



Date: April 17, 2012

Jack C. Montgomery
VA Medical Center
1011 Honor Heights Drive
Muskogee, Oklahoma

10930 East 56th St.
Tulsa, OK 74146
918-250-0461
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Attention: Amanda Riggs

Re: Proposed Pipeline

Job No: 04125086

We are transmitting

☒ herewith
☐ under separate cover # copies of the

☒ Field Data

☐ Laboratory Data

☐ Report

Regarding:

☐ Soils Test
☐ Welding Inspection Reports
☐ Drilled Piers
☐ Piles
☐ Concrete
☐ Asphalt
☐ Roofing
☐ Aggregate
☐ Non-Destructive Testing
of Steel
☐ Non-Destructive Testing
of Concrete
☐ Grain Size Analysis

☒ Boring Logs
☒ Location Diagram
☐ Soil Samples
☐ Concrete Core Samples
☐ Construction Material
Samples
☐ Moisture-Density
☐ Consolidation
☐ Triaxial Compression
☐ Permeability
☐ Field Boring Logs
☐ Atterberg Limits
☐ Post-Tension Cable Elongation

On-site observation services were provided

☐ Full time

☐ Part time

We have not been asked to interpret the data or to make design and/or construction recommendations based on the data, and cannot assume responsibility or liability for interpretation of this data by others.

Remarks: Approximate ground surface elevations at the borings, rounded to the nearest 0.5 feet,
are shown near the top of the boring logs. Terracon determined the elevation using a
surveyor's level and rod. The top of the concrete wall, at the southwest corner of the wall,
surrounding the gas meter northeast of boring B-1 was used as a benchmark (see Boring
Location Plan). The benchmark was assigned an arbitrary elevation of 100.0 feet.

Yours truly,
TERRACON


Guy C. Griffin
Project Manager

APPROXIMATE SITE LOCATION



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Project Mgr:	GCG
Project No.	04125086
Drawn By:	DC
Scale:	SEE BAR SCALE
Checked By:	GCG
File No.	04125086
Approved By:	BMW
Date:	APRIL 2012

Terracon
Consulting Engineers and Scientists

10830 EAST 56th STREET TULSA, OKLAHOMA 74146
PH. (918) 250-0461 FAX. (918) 250-4570

SITE LOCATION MAP GEOTECHNICAL EXPLORATION PROPOSED PIPELINE JACK C MONTGOMERY VA MEDICAL CENTER	
MUSKOGEE	OKLAHOMA

EXHIBIT NO.
A-2



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LEGEND
BORING LOCATION



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



Project Mng:	GCG
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Checked By:	GCG
Approved By:	BMW
Project No.	04125086
Scale:	SEE BAR SCALE
File No.	04125086
Date:	APRIL 2012

Terracon
Consulting Engineers and Scientists

10030 EAST 50th STREET TULSA, OKLAHOMA 74146
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BORING LOCATION PLAN
GEOTECHNICAL EXPLORATION
PROPOSED PIPELINE
JACK C MONGOMERY VA MEDICAL CENTER
MUSKOGEE OKLAHOMA

EXHIBIT NO.
A-3

LOG OF BORING NO. B-1

Page 1 of 1

CLIENT Jack C Montgomery VA Medical Center									
SITE Muskogee, Oklahoma		PROJECT Proposed Pipeline							
GRAPHIC LOG	DESCRIPTION Approx. Surface Elev.: 104.0 ft	DEPTH, ft.	USCS SYMBOL	SAMPLES				TESTS	
				NUMBER	TYPE	RECOVERY, in.	SPT-N BLOWS / ft.	WATER CONTENT, %	DRY UNIT WT pcf
	3" Topsoil LEAN CLAY brown and dark brown, very stiff			PA					
	2		CL	1	SS	18	12		
	102		CL	2	SS	18	16		
	LEAN CLAY with sandstone fragments, brown and light brown, very stiff (with sandstone seams below about 3 feet)								
	5		CL	3	SS	18	32		
	99	5							
	BOTTOM OF BORING								

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

WATER LEVEL OBSERVATIONS, ft

WL	▽ N/E	WD	▽ N/E	AB
WL	▽		▽	
WL				

Terracon

BORING STARTED	4-14-12
BORING COMPLETED	4-14-12
RIG	ATV
FOREMAN	TS
APPROVED	BMW
JOB #	04125086

Page 1 of 1

Jack C Montgomery VA Medical Center

Muskogee, Oklahoma

Proposed Pipeline

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

WL	∇ N/E	WD	∇ N/E	AB
WL	∇		∇	
WL				

APPROVED BMW	JOB # 04125086
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Terracon

Page 1 of 1

CLIENT

Jack C Montgomery VA Medical Center

SITE

Muskogee, Oklahoma

PROJECT

Proposed Pipeline

[illegible]

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

WATER LEVEL OBSERVATIONS, ft				
WL	▽ N/E	WD	▽ N/E	AB
WL	▽		▽	
WL				

Terracon

BORING STARTED		4-14-12	
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BOREHOLE BORING LOGS.GPJ 2011 TULSA.GDT 4/17/12