



ANALYTICAL SUMMARY REPORT

January 19, 2018

KE Construction
3588 Elk River Rd
Billings, MT 59101-6316

Work Order: B18011181

Project Name: Edgar Sub

Energy Laboratories Inc Billings MT received the following 1 sample for KE Construction on 1/17/2018 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B18011181-001	Edgar Sub	01/17/18 11:00	01/17/18	Drinking Water	Conductivity Nitrogen, Nitrate + Nitrite

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:


Supervisor, Wet Chemistry

Digitally signed by
Keri Conter
Date: 2018.01.19 16:49:36 -07:00



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: KE Construction
Project: Edgar Sub
Lab ID: B18011181-001
Client Sample ID: Edgar Sub

Report Date: 01/19/18
Collection Date: 01/17/18 11:00
Date Received: 01/17/18
Matrix: Drinking Water

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Conductivity @ 25 C	1050	umhos/cm		5		A2510 B	01/18/18 10:36 / pjw
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	3.13	mg/L		0.01	10	E353.2	01/18/18 09:59 / taw

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



QA/QC Summary Report

Prepared by Billings, MT Branch

Client: KE Construction

Report Date: 01/19/18

Project: Edgar Sub

Work Order: B18011181

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B										Batch: R293212
Lab ID: SC 2nd 1413		Laboratory Control Sample					Run: PHSC _101-B_180118A			01/18/18 08:53
Conductivity @ 25 C		1390 umhos/cm		5.0	99	90	110			
Lab ID: MBLK		Method Blank					Run: PHSC _101-B_180118A			01/18/18 10:33
Conductivity @ 25 C		ND umhos/cm		5						
Lab ID: B18011181-001ADUP		Sample Duplicate					Run: PHSC _101-B_180118A			01/18/18 10:38
Conductivity @ 25 C		1050 umhos/cm		5.0				0.6	10	
Lab ID: B18011216-002ADUP		Sample Duplicate					Run: PHSC _101-B_180118A			01/18/18 11:07
Conductivity @ 25 C		273 umhos/cm		5.0				0.4	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Prepared by Billings, MT Branch

Client: KE Construction

Report Date: 01/19/18

Project: Edgar Sub

Work Order: B18011181

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method: E353.2								Analytical Run: FIA203-B_180118A			
Lab ID: ICV	Initial Calibration Verification Standard										
Nitrogen, Nitrate+Nitrite as N		0.565	mg/L	0.010	100	90	110			01/18/18 09:22	
Method: E353.2								Batch: R293224			
Lab ID: MBLK	Method Blank										
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.005				Run: FIA203-B_180118A		01/18/18 09:23	
Lab ID: LFB	Laboratory Fortified Blank										
Nitrogen, Nitrate+Nitrite as N		0.947	mg/L	0.010	95	90	110	Run: FIA203-B_180118A		01/18/18 09:24	
Lab ID: B18011151-006BMS	Sample Matrix Spike										
Nitrogen, Nitrate+Nitrite as N		0.923	mg/L	0.010	92	90	110	Run: FIA203-B_180118A		01/18/18 10:13	
Lab ID: B18011151-006BMSD	Sample Matrix Spike Duplicate										
Nitrogen, Nitrate+Nitrite as N		0.921	mg/L	0.010	91	90	110	0.2	10	01/18/18 10:14	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Work Order Receipt Checklist

KE Construction

B18011181

Login completed by: Siobhan H. Coop

Date Received: 1/17/2018

Reviewed by: BL2000tedwards

Received by: rs4

Reviewed Date: 1/18/2018

Carrier name: Hand Del

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on all shipping container(s)/cooler(s)? Yes No Not Present
- Custody seals intact on all sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time?
(Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.) Yes No
- Temp Blank received in all shipping container(s)/cooler(s)? Yes No Not Applicable
- Container/Temp Blank temperature: 16.4°C No Ice
- Water - VOA vials have zero headspace? Yes No No VOA vials submitted
- Water - pH acceptable upon receipt? Yes No Not Applicable

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as -dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None



Trust our People. Trust our Data.
www.energylab.com

Billings, MT 606.735.4489 • Casper, WY 888.235.0515 • Gillette, WY 866.866.7175 • Helena, MT 877.472.0711

BOTTLE ORDER 119792



SHIPPED TO: KE Construction

Contact:

Order Created by: Wynn Pippin

Shipped From: Billings, MT

Ship Date: 1/17/2018

VIA: PickUp

Phone:

Project:

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
500 mL Plastic	1	A2510 B	Conductivity				1
250 mL Plastic	1	E353.2	Nitrogen, Nitrate + Nitrite		<input type="checkbox"/> H2SO4		1

Water

HNO3 - Nitric Acid
 H2SO4 - Sulfuric Acid
 NaOH - Sodium Hydroxide
 We strongly suggest that the samples are shipped the same day as they are collected.

ZnAc - Zinc Acetate
 HCl - Hydrochloric Acid
 H3PO4 - Phosphoric Acid

Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets

Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.

Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

310

Google Maps Edgar



Imagery ©2018 Google, Map data ©2019 Google 200 ft

Craig Dalton

From: Craig Dalton
Sent: Monday, March 19, 2018 2:55 PM
To: 'bridgermtpolice@yahoo.com'
Cc: Rick Stryker; Ashley Allinson
Subject: Edgar Subdivision Sewer Correspondence

Mr. Buechler,

This is an email to document the conversations you and I had over two phone calls pertaining to a proposed subdivision I am working on located just southwest of the Town of Edgar.

In our conversations (first call the week of March 19th, second phone call 3/19/18) we discussed the following:

Craig Dalton, Performance Engineering

- I explained that I am working for a the landowner of the 67-acre parcel located off the southeast corner of the intersection of Highway 310 and East Pryor Rd (Elwell St)
 - The project is proposed to be constructed in three filings, with the first filing being approximately 17-20 lots with full potential buildout of the subdivision containing somewhere around 45 lots
 - We are proposing to permit individual wells and septic systems, but was inquiring about the extents of the current Edgar sewer system.

Mike Buechler, Edgar Sewer District

- Edgar does not currently have a water distribution system (individual wells instead) but does have a public sewer system.
- Sewer system consists of collection mains which flow to a two cell lagoon system located northeast of town towards the river.
- Existing collection system comes south across Elwell St at the east end of town by the railroad tracks. From here it then turns west and stretches approximately (650 ft – estimated on Google Earth) up the alleyway to the east side of the old school. This is the dead end of the collection system on the south side of Elwell St. It is estimated that the depth of the sewer line at this manhole is around 6 feet.

Craig

- Based on the location and estimated shallow depth of the existing sewer, it is anticipated that a lift station would be required in order to tie the proposed subdivision into the existing Edgar sewer.
- The ground of the 67-acre parcel generally slopes from the NW to the SE, requiring the lift station to be positioned in the SE corner of the property to allow for future development.
- Plan to begin development in the NW 20 acres nearest the intersection of Highway 310 and East Pryor Rd.

Mike

- Sewer has a maintenance person that inspects and watches over the existing system. However, the District isn't equipped at this time to operate and maintain a lift station.

Mike/Craig

- Agreed that the preferable alternative for the developer and the Sewer District would be for the proposed development to implement individual wells and septic systems if possible.
- Craig – Will be in contact with Mike as our project moves forward.

If I have added any items out of context or omitted any key details please let me know. This correspondence will be provided with our applications as we move through the subdivision and DEQ permitting process. I appreciate the help and correspondence.

Thank you,

Craig Dalton, P.E.
Project Manager/Principal
craig@performance-ec.com
Office: (406) 384-0080
Mobile: (406) 459-8456



7100 Commercial Ave, Suite 4 • Billings, MT 59101
www.performance-ec.com

This message is for the sole use of the intended recipients and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not an intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message. E-mail attachments may contain viruses which could damage your computer. While we have taken precautions to minimize this risk, we cannot accept liability for such damage and you should carry out your own virus checks before opening an attachment. Thank you for your cooperation.