

July 18, 2013

New Mexico Environment Department
Petroleum Storage Tank Program
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

Attn: Ms. Susan von Gonten, CPG
Phone: (505) 476-4389
E-mail: lmroybal@sandia.gov

Re: Report of NAPL Recovery
Former Fairview Station
1626 North Riverside Drive
Española, New Mexico
Facility # 28779 / Release ID # 4657 / Work Plan ID # 16745
Terracon Project No. 66127029

Dear Ms. von Gonten:

Terracon Consultants, Inc. (Terracon) is pleased to provide this report of three bi-weekly events of non-aqueous phase liquid (NAPL) recovery at the above-referenced site. Our services were performed in accordance with our Work Plan dated April 26, 2013 and the Petroleum Storage Tank Bureau (PSTB) Work Plan approval dated May 13, 2013. NAPL gauging and recovery activities were performed on June 3, 2013, June 27, 2013 and July 10, 2013. In general, the NAPL thicknesses remained stable during the three events and averaged 0.30 feet in MW-1, 4.0 feet in MW-2, and 4.2 feet in MW-3. Terracon conducted NAPL recovery during each of the three events using hand bailing. A total of approximately 0.6 gallon of NAPL was removed from MW-1, approximately 10 gallons of NAPL were recovered from MW-2, and approximately 11 gallons of NAPL were removed from MW-3. The ground water gradient ranged from west-northwest to west-southwest during the three events. Attached Exhibits 1-3 depict the NAPL thicknesses during each of the three events and attached Exhibits 4-6 depict the direction of ground water flow. The recovered NAPL was stored on-site in a 55-gallon drum, which was labeled to note hazardous contents.

Based on the results of the NAPL recovery, it appears that the on-site aquifer is suitable for aggressive remediation such as dual-phase extraction. Terracon recommends continued remedial actions at the site to remove the NAPL and reduce dissolved-phase hydrocarbon concentrations in the on-site aquifer.

Terracon Consultants, Inc. 4905 Hawkins NE Albuquerque, NM 87109
P (505) 797 4287 F (505) 797 4288 terracon.com



NAPL Recovery Report

Former Fairview Station ■ Espanola, New Mexico

July 18, 2013 ■ Terracon Project No. 66127029



If you should have any questions or comments regarding this report, please contact Mark Hillier at (505) 797-4287.

Sincerely,

Terracon

A handwritten signature in blue ink, appearing to read "Julie A. Smith".

Julie A. Smith
Environmental Scientist

A handwritten signature in blue ink, appearing to read "Mark R. Hillier".

Mark R. Hillier, P.G. (TX)
Department Manager

Attachments: Table 1 – Ground Water and NAPL Measurements

Exhibits 1-3 – NAPL Thickness Maps

Exhibits 4-6 – Ground Water Gradient Maps

<p align="center">TABLE 1 GROUND WATER AND NAPL MEASUREMENTS Fairview Station - Facility # 28779, Release ID# 4657, WP ID# 16613 1626 N. Riverside Drive 1626 N. Riverside Drive, Espanola, New Mexico</p>										
Monitor Well	Gauging Date	Total Depth From TOC ¹ (feet)	Screened Interval (feet)	Top of Casing Elevation (feet)	Depth to Groundwater From TOC (feet)	Depth to NAPL (feet)	NAPL Thickness (feet)	NAPL Removed (gallons)	Cumulative NAPL Removed (gallons)	Groundwater Elevation ² (feet)
MW-1	2/1/2013	28	13-28	5622.71	not measured	not measured		0.0		
	2/4/2013			5622.71	not measured	not measured		0.0		
	2/27/2013			5622.71	14.40	14.06	0.34	0.0		5608.56
	6/3/2013			5622.71	14.20	13.92	0.28	0.5		5608.71
	6/27/2013			5622.71	14.80	14.43	0.37	0.1		5608.18
	7/10/2013			5622.71	14.45	14.21	0.24	0.0	0.6	5608.43
MW-2	2/1/2013	28	13-28	5622.99	not measured	not measured		4.5		
	2/4/2013			5622.99	not measured	not measured		5.0		
	2/27/2013			5622.99	18.56	13.11	5.45	0.0		5608.40
	6/3/2013			5622.99	17.39	13.42	3.97	4.5		5608.49
	6/27/2013			5622.99	18.20	13.98	4.22	3.0		5607.87
	7/10/2013			5622.99	17.50	13.67	3.83	2.5	19.5	5608.28
MW-3	2/1/2013	28	13-28	5623.02	not measured	not measured		0.5		
	2/4/2013			5623.02	not measured	not measured		2.0		
	2/27/2013			5623.02	16.69	13.80	2.89	0.0		5608.44
	6/3/2013			5623.02	17.57	13.46	4.11	4.5		5608.45
	6/27/2013			5623.02	18.33	13.88	4.45	3.5		5607.93
	7/10/2013			5623.02	17.68	13.70	3.98	3.0	13.5	5608.24

1 - TOC = Top-of-Casing elevation above mean sea level surveyed by a NM Licensed Surveyor.

2 - Product density value of 0.729 used for purpose of calculating water column overburden.

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NORTH RIVERSIDE DRIVE

CALLE RANCHITOS

N

FORMER
UST TANKHOLD

B-4

B-1/MW-1
0.28

3.97

B-2/MW-2

FORMER
DISPENSERS

BUILDING

B-5

B-3/MW-3
4.11

VACANT
COMMERCIAL
BUILDING

FORMER FAIRVIEW STATION
(1626 NORTH RIVERSIDE DR.)

UNDEVELOPED
LAND

LEGEND:

5.45 NAPL Thickness (ft) as
measured on 3/6/13

THIS DRAWING SHOULD
NOT BE USED SEPARATELY
FROM ORIGINAL REPORT.

0 15 30 feet
APPROXIMATE SCALE

NOTE: BORING LOCATIONS ARE APPROXIMATE.

Project Mngt:	MH
Drawn By:	JJD
Checked By:	MH
Approved By:	MH

Project No.	66127029
Scale:	AS SHOWN
Date:	07/17/13

Terracon
Consulting Engineers and Scientists
4905 Hawkins NE Albuquerque, New Mexico 87109
PH, (505) 797-4287 FAX, (505) 797-4288

NAPL THICKNESS MAP 6-3-13

FAIRVIEW STATION
1626 NORTH RIVERSIDE DRIVE
ESPANOLA, RIO ARriba COUNTY, NEW MEXICO

EXHIBIT

1

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NORTH RIVERSIDE DRIVE

CALLE RANCHITOS

N

FORMER
UST TANKHOLD

B-4

B-1/MW-1
0.37

4.22

B-2/MW-2

FORMER
DISPENSERS

BUILDING

B-5

B-3/MW-3
4.45

FORMER FAIRVIEW STATION
(1626 NORTH RIVERSIDE DR.)

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LEGEND:

5.45 NAPL Thickness (ft) as
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NAPL THICKNESS MAP 6-27-13

FAIRVIEW STATION
1626 NORTH RIVERSIDE DRIVE
ESPANOLA, RIO ARriba COUNTY, NEW MEXICO

EXHIBIT

2

Date: 07/17/13 N:\CAD\new mexico\66127029.dwg Layout: 3 Current Layer: 0

NORTH RIVERSIDE DRIVE

CALLE RANCHITOS

N

FORMER
UST TANKHOLD

B-4

B-1/MW-1

0.24

3.83

B-2/MW-2

FORMER
DISPENSERS

BUILDING

B-5

B-3/MW-3

3.98

FORMER FAIRVIEW STATION
(1626 NORTH RIVERSIDE DR.)

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LEGEND:

5.45 NAPL Thickness (ft) as
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NAPL THICKNESS MAP 7-10-13

FAIRVIEW STATION
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ESPANOLA, RIO ARriba COUNTY, NEW MEXICO

EXHIBIT

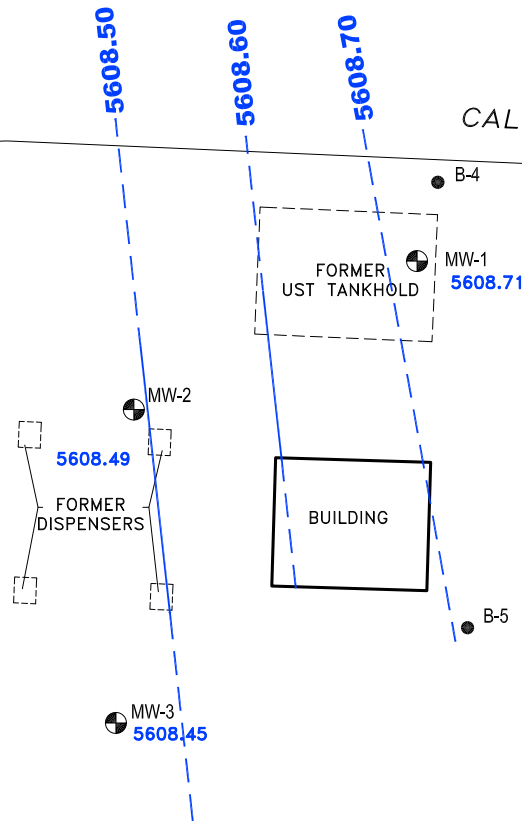
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NORTH RIVERSIDE DRIVE

CALLE RANCHITOS

N



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FORMER FAIRVIEW STATION
(1626 NORTH RIVERSIDE DR.)

UNDEVELOPED
LAND

LEGEND:

5608.56 GROUNDWATER ELEVATION (FT. MSL)

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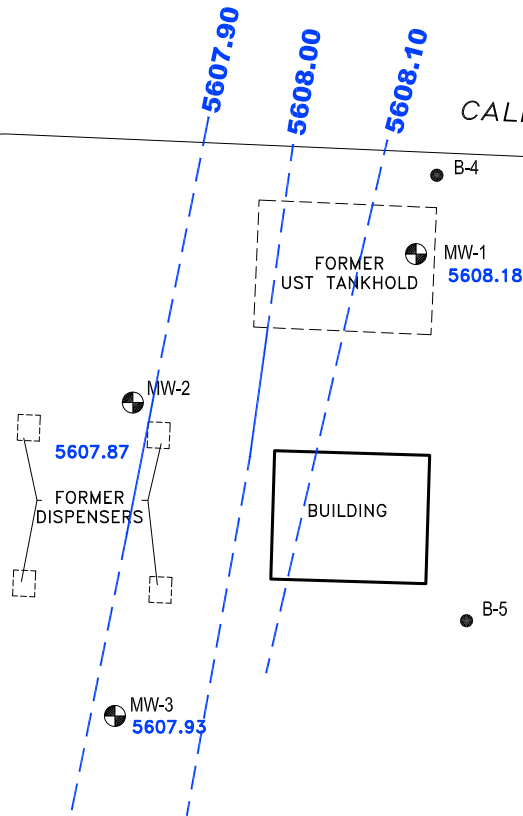
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Approved By:		Date:							
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JJD									
MH		07/17/13							

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NORTH RIVERSIDE DRIVE

CALLE RANCHITOS

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VACANT
COMMERCIAL
BUILDING

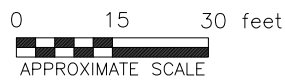
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UNDEVELOPED
LAND

LEGEND:

5608.56 GROUNDWATER ELEVATION (FT. MSL)

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GROUNDWATER GRADIENT MAP 6-27-13

FAIRVIEW STATION
1626 NORTH RIVERSIDE DRIVE
ESPANOLA, RIO ARriba COUNTY, NEW MEXICO

EXHIBIT

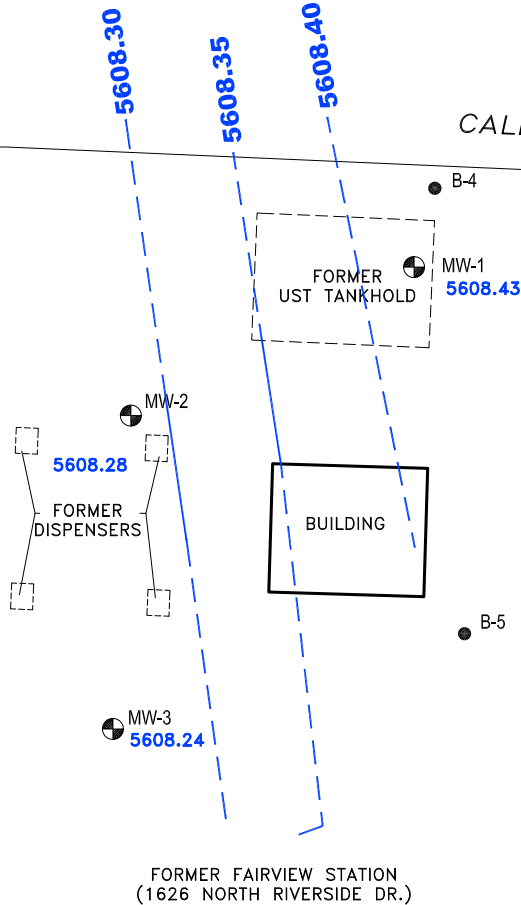
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NORTH RIVERSIDE DRIVE

CALLE RANCHITOS

N



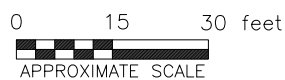
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Drawn By:	JJD	Scale:	AS SHOWN				6
Checked By:	MH	Date:	07/17/13				
Approved By:	MH						