

# Historical Document Review Report

Mary #2 Oil and Gas Well Site  
Longmont, Colorado

June 18, 2018

Terracon Project No. 22187008



**Prepared for:**

City of Longmont  
Longmont, Colorado

**Prepared by:**

Terracon Consultants, Inc.  
Longmont, Colorado

[terracon.com](http://terracon.com)

**Terracon**

Environmental    ■    Facilities    ■    Geotechnical    ■    Materials

June 18, 2018



City of Longmont  
385 Kimbark Street  
Longmont, Colorado 80501

Attn: Mr. Jason Elkins  
P: (303) 651-8310  
E: [Jason.Elkins@longmontcolorado.gov](mailto:Jason.Elkins@longmontcolorado.gov)


Re: Historical Document Review  
Mary #2 Oil and Gas Well Site  
Longmont, Colorado  
Terracon Project No. 22187008

Dear Mr. Elkins:

Terracon Consultants, Inc. (Terracon) is pleased to submit our report of Historical Document Review activities completed at the site referenced above, to accompany the Limited Soil, Groundwater, and Soil Gas Investigation Report dated June 18, 2018. Terracon conducted the document review in general accordance with our proposal (P22187008), dated January 29, 2018

Terracon appreciates this opportunity to provide environmental consulting services to The City of Longmont. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,  
**Terracon Consultants, Inc.**

  
Drew N. Stephens *FOR*  
Field Environmental Engineer

  
John C. Graves, P.G.  
Regional Manager/Senior Principal

Terracon Consultants, Inc. 1242 Bramwood Place Longmont, CO 80501  
P (303) 776-3921 F (303) 776-4041 [terracon.com](http://terracon.com)

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## 1.0 SITE DESCRIPTION

<b>Site Name</b>	Mary #2 O&G Well Site
<b>Site Location</b>	2227 Somerset Court, Longmont, Colorado

A Topographic Map showing the site location is included as Exhibit 1 and a Site Diagram is included as Exhibit 2 (from Investigation Report) in Appendix A.

## 2.0 SCOPE OF SERVICES

In 2012, Terracon was retained by the City of Longmont (COL) to assess seventeen plugged and abandoned oil and gas wells located within the City of Longmont limits. The objective of the 2012 assessment was to provide information concerning the plugging and abandoning of 17 O&G wellheads located within the City of Longmont and to assess the potential presence of surficial soil impacts, methane and other gasses in the subsurface near the surveyed well locations. Results of this investigation were issued in Terracon's Research Summary Report, dated February 6, 2013.

On May 2, 2017, the Colorado Oil and Gas Conservation Commission (COGCC) issued a statewide Notice to Operators (NTO) directing operators to inspect their inventory of existing flowlines and verify that any existing flowline not in active use, regardless of when it was installed or taken out of service, is abandoned pursuant to COGCC Rule 1103. Terracon performed soil, groundwater, and soil gas investigation activities at the site for the City of Longmont as detailed in the Investigation Report, dated June 18, 2018.

The objective of the document review was to provide historical information concerning former operations and to assess any concern pertaining to sensitive receptors with relation to the former well location of the Mary #2 O&G well located within the City of Longmont.

### 2.1 Reliance

This report has been prepared for the exclusive use of the City of Longmont, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of the City of Longmont and Terracon. Any unauthorized distribution or reuse is at the City of Longmont's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, report, and Terracon's Master Services Agreement (MSA) with the City of Longmont. The limitation of liability defined in the terms and conditions of the MSA is the

## Historical Document Review Report

Mary #2 O&G Well Site ■ Longmont, Colorado

June 18, 2018 ■ Terracon Project No. 22187008



aggregate limit of Terracon's liability to the City of Longmont and all relying parties unless otherwise agreed in writing.

## 2.2 Background Evaluation

As outlined in Terracon's Research Summary Report, dated February 6, 2013, drilling of the Mary #2 well (API Number 05-013-06226) was reported as starting on December 6, 1985, and the well was reportedly drilled to 6362' bgs. Surface casing was set at 481' bgs.

Plugging and abandonment was reportedly started on August 9, 1989. A bridge plug with a cement cap was placed above the perforations. The cap is intended to isolate the perforations and prevent flow up the casing from the formation. The production casing was cut and the loose pipe recovered. A cement plug was placed above the casing cut. Cement plugs were also placed across the surface casing shoe and at the surface.

The water well search using the Colorado Department of Water Resources (DWR) online database indicated that no water wells were located within a 1,000 foot radius of the Mary #2 wellsite.

The land use of the wellsite during drilling and plugging activities was agricultural based on historical aerial photos. Currently, the wellsite is in open space within the Somerset Meadows Subdivision. There are new homes and townhomes built near the former well location with the closest residences approximately 50-feet to the south of the former Mary #2 wellhead location. Utilities located along the streets to the south, northeast, and northwest of the former wellhead service the residential housing.

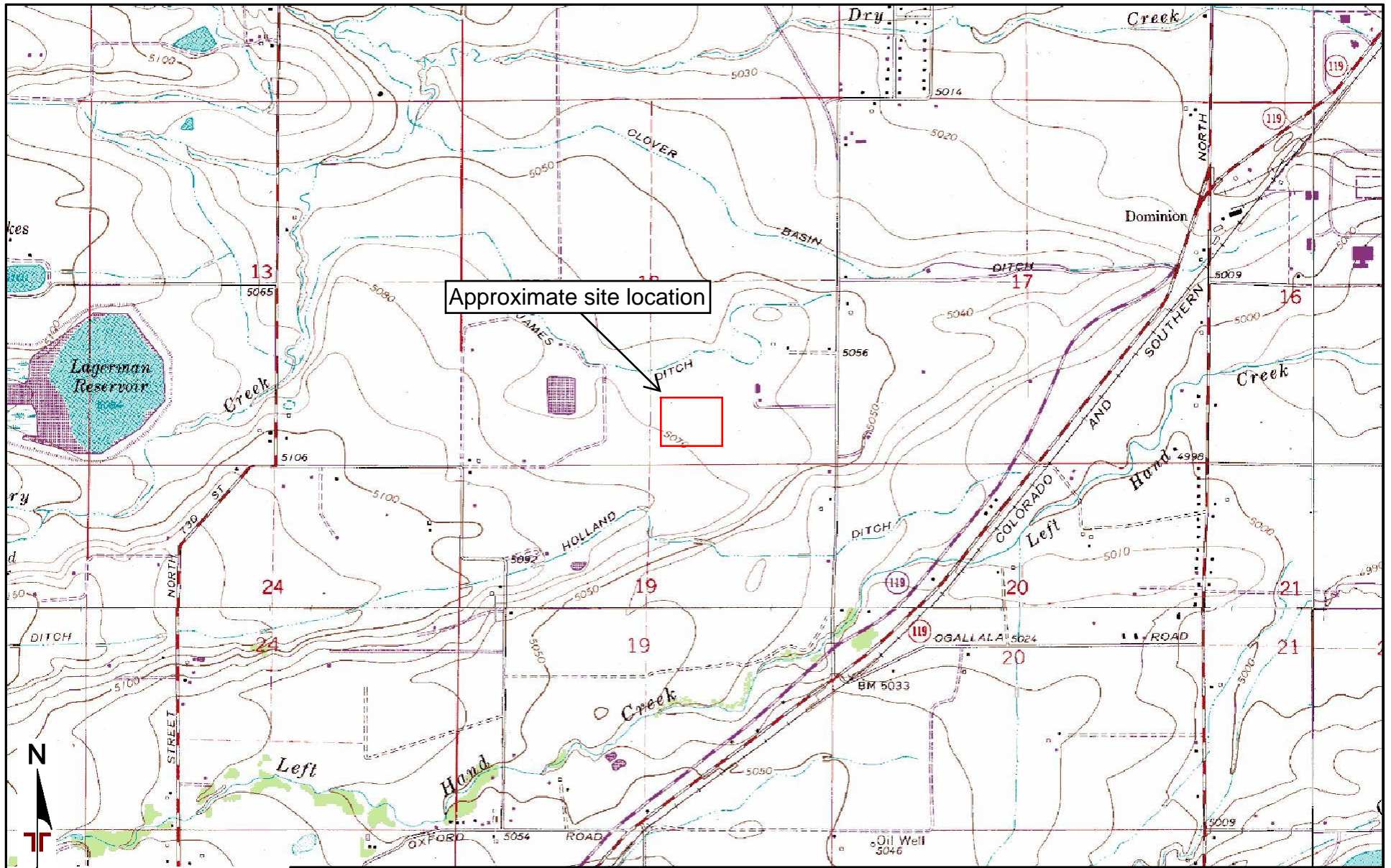
## 3.0 CONCLUSIONS

Based on observations conducted during site investigation activities and a review of the online COGCC database documentation, no other site conditions or sensitive receptors were noted.

## **APPENDIX A – EXHIBITS**

Exhibit 1 – Topographic Map

Exhibit 2 – Site Diagram



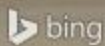
TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY  
 QUADRANGLES INCLUDE: HYGIENE, CO (1/1/1979), LONGMONT, CO (1/1/1979), NIWOT, CO (1/1/1979) and ERIE, CO (1/1/1979).  
 DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Manager: MJS	Project No: 22187008
Drawn by: ANS	Scale: 1"=2,000'
Checked by: JCG	File Name: Figure
Approved by: JCG	Date: 5/31/2018

**Terracon**  
 1242 Bramwood Pl  
 Longmont, CO 80501-6100

**TOPOGRAPHIC MAP**  
 Mary #2 PA O&G Well Site Investigation  
 Summerlin Drive & Gleneyre Drive  
 Longmont, CO

Exhibit
1



Summerlin Dr

Summerlin Dr

200 feet

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AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Manager:	MJS
Drawn by:	ANS
Checked by:	JCG
Approved by:	JCG

Project No.	22187008
Scale:	AS SHOWN
File Name:	Figure
Date:	5/31/2018

**Terracon**  
 1242 Bramwood Pl  
 Longmont, CO 80501-6100

**SITE DIAGRAM**

Mary #2 PA O&G Well Site Investigation  
 Summerlin Drive & Glenneyre Drive  
 Longmont, CO

Exhibit

2



## **APPENDIX B – RECEPTOR WORKSHEET**

Receptor Worksheet  
Mary #2 Oil and Gas Well

Lease:	Mary				
Well Number:	#2				
API Number:	05-013-06226				
Operator	Universal Operating Company				
Sensitive Receptor Detail					
Receptor	Distance	Gradient <sup>2</sup>	Direction	Type of Receptor	Comments
Surface Water Body:	1.45 mile	Cross-Gradient	West	Reservoir	Lagerman Reservoir
Surface Water Body:	800 feet	Down-Gradient	North	Pond	Subdivision retentionpond.
Surface Water Body:	0.65 mile	Down-Gradient	Southeast	Creek	Left Hand Creek
Structure:	50 feet	Cross-Gradient	South	Residential Homes	Residential Neighborhood
Structure:	500 feet	Down-Gradient	East	Residential Homes	Residential Neighborhood
Structure:	700 feet	Down-Gradient	North	Residential Homes	Residential Neighborhood
Structure:	300 feet	Up-Gradient	Northwest	Residential Homes	Residential Neighborhood
Buried Utilities:	200 feet	Cross-Gradient	South	Public Utility	Utilities along street
Buried Utilities:	200 feet	Cross-Gradient	Northwest	Public Utility	Utilities along street
Buried Utilities:	200 feet	Down-Gradient	Northeast	Public Utility	Utilities along street
Water Well <sup>1</sup> :	>1,000 feet				

1) Water well information obtained from the Colorado Department of Water Resources online database.

2) Site specific gradient determined from Terracon's Limited Soil, Groundwater, and Soil Gas Investigation (December 14, 2017).

\* Additional site and receptor information obtained from Colorado Oil and Gas Conservation Commission (COGCC) online database.