1	-1	-1	-1	2	-1	-1	2	3	1
E5850	-1	-1	-1	1	-1	-1	-1	-1	2	-1	-1	2	1	1
E5950	-1	1	1	-1	-1	2	-1	1	4	-1	-1	2	3	3
E6050	-1	1	1	2	1	-1	-1	-1	6	-1	-1	2	7	3
E6150	-1	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1
F5450	-1	3	-1	2	2	-1	-1	-1	11	-1	2	7	10	5
F5550	-1	2	2	3	2	2	-1	-1	12	-1	3	4	22	6

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	015 - LAR	016 - LB	017 - LB	018 - LB	019 - LB	020 - LA	021 - LPH	022 - LBA	023 - LAR	024 - LB	025 - LAR	026 - LBA	027 - LB	028 - ALK
F5650	-1	2	-1	2	2	-1	-1	-1	16	-1	4	3	12	6
F5750	-1	-1	2	3	2	-1	-1	-1	9	-1	2	2	10	4
F5850	-1	1	-1	1	1	1	-1	-1	5	-1	-1	2	4	3
F5950	-1	2	2	2	1	2	-1	1	15	-1	3	3	21	6
G5650	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1
G5750	-1	-1	1	2	2	-1	-1	-1	2	-1	-1	1	2	1
G5750-R	-1	-1	1	2	1	-1	-1	-1	2	-1	-1	1	3	1
G5850	-1	2	2	3	2	-1	-1	1	11	-1	2	5	14	5
G5950	-1	-1	2	3	2	1	-1	-1	-1	-1	-1	-1	-1	-1
H5650	-1	2	3	3	4	1	-1	1	20	-1	6	3	18	7
H5750	-1	2	2	2	-1	2	-1	1	9	-1	1	2	5	4
H5850	-1	-1	2	4	2	-1	-1	-1	7	-1	2	3	8	4
H5950	-1	1	2	2	-1	2	-1	-1	-1	-1	-1	1	-1	1
I5650	-1	3	3	-1	-1	1	-1	-1	11	-1	2	3	9	4
I5750	-1	1	2	3	2	-1	-1	-1	9	-1	2	2	10	4
I5850	-1	-1	2	3	1	1	-1	-1	-1	-1	-1	-1	-1	-1
I5950	-1	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1
D1100	-1	1	-1	2	2	3	-1	-1	1	-1	-1	2	-1	1
D1200	-1	-1	-1	-1	-1	2	-1	2	3	-1	-1	2	2	2
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	029 - HB	030 - HB	031 - HB	032 - HB	033 - HB	034 - HB	035 - LAR	036 - LBA	037 - HB	038 - LBA	039 - LAR	040 - LPB	041 - LBA	042 - LPB
D1050	2	-1	-1	-1	-1	-1	-1	1	1	2	-1	-1	2	-1
D1150	1	-1	2	-1	-1	-1	-1	2	-1	-1	-1	-1	1	-1
D1250	8	-1	4	-1	-1	-1	-1	-1	-1	4	-1	-1	6	-1
DD400	-1	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1
DD800	7	-1	11	-1	-1	11	-1	-1	-1	9	1	-1	12	2
DD800-R	5	-1	10	-1	-1	11	-1	-1	-1	8	1	-1	11	1
E1100	-1	-1	-1	-1	-1	-1	-1	2	-1	-1	-1	-1	2	-1
E1150X	-1	-1	-1	-1	-1	1	-1	1	1	-1	-1	-1	-1	-1
E1200	2	-1	2	-1	-1	2	-1	1	2	2	-1	-1	2	-1
E1250	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1
E1300	3	-1	2	-1	-1	3	-1	-1	2	2	-1	-1	3	-1
E400	-1	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	2	-1
E500	-1	-1	-1	-1	-1	-1	-1	1	-1	1	-1	-1	1	-1
E550	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
E600	1	-1	2	-1	-1	3	-1	3	2	1	-1	-1	2	-1
E650	6	-1	6	-1	-1	2	-1	-1	1	1	-1	-1	1	-1
E700	5	-1	5	-1	-1	-1	-1	-1	1	3	-1	-1	3	-1
E750	2	-1	3	-1	-1	-1	-1	1	2	2	-1	-1	3	-1
E800	2	-1	2	-1	-1	2	-1	1	2	2	-1	-1	2	-1
EE400	-1	-1	-1	-1	-1	-1	-1	2	-1	2	-1	-1	2	-1
EE800	-1	-1	-1	-1	-1	-1	-1	2	-1	-1	-1	-1	2	-1
EE800-R	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1
Ex-W	3	-1	2	-1	-1	-1	-1	-1	2	3	-1	-1	4	-1
F400	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	2	-1
F450	-1	-1	-1	-1	-1	-1	-1	2	-1	1	-1	-1	-1	-1
F500	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	2	-1
F550	1	-1	1	-1	-1	1	-1	-1	1	-1	-1	-1	1	-1
F600	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1
F650	4	-1	2	-1	-1	1	-1	-1	-1	2	-1	-1	3	-1
F700	-1	-1	3	-1	1	5	-1	1	3	3	-1	-1	3	-1
W100	4	-1	1	-1	-1	2	-1	1	2	1	-1	-1	2	-1
W150	9	-1	3	-1	-1	6	-1	-1	-1	5	-1	-1	5	-1
W200	5	-1	5	-1	-1	3	-1	-1	2	2	-1	-1	2	-1
W235	3	-1	1	-1	-1	5	-1	-1	3	1	-1	-1	2	-1
W325	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
W325-R	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1
W350	4	-1	4	-1	1	2	-1	-1	3	3	-1	-1	3	-1
W50	2	-1	2	-1	-1	-1	-1	-1	1	2	-1	-1	2	-1
A4450	2	-1	2	-1	-1	-1	-1	-1	1	1	-1	-1	1	-1
A4550	1	-1	2	-1	-1	2	-1	-1	2	1	-1	-1	1	-1
A4650	3	-1	1	-1	-1	2	-1	-1	2	2	-1	-1	2	-1
A4750	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1
A4850	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1	-1	1	-1
A4950	1	-1	1	-1	-1	1	-1	-1	1	-1	-1	-1	1	-1
A5050	2	-1	-1	-1	-1	-1	-1	1	1	2	-1	-1	2	-1
A5150	3	-1	2	-1	-1	4	-1	1	2	6	-1	-1	1	-1
A5250	1	-1	-1	-1	-1	2	-1	-1	2	2	-1	-1	2	-1
A5350	3	-1	1	-1	-1	-1	-1	1	1	2	-1	-1	3	-1
A5450	-1	-1	-1	-1	-1	-1	-1	1	-1	2	-1	-1	2	-1
A5550	1	-1	1	-1	-1	-1	-1	3	-1	3	-1	-1	3	-1
A5550-R	1	-1	1	-1	-1	-1	-1	3	-1	2	-1	-1	3	-1
A5650	-1	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	1	-1
A5750	6	-1	7	-1	-1	5	-1	-1	-1	4	-1	-1	4	-1
A5850	6	-1	2	-1	-1	5	-1	-1	2	3	-1	-1	4	-1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	029 - HB	030 - HB	031 - HB	032 - HB	033 - HB	034 - HB	035 - LAR	036 - LBA	037 - HB	038 - LBA	039 - LAR	040 - LPB	041 - LBA	042 - LPB
B4450	4	-1	1	-1	-1	2	-1	-1	1	2	-1	-1	3	-1
B4550	5	-1	1	-1	1	4	-1	2	2	3	-1	-1	3	-1
B4650	1	-1	1	-1	-1	2	-1	-1	1	-1	-1	-1	-1	-1
B4750	-1	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1
B4850	-1	-1	1	-1	-1	3	-1	-1	2	2	-1	-1	2	-1
B4950	-1	-1	-1	-1	-1	-1	-1	2	-1	-1	-1	-1	2	-1
B5050	7	-1	3	-1	2	6	-1	-1	2	5	-1	-1	6	-1
B5150	2	-1	2	-1	1	6	-1	-1	3	3	-1	-1	3	-1
B5250	4	-1	2	-1	1	5	-1	-1	1	3	-1	-1	4	-1
B5450	-1	-1	1	-1	-1	-1	-1	2	-1	1	-1	-1	2	-1
B5550	1	-1	1	-1	-1	-1	-1	4	-1	3	-1	-1	5	-1
B5650	-1	-1	-1	-1	-1	-1	-1	1	-1	3	-1	-1	2	-1
B5650-R	-1	-1	-1	-1	-1	-1	-1	1	-1	1	-1	-1	1	-1
B5750	3	-1	3	-1	-1	1	-1	1	-1	-1	-1	-1	1	-1
B5850	5	-1	5	-1	1	4	-1	-1	2	2	-1	-1	2	-1
C4450	2	-1	2	-1	-1	4	-1	-1	2	2	-1	-1	2	-1
C4550	5	-1	5	-1	-1	7	-1	-1	2	6	-1	-1	7	-1
C4650	-1	-1	-1	-1	-1	-1	-1	1	-1	2	-1	-1	2	-1
C4750	4	-1	4	-1	-1	2	-1	-1	2	3	-1	-1	3	-1
C4850	1	-1	1	-1	-1	-1	-1	-1	-1	1	-1	-1	2	-1
C4950	3	-1	4	-1	-1	2	-1	-1	2	1	-1	-1	2	-1
C5050	9	-1	4	-1	5	9	-1	-1	4	9	-1	-1	9	-1
C5150	8	-1	4	-1	-1	5	-1	-1	-1	3	-1	-1	4	-1
C5250	4	-1	4	-1	1	3	-1	-1	1	3	-1	-1	3	-1
C5350	27	-1	28	-1	-1	17	-1	-1	-1	4	1	-1	4	1
C5450	1	-1	1	-1	-1	-1	-1	2	-1	3	-1	-1	2	-1
C5550	-1	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	2	-1
C5650	-1	-1	1	-1	-1	-1	-1	-1	-1	1	-1	-1	1	-1
C5650-R	1	-1	-1	-1	-1	-1	-1	2	-1	4	-1	-1	3	-1
C5750	3	-1	3	-1	-1	2	-1	-1	2	2	-1	-1	3	-1
C5850	2	-1	2	-1	-1	1	-1	2	1	2	-1	-1	2	-1
D4750	3	-1	3	-1	-1	3	-1	2	2	2	-1	-1	2	-1
D4850	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
D4950	11	-1	3	-1	3	8	-1	-1	2	5	-1	-1	5	-1
D5050	5	-1	3	-1	3	13	-1	-1	3	2	-1	-1	2	-1
D5150	6	-1	6	-1	-1	7	-1	-1	-1	4	-1	-1	5	-1
D5250	1	-1	-1	-1	-1	2	-1	-1	2	1	-1	-1	1	-1
D5350	5	-1	1	-1	-1	3	-1	-1	2	2	-1	-1	2	-1
D5450	-1	-1	-1	-1	-1	-1	-1	1	-1	2	-1	-1	2	-1
D5550	6	-1	7	-1	-1	6	-1	-1	4	3	-1	-1	4	-1
D5650	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1
D5750	4	-1	4	-1	-1	2	-1	-1	2	1	-1	-1	1	-1
D5850	8	-1	3	-1	2	7	-1	-1	-1	6	-1	-1	6	-1
E5450	-1	-1	1	-1	-1	-1	-1	1	-1	1	-1	-1	2	-1
E5450-R	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
E5550	6	-1	6	-1	2	6	-1	-1	2	2	-1	-1	3	-1
E5650	-1	-1	-1	-1	-1	-1	-1	2	-1	1	-1	-1	3	-1
E5750	2	-1	1	-1	-1	2	-1	-1	1	-1	-1	-1	-1	-1
E5850	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1
E5950	2	-1	2	-1	-1	2	-1	-1	2	1	-1	-1	2	-1
E6050	1	-1	2	-1	-1	-1	-1	-1	1	1	-1	-1	2	-1
E6150	-1	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1
F5450	12	-1	12	-1	2	5	-1	-1	-1	2	-1	-1	2	-1
F5550	3	-1	4	-1	-1	8	-1	-1	-1	4	-1	-1	5	-1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	029 - HB	030 - HB	031 - HB	032 - HB	033 - HB	034 - HB	035 - LAR	036 - LBA	037 - HB	038 - LBA	039 - LAR	040 - LPB	041 - LBA	042 - LPB
F5650	7	-1	2	-1	2	7	-1	-1	-1	-1	-1	-1	1	-1
F5750	5	-1	5	-1	2	8	-1	-1	2	1	-1	-1	2	-1
F5850	3	-1	3	-1	-1	3	-1	-1	2	2	-1	-1	2	-1
F5950	4	-1	4	-1	-1	6	-1	-1	-1	3	-1	-1	4	-1
G5650	-1	-1	-1	-1	-1	-1	-1	1	-1	2	-1	-1	1	-1
G5750	1	-1	1	-1	-1	2	-1	-1	1	-1	-1	-1	-1	-1
G5750-R	-1	-1	1	-1	-1	2	-1	-1	1	-1	-1	-1	-1	-1
G5850	6	-1	2	-1	2	8	-1	-1	-1	3	-1	-1	4	-1
G5950	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
H5650	6	-1	7	-1	-1	7	-1	-1	-1	2	-1	-1	4	-1
H5750	5	-1	5	-1	2	3	-1	-1	2	3	-1	-1	4	-1
H5850	3	-1	3	-1	2	7	-1	-1	3	1	-1	-1	2	-1
H5950	-1	-1	1	-1	-1	-1	-1	2	-1	4	-1	-1	3	-1
I5650	6	-1	2	-1	1	5	-1	-1	3	3	-1	-1	3	-1
I5750	4	-1	2	-1	2	8	-1	-1	2	2	-1	-1	3	-1
I5850	-1	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1	2	-1
I5950	-1	-1	-1	-1	-1	-1	-1	-1	-1	2	-1	-1	2	-1
D1100	-1	-1	1	-1	-1	-1	-1	2	-1	2	-1	-1	3	-1
D1200	-1	-1	-1	-1	-1	-1	-1	-1	1	1	-1	-1	1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	043 - HB	044 - HB	045 - LA	046 - LPH	047 - LBA	048 - HB	049 - HB	050 - LBA	051 - LBI	052 - LPB	053 - LPB	054 - HB	055 - LPB	056 - LBI
D1050	-1	-1	6	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
D1150	-1	-1	4	-1	2	1	1	2	-1	-1	-1	1	-1	-1
D1250	-1	-1	9	-1	9	1	1	10	-1	-1	-1	1	-1	-1
DD400	-1	-1	3	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
DD800	-1	-1	18	-1	8	-1	-1	9	-1	-1	1	-1	-1	-1
DD800-R	-1	-1	17	-1	10	-1	-1	10	-1	-1	1	-1	-1	-1
E1100	-1	-1	4	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
E1150X	-1	-1	2	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
E1200	-1	-1	4	-1	4	-1	-1	5	-1	-1	-1	-1	-1	-1
E1250	-1	-1	2	-1	1	-1	-1	2	-1	-1	-1	-1	-1	-1
E1300	-1	-1	7	-1	6	-1	-1	7	-1	-1	-1	-1	-1	-1
E400	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
E500	-1	-1	1	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
E550	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
E600	-1	-1	4	-1	9	-1	-1	10	-1	-1	-1	1	-1	-1
E650	-1	-1	6	-1	6	-1	-1	6	-1	-1	-1	-1	-1	-1
E700	-1	-1	6	-1	4	-1	-1	5	-1	-1	-1	-1	-1	-1
E750	-1	-1	7	-1	9	-1	-1	9	-1	-1	-1	-1	-1	-1
E800	-1	-1	5	-1	7	-1	-1	7	-1	-1	-1	-1	-1	-1
EE400	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
EE800	-1	-1	4	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
EE800-R	-1	-1	3	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
Ex-W	-1	-1	7	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
F400	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
F450	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
F500	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
F550	-1	-1	2	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
F600	-1	-1	2	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
F650	-1	-1	7	-1	5	-1	-1	5	-1	-1	-1	-1	-1	-1
F700	-1	-1	8	-1	7	-1	-1	7	-1	-1	-1	-1	-1	-1
W100	-1	-1	4	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
W150	-1	-1	9	-1	7	-1	-1	7	-1	-1	-1	-1	-1	-1
W200	-1	-1	4	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
W235	-1	-1	5	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
W325	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
W325-R	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
W350	-1	-1	8	-1	6	1	1	6	-1	-1	-1	1	-1	-1
W50	-1	-1	3	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
A4450	-1	-1	3	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
A4550	-1	-1	3	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
A4650	-1	-1	5	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
A4750	-1	-1	3	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
A4850	-1	-1	3	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
A4950	-1	-1	3	-1	3	-1	-1	4	-1	-1	-1	-1	-1	-1
A5050	-1	-1	4	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
A5150	-1	-1	7	-1	12	-1	-1	12	-1	-1	-1	-1	-1	-1
A5250	-1	-1	4	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
A5350	-1	-1	5	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
A5450	-1	-1	3	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
A5550	-1	-1	6	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
A5550-R	-1	-1	5	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
A5650	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
A5750	-1	-1	6	-1	5	-1	-1	5	-1	-1	-1	-1	-1	-1
A5850	-1	-1	7	-1	4	-1	-1	5	-1	-1	-1	-1	-1	-1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	043 - HB	044 - HB	045 - LA	046 - LPH	047 - LBA	048 - HB	049 - HB	050 - LBA	051 - LBI	052 - LPB	053 - LPB	054 - HB	055 - LPB	056 - LBI
B4450	-1	-1	8	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
B4550	-1	-1	11	-1	6	-1	-1	6	-1	-1	-1	-1	-1	-1
B4650	-1	-1	2	-1	2	1	1	2	-1	-1	1	2	-1	-1
B4750	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
B4850	-1	-1	5	-1	7	-1	-1	7	-1	-1	-1	-1	-1	-1
B4950	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
B5050	-1	-1	10	-1	8	-1	-1	9	-1	-1	-1	-1	-1	-1
B5150	-1	-1	8	-1	5	-1	-1	5	-1	-1	-1	-1	-1	-1
B5250	-1	-1	7	-1	7	-1	-1	7	-1	-1	-1	-1	-1	-1
B5450	-1	-1	3	-1	1	-1	-1	2	-1	-1	-1	-1	-1	-1
B5550	-1	-1	9	-1	5	-1	-1	5	-1	-1	-1	-1	-1	-1
B5650	-1	-1	4	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
B5650-R	-1	-1	4	-1	3	-1	-1	2	-1	-1	-1	-1	-1	-1
B5750	-1	-1	4	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
B5850	-1	-1	6	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
C4450	-1	-1	4	-1	3	-1	-1	4	-1	-1	-1	-1	-1	-1
C4550	-1	-1	11	-1	9	-1	-1	11	-1	-1	-1	-1	-1	-1
C4650	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
C4750	-1	-1	4	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
C4850	-1	-1	3	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
C4950	-1	-1	4	-1	3	-1	-1	4	-1	-1	-1	-1	-1	-1
C5050	-1	-1	21	-1	10	-1	-1	11	-1	-1	-1	-1	-1	-1
C5150	-1	-1	9	-1	5	-1	-1	6	-1	-1	-1	-1	-1	-1
C5250	-1	-1	8	-1	6	-1	-1	7	-1	-1	-1	-1	-1	-1
C5350	-1	-1	10	-1	9	2	2	11	-1	-1	1	2	-1	-1
C5450	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
C5550	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
C5650	-1	-1	4	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
C5650-R	-1	-1	5	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
C5750	-1	-1	4	-1	4	-1	-1	5	-1	-1	-1	-1	-1	-1
C5850	-1	-1	5	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
D4750	-1	-1	6	-1	3	-1	-1	3	-1	-1	-1	1	-1	-1
D4850	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
D4950	-1	-1	15	-1	7	-1	-1	9	-1	-1	-1	-1	-1	-1
D5050	-1	-1	7	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
D5150	-1	-1	7	-1	3	-1	-1	4	-1	-1	-1	-1	-1	-1
D5250	-1	-1	5	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
D5350	-1	-1	5	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
D5450	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
D5550	-1	-1	6	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
D5650	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
D5750	-1	-1	3	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
D5850	-1	-1	8	-1	9	3	4	8	-1	-1	-1	3	-1	-1
E5450	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
E5450-R	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
E5550	-1	-1	7	-1	4	-1	-1	5	-1	-1	-1	-1	-1	-1
E5650	-1	-1	6	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
E5750	-1	-1	2	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
E5850	-1	-1	2	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
E5950	-1	-1	5	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
E6050	-1	-1	4	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
E6150	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
F5450	-1	-1	7	-1	6	-1	-1	6	-1	-1	-1	-1	-1	-1
F5550	-1	-1	8	-1	5	3	3	4	-1	-1	-1	2	-1	-1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	043 - HB	044 - HB	045 - LA	046 - LPH	047 - LBA	048 - HB	049 - HB	050 - LBA	051 - LBI	052 - LPB	053 - LPB	054 - HB	055 - LPB	056 - LBI
F5650	-1	-1	3	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
F5750	-1	-1	5	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
F5850	-1	-1	5	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
F5950	-1	-1	7	-1	4	-1	-1	4	-1	-1	-1	-1	-1	-1
G5650	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
G5750	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
G5750-R	-1	-1	2	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
G5850	-1	-1	4	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
G5950	-1	-1	2	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1
H5650	-1	-1	6	-1	5	-1	-1	5	-1	-1	-1	-1	-1	-1
H5750	-1	-1	7	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
H5850	-1	-1	3	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
H5950	-1	-1	5	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
I5650	-1	-1	7	-1	3	-1	-1	4	-1	-1	-1	-1	-1	-1
I5750	-1	-1	5	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
I5850	-1	-1	3	-1	1	-1	-1	1	-1	-1	-1	-1	-1	-1
I5950	-1	-1	2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
D1100	-1	-1	4	-1	3	-1	-1	3	-1	-1	-1	-1	-1	-1
D1200	-1	-1	2	-1	2	-1	-1	2	-1	-1	-1	-1	-1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	057 - ALK	058 - LPB	059 - LPB	060 - LPH	061 - LBI	062 - LBA	063 - LPH	064 - LBA	065 - HPB	066 - LBA	067 - LBI	068 - HPB	069 - LA	070 - HPB
D1050	1	-1	-1	-1	-1	11	2	63	-1	5	1	-1	7	1
D1150	-1	-1	-1	-1	-1	5	3	18	-1	3	-1	-1	5	2
D1250	2	-1	-1	-1	1	11	5	149	2	9	1	1	13	3
DD400	-1	-1	-1	-1	-1	3	2	7	-1	4	-1	-1	4	1
DD800	3	1	2	1	2	26	9	213	1	10	3	3	27	7
DD800-R	3	1	1	1	2	23	9	196	1	11	3	2	28	6
E1100	-1	-1	-1	-1	-1	3	2	5	-1	5	-1	-1	5	1
E1150X	-1	-1	-1	-1	-1	3	1	7	-1	3	-1	-1	2	1
E1200	-1	-1	-1	-1	-1	7	2	16	-1	5	-1	-1	6	1
E1250	-1	-1	-1	-1	-1	2	1	3	-1	2	-1	-1	3	1
E1300	-1	-1	-1	-1	-1	6	2	11	1	8	1	-1	8	2
E400	-1	-1	-1	-1	-1	2	1	3	-1	3	-1	-1	3	1
E500	-1	-1	-1	-1	-1	2	-1	3	-1	-1	-1	-1	2	-1
E550	-1	-1	-1	-1	-1	2	-1	3	-1	1	-1	-1	3	1
E600	3	-1	-1	-1	-1	9	2	30	-1	4	-1	-1	4	1
E650	2	-1	-1	-1	-1	16	2	70	1	-1	-1	-1	7	2
E700	-1	-1	-1	-1	-1	11	2	36	1	5	-1	-1	11	2
E750	2	-1	-1	-1	-1	17	2	58	1	6	1	-1	9	2
E800	1	-1	-1	-1	-1	8	2	20	1	4	-1	-1	6	1
EE400	-1	-1	-1	-1	-1	3	2	4	-1	3	-1	-1	3	1
EE800	-1	-1	-1	-1	-1	2	-1	4	-1	3	-1	-1	4	1
EE800-R	-1	-1	-1	-1	-1	2	-1	3	-1	3	-1	-1	4	1
Ex-W	1	-1	-1	1	-1	21	3	85	1	3	1	-1	8	2
F400	-1	-1	-1	-1	-1	2	1	3	-1	4	-1	-1	3	1
F450	-1	-1	-1	-1	-1	2	1	4	-1	4	-1	-1	4	1
F500	-1	-1	-1	-1	-1	2	-1	3	-1	3	-1	-1	3	1
F550	-1	-1	-1	-1	-1	5	1	20	-1	3	-1	-1	3	-1
F600	-1	-1	-1	-1	-1	5	1	10	-1	3	-1	-1	3	1
F650	2	-1	-1	-1	-1	6	2	76	1	2	-1	-1	11	1
F700	2	-1	-1	-1	1	9	3	45	1	6	1	-1	9	2
W100	1	-1	-1	-1	-1	6	2	24	-1	3	-1	-1	6	1
W150	2	-1	-1	-1	-1	14	3	71	-1	5	1	-1	11	2
W200	-1	-1	-1	-1	-1	6	2	29	1	4	-1	-1	7	2
W235	-1	-1	-1	-1	-1	6	3	35	-1	3	-1	-1	7	2
W325	-1	-1	-1	-1	-1	2	1	4	-1	1	-1	-1	3	-1
W325-R	-1	-1	-1	-1	-1	2	1	4	-1	2	-1	-1	3	-1
W350	1	-1	-1	-1	-1	9	2	22	1	4	-1	-1	8	2
W50	-1	-1	-1	-1	-1	7	2	34	-1	2	-1	-1	5	-1
A4450	-1	-1	-1	-1	-1	5	-1	13	-1	5	-1	-1	4	-1
A4550	-1	-1	-1	-1	-1	3	1	8	-1	4	-1	-1	3	1
A4650	-1	-1	-1	-1	-1	5	1	15	-1	6	-1	-1	7	1
A4750	-1	-1	-1	-1	-1	2	1	3	-1	-1	-1	-1	4	1
A4850	-1	-1	-1	-1	-1	3	-1	4	-1	-1	-1	-1	4	-1
A4950	1	-1	-1	-1	-1	5	1	13	-1	3	-1	-1	4	1
A5050	-1	-1	-1	-1	-1	7	2	22	-1	3	-1	-1	6	1
A5150	3	-1	-1	1	-1	9	3	35	-1	6	-1	-1	6	2
A5250	-1	-1	-1	-1	-1	3	2	5	-1	2	-1	-1	5	1
A5350	-1	-1	-1	-1	-1	5	2	11	-1	5	-1	-1	8	1
A5450	-1	-1	-1	-1	-1	3	1	4	-1	3	-1	-1	4	1
A5550	-1	-1	-1	-1	-1	4	1	6	-1	6	-1	-1	6	1
A5550-R	-1	-1	-1	-1	-1	4	1	6	-1	5	-1	-1	7	1
A5650	-1	-1	-1	-1	-1	2	-1	3	-1	3	-1	-1	4	1
A5750	1	-1	-1	1	-1	6	3	17	1	6	-1	-1	8	2
A5850	-1	-1	-1	-1	-1	9	2	23	1	6	-1	-1	10	2

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	057 - ALK	058 - LPB	059 - LPB	060 - LPH	061 - LBI	062 - LBA	063 - LPH	064 - LBA	065 - HPB	066 - LBA	067 - LBI	068 - HPB	069 - LA	070 - HPB
B4450	1	-1	-1	-1	-1	9	2	22	-1	4	-1	-1	8	2
B4550	1	-1	-1	1	-1	14	3	37	1	6	-1	-1	10	2
B4650	-1	-1	-1	-1	-1	4	1	7	-1	3	-1	-1	5	1
B4750	-1	-1	-1	-1	-1	2	1	3	1	3	-1	-1	3	1
B4850	2	-1	-1	-1	-1	11	2	29	-1	5	-1	-1	6	1
B4950	-1	-1	-1	-1	-1	3	-1	5	-1	4	-1	-1	5	-1
B5050	1	-1	-1	1	1	12	3	34	1	9	1	-1	13	2
B5150	1	-1	-1	1	-1	7	3	16	1	7	-1	-1	10	2
B5250	1	-1	-1	1	-1	7	3	16	1	5	-1	-1	9	2
B5450	-1	-1	-1	-1	-1	3	1	4	-1	3	-1	-1	4	1
B5550	-1	-1	-1	-1	1	5	1	6	-1	7	-1	-1	9	1
B5650	-1	-1	-1	-1	-1	4	2	5	-1	3	-1	-1	6	1
B5650-R	-1	-1	-1	-1	-1	4	2	5	-1	2	-1	-1	6	1
B5750	1	-1	-1	-1	-1	4	1	9	-1	6	-1	-1	5	1
B5850	1	-1	-1	-1	-1	9	2	19	-1	5	-1	-1	7	1
C4450	1	-1	-1	-1	-1	7	2	15	-1	5	-1	-1	7	1
C4550	2	-1	-1	2	1	16	5	36	1	9	1	1	15	3
C4650	-1	-1	-1	-1	-1	2	-1	2	-1	1	-1	-1	4	-1
C4750	-1	-1	-1	-1	-1	6	1	16	-1	3	-1	-1	6	1
C4850	-1	-1	-1	-1	-1	2	1	3	-1	2	-1	-1	4	-1
C4950	1	-1	-1	-1	-1	5	2	15	-1	4	-1	-1	6	1
C5050	2	-1	-1	2	2	25	5	68	2	9	2	1	25	3
C5150	2	-1	-1	1	1	15	3	66	1	2	1	-1	14	2
C5250	1	-1	-1	-1	-1	10	2	36	-1	5	-1	-1	11	2
C5350	3	1	1	1	1	26	7	170	2	4	2	1	17	3
C5450	-1	-1	-1	-1	-1	2	-1	3	-1	2	-1	-1	5	-1
C5550	-1	-1	-1	-1	-1	3	-1	4	-1	1	-1	-1	4	-1
C5650	-1	-1	-1	-1	-1	4	1	6	-1	5	-1	-1	6	1
C5650-R	-1	-1	-1	-1	-1	4	1	6	-1	5	-1	-1	5	1
C5750	1	-1	-1	-1	-1	6	1	12	-1	5	-1	-1	5	1
C5850	-1	-1	-1	-1	-1	4	1	10	-1	6	-1	-1	8	1
D4750	1	-1	-1	-1	-1	10	2	29	-1	3	-1	-1	6	-1
D4850	-1	-1	-1	-1	-1	2	-1	3	-1	2	-1	-1	5	-1
D4950	2	-1	-1	1	1	20	3	56	1	7	1	-1	24	3
D5050	1	-1	-1	1	-1	14	4	36	1	4	-1	-1	10	2
D5150	-1	-1	-1	1	-1	7	3	14	1	4	1	-1	12	2
D5250	-1	-1	-1	-1	-1	4	1	5	-1	5	-1	-1	7	1
D5350	-1	-1	-1	-1	-1	5	2	8	-1	4	-1	-1	7	1
D5450	-1	-1	-1	-1	-1	3	1	4	-1	3	-1	-1	4	-1
D5550	1	-1	-1	1	-1	10	3	39	1	6	1	-1	11	2
D5650	-1	-1	-1	-1	-1	2	-1	2	-1	2	-1	-1	4	-1
D5750	-1	-1	-1	-1	-1	4	2	9	-1	4	-1	-1	5	-1
D5850	4	-1	-1	-1	-1	27	3	137	1	4	1	-1	12	2
E5450	-1	-1	-1	-1	-1	2	1	4	-1	4	-1	-1	3	1
E5450-R	-1	-1	-1	-1	-1	2	1	4	-1	3	-1	-1	4	1
E5550	1	-1	-1	-1	-1	6	2	20	-1	7	-1	-1	11	2
E5650	-1	-1	-1	-1	-1	4	-1	6	-1	6	-1	-1	8	-1
E5750	-1	-1	-1	-1	-1	3	1	7	-1	3	-1	-1	3	-1
E5850	-1	-1	-1	-1	-1	2	-1	3	-1	1	-1	-1	3	-1
E5950	-1	-1	-1	-1	-1	4	1	6	-1	5	-1	-1	5	-1
E6050	-1	-1	-1	-1	-1	4	1	9	-1	3	-1	-1	5	1
E6150	-1	-1	-1	-1	-1	2	-1	2	-1	2	-1	-1	3	-1
F5450	3	-1	-1	1	-1	19	3	59	-1	-1	-1	-1	7	1
F5550	3	-1	-1	-1	-1	24	4	135	1	3	1	1	11	2

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	057 - ALK	058 - LPB	059 - LPB	060 - LPH	061 - LBI	062 - LBA	063 - LPH	064 - LBA	065 - HPB	066 - LBA	067 - LBI	068 - HPB	069 - LA	070 - HPB
F5650	1	-1	-1	1	-1	5	3	14	-1	3	-1	-1	6	1
F5750	1	-1	-1	-1	-1	9	2	35	-1	3	-1	-1	7	1
F5850	-1	-1	-1	-1	-1	6	2	12	-1	4	-1	-1	6	-1
F5950	1	-1	-1	1	-1	9	3	27	-1	6	1	-1	12	2
G5650	-1	-1	-1	-1	-1	2	1	4	-1	3	-1	-1	4	-1
G5750	1	-1	-1	1	-1	6	1	16	-1	3	-1	-1	3	1
G5750-R	-1	-1	-1	-1	-1	6	1	15	-1	3	-1	-1	4	-1
G5850	1	-1	-1	-1	-1	9	3	21	-1	3	-1	-1	7	1
G5950	-1	-1	-1	-1	-1	2	1	2	-1	2	-1	-1	3	-1
H5650	2	-1	-1	2	-1	10	4	34	1	4	-1	-1	9	2
H5750	-1	-1	-1	-1	-1	5	2	11	-1	6	-1	-1	8	2
H5850	1	-1	-1	1	-1	6	2	12	-1	2	-1	-1	5	1
H5950	-1	-1	-1	-1	-1	3	1	4	-1	4	-1	-1	7	1
I5650	1	-1	-1	1	-1	13	3	33	1	6	-1	1	10	2
I5750	-1	-1	-1	1	-1	5	3	10	1	5	-1	-1	8	2
I5850	1	-1	-1	1	-1	3	1	5	-1	5	-1	-1	5	1
I5950	-1	-1	-1	-1	-1	2	-1	2	-1	1	-1	-1	4	-1
D1100	1	-1	-1	1	-1	3	1	4	-1	5	-1	-1	5	1
D1200	-1	-1	-1	-1	-1	3	1	4	-1	3	-1	-1	3	-1
LMB-QA	-1	-1	-1	-1	-1	1	-1	1	-1	1	-1	-1	1	-1
LMB-QA	1	-1	-1	1	-1	1	-1	1	-1	1	-1	-1	2	1
LMB-QA	-1	-1	-1	-1	-1	1	-1	1	-1	2	-1	-1	3	-1
LMB-QA	1	-1	-1	1	-1	1	-1	1	-1	2	-1	-1	2	1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	071 - HPB	072 - HPB	073 - HBA	074 - HBA	075 - HPB	076 - LPH	077 - MAR	078 - ALK	079 - LBI	080 - LPH	081 - MAR	082 - LPH	083 - HBA	084 - HBA
D1050	1	1	4	5	-1	-1	-1	2	-1	-1	2	1	7	1
D1150	2	1	3	4	-1	-1	-1	1	-1	-1	2	1	5	-1
D1250	3	3	7	8	1	1	1	3	-1	1	5	2	13	2
DD400	-1	-1	2	2	-1	-1	-1	-1	-1	-1	1	-1	4	-1
DD800	7	6	15	16	2	2	2	5	1	2	9	-1	22	3
DD800-R	7	4	15	18	2	2	2	5	1	2	8	1	28	3
E1100	2	1	3	4	1	-1	-1	1	-1	-1	1	1	5	1
E1150X	-1	-1	1	2	-1	-1	-1	-1	-1	-1	-1	-1	2	-1
E1200	1	1	4	4	1	-1	-1	1	-1	-1	1	1	7	1
E1250	-1	-1	2	3	-1	-1	-1	-1	-1	-1	-1	-1	2	-1
E1300	2	2	4	5	2	-1	-1	2	-1	-1	3	1	8	1
E400	1	-1	2	2	-1	-1	-1	-1	-1	-1	1	-1	2	-1
E500	1	-1	1	2	-1	-1	-1	-1	-1	-1	-1	-1	2	-1
E550	1	-1	2	2	-1	-1	-1	-1	-1	-1	1	-1	3	-1
E600	1	1	2	3	-1	-1	-1	2	-1	-1	1	-1	5	1
E650	2	1	3	4	1	-1	-1	2	-1	-1	2	1	8	1
E700	2	2	6	6	-1	-1	-1	2	-1	-1	2	1	4	1
E750	2	2	4	6	1	-1	-1	2	-1	-1	2	1	4	1
E800	1	1	3	4	1	-1	-1	2	-1	-1	1	1	8	1
EE400	1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	3	-1
EE800	1	1	2	2	1	-1	-1	-1	-1	-1	1	-1	4	-1
EE800-R	1	-1	2	2	1	-1	-1	-1	-1	-1	1	-1	3	-1
Ex-W	2	2	4	5	-1	-1	-1	2	-1	-1	2	-1	8	1
F400	1	-1	2	2	-1	-1	-1	-1	-1	-1	1	1	4	-1
F450	1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	1	4	-1
F500	-1	-1	2	2	-1	-1	-1	-1	-1	-1	1	1	4	-1
F550	-1	-1	2	3	-1	-1	-1	1	-1	-1	-1	1	3	1
F600	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
F650	2	2	6	6	1	-1	-1	2	-1	-1	2	1	1	1
F700	2	2	4	6	-1	-1	-1	2	-1	-1	2	-1	3	1
W100	1	1	3	4	1	-1	-1	2	-1	-1	2	-1	4	-1
W150	2	2	7	8	-1	-1	-1	3	-1	1	2	-1	5	1
W200	2	2	4	4	1	-1	-1	2	-1	-1	2	1	5	1
W235	2	1	4	5	1	-1	-1	2	-1	-1	2	1	1	1
W325	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	3	-1
W325-R	1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	4	-1
W350	2	2	4	5	-1	-1	-1	2	-1	-1	1	-1	9	1
W50	1	-1	2	3	-1	-1	-1	1	-1	-1	1	1	3	1
A4450	1	-1	2	3	-1	-1	-1	1	-1	-1	1	-1	4	-1
A4550	-1	-1	2	3	-1	-1	-1	-1	-1	-1	-1	-1	4	-1
A4650	1	1	3	4	-1	-1	-1	1	-1	-1	1	1	3	-1
A4750	1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	4	-1
A4850	-1	-1	2	3	-1	-1	-1	-1	-1	-1	-1	-1	4	-1
A4950	1	-1	2	3	-1	-1	-1	1	-1	-1	1	-1	4	-1
A5050	1	-1	3	4	-1	-1	-1	1	-1	-1	1	-1	3	-1
A5150	2	2	3	4	2	-1	-1	2	-1	-1	1	1	7	1
A5250	1	1	2	3	1	-1	-1	1	-1	-1	-1	-1	1	-1
A5350	1	1	4	5	-1	-1	-1	2	-1	-1	1	1	3	1
A5450	1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	2	1
A5550	1	-1	3	4	-1	-1	-1	1	-1	-1	1	1	7	1
A5550-R	1	-1	3	4	-1	-1	-1	1	-1	-1	1	1	6	-1
A5650	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	3	-1
A5750	2	2	5	6	-1	-1	-1	2	-1	-1	2	1	8	1
A5850	2	2	6	6	-1	-1	-1	2	-1	-1	2	1	5	1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	071 - HPB	072 - HPB	073 - HBA	074 - HBA	075 - HPB	076 - LPH	077 - MAR	078 - ALK	079 - LBI	080 - LPH	081 - MAR	082 - LPH	083 - HBA	084 - HBA
B4450	2	1	4	5	-1	-1	-1	2	-1	-1	2	1	8	1
B4550	2	2	5	3	-1	-1	-1	2	-1	-1	2	1	5	1
B4650	1	-1	2	3	-1	-1	-1	1	-1	-1	1	1	2	-1
B4750	1	-1	2	2	-1	-1	-1	-1	-1	-1	2	-1	3	-1
B4850	1	1	3	6	-1	-1	-1	2	-1	-1	1	1	2	1
B4950	-1	-1	2	3	-1	-1	-1	-1	-1	-1	1	1	5	-1
B5050	3	2	6	7	2	-1	1	2	-1	1	3	1	11	1
B5150	2	2	5	6	2	-1	-1	2	-1	-1	2	1	4	1
B5250	2	2	4	5	2	-1	-1	2	-1	-1	2	1	8	1
B5450	1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	4	-1
B5550	1	1	4	5	1	-1	-1	1	-1	-1	1	1	8	1
B5650	1	-1	3	3	-1	-1	-1	1	-1	-1	1	-1	6	-1
B5650-R	1	-1	3	3	-1	-1	-1	1	-1	-1	2	-1	6	-1
B5750	1	-1	2	3	1	-1	-1	1	-1	-1	1	1	5	-1
B5850	1	1	4	5	-1	-1	-1	2	-1	-1	2	1	3	-1
C4450	1	1	4	6	-1	-1	-1	2	-1	-1	1	1	-1	-1
C4550	3	3	7	10	2	-1	1	3	-1	1	2	-1	3	1
C4650	-1	-1	2	2	-1	-1	-1	-1	-1	-1	1	-1	3	-1
C4750	1	1	2	3	-1	-1	-1	1	-1	-1	1	-1	4	-1
C4850	-1	-1	2	2	-1	-1	-1	-1	-1	-1	1	-1	4	-1
C4950	1	-1	3	-1	-1	-1	-1	2	-1	-1	1	1	3	-1
C5050	4	3	12	14	-1	1	2	4	-1	1	4	2	23	2
C5150	2	2	7	9	-1	-1	1	3	-1	1	3	-1	6	1
C5250	2	1	5	6	1	-1	-1	2	-1	-1	2	1	11	-1
C5350	3	2	10	12	1	1	1	6	-1	1	5	2	5	2
C5450	1	-1	2	3	-1	-1	-1	-1	-1	-1	1	-1	5	-1
C5550	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	4	-1
C5650	1	-1	3	3	-1	-1	-1	1	-1	-1	1	1	2	-1
C5650-R	1	1	3	3	-1	-1	-1	1	-1	-1	1	-1	5	-1
C5750	1	-1	3	4	1	-1	-1	1	-1	-1	1	1	6	-1
C5850	1	1	3	4	1	-1	-1	1	-1	-1	1	1	4	1
D4750	1	-1	3	4	-1	-1	-1	2	-1	-1	1	1	6	-1
D4850	-1	-1	2	3	-1	-1	-1	-1	-1	-1	-1	-1	4	-1
D4950	3	2	11	12	-1	1	1	3	-1	1	3	1	6	2
D5050	2	2	5	6	-1	-1	-1	2	-1	-1	2	1	2	1
D5150	2	1	6	9	-1	-1	-1	3	-1	-1	2	1	3	1
D5250	1	-1	3	3	-1	-1	-1	-1	-1	-1	1	1	6	1
D5350	1	1	3	4	-1	-1	-1	2	-1	-1	2	-1	2	-1
D5450	-1	-1	2	2	-1	-1	-1	-1	-1	-1	1	-1	4	-1
D5550	2	2	5	7	2	-1	-1	2	-1	1	2	1	3	1
D5650	-1	-1	2	3	-1	-1	-1	-1	-1	-1	-1	-1	4	-1
D5750	1	1	3	4	1	-1	-1	1	-1	-1	1	1	2	-1
D5850	2	2	6	7	2	-1	-1	4	-1	1	3	1	12	1
E5450	1	-1	2	2	-1	-1	-1	-1	-1	-1	1	-1	-1	-1
E5450-R	1	-1	2	2	-1	-1	-1	-1	-1	-1	1	-1	3	-1
E5550	2	1	5	7	1	-1	-1	2	-1	-1	2	1	3	1
E5650	-1	-1	4	4	-1	-1	-1	1	-1	-1	1	1	7	1
E5750	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	4	-1
E5850	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
E5950	1	-1	3	3	-1	-1	-1	1	-1	-1	1	-1	5	-1
E6050	1	-1	3	3	-1	-1	-1	1	-1	-1	1	-1	4	-1
E6150	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
F5450	1	1	4	5	-1	-1	-1	3	-1	-1	2	1	3	1
F5550	2	2	6	7	-1	-1	-1	3	-1	1	2	1	4	2

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	071 - HPB	072 - HPB	073 - HBA	074 - HBA	075 - HPB	076 - LPH	077 - MAR	078 - ALK	079 - LBI	080 - LPH	081 - MAR	082 - LPH	083 - HBA	084 - HBA
F5650	1	1	3	4	-1	-1	-1	2	-1	-1	2	1	3	-1
F5750	1	-1	4	5	-1	-1	-1	2	-1	-1	2	1	3	-1
F5850	-1	-1	3	4	-1	-1	-1	1	-1	-1	1	-1	6	-1
F5950	2	1	6	8	-1	-1	-1	2	-1	-1	2	1	11	1
G5650	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	3	-1
G5750	1	1	2	2	-1	-1	-1	1	-1	-1	1	-1	1	1
G5750-R	-1	-1	2	3	-1	-1	-1	1	-1	-1	-1	-1	3	-1
G5850	1	-1	4	5	-1	-1	-1	2	-1	-1	1	1	7	1
G5950	-1	-1	2	2	-1	-1	-1	-1	-1	-1	1	-1	3	-1
H5650	2	2	4	5	-1	-1	-1	2	-1	-1	2	1	8	1
H5750	2	1	4	5	-1	-1	-1	1	-1	-1	2	1	8	1
H5850	1	1	2	3	-1	-1	-1	1	-1	-1	1	1	4	1
H5950	1	-1	4	4	-1	-1	-1	1	-1	-1	1	-1	7	-1
I5650	2	2	5	6	-1	-1	-1	2	-1	-1	2	1	4	1
I5750	2	1	4	5	-1	-1	-1	2	-1	-1	2	1	8	-1
I5850	1	1	2	3	-1	-1	-1	1	-1	-1	1	-1	4	1
I5950	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	4	-1
D1100	2	1	3	4	1	-1	-1	1	-1	-1	1	1	6	-1
D1200	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	3	-1
LMB-QA	-1	-1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	2	-1
LMB-QA	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1
LMB-QA	-1	-1	2	2	-1	-1	-1	-1	-1	-1	-1	-1	3	-1
LMB-QA	1	1	1	2	-1	-1	-1	-1	-1	-1	-1	-1	1	1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	085 - LPH	086 - LBI	087 - MAR	088 - HBA	089 - THI	090 - HPB	091 - LBI	092 - LPH	093 - LA	094 - LBI	095 - MAR	096 - LPH	097 - HBA	098 - THI
D1050	8	-1	1	7	-1	1	2	2	22	2	1	3	11	2
D1150	6	-1	2	6	-1	1	2	2	18	2	1	3	10	1
D1250	14	1	3	11	-1	3	3	5	29	2	2	10	16	1
DD400	5	-1	1	4	-1	1	1	1	11	1	1	2	6	1
DD800	24	2	6	23	-1	-1	10	12	85	4	3	23	37	2
DD800-R	25	2	5	27	-1	4	11	11	104	5	3	21	48	2
E1100	6	-1	1	4	-1	1	1	1	15	1	1	2	7	1
E1150X	3	-1	-1	3	-1	1	-1	1	6	-1	-1	2	4	-1
E1200	7	-1	1	6	-1	1	1	2	17	1	1	3	8	-1
E1250	4	-1	-1	3	-1	-1	-1	1	5	-1	-1	2	3	-1
E1300	9	-1	2	9	-1	-1	2	2	22	2	1	4	11	-1
E400	3	-1	1	2	-1	1	-1	-1	5	-1	-1	1	3	-1
E500	3	-1	1	2	-1	-1	-1	-1	4	-1	-1	1	3	-1
E550	4	-1	2	2	-1	1	-1	-1	6	-1	2	1	4	2
E600	5	-1	1	4	-1	1	-1	2	9	-1	1	2	6	-1
E650	9	-1	2	7	-1	-1	2	2	22	2	1	4	10	-1
E700	9	-1	2	9	-1	2	2	2	31	2	1	4	14	2
E750	8	-1	2	7	-1	2	2	2	19	1	1	3	9	-1
E800	7	-1	2	5	-1	1	1	1	14	1	1	2	7	1
EE400	3	-1	1	3	-1	1	-1	1	6	-1	1	2	3	-1
EE800	4	-1	2	3	-1	1	1	-1	9	1	3	1	5	1
EE800-R	4	-1	2	3	-1	1	-1	-1	9	1	-1	1	8	-1
Ex-W	8	-1	2	8	-1	2	3	3	24	2	2	5	10	2
F400	4	-1	3	3	-1	1	1	1	8	1	-1	2	4	-1
F450	4	-1	2	4	-1	1	1	1	10	1	1	1	5	1
F500	3	-1	2	3	-1	1	1	-1	8	1	-1	1	4	1
F550	5	-1	1	3	-1	1	1	1	9	1	1	2	5	1
F600	4	-1	1	3	-1	1	-1	1	7	-1	-1	2	4	-1
F650	10	1	2	6	-1	2	2	2	29	2	1	4	25	4
F700	11	-1	2	8	-1	2	2	2	24	2	2	4	12	2
W100	6	-1	1	5	-1	1	1	2	14	1	1	3	7	-1
W150	11	-1	2	10	-1	-1	3	3	33	2	1	5	16	-1
W200	8	-1	2	6	-1	-1	2	2	27	2	1	4	13	1
W235	7	-1	1	5	-1	1	1	2	17	1	1	4	9	1
W325	3	-1	3	2	-1	1	1	-1	8	1	2	1	5	1
W325-R	4	-1	3	3	-1	1	1	-1	8	1	2	1	5	1
W350	10	-1	2	7	-1	2	2	2	25	2	1	3	11	1
W50	5	-1	-1	3	-1	-1	1	1	10	1	1	2	6	1
A4450	5	-1	1	5	-1	1	1	-1	12	1	-1	1	6	-1
A4550	4	-1	1	3	-1	1	-1	-1	8	-1	-1	1	4	-1
A4650	5	-1	1	5	-1	-1	1	1	14	1	-1	2	7	-1
A4750	4	-1	2	3	-1	1	-1	1	9	1	1	2	5	-1
A4850	4	-1	1	4	-1	-1	1	-1	9	1	1	-1	4	-1
A4950	5	-1	1	4	-1	1	1	1	8	1	1	2	5	1
A5050	5	-1	-1	4	-1	1	-1	1	10	1	1	2	5	1
A5150	8	-1	1	6	-1	-1	2	2	17	1	1	3	9	1
A5250	5	-1	1	4	-1	1	1	1	8	1	2	2	4	1
A5350	6	-1	1	6	-1	2	1	2	15	1	1	3	7	1
A5450	4	-1	2	4	-1	1	1	-1	9	1	1	1	5	1
A5550	8	-1	2	6	-1	2	1	1	19	1	2	2	9	2
A5550-R	7	-1	2	7	-1	-1	1	1	20	2	2	2	8	2
A5650	5	-1	2	4	-1	1	-1	-1	9	1	2	1	5	1
A5750	7	-1	2	8	-1	2	2	3	18	1	1	5	9	1
A5850	10	-1	2	8	-1	-1	2	2	26	2	2	4	11	1

	085 - LPH	086 - LBI	087 - MAR	088 - HBA	089 - THI	090 - HPB	091 - LBI	092 - LPH	093 - LA	094 - LBI	095 - MAR	096 - LPH	097 - HBA	098 - THI
B4450	9	-1	1	7	-1	-1	2	2	29	2	1	3	11	-1
B4550	8	-1	2	8	-1	-1	2	2	26	2	1	4	10	-1
B4650	3	-1	1	3	-1	1	1	1	8	1	1	2	5	1
B4750	4	-1	4	4	-1	3	1	1	12	1	10	2	4	11
B4850	7	-1	1	6	-1	1	1	2	14	1	1	3	7	1
B4950	5	-1	2	4	-1	-1	1	-1	12	1	1	1	6	1
B5050	12	-1	2	9	-1	-1	2	3	29	2	1	4	12	-1
B5150	10	-1	1	6	-1	-1	1	2	16	1	1	3	7	1
B5250	8	-1	1	8	-1	-1	2	2	16	1	2	4	8	1
B5450	4	-1	2	3	-1	1	1	-1	8	1	1	1	4	1
B5550	8	-1	3	7	-1	2	2	1	23	2	9	2	11	4
B5650	7	-1	5	7	-1	2	1	1	14	1	3	2	7	2
B5650-R	7	-1	5	7	-1	-1	1	1	14	1	3	2	7	2
B5750	6	-1	1	5	-1	1	1	1	10	1	1	2	5	1
B5850	6	-1	1	6	-1	1	1	2	14	1	1	3	7	1
C4450	6	-1	1	5	-1	1	1	1	9	1	1	2	5	1
C4550	12	1	2	10	-1	-1	2	3	28	2	1	6	12	-1
C4650	5	-1	3	4	-1	1	1	-1	8	1	2	1	5	2
C4750	6	-1	1	4	-1	1	1	1	10	1	1	2	6	1
C4850	5	-1	2	3	-1	1	1	1	10	1	3	2	5	2
C4950	6	-1	1	5	-1	-1	1	1	15	1	1	2	6	1
C5050	23	-1	3	19	-1	1	7	5	91	3	2	8	30	1
C5150	13	-1	2	13	-1	-1	3	3	39	2	2	6	15	-1
C5250	9	-1	2	10	-1	-1	2	2	33	2	1	3	13	-1
C5350	8	1	3	16	-1	3	3	8	36	2	3	12	17	2
C5450	6	-1	2	5	-1	1	1	1	12	1	1	1	6	1
C5550	5	-1	2	4	-1	1	1	-1	10	1	2	1	5	1
C5650	6	-1	2	5	-1	1	1	1	15	1	1	2	7	1
C5650-R	6	-1	2	5	-1	1	1	1	15	1	1	2	7	1
C5750	7	-1	1	6	-1	1	1	-1	16	1	1	1	8	1
C5850	8	-1	2	6	-1	1	2	1	20	2	1	2	8	1
D4750	7	-1	1	6	-1	1	1	1	21	1	-1	2	9	1
D4850	5	-1	3	3	-1	1	1	-1	13	1	9	2	7	3
D4950	18	-1	3	16	-1	1	4	3	60	3	2	5	23	-1
D5050	8	-1	2	7	-1	2	2	2	19	1	1	4	8	-1
D5150	10	-1	2	9	-1	2	2	3	29	2	2	4	12	1
D5250	6	-1	1	5	-1	1	1	1	23	2	1	2	8	1
D5350	8	-1	1	6	-1	1	1	2	16	1	1	2	7	1
D5450	4	-1	2	4	-1	1	1	-1	9	1	1	1	5	1
D5550	8	-1	2	8	-1	2	1	3	17	1	2	5	9	1
D5650	4	-1	2	4	-1	1	1	-1	10	1	2	1	6	1
D5750	4	-1	1	4	-1	1	-1	1	9	-1	-1	2	5	1
D5850	11	-1	2	12	-1	-1	3	3	37	2	1	4	16	-1
E5450	4	-1	2	4	-1	1	1	1	10	1	2	2	6	1
E5450-R	4	-1	2	4	-1	1	-1	1	9	1	2	1	5	1
E5550	9	-1	2	8	-1	2	2	2	22	1	1	3	10	1
E5650	8	-1	2	6	-1	1	2	-1	26	2	1	1	12	2
E5750	3	-1	-1	3	-1	1	-1	-1	5	-1	-1	1	4	-1
E5850	4	-1	1	3	-1	1	-1	-1	7	-1	-1	1	4	-1
E5950	5	-1	1	4	-1	1	1	1	16	1	1	2	8	1
E6050	5	-1	1	5	-1	1	1	1	15	1	-1	2	7	1
E6150	4	-1	1	3	-1	1	-1	-1	7	-1	1	1	4	-1
F5450	7	-1	2	7	-1	2	2	3	25	1	1	5	11	-1
F5550	9	-1	2	9	-1	2	2	4	27	2	2	6	13	-1

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	085 - LPH	086 - LBI	087 - MAR	088 - HBA	089 - THI	090 - HPB	091 - LBI	092 - LPH	093 - LA	094 - LBI	095 - MAR	096 - LPH	097 - HBA	098 - THI
F5650	6	-1	1	6	-1	-1	1	2	15	1	1	4	7	1
F5750	6	-1	1	6	-1	-1	1	2	13	1	1	3	7	-1
F5850	6	-1	1	5	-1	1	1	1	21	1	-1	2	8	1
F5950	12	-1	2	10	-1	-1	3	3	35	2	1	5	16	-1
G5650	4	-1	2	3	-1	1	1	-1	9	1	1	1	5	1
G5750	4	-1	1	3	-1	-1	-1	-1	8	1	-1	1	4	-1
G5750-R	4	-1	-1	3	-1	1	-1	-1	9	1	-1	1	5	-1
G5850	7	-1	1	7	-1	1	1	2	14	1	1	3	7	1
G5950	5	-1	1	5	-1	1	1	1	9	1	1	1	5	1
H5650	9	-1	2	8	-1	2	2	3	19	1	2	5	9	1
H5750	8	-1	1	6	-1	-1	2	2	22	2	1	3	9	1
H5850	4	-1	1	4	-1	1	1	2	11	1	1	3	5	-1
H5950	7	-1	3	7	-1	1	1	1	17	1	1	2	8	1
I5650	10	-1	2	8	-1	-1	2	2	23	2	1	4	10	-1
I5750	8	-1	1	8	-1	2	2	2	21	2	1	4	9	1
I5850	5	-1	2	5	-1	1	1	1	11	1	1	1	6	1
I5950	5	-1	2	4	-1	1	1	-1	11	1	1	1	5	1
D1100	7	-1	1	6	-1	1	1	1	10	1	1	2	6	-1
D1200	4	-1	-1	4	-1	-1	-1	1	7	-1	-1	1	4	-1
LMB-QA	2	-1	-1	1	-1	-1	-1	-1	3	-1	-1	-1	2	-1
LMB-QA	2	-1	-1	1	-1	-1	-1	-1	3	-1	-1	-1	2	-1
LMB-QA	3	-1	-1	2	-1	-1	-1	-1	3	-1	-1	-1	-1	-1
LMB-QA	2	-1	-1	1	-1	-1	-1	-1	3	-1	-1	-1	2	-1

	099 - LPH	100 - LPH	101 - MAR	102 - MBI	103 - LPH	104 - MAR	105 - ALK	106 - MBI	107 - MBI	108 - LPH	109 - MAR	110 - HBA	111 - MAR	112 - MBI
D1050	2	2	-1	1	1	2	3	-1	1	4	6	17	2	21
D1150	2	2	-1	1	1	2	2	-1	1	4	5	12	2	14
D1250	4	4	-1	2	2	5	4	1	2	5	7	21	3	55
DD400	1	1	-1	1	1	2	1	-1	1	3	4	8	2	11
DD800	6	7	-1	2	3	9	6	2	2	7	12	45	6	23
DD800-R	6	7	-1	3	3	9	7	2	2	7	12	56	7	43
E1100	1	1	-1	1	-1	1	1	-1	1	3	5	9	2	13
E1150X	1	1	-1	-1	-1	1	2	-1	1	3	4	8	2	15
E1200	1	2	-1	1	1	2	2	-1	1	3	5	12	2	27
E1250	1	1	-1	-1	-1	1	1	-1	1	3	4	6	2	24
E1300	2	2	-1	1	1	2	2	-1	1	3	6	15	3	32
E400	-1	1	-1	-1	-1	1	1	-1	-1	3	4	6	2	7
E500	-1	1	-1	-1	-1	1	1	-1	-1	3	4	6	2	9
E550	1	1	-1	1	1	2	1	-1	1	3	4	6	2	7
E600	1	2	-1	1	1	2	2	-1	1	3	4	9	2	21
E650	2	2	-1	1	1	3	3	-1	1	4	6	16	3	11
E700	2	2	-1	1	1	3	3	-1	1	3	5	20	3	14
E750	2	2	-1	1	1	2	3	-1	1	4	5	16	3	37
E800	1	2	-1	1	1	2	2	-1	1	3	5	13	2	30
EE400	1	1	-1	1	1	1	1	-1	1	3	4	7	2	14
EE800	1	1	-1	1	-1	1	1	-1	1	3	4	7	2	4
EE800-R	1	1	-1	1	1	2	1	-1	-1	3	4	7	2	4
Ex-W	2	3	-1	1	1	3	3	-1	1	4	5	17	2	19
F400	1	1	-1	-1	1	2	1	-1	1	3	4	8	2	8
F450	1	1	-1	1	-1	2	1	-1	1	3	4	8	2	8
F500	-1	1	-1	1	-1	1	1	-1	1	3	4	8	2	4
F550	1	1	-1	1	1	1	2	-1	1	3	4	8	2	9
F600	1	1	-1	-1	1	1	1	-1	-1	3	4	7	2	9
F650	2	2	-1	1	1	3	3	-1	1	4	5	15	2	26
F700	2	2	-1	1	1	2	2	-1	1	3	6	14	2	23
W100	2	2	-1	1	1	2	2	-1	1	3	5	10	2	22
W150	2	2	-1	1	1	3	3	-1	1	4	6	21	3	27
W200	2	2	-1	1	1	2	2	-1	1	3	6	15	2	11
W235	2	2	-1	1	1	2	2	-1	1	3	4	11	2	22
W325	1	1	-1	1	1	-1	1	-1	1	3	4	7	2	5
W325-R	1	1	-1	-1	-1	2	1	-1	1	3	4	7	2	4
W350	2	2	-1	1	1	2	2	-1	1	3	5	15	2	9
W50	1	1	-1	1	1	1	2	-1	1	3	4	9	2	18
A4450	1	1	-1	1	-1	1	2	-1	1	3	4	8	2	5
A4550	1	1	-1	-1	1	1	1	-1	1	3	4	8	2	11
A4650	1	2	-1	1	1	1	2	-1	1	3	4	10	2	8
A4750	1	1	-1	1	-1	1	1	-1	1	3	4	8	2	10
A4850	-1	1	-1	1	-1	1	1	-1	1	3	4	8	2	5
A4950	1	1	-1	-1	1	1	2	-1	1	3	4	8	2	12
A5050	1	1	-1	-1	1	1	2	-1	1	3	4	8	2	17
A5150	2	2	-1	1	1	2	2	-1	1	3	5	12	2	26
A5250	1	1	-1	1	1	1	1	-1	1	3	4	7	2	11
A5350	1	2	-1	1	1	2	2	-1	1	3	5	10	2	9
A5450	1	1	-1	1	1	1	2	-1	1	3	4	8	2	8
A5550	1	1	-1	1	1	2	4	-1	1	4	5	16	2	12
A5550-R	1	1	-1	1	1	2	3	-1	1	4	5	15	2	10
A5650	-1	1	-1	1	-1	2	1	-1	-1	3	4	8	2	4
A5750	2	2	-1	1	1	2	3	-1	1	3	5	14	2	19
A5850	2	2	-1	1	1	2	2	-1	1	4	5	16	3	20

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	099 - LPH	100 - LPH	101 - MAR	102 - MBI	103 - LPH	104 - MAR	105 - ALK	106 - MBI	107 - MBI	108 - LPH	109 - MAR	110 - HBA	111 - MAR	112 - MBI
B4450	2	2	-1	1	1	2	3	-1	1	3	6	17	3	18
B4550	2	2	-1	1	1	2	2	-1	1	4	5	16	2	40
B4650	1	1	-1	1	-1	1	1	-1	1	3	4	9	2	7
B4750	3	4	3	1	4	29	4	1	1	9	4	11	2	25
B4850	1	2	-1	1	1	2	2	-1	1	4	5	12	2	25
B4950	-1	1	-1	-1	-1	1	1	-1	1	3	5	8	2	4
B5050	2	2	-1	1	1	2	3	-1	1	3	6	17	3	19
B5150	2	2	-1	1	1	2	2	-1	1	3	5	11	2	17
B5250	2	2	-1	1	1	2	2	-1	1	-1	5	13	2	18
B5450	1	1	-1	1	-1	1	1	-1	1	3	4	8	2	6
B5550	2	1	-1	1	1	2	3	-1	1	3	5	15	2	17
B5650	1	1	-1	1	1	2	2	-1	1	3	4	10	2	9
B5650-R	1	1	-1	1	1	2	2	-1	1	3	4	9	2	9
B5750	1	1	-1	1	-1	1	2	-1	1	3	4	9	2	14
B5850	1	2	-1	1	1	2	2	-1	1	3	5	10	2	25
C4450	1	1	-1	1	-1	1	2	-1	1	3	5	9	2	13
C4550	3	3	-1	1	1	2	3	-1	1	4	7	20	3	38
C4650	1	1	-1	1	1	2	2	-1	1	3	4	8	2	4
C4750	1	1	-1	-1	1	1	2	-1	1	3	5	8	2	8
C4850	2	2	-1	1	1	2	2	-1	1	3	4	9	2	8
C4950	1	2	-1	1	1	1	2	-1	1	3	4	10	2	6
C5050	3	3	-1	2	2	4	5	1	2	5	9	42	5	56
C5150	2	3	-1	2	1	3	4	-1	2	-1	7	27	3	22
C5250	2	2	-1	1	1	2	3	-1	1	4	6	18	3	39
C5350	-1	5	-1	1	2	5	5	1	2	6	6	25	3	15
C5450	-1	1	-1	1	-1	1	2	-1	1	3	4	10	2	9
C5550	1	1	-1	1	-1	1	2	-1	1	3	4	9	2	4
C5650	1	1	-1	1	-1	2	2	-1	1	3	5	12	2	6
C5650-R	1	1	-1	-1	-1	1	2	-1	1	3	4	12	2	9
C5750	1	1	-1	1	-1	1	2	-1	1	3	4	13	2	7
C5850	1	1	-1	1	-1	1	2	-1	1	3	5	11	2	5
D4750	1	2	-1	1	1	1	2	-1	1	3	4	13	2	27
D4850	1	1	-1	1	-1	1	1	-1	1	3	4	8	2	4
D4950	2	3	-1	2	1	3	5	1	2	4	8	32	4	12
D5050	2	2	-1	1	1	2	2	-1	1	4	5	12	2	14
D5150	2	2	-1	1	1	2	3	-1	1	4	5	20	3	10
D5250	1	1	-1	1	-1	1	2	-1	1	3	5	11	2	5
D5350	1	2	-1	1	-1	2	2	-1	1	3	5	11	2	12
D5450	1	1	-1	1	-1	1	1	-1	1	3	4	8	2	5
D5550	2	3	-1	1	1	3	3	-1	1	4	5	16	3	43
D5650	-1	1	-1	-1	-1	1	1	-1	1	3	4	8	2	3
D5750	1	1	-1	1	1	1	2	-1	1	3	4	8	2	13
D5850	2	2	-1	1	1	2	4	-1	1	4	6	26	3	17
E5450	1	2	-1	1	1	2	1	-1	1	3	4	8	2	8
E5450-R	1	1	-1	1	1	2	1	-1	1	3	5	8	2	6
E5550	2	2	-1	1	1	2	2	-1	1	3	5	16	3	14
E5650	-1	1	-1	1	-1	1	2	-1	1	3	5	13	2	4
E5750	1	1	-1	1	-1	1	1	-1	1	3	4	6	2	4
E5850	-1	1	-1	-1	-1	1	1	-1	-1	3	3	6	2	8
E5950	1	2	-1	1	-1	1	2	-1	1	3	5	9	2	9
E6050	1	2	-1	1	1	1	2	-1	1	3	5	10	2	13
E6150	-1	1	-1	1	-1	1	1	-1	1	3	4	7	2	5
F5450	2	2	-1	1	1	2	3	-1	1	4	5	15	2	15
F5550	2	3	-1	1	1	3	3	-1	1	4	5	18	3	13

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	099 - LPH	100 - LPH	101 - MAR	102 - MBI	103 - LPH	104 - MAR	105 - ALK	106 - MBI	107 - MBI	108 - LPH	109 - MAR	110 - HBA	111 - MAR	112 - MBI
F5650	2	2	-1	1	1	2	2	-1	1	3	5	11	2	15
F5750	1	2	-1	1	1	2	2	-1	1	3	6	10	2	5
F5850	1	1	-1	1	-1	1	2	-1	1	3	4	11	2	13
F5950	2	3	-1	1	1	3	3	-1	1	4	6	22	3	12
G5650	1	1	-1	-1	-1	1	1	-1	-1	3	4	8	2	5
G5750	1	1	-1	1	-1	1	1	-1	1	3	4	7	2	4
G5750-R	1	1	-1	-1	-1	1	1	-1	1	3	4	7	2	4
G5850	2	2	-1	1	1	2	2	-1	1	3	4	12	2	13
G5950	1	1	-1	1	1	1	2	-1	1	3	6	10	3	7
H5650	2	2	-1	1	1	2	3	-1	1	4	5	14	3	14
H5750	2	2	-1	1	1	2	2	-1	1	3	5	12	2	13
H5850	2	2	-1	1	1	1	2	-1	1	3	4	9	2	7
H5950	1	1	-1	1	-1	1	2	-1	1	3	4	11	2	6
I5650	2	2	-1	1	1	2	2	-1	1	3	5	13	3	9
I5750	2	2	-1	1	1	2	2	-1	1	3	5	14	2	14
I5850	1	1	-1	1	-1	1	2	-1	1	3	4	9	2	6
I5950	-1	1	-1	1	-1	1	1	-1	1	3	4	9	2	4
D1100	1	1	-1	1	-1	2	2	-1	1	3	5	13	2	5
D1200	-1	1	-1	1	-1	1	1	-1	-1	3	4	8	2	4
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	1	3	4	5	2	2
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	3	3	5	2	2
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	1	3	4	5	2	2
LMB-QA	-1	-1	-1	-1	-1	-1	-1	-1	-1	3	4	4	2	2

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	113 - HBA	114 - MBI	115 - MBI	116 - MAR	117 - HA	118 - MPH	119 - HBA	120 - THI	121 - MPH	122 - MPH	123 - MPH	124 - MBI	125 - HAR	126 - MPH
D1050	11	9	8	3	53	5	19	2	4	8	4	5	4	4
D1150	8	6	8	2	22	4	11	3	4	6	3	4	3	3
D1250	16	19	16	3	46	8	20	2	7	11	7	10	6	7
DD400	7	5	6	2	16	3	8	2	3	6	3	4	3	3
DD800	27	14	15	4	68	14	27	3	12	11	10	9	7	11
DD800-R	32	19	20	5	109	15	38	3	12	12	10	10	8	11
E1100	7	6	5	2	21	3	9	2	3	6	3	4	3	3
E1150X	7	6	5	2	17	3	8	2	3	6	3	4	3	3
E1200	9	10	8	2	38	4	14	2	3	7	3	5	3	3
E1250	6	9	7	2	17	3	9	2	3	6	3	4	3	3
E1300	11	11	9	2	47	5	16	2	5	7	5	6	4	5
E400	6	4	4	2	11	3	7	2	3	5	3	4	3	3
E500	5	5	5	2	13	3	7	2	2	6	3	4	3	3
E550	3	4	5	2	14	3	7	2	3	5	3	4	3	3
E600	7	9	9	2	40	4	14	2	4	7	4	5	5	3
E650	12	6	6	2	36	6	15	2	5	7	5	7	5	5
E700	13	7	7	3	35	5	17	2	5	7	4	5	4	4
E750	10	13	11	3	58	4	19	2	4	7	4	6	4	4
E800	9	12	11	2	43	4	16	2	4	6	3	6	3	3
EE400	6	6	6	2	14	3	8	2	3	5	3	4	3	3
EE800	7	3	4	2	18	3	8	2	3	6	3	4	3	3
EE800-R	7	3	4	2	18	3	10	2	3	5	4	4	3	3
Ex-W	10	9	9	3	34	5	15	2	5	7	4	5	5	5
F400	7	5	5	2	13	3	8	2	3	5	3	5	3	3
F450	5	5	6	2	18	3	9	2	3	6	3	4	4	3
F500	7	3	4	2	15	3	7	2	3	5	3	4	3	3
F550	7	5	5	2	28	3	10	2	3	6	3	4	4	3
F600	6	5	4	2	15	3	8	2	3	5	3	4	-1	3
F650	11	9	8	3	36	5	17	2	4	7	4	7	4	4
F700	11	9	8	3	39	4	14	2	4	6	3	5	4	4
W100	8	8	7	2	23	3	11	2	3	6	3	5	3	3
W150	13	10	9	2	69	5	24	-1	5	7	4	6	4	4
W200	9	5	5	2	36	4	16	2	4	6	4	4	4	4
W235	8	9	8	2	26	4	11	2	4	5	3	5	3	4
W325	7	4	5	2	12	3	7	2	3	5	3	5	-1	3
W325-R	-1	4	4	2	12	3	7	2	3	5	3	4	3	3
W350	11	5	5	3	47	3	16	2	3	6	3	4	3	3
W50	9	7	7	2	22	3	10	2	3	6	3	4	3	3
A4450	8	3	4	2	20	3	9	2	3	5	3	4	3	3
A4550	6	5	5	2	25	3	10	2	3	5	3	4	3	3
A4650	9	4	4	2	30	3	12	2	3	5	3	4	3	3
A4750	6	5	5	2	15	3	7	2	3	5	3	4	3	3
A4850	7	3	3	2	25	3	11	3	3	5	3	3	3	3
A4950	7	5	5	2	23	3	5	2	3	5	3	4	3	3
A5050	7	7	6	2	22	3	11	2	3	5	3	4	3	3
A5150	9	10	8	2	55	4	17	2	3	6	3	5	3	3
A5250	7	5	5	2	16	3	8	2	3	5	3	4	3	3
A5350	9	4	5	2	35	3	13	2	3	6	3	4	3	3
A5450	7	4	5	2	17	3	9	2	3	5	3	4	3	3
A5550	11	6	6	2	50	3	16	2	3	9	3	4	4	3
A5550-R	10	5	6	2	38	3	14	2	3	7	3	4	4	3
A5650	7	4	5	2	19	3	9	2	3	5	3	4	3	3
A5750	12	8	8	2	41	4	15	2	4	6	3	5	3	4
A5850	11	8	7	2	84	4	14	2	4	6	3	5	4	4

	113 - HBA	114 - MBI	115 - MBI	116 - MAR	117 - HA	118 - MPH	119 - HBA	120 - THI	121 - MPH	122 - MPH	123 - MPH	124 - MBI	125 - HAR	126 - MPH
B4450	12	7	7	3	48	3	16	2	3	6	3	5	4	4
B4550	11	14	12	3	45	4	16	2	4	6	3	6	4	4
B4650	7	4	4	2	18	3	9	2	3	5	3	4	3	3
B4750	9	23	15	2	19	5	10	3	4	6	4	10	5	4
B4850	10	9	9	2	50	3	17	2	3	6	4	5	4	4
B4950	8	3	4	2	14	3	8	2	3	5	3	4	3	3
B5050	11	8	7	3	48	4	17	2	4	6	3	5	4	4
B5150	10	7	7	2	39	4	15	2	3	6	3	4	3	4
B5250	11	7	7	2	38	4	14	2	4	6	4	5	4	4
B5450	7	4	5	2	13	3	8	2	3	5	3	4	3	3
B5550	9	8	7	3	50	3	14	2	3	7	3	4	4	3
B5650	8	6	6	2	17	3	8	2	3	5	3	4	3	3
B5650-R	9	5	6	2	18	3	9	2	3	5	3	4	3	3
B5750	8	6	6	2	38	3	13	2	3	5	3	5	3	3
B5850	9	9	8	2	36	3	13	2	3	5	3	5	3	3
C4450	8	6	6	2	38	4	15	2	3	5	3	4	3	3
C4550	14	14	12	3	50	4	20	2	4	6	4	6	4	4
C4650	6	4	4	2	14	3	8	2	3	4	3	4	3	3
C4750	7	4	4	2	30	3	12	2	3	5	3	4	3	3
C4850	8	5	5	2	12	3	8	2	3	4	3	4	4	3
C4950	8	4	4	2	41	4	15	2	3	6	3	4	3	3
C5050	22	19	17	4	101	6	31	3	6	8	6	10	6	6
C5150	17	9	9	3	60	5	23	3	5	7	5	6	5	5
C5250	13	13	11	3	56	4	17	3	3	6	4	6	4	4
C5350	20	10	12	3	60	10	27	3	8	8	8	9	6	8
C5450	8	6	5	2	22	3	10	2	3	4	3	4	3	3
C5550	8	3	4	2	15	3	8	2	3	4	3	4	3	3
C5650	8	4	4	2	26	3	11	2	3	5	3	4	3	3
C5650-R	8	5	6	2	35	3	12	2	3	5	3	4	3	3
C5750	9	4	4	2	40	3	15	2	3	5	3	4	3	3
C5850	8	4	4	2	42	3	15	2	3	5	3	4	3	3
D4750	10	10	8	2	81	3	13	2	3	5	8	5	3	3
D4850	7	3	4	2	16	3	8	3	3	4	3	4	3	3
D4950	16	7	7	3	69	5	27	3	4	6	4	6	5	5
D5050	11	6	6	2	27	4	13	2	4	5	4	5	4	4
D5150	13	6	7	3	39	5	21	3	5	5	4	5	4	4
D5250	7	3	3	2	18	3	9	2	3	4	3	3	3	3
D5350	8	5	5	2	28	3	2	2	3	5	3	4	3	3
D5450	6	3	4	2	13	3	8	3	3	4	2	3	3	3
D5550	12	15	15	3	39	6	17	2	5	6	4	6	4	5
D5650	6	3	4	2	14	3	8	3	3	4	3	3	3	3
D5750	7	6	5	2	27	3	12	2	3	4	3	4	3	3
D5850	16	8	8	3	54	4	21	2	4	7	4	6	4	4
E5450	7	5	5	2	15	3	8	2	3	5	3	4	3	3
E5450-R	7	4	5	2	15	3	8	2	3	4	3	4	3	3
E5550	11	7	7	3	51	4	19	2	4	5	3	5	4	4
E5650	9	3	4	2	40	3	13	2	3	5	-1	4	3	3
E5750	6	3	4	2	16	3	8	2	3	4	3	3	3	3
E5850	7	4	4	2	18	3	8	2	3	4	3	3	3	3
E5950	8	5	5	2	19	3	9	2	3	4	3	4	3	3
E6050	8	6	5	2	19	3	9	2	3	5	3	4	3	3
E6150	7	3	4	2	10	3	7	2	3	4	3	3	3	3
F5450	11	7	7	3	50	5	19	2	4	7	4	7	5	5
F5550	14	7	8	3	31	5	15	2	5	6	4	5	5	5

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	113 -HBA	114 - MBI	115 - MBI	116 - MAR	117 - HA	118 - MPH	119 - HBA	120 - THI	121 - MPH	122 - MPH	123 - MPH	124 - MBI	125 - HAR	126 - MPH
F5650	9	7	7	2	26	4	12	2	4	5	4	5	4	4
F5750	9	4	4	2	20	3	11	2	3	5	3	4	4	3
F5850	8	6	5	2	25	3	11	2	3	5	3	4	3	3
F5950	14	6	6	3	35	4	16	2	4	6	4	5	4	4
G5650	7	4	4	2	13	3	7	2	3	4	2	3	3	3
G5750	6	3	3	2	12	3	8	2	3	4	3	3	3	3
G5750-R	6	3	3	2	17	3	9	2	3	4	3	3	3	3
G5850	11	6	6	2	22	4	11	2	4	6	4	5	4	4
G5950	8	4	4	2	16	3	10	2	3	4	3	4	3	3
H5650	10	7	7	2	33	5	14	2	4	5	4	5	4	4
H5750	9	6	6	2	21	3	11	2	3	5	3	4	3	3
H5850	7	4	4	2	16	3	9	2	3	5	3	4	3	3
H5950	9	4	5	2	19	3	10	2	3	4	3	4	3	3
I5650	9	5	5	2	28	4	13	2	4	5	3	4	3	4
I5750	11	6	6	2	36	4	14	2	4	5	3	4	3	4
I5850	8	4	4	2	19	3	9	2	3	4	3	4	3	3
I5950	7	3	4	2	18	3	10	2	3	4	3	3	3	3
D1100	-1	4	4	2	34	3	13	2	3	4	3	3	3	3
D1200	6	3	3	2	15	3	8	2	-1	4	3	3	3	3
LMB-QA	6	2	2	2	8	2	6	2	2	6	2	3	3	3
LMB-QA	6	2	3	2	10	2	7	2	2	4	2	3	3	3
LMB-QA	5	2	2	2	10	3	6	2	2	4	3	3	3	3
LMB-QA	5	2	2	2	8	2	6	3	3	4	2	3	3	3

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	127 - MPH	128 - MPH	129 - HAR	130 - HAR	131 - MPH	132 - ALK	133 - HAR	134 - HAR	135 - MPH	136 - MPH	137 - HBI	138 - HBI	139 - HPH	140 - HPH
D1050	3	2	3	3	3	17	7	12	7	6	4	6	6	5
D1150	2	2	2	3	3	9	6	10	6	5	3	5	5	5
D1250	4	3	3	4	4	25	7	13	9	8	6	7	1	6
DD400	2	2	2	3	3	7	6	10	6	5	3	5	-1	4
DD800	7	3	5	6	6	42	9	19	11	9	6	8	1	6
DD800-R	6	3	4	5	6	45	9	21	11	10	8	9	1	7
E1100	2	2	2	3	3	8	6	9	5	6	3	5	6	5
E1150X	2	2	2	3	3	8	6	9	6	5	3	5	6	5
E1200	3	2	2	3	3	11	6	10	7	6	4	5	5	5
E1250	2	2	2	3	3	8	6	9	6	5	4	5	5	4
E1300	3	2	2	3	3	13	7	11	7	5	3	5	6	5
E400	2	2	2	3	3	6	6	9	5	5	3	4	-1	4
E500	2	2	2	3	3	7	6	8	5	5	3	4	-1	4
E550	2	2	2	3	3	7	6	9	5	5	3	5	5	4
E600	2	2	3	3	3	11	6	9	6	5	3	5	5	5
E650	3	3	3	3	4	20	6	11	7	6	3	5	6	5
E700	3	2	3	3	3	16	7	11	6	6	4	5	6	5
E750	3	2	3	4	3	18	7	11	7	7	5	6	6	5
E800	3	2	2	3	3	12	7	10	6	6	4	5	1	5
EE400	2	2	2	3	3	7	6	9	6	5	3	4	-1	5
EE800	3	2	2	2	3	7	6	8	6	5	3	4	5	5
EE800-R	2	2	2	3	3	7	6	9	6	5	3	4	5	5
Ex-W	3	2	3	4	3	19	6	10	7	6	4	5	6	5
F400	2	2	2	3	3	7	6	9	6	5	3	4	5	4
F450	2	2	2	3	3	7	6	9	6	5	3	4	5	4
F500	2	2	2	3	3	7	6	9	6	5	3	4	5	4
F550	2	2	2	3	3	9	6	9	6	5	3	5	5	5
F600	2	2	2	3	3	8	6	8	5	5	3	5	5	4
F650	3	2	3	3	4	25	7	11	7	7	4	6	7	5
F700	3	2	2	3	3	15	7	10	6	5	4	5	6	5
W100	2	2	2	3	3	14	6	9	6	6	3	5	5	5
W150	3	2	3	3	4	25	7	11	8	6	4	6	6	5
W200	3	2	2	3	3	15	6	10	7	6	3	5	6	5
W235	3	2	2	3	3	16	6	9	6	6	4	5	6	5
W325	2	2	2	3	3	7	6	9	5	5	3	4	5	4
W325-R	2	2	2	3	3	7	6	8	6	5	3	5	5	4
W350	2	2	2	3	3	12	6	10	6	6	3	5	6	5
W50	3	2	2	3	3	13	6	9	6	6	4	5	5	4
A4450	2	2	2	3	3	9	6	8	6	5	3	4	5	4
A4550	2	2	2	3	3	9	6	8	6	5	3	4	5	5
A4650	2	2	2	3	3	11	6	9	6	5	3	5	6	5
A4750	2	2	2	3	3	7	6	9	6	5	3	4	5	4
A4850	2	2	2	3	3	8	6	9	6	5	3	5	5	4
A4950	2	2	2	3	3	10	6	8	6	5	3	5	5	5
A5050	2	2	2	3	3	11	6	9	6	5	4	5	5	5
A5150	3	2	2	3	3	14	6	10	6	6	4	5	-1	4
A5250	2	2	2	3	3	9	6	9	5	5	3	4	5	4
A5350	3	2	2	3	3	13	6	10	6	5	3	5	6	5
A5450	2	2	2	3	3	8	6	9	6	6	3	4	5	4
A5550	3	2	2	3	3	10	6	10	6	5	3	5	6	5
A5550-R	2	2	2	3	3	9	6	9	6	6	3	5	6	4
A5650	2	1	2	3	2	8	6	8	5	5	3	4	5	4
A5750	3	2	2	3	3	15	7	10	6	6	4	5	-1	4
A5850	3	2	2	3	3	15	6	10	6	6	4	5	6	4

	127 - MPH	128 - MPH	129 - HAR	130 - HAR	131 - MPH	132 - ALK	133 - HAR	134 - HAR	135 - MPH	136 - MPH	137 - HBI	138 - HBI	139 - HPH	140 - HPH
B4450	3	2	2	3	3	16	7	10	6	6	4	5	6	5
B4550	3	2	2	3	3	18	6	11	7	6	4	6	6	5
B4650	2	2	2	3	3	9	6	8	6	5	3	4	5	4
B4750	2	2	2	3	3	8	6	8	6	6	3	5	6	5
B4850	3	2	3	3	4	18	7	9	7	6	3	5	6	5
B4950	2	2	2	3	3	7	6	8	5	5	3	5	-1	5
B5050	3	2	2	3	3	18	7	11	7	6	3	5	6	5
B5150	3	2	2	3	3	14	6	9	6	5	3	5	6	5
B5250	3	2	3	3	3	17	6	10	7	5	4	5	6	5
B5450	2	2	2	3	3	7	6	8	6	5	3	5	-1	5
B5550	2	2	2	3	3	9	6	9	6	6	4	5	6	4
B5650	2	2	2	3	3	9	6	9	5	5	4	5	5	5
B5650-R	2	2	2	3	3	8	7	8	5	5	3	4	-1	5
B5750	3	2	2	3	3	11	6	9	5	6	3	4	6	4
B5850	3	2	2	3	3	15	6	9	7	6	4	5	6	4
C4450	2	2	2	3	3	15	7	8	7	6	4	5	6	5
C4550	3	2	3	3	3	23	7	11	7	7	4	5	6	5
C4650	2	2	2	3	3	8	6	8	5	5	3	5	5	5
C4750	2	2	2	2	3	12	6	9	6	5	3	5	5	4
C4850	2	2	2	3	3	8	6	8	6	5	3	5	5	5
C4950	3	2	2	3	3	13	7	9	6	5	3	5	-1	4
C5050	4	3	3	4	4	35	8	16	8	7	6	8	6	5
C5150	3	2	3	4	4	39	7	12	8	8	4	6	7	5
C5250	3	2	2	3	3	21	7	11	7	7	4	6	6	5
C5350	5	2	5	6	6	63	8	14	11	8	4	7	9	7
C5450	2	2	2	3	3	9	6	8	5	5	3	5	5	4
C5550	2	2	2	3	3	8	6	8	5	5	3	5	6	5
C5650	2	2	2	3	3	9	6	8	6	6	3	5	5	5
C5650-R	2	2	2	3	3	9	6	8	6	5	3	5	5	5
C5750	2	2	2	3	3	11	6	8	6	5	3	5	5	4
C5850	2	2	2	3	3	11	6	9	6	5	3	4	5	5
D4750	3	2	2	3	3	15	6	9	6	5	4	5	6	5
D4850	2	2	2	3	3	8	6	8	6	5	3	5	5	5
D4950	3	2	3	3	4	31	7	14	8	7	4	6	1	5
D5050	3	2	2	3	3	18	6	9	7	6	4	5	1	5
D5150	3	2	3	3	4	25	8	10	7	7	4	5	6	5
D5250	2	2	2	3	3	9	6	9	6	5	3	5	5	4
D5350	2	2	2	3	3	15	6	9	6	5	4	5	-1	4
D5450	2	2	2	3	3	7	6	8	6	5	3	4	5	4
D5550	3	2	3	4	4	21	6	10	7	6	5	6	7	5
D5650	2	2	2	3	3	7	6	8	6	6	3	4	-1	5
D5750	3	2	2	3	3	12	6	8	6	5	3	5	6	5
D5850	3	2	3	4	3	37	7	12	7	7	4	6	1	5
E5450	3	2	2	3	3	8	6	8	6	6	3	4	5	4
E5450-R	2	2	2	3	3	10	6	8	6	6	3	5	6	4
E5550	3	2	2	3	4	21	7	10	7	6	3	5	1	5
E5650	2	2	2	3	3	10	7	8	5	5	3	4	5	4
E5750	2	2	2	3	3	8	6	7	6	5	3	4	-1	5
E5850	2	2	2	3	3	7	6	7	5	5	3	4	5	5
E5950	2	2	2	3	3	11	6	8	6	5	3	4	5	4
E6050	2	2	2	3	3	11	6	8	6	5	3	5	5	5
E6150	2	2	2	3	3	7	5	8	5	5	3	4	5	4
F5450	3	2	3	4	4	41	7	12	8	7	4	6	6	5
F5350	4	2	4	5	4	29	6	11	8	7	4	6	7	5

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	127 - MPH	128 - MPH	129 - HAR	130 - HAR	131 - MPH	132 - ALK	133 - HAR	134 - HAR	135 - MPH	136 - MPH	137 - HBI	138 - HBI	139 - HPH	140 - HPH
F5650	3	2	2	3	3	17	6	9	6	6	4	5	6	4
F5750	3	2	3	3	3	17	6	9	6	6	3	5	-1	5
F5850	2	2	2	3	3	12	6	9	6	5	3	5	5	4
F5950	3	2	3	4	3	24	6	11	7	6	4	5	1	5
G5650	2	2	2	3	3	7	6	8	6	5	3	5	5	5
G5750	2	1	2	3	3	8	6	8	6	4	3	4	5	4
G5750-R	2	2	2	3	3	9	6	8	6	5	3	5	5	5
G5850	3	2	3	3	3	25	6	9	7	6	4	5	6	5
G5950	2	2	2	3	3	9	6	10	6	5	3	5	5	5
H5650	3	2	2	3	4	17	7	9	6	5	3	5	-1	5
H5750	3	2	2	3	3	13	6	9	6	6	4	5	6	5
H5850	2	2	2	3	3	12	6	9	6	5	3	5	5	4
H5950	2	2	2	3	3	8	6	8	6	5	3	5	5	4
I5650	3	2	2	3	3	15	6	10	7	6	3	5	-1	5
I5750	3	2	2	3	3	14	6	9	6	5	3	5	6	5
I5850	2	2	2	3	3	8	6	8	6	4	3	4	5	5
I5950	2	2	2	3	3	8	6	8	6	5	3	4	5	4
D1100	2	2	2	3	3	8	6	8	6	5	3	4	5	4
D1200	2	2	2	3	3	8	6	7	6	4	2	4	5	4
LMB-QA	2	2	2	3	3	6	6	8	6	5	3	5	5	4
LMB-QA	2	2	2	3	2	6	6	8	6	5	3	4	5	4
LMB-QA	2	2	2	3	3	7	6	7	6	5	3	4	5	4
LMB-QA	2	2	2	2	2	6	6	8	5	5	3	4	5	4

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	141 - HBI	142 - HPH	143 - HA	144 - HBI	145 - HBA	146 - HPH	147 - HBI	148 - HPH	149 - HBI	150 - HPH	151 - HBI	152 - HPH	153 - HPH	154 - HPH
D1050	7	7	52	8	25	10	5	5	7	6	5	9	12	9
D1150	6	6	28	6	22	-1	4	5	6	5	5	2	9	8
D1250	11	8	42	10	30	12	6	6	8	7	5	13	22	11
DD400	5	6	20	6	13	9	4	4	5	6	5	6	8	8
DD800	9	10	105	13	54	17	8	8	9	8	6	4	32	12
DD800-R	12	12	152	15	66	18	8	8	10	8	6	19	31	12
E1100	5	-1	24	6	16	1	4	4	6	5	5	-1	8	8
E1150X	6	6	20	6	20	9	4	5	6	-1	5	7	9	8
E1200	6	6	30	7	22	10	4	5	-1	6	5	-1	11	9
E1250	6	5	19	6	24	-1	4	4	6	5	5	6	8	8
E1300	6	6	33	7	26	-1	4	5	6	6	5	8	12	9
E400	4	-1	17	5	11	1	3	4	-1	5	4	7	8	8
E500	5	6	18	6	13	9	4	4	6	1	5	1	8	1
E550	5	6	19	6	15	9	4	4	6	5	5	1	8	9
E600	6	6	23	6	19	9	4	5	6	5	5	7	10	8
E650	6	7	42	7	29	11	4	5	6	6	5	13	22	10
E700	6	7	52	7	41	10	4	5	1	6	5	3	13	9
E750	8	6	44	7	39	1	5	5	6	6	5	8	10	9
E800	7	7	31	7	26	10	4	5	6	6	5	8	11	9
EE400	5	5	21	6	17	1	4	4	-1	6	5	7	9	9
EE800	5	5	20	5	13	9	3	5	6	6	5	7	8	1
EE800-R	5	6	19	5	11	8	4	4	5	5	5	-1	8	8
Ex-W	6	7	42	8	25	10	5	6	1	6	5	2	12	9
F400	5	-1	21	6	13	1	4	4	5	6	5	8	10	1
F450	5	5	24	6	15	-1	4	4	6	5	5	1	8	8
F500	4	5	23	6	14	-1	4	5	6	6	5	7	8	8
F550	5	5	24	6	22	2	4	5	6	6	5	1	8	9
F600	5	6	20	6	21	-1	4	4	5	-1	5	1	8	8
F650	7	7	54	8	39	1	5	5	-1	6	5	8	14	9
F700	6	6	34	7	33	2	4	5	6	1	5	-1	9	8
W100	6	6	29	6	25	9	4	5	6	6	5	-1	11	9
W150	7	7	52	8	55	11	5	5	7	6	5	3	14	9
W200	6	6	42	7	29	10	4	4	1	6	5	3	14	9
W235	6	6	33	7	39	-1	4	5	6	6	5	-1	10	9
W325	5	5	18	6	12	9	4	4	6	6	5	1	8	8
W325-R	5	6	19	5	12	2	3	5	5	6	5	-1	9	8
W350	5	6	40	6	24	-1	4	5	6	6	-1	1	9	1
W50	6	5	27	6	21	9	4	5	6	-1	5	-1	8	8
A4450	5	6	27	6	20	8	4	4	6	5	5	1	9	1
A4550	5	6	21	6	19	-1	4	4	6	5	5	1	9	1
A4650	5	6	25	6	24	2	4	5	6	5	5	7	10	9
A4750	5	5	20	5	14	3	4	5	6	6	5	7	8	8
A4850	5	5	23	5	15	9	4	5	1	5	5	7	8	9
A4950	5	6	23	6	24	2	4	4	6	5	5	7	9	8
A5050	6	6	25	6	40	9	4	4	-1	5	5	7	9	2
A5150	6	1	31	7	23	2	4	4	6	5	5	9	12	8
A5250	5	5	21	6	23	2	4	4	6	5	5	1	8	8
A5350	5	6	30	6	29	9	4	5	6	5	5	2	11	9
A5450	5	-1	22	6	15	1	4	5	5	5	5	7	8	8
A5550	5	6	32	6	23	-1	4	5	6	6	5	2	9	8
A5550-R	5	6	29	6	21	-1	4	5	6	6	5	1	8	9
A5650	4	6	22	5	13	9	4	4	-1	5	5	-1	8	8
A5750	5	6	32	7	32	2	4	5	6	6	5	8	11	9
A5850	6	6	36	6	22	10	4	5	6	5	5	8	12	2

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	141 - HBI	142 - HPH	143 - HA	144 - HBI	145 - HBA	146 - HPH	147 - HBI	148 - HPH	149 - HBI	150 - HPH	151 - HBI	152 - HPH	153 - HPH	154 - HPH
B4450	6	6	52	7	29	-1	4	5	6	6	5	8	11	9
B4550	8	7	37	7	43	10	4	5	1	-1	5	4	12	9
B4650	5	6	25	6	32	-1	4	4	6	5	5	1	9	8
B4750	5	7	20	6	14	11	4	5	6	6	5	1	9	9
B4850	7	6	36	7	46	10	4	5	-1	6	5	8	12	2
B4950	5	6	24	6	17	2	4	4	5	5	5	7	8	1
B5050	6	7	38	7	30	10	4	5	6	6	5	3	13	9
B5150	6	-1	28	6	46	1	4	5	-1	6	5	4	10	2
B5250	6	6	31	7	26	10	4	5	1	-1	5	5	11	9
B5450	5	6	21	6	15	9	4	4	6	-1	5	7	8	1
B5550	5	6	29	6	19	9	4	5	5	5	5	1	9	8
B5650	5	5	27	6	17	9	4	4	6	6	5	7	9	8
B5650-R	5	-1	24	6	16	1	4	4	6	5	5	7	9	1
B5750	5	5	28	6	29	9	4	5	5	6	5	3	10	9
B5850	6	6	28	6	41	2	4	5	6	6	5	3	10	9
C4450	6	6	29	6	64	9	4	4	6	5	5	-1	9	8
C4550	7	7	42	8	54	1	5	5	6	6	5	9	13	9
C4650	5	6	22	6	15	-1	4	4	-1	5	5	1	8	8
C4750	5	-1	24	5	22	1	4	4	5	5	5	1	10	1
C4850	5	6	22	6	13	-1	4	4	-1	5	5	7	8	1
C4950	5	6	31	6	36	9	4	5	6	5	5	8	10	9
C5050	10	7	100	9	59	11	5	6	7	6	5	12	18	10
C5150	8	8	88	9	39	12	5	6	8	7	5	11	16	10
C5250	7	1	45	7	30	1	4	5	7	6	5	9	13	9
C5350	9	10	57	11	50	15	7	8	9	8	6	4	23	11
C5450	5	6	26	6	17	2	4	4	6	6	5	7	8	1
C5550	5	6	20	5	15	2	4	4	5	5	5	7	9	8
C5650	5	6	26	6	20	9	4	4	6	5	5	1	9	9
C5650-R	-1	6	29	6	18	9	4	5	-1	5	5	1	9	1
C5750	5	5	33	6	25	-1	4	4	1	6	5	7	9	9
C5850	5	5	33	6	25	9	4	4	-1	6	5	1	8	9
D4750	6	6	36	6	82	2	4	5	6	6	5	7	10	8
D4850	5	6	24	6	17	2	4	4	5	5	-1	7	8	9
D4950	6	8	84	7	62	11	4	5	6	6	5	12	19	10
D5050	6	-1	30	7	32	1	4	5	-1	-1	5	3	11	9
D5150	6	6	56	7	82	10	5	5	7	1	5	8	11	9
D5250	5	5	29	6	19	9	4	5	5	5	5	7	8	8
D5350	5	6	31	6	30	9	4	5	6	-1	5	4	11	9
D5450	5	6	22	5	14	2	4	4	5	5	5	6	8	8
D5550	8	7	37	9	31	3	5	5	2	6	5	3	11	9
D5650	5	6	22	6	16	-1	4	4	6	5	4	6	8	8
D5750	5	-1	25	6	25	1	4	4	6	5	5	7	9	8
D5850	7	7	84	8	37	11	5	6	6	1	5	4	19	2
E5450	5	5	22	6	15	1	4	4	6	6	5	3	11	10
E5450-R	5	6	22	1	14	1	4	4	-1	6	6	12	11	10
E5550	5	6	33	7	64	1	4	5	1	-1	5	4	12	9
E5650	5	5	35	6	19	9	4	4	6	5	5	1	9	1
E5750	5	6	18	6	15	2	4	5	5	6	5	1	8	1
E5850	5	1	19	5	16	1	4	4	5	5	5	6	8	8
E5950	5	6	30	6	19	2	4	4	5	5	5	1	10	9
E6050	6	6	31	6	23	9	4	5	6	6	5	7	9	9
E6150	5	1	19	5	14	1	3	4	5	5	5	7	9	1
F5450	7	6	50	7	39	11	5	5	7	-1	5	10	14	9
F5350	7	8	49	9	34	12	5	6	7	7	5	3	13	9

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	141 - HBI	142 - HPH	143 - HA	144 - HBI	145 - HBA	146 - HPH	147 - HBI	148 - HPH	149 - HBI	150 - HPH	151 - HBI	152 - HPH	153 - HPH	154 - HPH
F5650	6	6	33	7	31	2	4	5	6	6	5	4	12	9
F5750	5	6	28	6	28	2	4	5	1	1	6	7	9	9
F5850	5	6	32	6	21	-1	4	5	6	6	5	7	10	9
F5950	5	6	54	7	33	2	4	5	1	6	5	9	13	9
G5650	5	5	21	6	14	2	4	4	6	5	4	7	8	8
G5750	4	6	22	6	18	9	4	4	5	5	5	1	9	1
G5750-R	5	6	22	6	28	9	4	4	-1	5	5	7	8	8
G5850	6	6	32	7	23	-1	5	5	6	6	5	4	13	9
G5950	5	6	24	6	17	-1	4	4	6	5	5	1	8	8
H5650	6	6	32	7	27	2	4	4	6	1	5	8	11	9
H5750	5	6	31	6	18	-1	4	4	6	6	5	8	10	8
H5850	5	6	26	6	21	9	4	5	6	6	5	7	9	8
H5950	5	6	25	6	18	-1	4	4	1	5	5	7	8	9
I5650	5	-1	31	7	42	1	4	4	6	-1	4	3	11	9
I5750	6	-1	32	7	28	1	4	5	6	5	5	7	10	9
I5850	5	5	26	6	20	8	4	4	6	6	5	6	8	8
I5950	5	-1	29	6	18	1	4	4	6	5	5	2	9	8
D1100	5	-1	20	6	20	1	3	4	5	5	5	-1	8	8
D1200	5	6	22	6	18	2	4	4	5	5	5	6	8	2
LMB-QA	4	5	16	5	10	-1	3	5	5	5	5	7	9	1
LMB-QA	4	5	16	6	16	1	3	4	5	1	5	7	2	2
LMB-QA	4	5	17	5	16	8	4	5	5	5	5	6	8	8
LMB-QA	4	5	15	5	19	-1	4	4	1	5	5	-1	8	8

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	155 - HPH	156 - HBI	157 - HAR	158 - HBA	159 - HBA	160 - HBI	161 - HA	162 - HPH
D1050	8	7	7	23	9	9	29	9
D1150	9	7	-1	19	8	8	39	9
D1250	8	7	7	22	1	10	27	10
DD400	8	7	7	19	9	9	24	2
DD800	10	8	8	25	9	10	35	1
DD800-R	9	8	8	31	10	10	39	10
E1100	9	7	7	19	9	9	13	2
E1150X	8	7	7	17	9	9	27	9
E1200	8	7	7	21	9	9	28	9
E1250	9	7	7	19	9	9	30	8
E1300	9	7	7	20	9	9	26	9
E400	9	7	7	18	9	2	24	9
E500	8	7	7	18	9	9	14	9
E550	8	7	7	19	1	8	23	1
E600	8	7	7	19	1	9	26	1
E650	9	7	7	21	8	9	29	9
E700	8	7	7	20	8	8	29	2
E750	9	7	8	23	9	9	32	9
E800	9	7	8	20	1	9	27	9
EE400	8	7	7	19	9	9	23	9
EE800	8	7	8	18	9	9	22	9
EE800-R	9	7	7	19	8	8	25	9
Ex-W	8	7	7	22	8	8	28	9
F400	9	7	7	18	8	8	2	9
F450	9	7	7	17	1	9	23	9
F500	8	7	7	17	9	9	25	2
F550	8	7	7	20	9	9	3	9
F600	8	8	8	19	9	8	23	9
F650	8	8	-1	23	9	2	27	2
F700	9	7	7	19	9	9	26	9
W100	8	7	7	20	1	8	26	9
W150	8	7	7	23	9	9	31	10
W200	9	7	7	21	1	9	25	9
W235	8	6	6	19	8	2	26	8
W325	8	7	7	17	1	9	24	9
W325-R	8	7	7	18	2	8	24	1
W350	8	7	8	20	9	2	27	9
W50	9	7	7	20	1	9	25	9
A4450	8	7	7	19	9	9	23	1
A4550	8	7	7	19	8	8	25	9
A4650	9	7	8	19	9	9	22	9
A4750	9	7	7	20	2	9	24	9
A4850	2	7	7	19	1	8	26	9
A4950	8	6	7	18	8	8	25	9
A5050	8	7	7	19	8	9	26	9
A5150	8	7	7	21	9	9	26	1
A5250	8	7	7	18	9	8	24	9
A5350	8	7	7	19	8	2	27	9
A5450	9	7	8	20	8	9	25	9
A5550	8	7	7	21	8	9	28	9
A5550-R	8	7	7	20	9	1	25	9
A5650	8	7	7	19	8	-1	23	0
A5750	9	7	7	20	8	8	25	9
A5850	8	8	7	20	8	-1	4	2

	155 - HPH	156 - HBI	157 - HAR	158 - HBA	159 - HBA	160 - HBI	161 - HA	162 - HPH
B4450	9	7	8	24	9	9	29	10
B4550	9	7	7	22	8	2	29	2
B4650	9	7	7	19	9	9	24	9
B4750	9	7	7	19	8	9	25	1
B4850	9	7	7	21	9	9	26	9
B4950	9	7	7	20	9	9	26	10
B5050	9	7	7	23	8	1	25	1
B5150	2	8	8	21	9	9	27	1
B5250	9	7	7	21	9	9	26	9
B5450	9	7	7	20	9	2	27	9
B5550	8	7	7	19	9	9	26	9
B5650	8	7	7	1	9	9	7	9
B5650-R	8	7	7	20	9	1	23	9
B5750	9	7	7	20	9	9	26	9
B5850	8	7	7	22	9	2	24	9
C4450	9	7	7	21	8	9	28	1
C4550	9	7	7	24	8	9	31	9
C4650	8	7	7	20	8	8	27	10
C4750	9	7	7	21	9	1	24	9
C4850	8	7	7	18	2	9	25	9
C4950	8	7	7	22	9	9	25	9
C5050	9	8	8	28	9	10	37	1
C5150	9	7	8	26	9	10	34	9
C5250	9	7	7	21	9	2	30	2
C5350	9	8	8	27	9	10	36	2
C5460	9	7	7	20	9	9	5	9
C5550	8	7	7	18	9	9	5	9
C5650	9	7	7	-1	1	9	26	1
C5650-R	9	7	7	19	8	8	28	9
C5750	8	7	7	20	9	2	26	10
C5850	8	7	7	20	9	9	24	10
D4750	8	7	7	21	9	9	29	10
D4850	9	7	7	19	8	9	24	9
D4950	9	7	7	24	8	9	33	1
D5050	9	7	7	21	1	2	24	9
D5150	9	7	7	24	9	1	30	9
D5250	8	7	7	21	9	9	25	9
D5350	9	7	7	20	1	8	26	9
D5450	8	7	7	20	8	9	25	9
D5550	9	7	7	21	9	10	27	10
D5650	8	7	7	20	9	8	25	10
D5750	8	7	7	19	8	9	25	1
D5850	9	7	7	27	9	10	35	9
E5450	9	7	7	-1	9	1	24	9
E5450-R	9	7	7	20	8	9	25	1
E5550	9	7	7	21	9	9	33	1
E5650	8	7	7	21	1	9	29	2
E5750	8	7	7	19	2	8	24	2
E5850	8	7	8	17	9	8	26	9
E5950	8	7	7	20	8	8	4	9
E6050	9	7	7	21	9	8	26	9
E6150	8	7	7	19	9	9	23	9
F5450	9	8	8	24	9	9	28	9
F5550	10	8	7	24	9	9	28	9

SOIL GAS HYDROCARBONS
(SGH) by GC/MS
COBB BAY\MATTABI PROJECT SITES

	155 - HPH	156 - HBI	157 - HAR	158 - HBA	159 - HBA	160 - HBI	161 - HA	162 - HPH
F5650	9	7	7	21	9	9	27	9
F5750	9	7	7	20	8	9	26	1
F5850	9	7	7	20	1	8	25	9
F5950	9	7	7	20	9	9	27	2
G5650	8	7	7	19	8	9	24	2
G5750	9	7	8	19	9	8	26	9
G5750-R	8	7	7	19	1	8	23	9
G5850	8	7	8	9	2	9	25	10
G5950	9	7	7	20	9	1	27	2
H5650	8	7	7	20	9	9	25	9
H5750	9	7	8	20	2	2	25	9
H5850	9	7	7	19	1	9	27	9
H5950	9	7	7	20	8	9	28	9
I5650	9	7	7	20	9	9	27	2
I5750	8	7	7	20	8	9	29	9
I5850	9	7	7	19	1	9	26	9
I5950	8	7	7	20	1	8	28	9
D1100	8	7	7	19	8	8	80	1
D1200	8	7	7	18	9	9	28	9
LMB-QA	8	7	7	-1	8	8	23	9
LMB-QA	9	7	7	-1	8	8	13	1
LMB-QA	8	7	8	20	9	8	25	9
LMB-QA	8	7	7	20	8	1	25	2

APPENDIX F

SGH Sample Methodology

Soil samples were gather with a metal “Dutch” or hand auger at approximately 100 meter intervals east to west on sample lines 100 meters apart north to south. Positions were determined with GPS units.

After removing the top organic black layer from the bit and the leached A0 horizon, 200-300 grams of inorganic soil, typically from the B horizon, was placed in a heavy duty polyethylene Ziploc bag after removing as much of the air inside as possible. The bags were then labeled on the exterior with an indelible marker, and carried in a back pack.

Typical sample depths were between 2 and 8 inches below the surface and the samples were shipped to the lab in the Ziploc bags.