

Memorandum

To: Vanessa Benwood, Alexco Keno Hill Mining Corp (AKHM)
From: Catherine Henry, Ethan Allen, Access Consulting Group (ACCESS)
CC: Brad Thrall, Jim Harrington, Alexco Resource Corp
Date: March 26, 2012
Re: Keno District Mill 2011 Dustfall Monitoring Results

1 INTRODUCTION

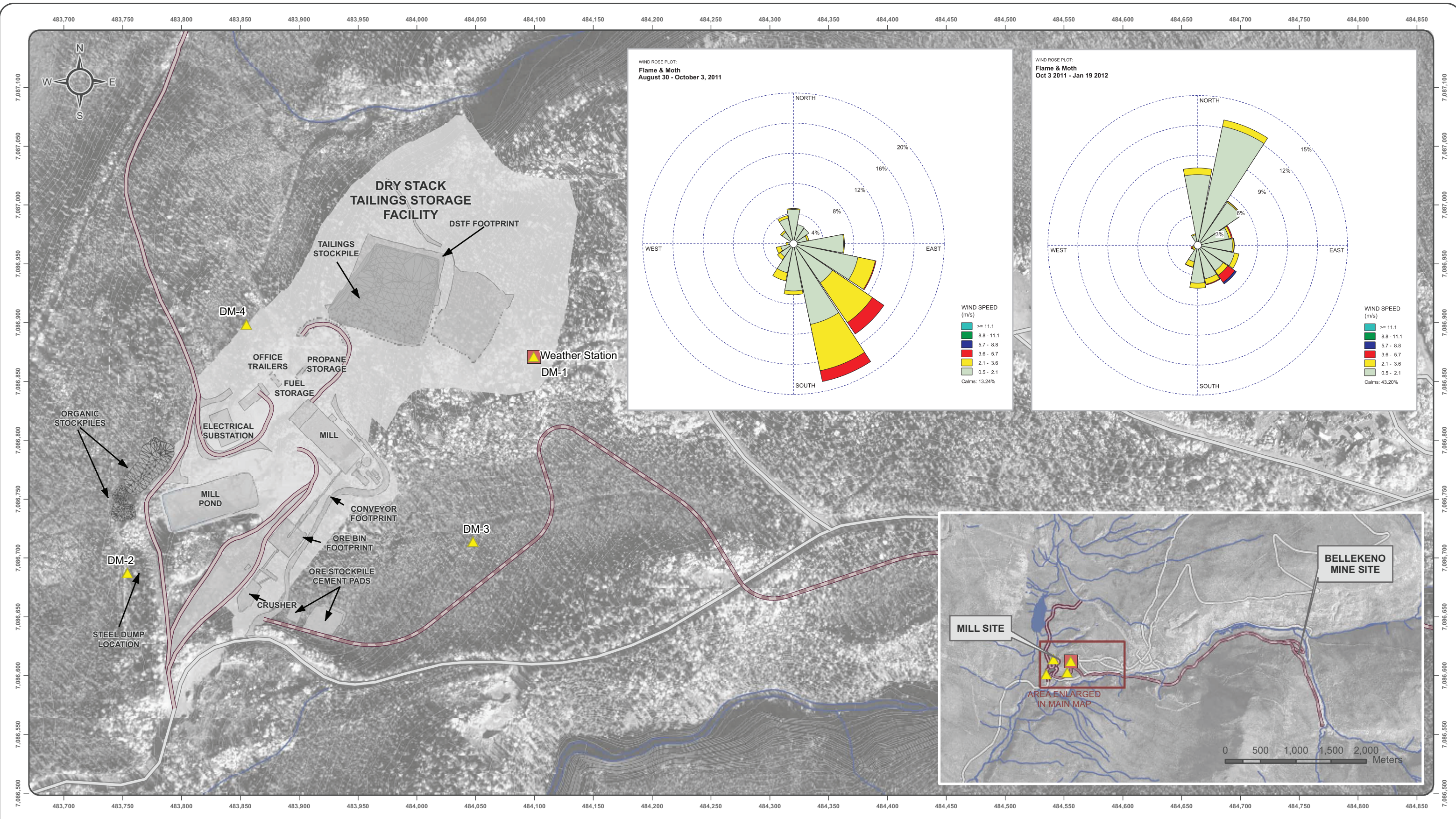
In accordance with Clause 69 of the Decision Document for the assessment for the Bellekeno Mine Project (YESAB File Number 2009-0030), dustfall monitoring was installed at two locations near the Keno District mill site on March 6, 2011. Samples have been collected on an approximately monthly basis at two locations near the mill site, namely DM1 and DM2, continuously from March 6, 2011 to May 10, 2011. Based on the preliminary results, two more sampling locations, DM3 and DM4, were added as of May 2011. The dust monitoring program is described in the Monitoring and Surveillance Plan Revision 1 (June, 2011), which is currently under review by Yukon Government Energy Mines and Resources.

1.1 PURPOSE

This memorandum summarizes the results of dustfall monitoring undertaken by AKHM for the period between March 6, 2011 and January 19, 2012, as part of the Annual Report required under QML # 0009.

2 METHODS

Mill site layout and infrastructure, as well as locations of Bergerhoff dust monitoring gauges currently in place at four representative locations around the mill site are shown on Figure 1. DM1 is located near the weather station, DM2 is near the mill pond / scrap area, DM3 is located east of the crusher and the mill and DM4 is at the toe of the DSTF.



Aerial photography flight date: July 13th 2006. Ortho-rectification produced by Challenger Geomatics Ltd. Data obtained from EBA: "As built" spatial data: Mill pond (Y.E.S.), Mill structure, and current DSTF footprints, Roads (In House survey December 11th 2011). Design spatial data: Conveyance and water collection, diversion ditches and berm.

Datum: NAD 83; Projection: UTM Zone 8N

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Main Map: 1:3,000 Inset Map: 1:50,000
 (when printed on 11 x17 inch paper)

- Dry Stack Tailings
- Design PU
- AsBuilt; As Built
- Mill Access Road
- Haul Road
- Local Road



ALEXCO KENO HILL MINING CORP.

**FIGURE 1
 DUST MONITORING AND
 WEATHER STATION LOCATIONS**

Drawn By JP	MARCH 2012	Verified by VB
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I:\ALEX-05-01\Bellekeno\GIS\msd\Permitting\Monitoring_and_Surveillance_Plan_QLM_0009\Dust_Monitoring_Stns_20120322.mxd
 (Last edited by: jjan; 3/26/2012 10:56 PM)



2.1 SITE SAMPLING PROCEDURE

Two samples were collected for the period between March 6, 2011, and May 10, 2011 at stations DM1 and DM2 at approximately monthly intervals. Because of the prevailing winter/spring conditions during collection of these two initial samples, no special procedure was undertaken with respect to ensuring maintenance of water in the collection bottle. All samples contained a significant amount of water (or snow) at the time of collection. The March 6 – April 3 and April 3 – May 10 samples were emptied and rinsed with deionized water into secondary sample bottles and sent to Maxxam Analytical Laboratories of Burnaby, BC for analysis.

No samples were collected between May and August 2011 due to delays in obtaining the equipment from the lab in conjunction with the establishment of two new stations (DM3 and DM4), equipment stability issues (due to weather and/or animals) and staff changeover.

From August 2011 to January 2012, two samples from each of the four stations were collected: one from August to October 2011 and one from October 2011 to January 2012. The August 30 – October 3 and October 3 – January 19 samples were sent to Maxxam in the primary sample bottles.

2.2 LABORATORY ANALYTICAL PROCEDURE

The first set of samples (DM1 and DM2 from March to May 2011) were subjected to the following procedure upon receipt by Maxxam:

- Samples were split into two portions of 60 mL.
- One aliquot was run for Total Suspended Solids.
- The second aliquot for Total Solids, fixed and volatile.

Total Suspended Solids (TSS) Aliquot

- Extraneous material was removed prior to filtering.
- Samples were filtered using a Whatman 934AH 12.5 cm 1.5µm filter to determine TSS.

Total Solids Aliquot

- Samples were dried overnight at 105 degrees C.

Loss on Ignition (LOI)

- LOI was conducted on both aliquots at 600 degrees C on the filtrate from the total and suspended solids aliquots in order to determine total weight of the fixed and volatile portions. The volatile fraction, which was burned off during LOI was assumed to be organic material.

For subsequent samples, Maxxam was instructed to analyze the samples for only TSS. Also, Maxxam has been instructed to keep the solids from the Total Solids and if enough sample is available (at least 1 gram) to proceed with an ICP metals analysis.



3 RESULTS

The results of preliminary dust monitoring for DM1 and DM2 are summarized in Table 1 below. Subsequent results for stations DM1 to DM4 (TSS only) are presented in Table 2. Analytical certificates for these samples are included as Attachment 1.

Table 1 Summary of Results for DM1 and DM2, March to May 2011

Station #	Units	Sampling Period	Total Solids Aliquot			Total Suspended Solids Aliquot		
			Total	Fixed	Volatile	Total	Fixed	Volatile
DM1	mg/sample ¹	March 6 - April 3	18	<10	18	<10	<1	<1
DM2	mg/sample ¹	March 6 - April 3	22	<10	18	<10	7	<1
DM1	mg/sample ¹	April 3 - May 10	19	<10	19	<10	2	<1
DM2	mg/sample ¹	April 3 - May 10	13	<10	12	<10	2	<1
RDL²			10	10	10	10 ³	1	1

Notes: ¹All measurements calculated to represent the entire sample (both aliquots)

²RDL = Reportable Detection Limit

³The RDL was raised to from 1 to 10 due to insufficient sample volume

Table 2 Summary of Results for DM1 to DM4, August 2011 to January 2012

Station #	Units	Sampling Period	Total Suspended Solids		
			Total	Fixed	Volatile
DM1	mg/sample ¹	Aug 30 - Oct 3	43	2	41
DM2	mg/sample ¹	Aug 30 - Oct 3	54	36	17
DM3	mg/sample ¹	Aug 30 - Oct 3	99	54	45
DM4	mg/sample ¹	Aug 30 - Oct 3	38	11	27
RDL²			4	1	1
QC Batch			5246948	5255612	5255612
DM1	mg/sample ¹	Oct 3 - Jan 19	20.5	16	5
DM2	mg/sample ¹	Oct 3 - Jan 19	1900	1800	55
DM3	mg/sample ¹	Oct 3 - Jan 19	89.5	87	3
DM4	mg/sample ¹	Oct 3 - Jan 19	93.8	87	7
RDL²			4	1	1
QC Batch			5539916	5543284	5543284

Notes: ¹All measurements calculated to represent the entire sample

²RDL = Reportable Detection Limit

A summary table of calculated deposition rates is included in Table 3.

Table 3 Dust Deposition Rates Summary Table (in mg/(dm2*d))

Period	# Days	DM1	DM2	DM3	DM4
March 6 - April 3	29	0.012	0.165		
April 3 - May 10	38	0.036	0.036		
Aug 30 - Oct 3	35	0.039	0.704	1.056	0.215
Oct 3 - Jan 19	109	0.100	11.304	0.546	0.546



Dust deposition was calculated based on the TSS fixed, and a sample bottle surface area of 1.46 dm². The TSS fixed value was divided by the surface area of the sample bottle mouth and the number of days over each sample was collected. The resultant dust deposition values are reported in mg/(dm²*d), which is comparable to the Ambient Air Control Objectives in the Pollution Control Objectives for the Mining, Smelting and Related Industries of BC (1979), which provides an acceptable range of 1.7 to 2.9 mg/(dm²*d). The use of only the fixed solids measurements is deemed the most appropriate representation of dust which may originate from the site, and is expected to consist wholly of minerals, which would not be significantly volatilized by LOI. The focus on mineral non-volatile dust fraction was also precautionary in order to attempt to isolate the potential impact of sample contamination from the nearby Keno City dump incinerator, which is located approximately 100 m to the northeast of DM1. This incinerator is an open burn barrel type, and may emit significant amounts of volatile and non-mineral particulate matter (i.e. soot) which may impact Alexco's dustfall measurements.

3.1 WIND ANALYSIS

Wind speed and direction was analyzed for each sampling period and wind roses are presented in attachment. For March 6 – April 3 2011 and April 3 – May 10 2011, the only wind data available is from the Galena Hill weather station. Wind roses for those 2 sampling periods have been plotted and are presented in Figures 1 and 2 of Attachment 2. Dominant winds are observed to be from the SE, with northerly and northwesterly components for the second period.

The Flame and Moth weather station, located by the dust monitoring station DM1, was commissioned on June 2, 2011 and winds observed at this location are deemed to be more representative of conditions observed in the vicinity of the dust monitoring stations. For subsequent sampling periods, winds from both meteorological stations were analyzed.

For the sampling period from August 30 to October 3 2011, both stations display predominant winds from the SE, but wind speeds are on average higher at Galena Hill (3.06 m/s) than at Flame and Moth (1.38 m/s) (see Figures 3 and 4 of attachment 2). For the sampling period from October 3 2011 to January 19 2012, the Galena Hill station still displays predominant winds from the SE, with a slightly higher average wind speed than for the previous period (3.42 m/s) (see Figure 5). The Flame & Moth station on the other hand displays predominant winds from the NE, with a much lower average wind speed (0.69 m/s) (see figure 6). Note however that the stronger winds (>3.6 m/s) are also from the SE at the Flame & Moth station.

All data from the available record common to both meteorological stations was also analyzed and compared for reference (Figures 7 and 8). Dominant winds are clearly from the SE at Galena Hill, while there is more variability at Flame and Moth, with predominant southwesterly and northwesterly components. Note that stronger winds (>3.6 m/s) at Flame and Moth are exclusively from the SE. Average wind speeds are much higher at Galena Hill (2.79 m/s) than at Flame and Moth (0.98 m/s). Also note that there is considerably more missing data at Galena Hill, due to icing of the wind sensor.

4 DISCUSSION AND RECOMMENDATIONS

A number of observations and interpretations can be made from these data:

- One exceedence of the BC Ambient Air Control Objectives was observed, at station DM2 for the period going from October 3, 2011 to January 19, 2012. The deposition rate calculated for this period is about 3.9 times higher than the upper limit of the Pollution Control Objectives for the Mining, Smelting and Related Industries of BC. The single exceedence is out of 12 samples collected over the reporting period, with 11 of the 12 samples collected below the BC Ambient Air Control Objectives. It is noted that the single exceedence for DM2 is 21 to 113 times higher than samples from the other stations for the same period, which suggests a biased sample. The dust may be attributable to the large steel dump located less than 10 meters away from the dust monitoring station DM2 (see picture below). Waste steel is pulled from just after the jaw crusher, so is covered with ore dust. Particulates are likely mobilised each time materials are added to the dump.
- Deposition rates generally appear to be higher during periods of cold weather and higher at stations DM2 and DM3. These observations are based on a very limited number of samples and continued monitoring will allow a better understanding of seasonal trends and a more precisely delineation of the locations most impacted. Potential dust sources at the mill site have been identified as the Dry Stack Tailings Facility (DSTF), the tailings and concentrate loadout areas, the fine ore stockpile, the primary and secondary crushers, and fugitive dust from mill site area roads. Based on the dust modeling conducted and submitted as part of the DSTF Construction and Operation Plan and preliminary data collected to date, these potential dust sources are expected to be more likely to produce dust at different times of the year. Dust from crushing activity is most likely during periods of cold weather during the winter months, when natural water in ore is too frozen to provide natural dust suppression. Dust from other sources (DSTF, loadout areas, stockpiles, and roads) is considered more likely to be produced during the summer months during periods of dry weather.



Figure 2 Steel Dump Near Dust Monitoring Station DM2



- Dust transport is a function of wind speed and direction, and was found to be maximal at moderate wind speeds during the dust modeling exercise. It is still too early to establish a clear correlation between dustfall results obtained to date and observed wind speeds and directions. Given the predominant southeasterlies, higher dustfall rates would be expected at stations DM2 and DM4, which are located downwind from the crusher. Note that predominant winds from both weather stations blow away from Keno City, therefore any dust produced at the mill site is not expected to be transported towards Keno City. This prediction is supported by the reported dustfall monitoring results in which DM1 and DM3 showed low dust deposition rates over the sample intervals.
- The ratio of volatile (organic) solids to total solids ranged from 82% to 100% for the preliminary samples, from 31% to 95% for the period from August to October 2011 and went as low as 3% for the last sampling period. The higher proportion of volatile solids during the earlier (spring) and late summer-early autumn periods is likely due to the dispersion and deposition of biogenic organic materials, e.g. pollen, plant parts and insects.

Based on the monitoring period summarized in this memo, the following recommendations are made relating to future dust monitoring activities as described

- Given the results obtained to date, it is recommended that the sampling frequency be increased (to at least monthly) during the winter months as higher dustfall rates seem to be associated with cold temperatures.
- The potential causal relationship between the steel dump and DM-2 should be further investigated. If there is sufficient grounds to warrant it, Alexco may wish to change the location of the steel dump or consider relocating DM-2.
- Continuation of pre-emptive and reactive dust control procedures as outlined in the DSTF Construction and Operation Plan, Traffic Management Plan, and Monitoring and Surveillance Plan is recommended to help ensure that fugitive dusting does not become an issue.

5 CLOSURE

Should you have any questions, please contact the undersigned at (867)-668-6463.

A handwritten signature in black ink that reads "Catharine Henry".

C. Henry, M.Sc.

Environmental Scientist

A handwritten signature in black ink that reads "Ethan Allen".

Ethan Allen, M.Sc.

Environmental Geoscientist



Attachments:

1. Dust Monitoring Analytical Certificates from Maxxam Analytical
2. Wind Rose Diagrams, Galena Hill and Keno Mill Site Weather Stations

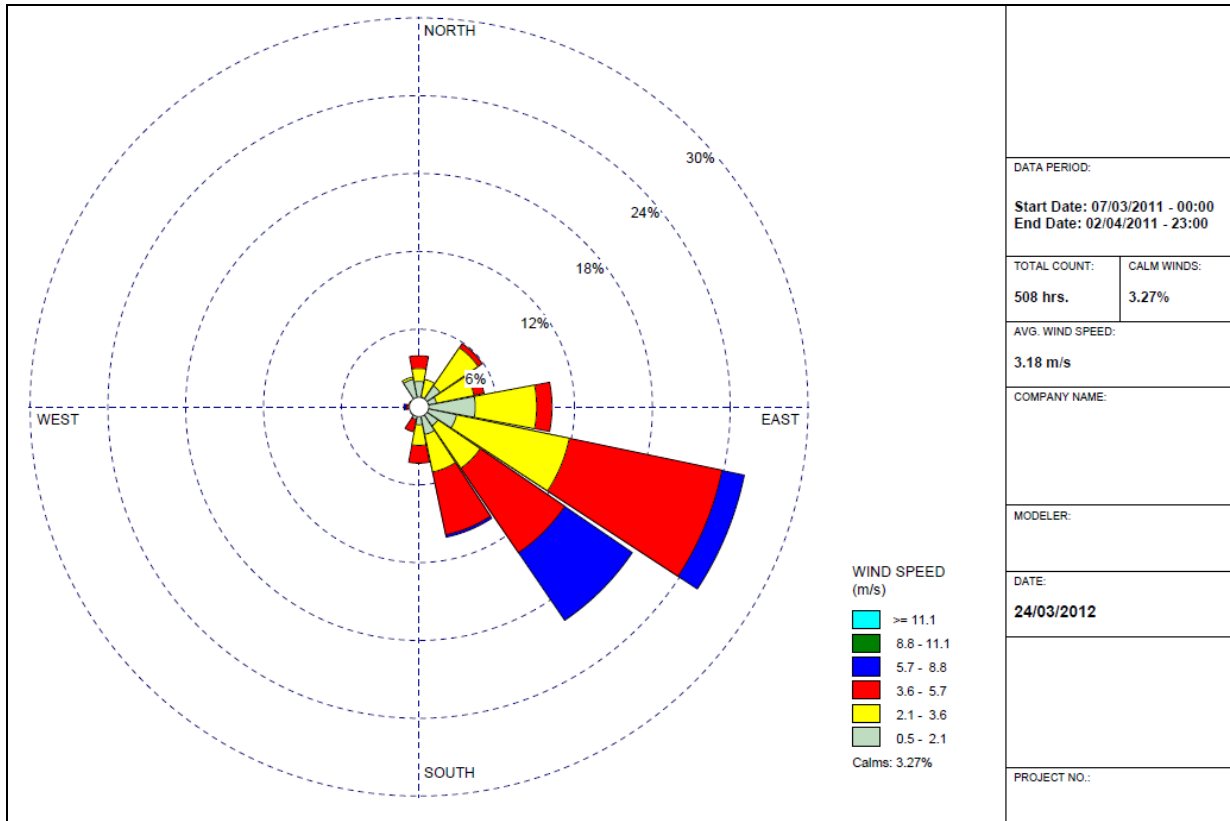


Figure 1. Galena Hill March 6 – April 3 2011

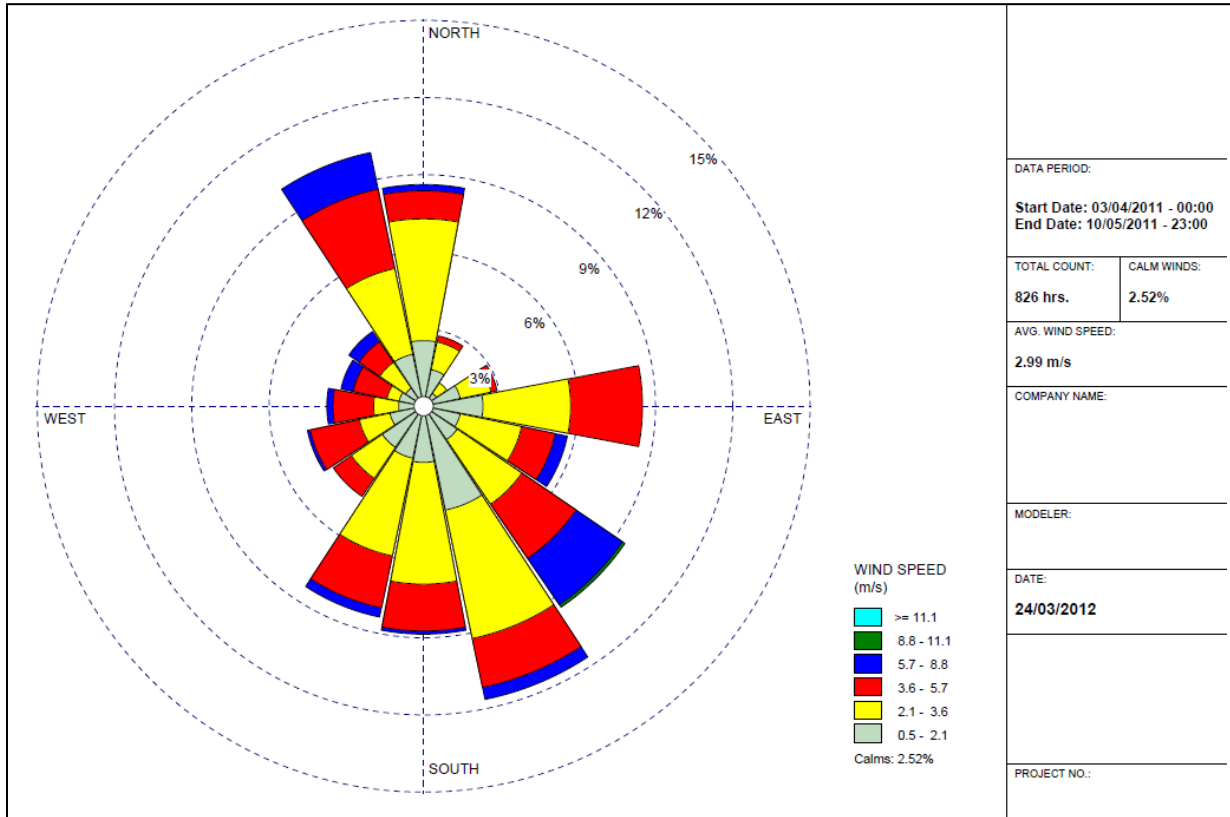


Figure 2. Galena Hill April 3 – May 10 2011

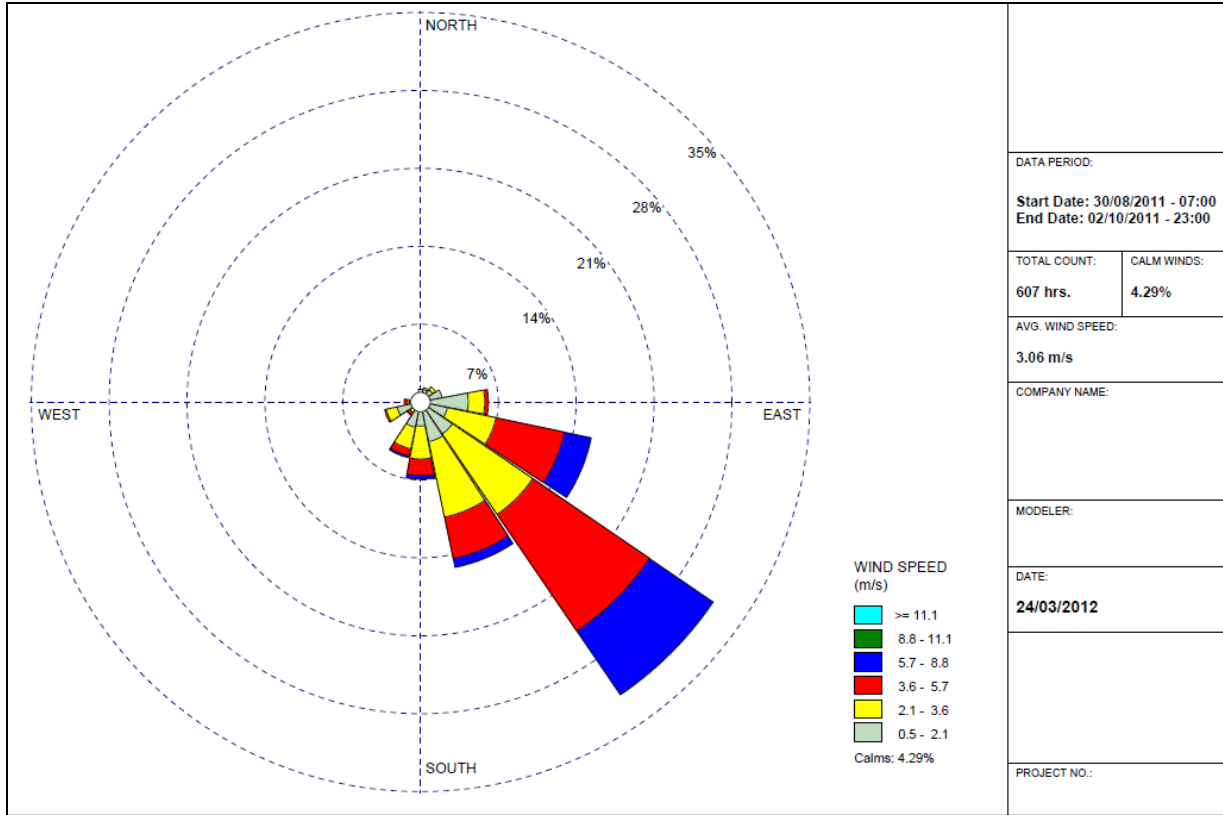


Figure 3. Galena Hill August 30 – October 3 2011

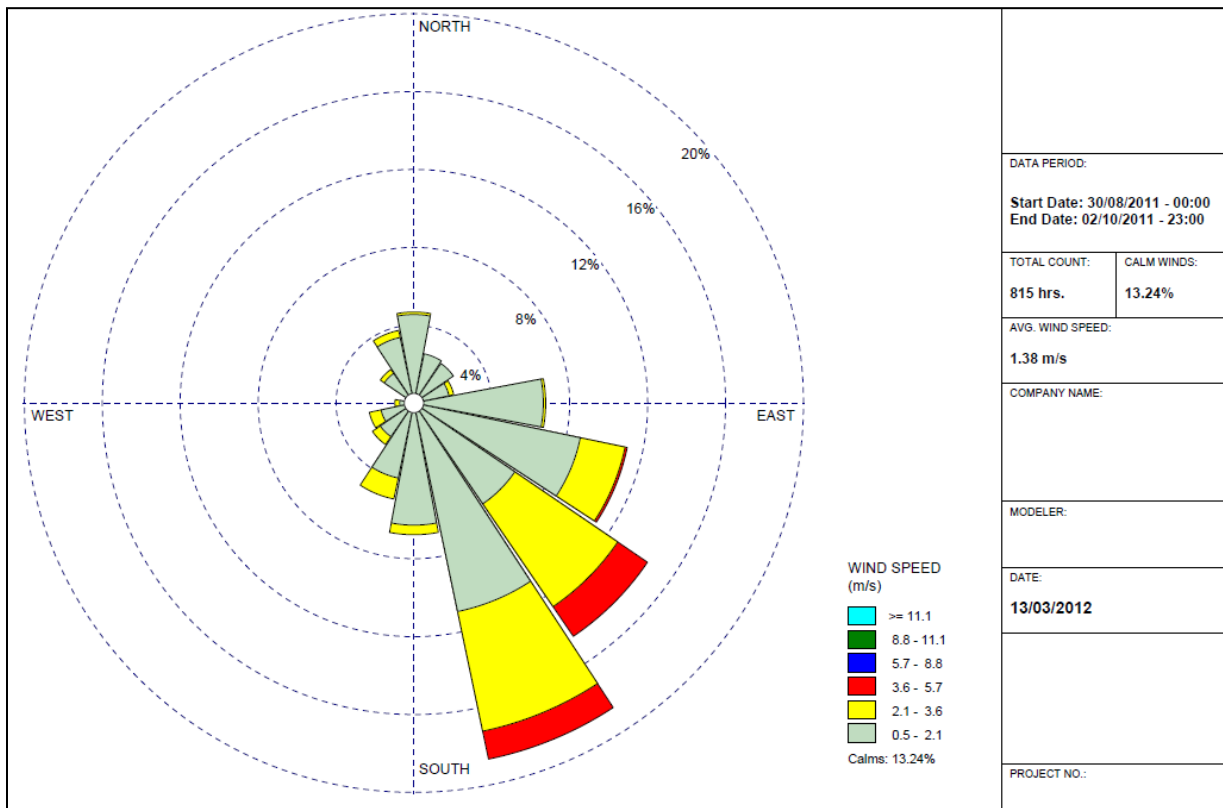


Figure 4. Flame & Moth August 30 – October 3 2011

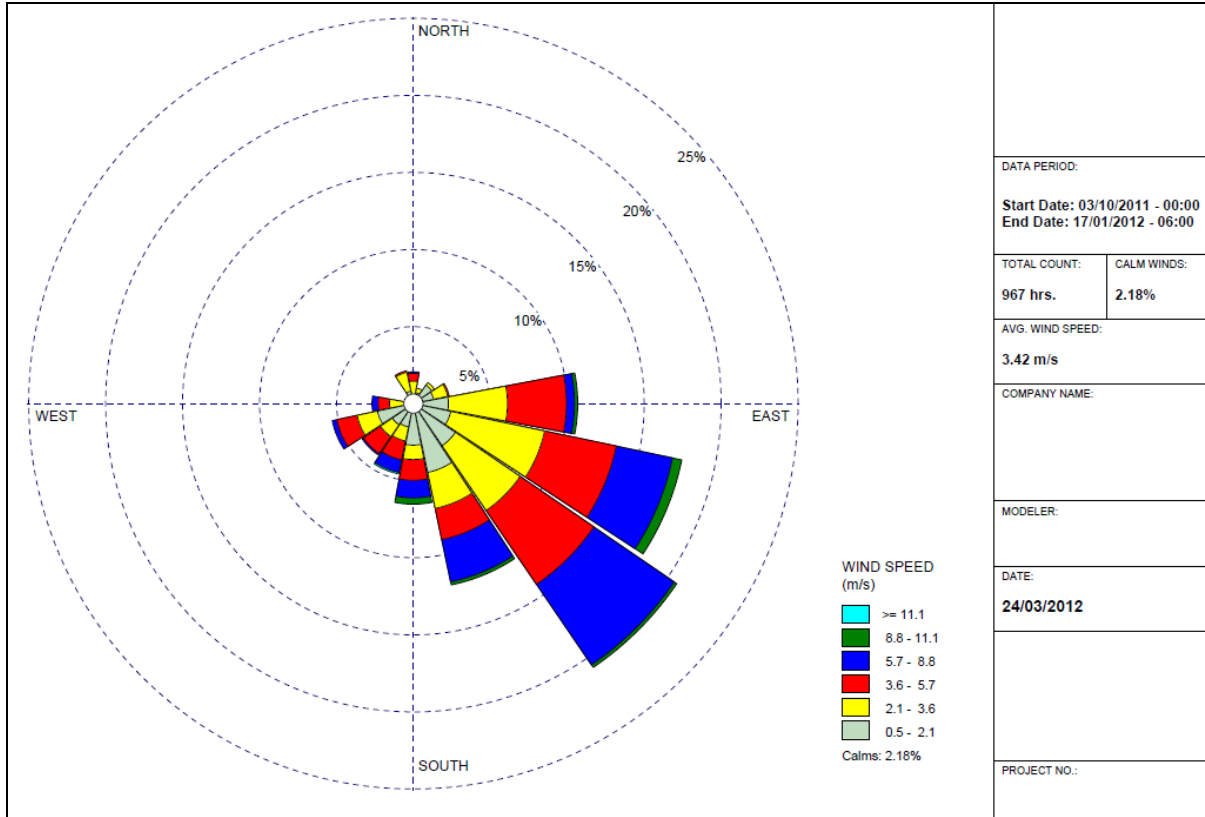


Figure 5. Galena Hill October 3 2011 – January 19 2012

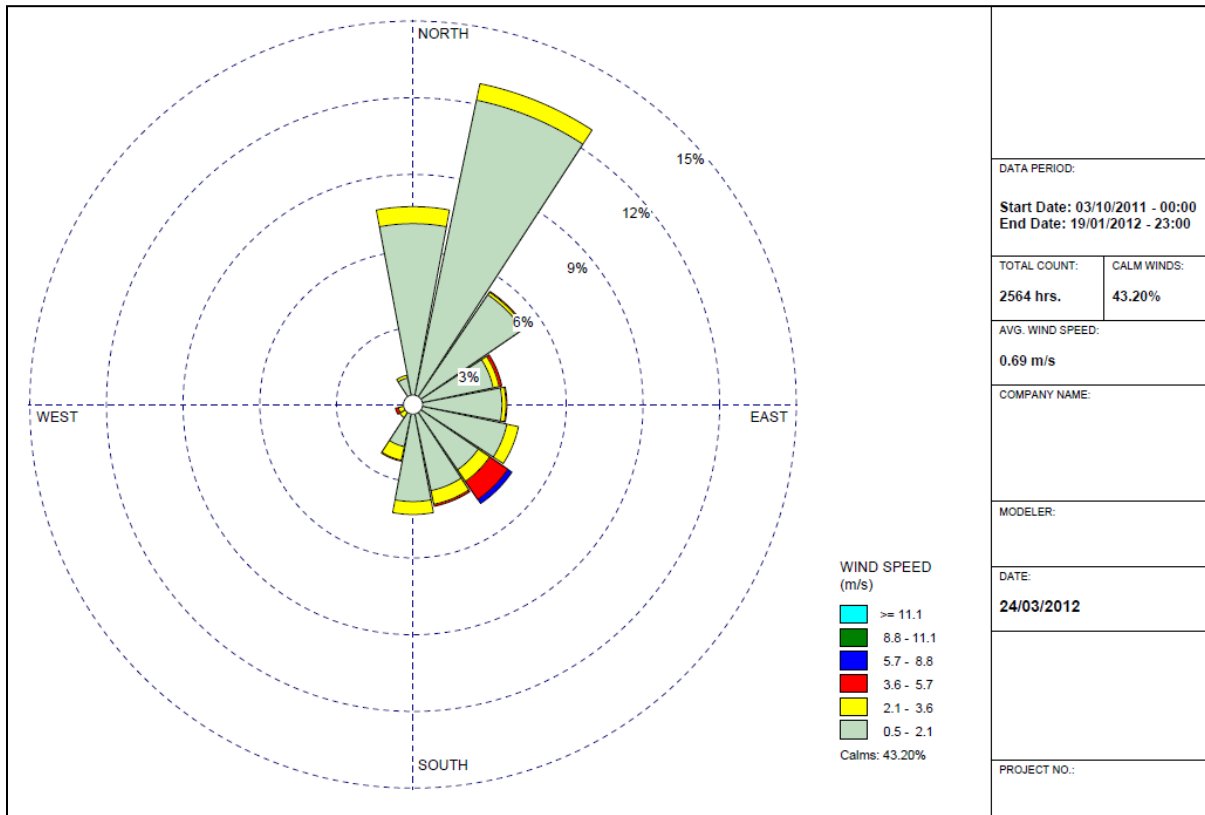


Figure 6. Flame & Moth October 3 – January 19 2012

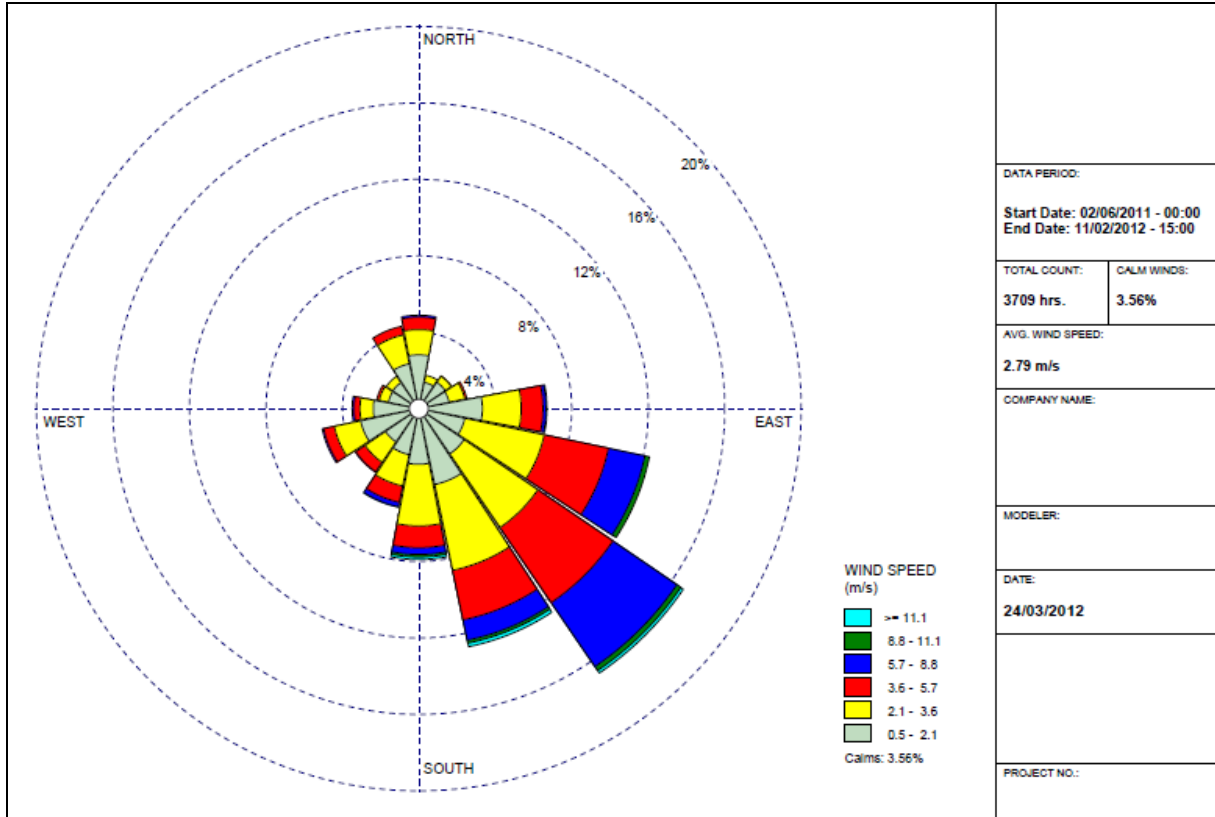


Figure 7. Galena Hill June 2011 – February 2012

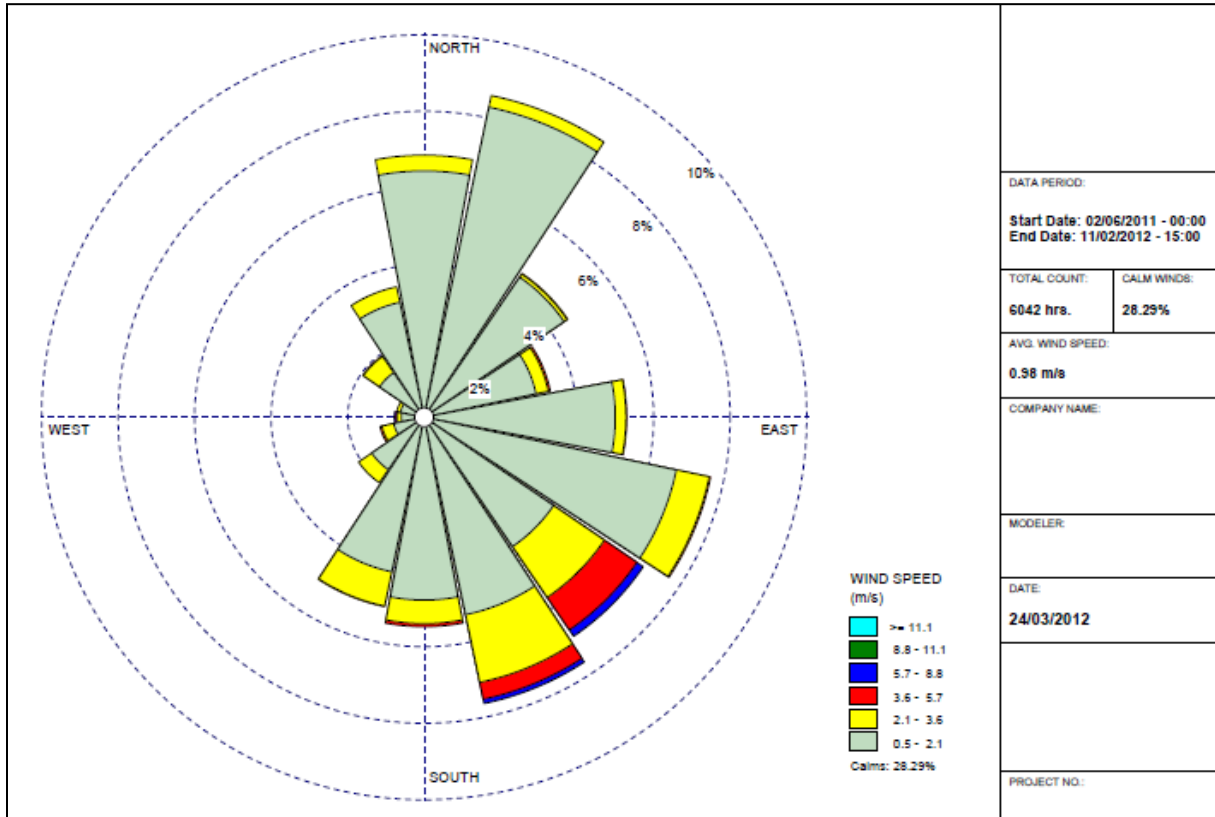


Figure 8. Flame & Moth June 2011 – February 2012

Your Project #: 11-5002-001
Your C.O.C. #: 08343379

Attention: Scott Davidson
ACCESS CONSULTING GROUP
#3 Calcite
151 Industrial Road
WHITEHORSE, YT
CANADA Y1A 3C8

Report Date: 2012/01/25

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B205392
Received: 2012/01/23, 12:55

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date		Laboratory Method	Analytical Method
		Extracted	Analyzed		
Total Suspended Solids	4	N/A	2012/01/24	BBY6SOP-00034	SM - 2540 D
Total Suspended Solids(Fixed & Volatile)	4	N/A	2012/01/24	BBY6SOP-00034	SM2540 E

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

LANOY LUANGKHAMDENG, Burnaby Project Manager
Email: LLuangkhamdeng@maxxam.ca
Phone# (604) 638-2636

=====
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Total cover pages: 1

Maxxam Job #: B205392
 Report Date: 2012/01/25

ACCESS CONSULTING GROUP
 Client Project #: 11-5002-001

Sampler Initials: MD

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		CO1780	CO1781	CO1782	CO1783		
Sampling Date		2012/01/19 12:00	2012/01/19 13:00	2012/01/19 14:00	2012/01/19 15:00		
	Units	SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	RDL	QC Batch
Misc. Inorganics							
Total Suspended Solids (Fixed)	mg/L	1800	87	87	16	1	5543284
Total Suspended Solids (Volatile)	mg/L	55	3	7	5	1	5543284
Physical Properties							
Total Suspended Solids	mg/L	1900	89.5	93.8	20.5	4.0	5539916

RDL = Reportable Detection Limit

Maxxam Job #: B205392
Report Date: 2012/01/25

ACCESS CONSULTING GROUP
Client Project #: 11-5002-001

Sampler Initials: MD

Package 1	1.0°C
Package 2	1.3°C

Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

Maxxam Job #: B205392
 Report Date: 2012/01/25

ACCESS CONSULTING GROUP
 Client Project #: 11-5002-001

Sampler Initials: MD

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
5539916	Total Suspended Solids	2012/01/24	100	80 - 120	103	80 - 120	<4.0	mg/L	NC	20
5543284	Total Suspended Solids (Fixed)	2012/01/24					<1	mg/L		
5543284	Total Suspended Solids (Volatile)	2012/01/24					<1	mg/L		

N/A = Not Applicable

RPD = Relative Percent Difference

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.



8577 Commerce Court Phone: (604) 444-4808
 Burnaby, BC V5A 4N5 Fax: (604) 444-4511
 www.maxxamanalytics.com Toll-Free: 1-800-440-4808



LAB USE ONLY MAXXAM JOB # B205392	ANALYSIS REQUEST	LAB USE ONLY COC #
--	-------------------------	-----------------------

COMPANY NAME: Access Consulting Group	CLIENT PROJECT NO.: 11-5002-001
COMPANY ADDRESS: #3 Calcite Business Center 151 Industrial Rd. Whitehorse, YT Y1A 2V3	TEL.: nspeiss@accessconsulting.ca E-MAIL: tlunday@accessconsulting.ca matducharme@accessconsulting.ca FAX: 867-667-6680
SAMPLER NAME (PRINT): M.Ducharme, A.Bier	PROJECT MANAGER: Scott Davidson
	LABORATORY CONTACT: Kimberly Webber

FIELD SAMPLE ID	MAXXAM LAB #	MATRIX					SAMPLING			# CONTAINERS	Lost on ignition
		GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	DATE	TIME			
							DDMMYY				
1 Sample 1	CO1780					x	19/01/2012	12:00	1	x	
2 Sample 2	CO1781					x	19/01/2012	13:00	1	x	
3 Sample 3	CO1782					x	19/01/2012	14:00	1	x	
4 Sample 4	CO1783					x	19/01/2012	15:00	1	x	
5											
6											
7											
8											
9											
10											
11											
12											



B205392

TAT (Turnaround Time) LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL	PO NUMBER OR QUOTE NUMBER:	SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:
* Some exceptions apply - please contact laboratory	ACCOUNTING CONTACT: Kim Borden Hall	SPECIAL REPORTING OR BILLING INSTRUCTIONS:
STANDARD 5 BUSINESS DAYS	RELINQUISHED BY SAMPLER: M.Ducharme	DATE: DD/MM/YY 20/01/2012
RUSH 3 BUSINESS DAYS	RELINQUISHED BY:	TIME: 8:00
RUSH 2 BUSINESS DAYS	RELINQUISHED BY:	DATE: DD/MM/YY 23/01/2012
URGENT 1 BUSINESS DAY	RELINQUISHED BY:	TIME: Page 5 of 5
OTHER BUSINESS DAYS	RELINQUISHED BY:	DATE: DD/MM/YY

CCME	ARRIVAL TEMPERATURE °C:	DUE DATE:	LOG IN CHECK:
CSR			
LAB TIER 1			
OTHER			
# JARS USED: 1111 1112	RECEIVED BY: Naked Amer		
	RECEIVED BY:		
	RECEIVED BY LABORATORY:		

CUSTODY RECORD

Your Project #: ELSA
Your C.O.C. #: 08338622

Attention: Scott Davidson
ACCESS CONSULTING GROUP
#3 Calcite
151 Industrial Road
WHITEHORSE, YT
CANADA Y1A 3C8

Report Date: 2011/10/12

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B195848
Received: 2011/10/06, 14:10

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date		Laboratory Method	Analytical Method
		Extracted	Analyzed		
Total Suspended Solids	4	N/A	2011/10/07	BBY6SOP-00034	SM - 2540 D
Total Suspended Solids(Fixed & Volatile)	4	N/A	2011/10/07	BBY6SOP-00034	SM2540 E

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kimberley Mohr, BBY Customer Service Supervisor
Email: kmohr@maxxam.ca
Phone# (604) 638-3254

=====

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Total cover pages: 1

Maxxam Job #: B195848
 Report Date: 2011/10/12

ACCESS CONSULTING GROUP
 Client Project #: ELSA

Sampler Initials: MD

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		BT1484	BT1485	BT1486	BT1487		
Sampling Date		2011/10/03 14:00	2011/10/03 14:00	2011/10/03 14:00	2011/10/03 14:00		
	Units	DS 1	DS 2	DS 3	DS 4	RDL	QC Batch
Misc. Inorganics							
Total Suspended Solids (Fixed)	mg/L	2	36	54	11	1	5255612
Total Suspended Solids (Volatile)	mg/L	41	17	45	27	1	5255612
Physical Properties							
Total Suspended Solids	mg/L	43	54	99	38	4	5246948

RDL = Reportable Detection Limit

Maxxam Job #: B195848
Report Date: 2011/10/12

ACCESS CONSULTING GROUP
Client Project #: ELSA

Sampler Initials: MD

Package 1	8.7°C
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Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

Maxxam Job #: B195848
 Report Date: 2011/10/12

ACCESS CONSULTING GROUP
 Client Project #: ELSA

Sampler Initials: MD

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
5246948	Total Suspended Solids	2011/10/07	98	80 - 120	96	80 - 120	<4	mg/L	NC	20
5255612	Total Suspended Solids (Fixed)	2011/10/12					<1	mg/L		
5255612	Total Suspended Solids (Volatile)	2011/10/12					<1	mg/L		

N/A = Not Applicable

RPD = Relative Percent Difference

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.



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CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST



LAB USE ONLY MAXXAM JOB #	ANALYSIS REQUEST	LAB USE ONLY COC #
B195848		

COMPANY NAME: Access Consulting Group	CLIENT PROJECT NO.: Elsa
COMPANY ADDRESS: #3 Calcite Business Center 151 Industrial Rd. Whitehorse, YT Y1A 2V3	TEL.: 867-668-6463 E-MAIL: nspeiss@accessconsulting.ca tlunday@alexcoresource.com FAX: 867-667-6680
SAMPLER NAME (PRINT): M.Ducharme	PROJECT MANAGER: Scott Davidson
	LABORATORY CONTACT: Kimberley Webber

FIELD SAMPLE ID	MAXXAM LAB # <small>(LAB USE ONLY)</small>	MATRIX					SAMPLING			# CONTAINERS	Loss on Ignition
		GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	DATE <small>DD/MM/YY</small>	TIME			
1 DS 1 BT1484						x	3/10/2011	14:00	1	x	
2 DS 2 BT1485						x	3/10/2011	14:00	1	x	
3 DS 3 BT1486						x	3/10/2011	14:00	1	x	
4 DS 4 BT1487						x	3/10/2011	14:00	1	x	
5											
6											
7											
8											
9											
10											
11											
12											



TAT (Turnaround Time) LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL * Some exceptions apply - please contact laboratory STANDARD 5 BUSINESS DAYS RUSH 3 BUSINESS DAYS RUSH 2 BUSINESS DAYS URGENT 1 BUSINESS DAY OTHER BUSINESS DAYS _____	PO NUMBER OR QUOTE NUMBER:	SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:	CCME	LAB USE ONLY		
	ACCOUNTING CONTACT:	SPECIAL REPORTING OR BILLING INSTRUCTIONS:	CSR	ARRIVAL TEMPERATURE °C:	DUE DATE:	LOG IN CHECK:
			AS TIER 1	10/8/8		
			OTHER			
			# JARS USED:			
	RELINQUISHED BY SAMPLER: M.Ducharme	DATE: DD/MM/YY 05/10/2011	TIME: 12:00	RECEIVED BY:		
	RELINQUISHED BY:	DATE: DD/MM/YY 10/06/2011	TIME: 14:10	RECEIVED BY: EM DONGBO FAN		
	RELINQUISHED BY:	DATE: DD/MM/YY	TIME: Page 5 of 5	RECEIVED BY LABORATORY:		

CUSTODY RECORD

Your Project #: ELSA
Your C.O.C. #: 08332361

Attention: Scott Davidson
ACCESS CONSULTING GROUP
#3 Calcite
151 Industrial Road
WHITEHORSE, YT
CANADA Y1A 3C8

Report Date: 2011/05/19

This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B138809
Received: 2011/05/12, 14:00

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date		Laboratory Method	Analytical Method
		Extracted	Analyzed		
Total Suspended Solids-LowLevel	4	N/A	2011/05/16	BBY6SOP-00034	Based on SM-2540 D
Total Suspended Solids(Fixed & Volatile)	4	N/A	2011/05/19	BBY6SOP-00034	Based on SM2540 E
Total Solids (Fixed and Volatile)	4	2011/05/17	2011/05/17	BBY6SOP-00035	Based on SM2540 E
Total Solids	4	N/A	2011/05/19	BBY6SOP-00035	Based on SM-2540 D

* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kimberley Mohr, BBY Customer Service Manager
Email: kmohr@maxxam.ca
Phone# (604) 638-3254

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Maxxam Job #: B138809
 Report Date: 2011/05/19

ACCESS CONSULTING GROUP
 Client Project #: ELSA

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		AM9723	AM9724	AM9725	AM9726		
Sampling Date		2011/05/10 16:15	2011/05/10 16:15	2011/05/10 16:15	2011/05/10 16:15		
	Units	DS1	DS2	DS3	DS4	RDL	QC Batch
Misc. Inorganics							
Total Solids (Fixed)	mg/L	<10	<10	<10	<10	10	4861926
Total Suspended Solids (Fixed)	mg/L	<1	7	2	2	1	4869651
Total Solids (Volatile)	mg/L	18	18	19	12	10	4861926
Total Suspended Solids (Volatile)	mg/L	<1	<1	<1	<1	1	4869651
Physical Properties							
Total Suspended Solids	mg/L	<10 ⁽¹⁾	<10 ⁽¹⁾	<10 ⁽¹⁾	<10 ⁽¹⁾	10	4856743
Total Solids	mg/L	18	22	19	13	10	4870917

RDL = Reportable Detection Limit

(1) - The RDL was raised due to insufficient sample volume

Maxxam Job #: B138809
Report Date: 2011/05/19

ACCESS CONSULTING GROUP
Client Project #: ELSA

Package 1	2.0°C
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Each temperature is the average of up to three cooler temperatures taken at receipt

General Comments

units in mg per sample

Maxxam Job #: B138809
Report Date: 2011/05/19

ACCESS CONSULTING GROUP
Client Project #: ELSA

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Spiked Blank		Method Blank	
			% Recovery	QC Limits	Value	Units
4856743	Total Suspended Solids	2011/05/16	97	80 - 120	<1	mg/L
4861926	Total Solids (Fixed)	2011/05/17			<10	mg/L
4861926	Total Solids (Volatile)	2011/05/17			<10	mg/L

N/A = Not Applicable

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.



8577 Commerce Court Phone: (604) 444-4808
 Burnaby, BC V5A 4N5 Fax: (604) 444-4511
 www.maxxamanalytics.com Toll-Free: 1-800-440-4808

CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST



LAB USE ONLY MAXXAM JOB # B136809	ANALYSIS REQUEST	LAB USE ONLY COC #
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COMPANY NAME: Access Consulting Group	CLIENT PROJECT NO.: Elsa
COMPANY ADDRESS: #3 Calcite Business Center 151 Industrial Rd. Whitehorse, YT Y1A 2V3	TEL: 867-668-6463 Fax 867-667-6680 E-MAIL: nspeiss@accessconsulting.ca tlunday@alexcoresource.com rschneider@alexcoresource.com FAX: 867-667-6680
SAMPLER NAME (PRINT): Care and Maint. (M.Ducharme)	PROJECT MANAGER: Scott Davidson
	LABORATORY CONTACT: Kimberley Webber

FIELD SAMPLE ID	MAXXAM LAB # (LAB USE ONLY)	MATRIX					SAMPLING		# CONTAINERS	Loss on Ignition
		GROUNDWATER	SURFACE WATER	DRINKING WATER	SOIL	OTHER	DATE	TIME		
1 DS 1							10/5/2011	16:15		X
2 DS 2							10/5/2011	16:15		X
3 DS 3							10/5/2011	16:15		X
4 DS 4							10/5/2011	16:15		X
5										
6										
7										
8										
9										
10										
11										
12										



B136809

TAT (Turnaround Time) LESS THAN 5 DAY TAT MUST HAVE PRIOR APPROVAL	PO NUMBER OR QUOTE NUMBER:	SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:	CCME CSR AB TIER 1 OTHER:	LAB USE ONLY ARRIVAL TEMPERATURE °C: 2,2,2.	DUE DATE:	LOG IN CHECK:
* Some exceptions apply - please contact laboratory	ACCOUNTING CONTACT:	SPECIAL REPORTING OR BILLING INSTRUCTIONS:	# JARS USED:			
STANDARD 5 BUSINESS DAYS RUSH 3 BUSINESS DAYS RUSH 2 BUSINESS DAYS URGENT 1 BUSINESS DAY	RELINQUISHED BY SAMPLER: S.G	DATE: DD/MM/YY 05/11/2011	TIME: 12:00	RECEIVED BY:		
OTHER BUSINESS DAYS	RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:		
CUSTODY RECORD	RELINQUISHED BY:	DATE: DD/MM/YY 12/05/11	TIME: Page 5 of 5 14:00	RECEIVED BY LABORATORY: NICOLE LOCKYER		