Weston Solutions, Inc.
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Lakewood, Colorado 80215
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June 30, 2017

Mr. Martin McComb
On-Scene Coordinator
United States Environmental Protection Agency, Region VIII
Mail Code: 8EPR-ER
1595 Wynkoop Street
Denver, CO 80202

Re: Reilly Tar and Chemical Corporation – Draft Letter Report
Provo, Utah County, Utah
TDD: 0001/1706-08
DCN: W0495.1A.01357
WO#: 20408.012.001.0495.00

Dear Mr. McComb:

The United States Environmental Protection Agency (U.S. EPA) tasked the Weston Solutions, Inc., (WESTON®) Superfund Technical Assessment and Response Team (START) under Technical Direction Document (TDD) 0001/1706-08 to support U.S. EPA's removal activities at the Reilly Tar and Chemical Corporation site in Provo, Utah County, Utah. EPA conducted the removal to investigate the subsurface contamination at Reilly Tar and Chemical Corporation (the Site). START collected field measurements and observations via mobile mapping at the Site.

SITE DESCRIPTION

The Site (40.197816˚ north and 111.628421˚ west) is located at 2555 South Industrial Parkway, Provo, Utah County, Utah (Attachment A, Figure 1). The Site is a former coal tar processing facility located on a 31.84-acre empty lot. All buildings and structures have been removed, but some remnants such as concrete foundations still remain on the property (Attachment A, Figure 2). The northern portion of the property contains the area where plant operations historically took place, whereas the southern portion is an undeveloped field and seasonal wetland.

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BACKGROUND

The Site is the Reilly Tar and Chemical Corporation located at 2555 South Industrial Parkway, Provo, Utah County, Utah. The Site operated as a coal tar processing facility from 1927-2001. Reilly Tar and Chemical had many plant locations throughout the United States, and eventually claimed bankruptcy around 2001.

Previous investigations of the Site include the Utah Department of Environmental Quality (UDEQ) performing regular groundwater sampling events. Groundwater sample results from UDEQ showed groundwater contamination of petroleum products.

EMERGENCY RESPONSE ATIVITIES

On June 14, 2017, EPA tasked START with providing in-situ X-ray fluorescence (XRF) and MultiRAE Pro field observations of subsurface soils to support the sampling efforts by the UDEQ. START was also tasked with performing mobile mapping of test trenches and pits dug by Emergency and Rapid Response Services (ERRS) using site-specific forms in mobile ArcGIS software on an iPad with a linked GarminGLO GPS unit.

Fieldwork was conducted by START from June 19th-22nd, 2017. START collected field measurements including discrete monitoring with the MultiRAE Pro, in-situ XRF measurements, and headspace analysis of soil samples. START performed mobile mapping to collect field observations, site features, test trenches and pits dug by ERRS, site and associated photos with descriptions, and UDEQ sample locations.

All of the field observations, photos, and site features collected by START were published to the EPA Region 8 Operations Viewer as the data was collected, which can be viewed online at https://r8.ercloud.org/R8Response. The data was also collected in a field logbook and can be viewed in Attachment B, Logbook.

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The preparation of this draft letter report precedes a final letter. If there are any questions or comments regarding this report, please do not hesitate to contact me at 303-729-6118, or Robert Reed, Jr., Project Manager, at 303-729-6113.

Very truly yours,

WESTON SOLUTIONS, INC.

Molly Patterson
START Field Sampler

Attachments:

A– Figures
B– Logbook

cc: Joni Sandoval, U.S. EPA Project Officer
Robert Reed, Jr., Project Manager
START DCN File

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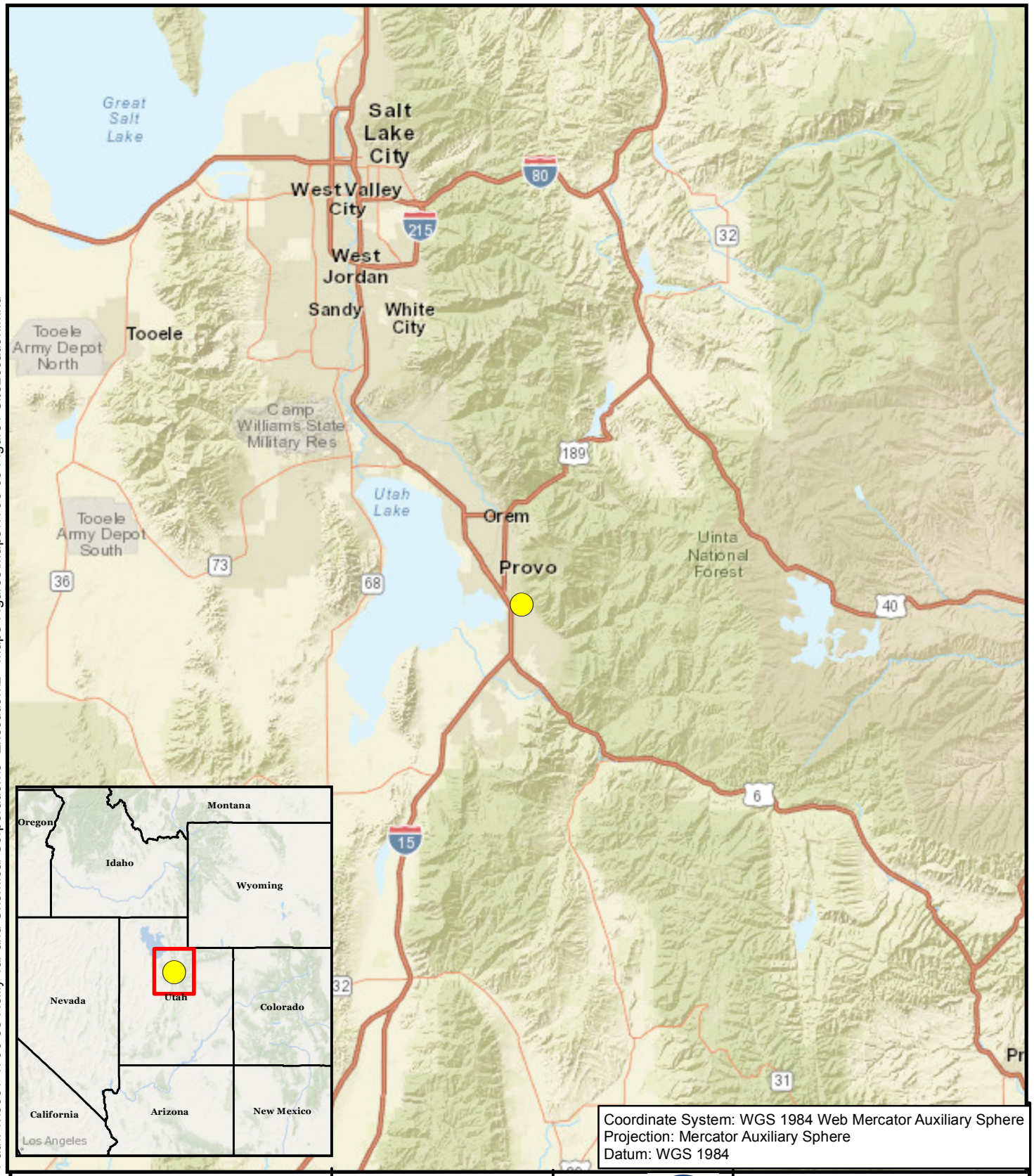
Attachment A

Figures



Path: T:\0001-1706-08 Reilly Tar and Chemical Corporation\3- Execution\2 - Maps-Figures\Maps\1706-08 Figure1 SiteLocation.mxd

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
Projection: Mercator Auxiliary Sphere
Datum: WGS 1984

Legend

Site Location

0 5 10 20 Miles

N

Prepared for:
U.S. EPA Region 8

Contract No.:
EP-S8-13-01

TDD:
1706-08

TO:
0001

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START IV

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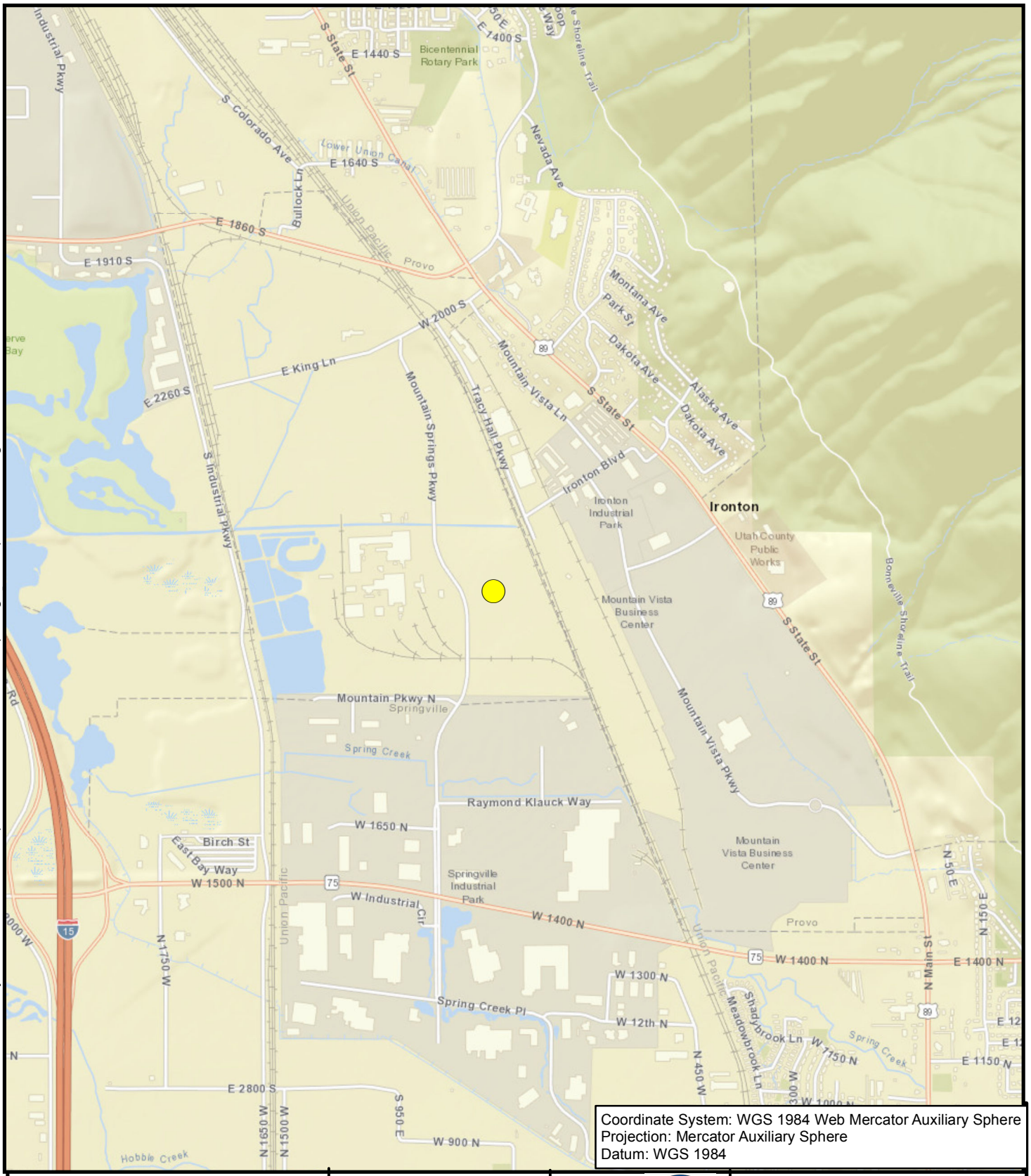
Lakewood, CO 80215

FIGURE 1
SITE LOCATION MAP
REILLY TAR AND CHEMICAL CORPORATION
PROVO, UTAH

Date: 6/15/2017



Path: T:\0001-1706-08 Reilly Tar and Chemical Corporation\3- Execution\2 - Maps-Figures\Maps\1706-08 Figure2 Site Features.mxd

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
Projection: Mercator Auxiliary Sphere
Datum: WGS 1984

Legend

Site Location

0 0.125 0.25 0.5 Miles

N

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TO:
0001

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FIGURE 2
SITE FEATURES MAP
REILLY TAR AND CHEMICAL CORPORATION
PROVO, UTAH

Date: 6/15/2017

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Attachment B

Logbook

DEFYING
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SINCE 1916

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Rite in the Rain
ALL-WEATHER
JOURNAL
№ 391FX

Reilly Tar and Chemical
Corporation
20408.012.001.0495.00
0001/1706-08
Provo, Utah County, Utah
6/19/17 -
Book 1 of ___

MADE IN TACOMA — SINCE 1916 —

Rite in the Rain®

DEFYING MOTHER NATURE

Name Molly Patterson - START

Address 1435 Garrison St #100
Lakewood, CO 80215

Phone 303-729-6118

Project Reilly Tar and Chemical Corporation

RiteintheRain.com

8

CONTENTS

PAGE	REFERENCE	DATE

6/19/17 Reilly Tar+Chemical Corp M. Patterson
1200 - START arrive at site. WDEQ (Mel FSA)
— on site. OSC McComb. ERRS. EPA on site — MP
1305 -

1315 - Calibrate MultiRAE #965860 — MP
— VOC (10ppm) = 8.3 ppm recal → 10.4ppm
— O_2 (18%) = 16.9% recal → 17.9%
— LEL (50%) = 99% recal → 99% ← Bad sensor?
— H_2S (10ppm) = 11.5ppm recal → 10.0ppm
— CO (50ppm) = 50ppm recal → 50ppm — MP

— Calibrate MultiRAE #965861
— VOC (10ppm) = 8.9 ppm recal → 10.3 ppm — MP
— O_2 (18%) = 18.1% ok
— LEL (50%) = 48% ok
— H_2S (10ppm) = 10.0ppm ok
— CO (50ppm) = 48ppm ok — MP
13:53 - Collected @ Trench 1, 5-7 ft — MP
— Collected Trench 1, 7-9 ft — MP
— Collected trench 1, 9-11 ft — MP
— Collected trench 1, 11-13 ft — MP
— All collections placed in baggies for — MP
— headspace testing.
14:41 Trench 1A, 5-13 ft deep, brown 0-5 ft, — MP
— Grey 5-12 ft, brown 12-13 ft.

6/19/17 Reilly Tar and Chemical Corp M. Patterson
Smells of petroleum product. — MP
15:25 Trench 1B, 3-13 ft deep, brown 0-5 ft,
— Brownish-grey 5-13 ft, smells of — MP
— petroleum product, hit groundwater — MP
15:27 Trench 1C, 3 ft deep, brown 0-3 ft, — MP
— slight/no smell of petroleum product, — MP
1532 Trench 1D, 7 ft deep, brownish-grey — MP
— 0-7 ft, smells of petroleum product,
— tarballs on surface. — MP
15:38 Trench 2A, 5-13 ft deep, brown 0-
— 3 ft, brownish grey 3-6 ft, grey 6-13 ft.
— smells of petroleum product, hit — MP
— groundwater, GW observed with coal
— sheen present ERRS H_2S 9 ppm. 3 ft.
1551 Trench 2B, 7-14 ft deep, brown 0-
— 3 ft, brownish-grey 3-6 ft, grey 6-13 ft.
— hit groundwater, ~~oil present ft~~ MP, sheen
— + oil/petroleum product present in GW.
— Tar chunks (approx. 3/4-1 excavator — MP
— bucket in size) were pulled up by — MP
— heavy equipment. Tar pulled from
— 3-6 ft. — MP
1550 MP
1550-Trench 3A, 6-13 ft deep, brownish grey
— 2-3 ft., heavy smell of petroleum, tar
— at 2-13 ft depth — MP

Rita in the Rain

6/19/17 Reilly Tar & Chemical Corp. M. Patterson
15:58 - Trench 3B, 7 ft deep, brownish
— grey at 0-7 ft, no smell of petroleum
— products, rust colored clay and coal — MP
— present. — MP
16:04 - Trench 4A, 10 ft deep, color is black
— 0-10 ft, heavy smell of petroleum, — MP
— hit groundwater at 10 ft with sheen — MP
— and oil products, tar coal and grey — MP
— clay with heavy scent present. — MP
16:13 - Trench 5A, 2-13 ft deep, uncured
— concrete 0-3 ft, brown/tar 3-13 ft,
— heavy petroleum smell, hit groundwater
— at 11-13 ft, tar and oil present, — MP
— railroad ties present. — MP
17:03 - Trench 6A, 7 ft deep, grayish-
— brown 0-3 ft, grey 3-7 ft, smells like
— petroleum products, no groundwater,
— tar at 2-7 ft mixed with soils — MP
17:25 - Trench 6B 8-13 ft deep, brown
— 0-2 ft, grayish black 2-3 ft, grayish
— brown 3-4 ft, light grey 4-13 ft. — MP
— Petroleum smell present, coal from
— 2-3 ft, groundwater at 8 ft — MP
17:31 - Trench 7A, depth of 3 ft, brown
— grey soils 0-1 ft, gray is black 1-3 ft

6/19/17 Reilly Tar & Chemical Corp M. Patterson
cont'd - smells of petroleum products, tar
— observed at 1-3 ft deep. — MP
17:44 - Trench 8A, 4 ft deep, light brown
— 0-1 ft, grayish brown 1-3 ft, brown 3-4 ft,
— light smell of petroleum, groundwater
— at 4 ft deep, hard tar layer at 1-3 ft. — MP
18:02 - Trench 9A, 3-4 ft deep, light — MP
— brown 0-1 ft blackish brown 1-2 ft, — MP
— brown 2-4 ft, very light petroleum — MP
— smell, ground water at 4 ft, hard — MP
— tar at 1-2 ft. — MP
18:27 - multi RAE readings of soil cuttings
— from various depths of trench 1A

	Depth	H_2S (ppm)	LEL (%)	O_2 (%)	VOC (ppb)	CO (ppm)
Trench 1A	5-7 ft	10.0	0	20.6	3100	33
Trench 1A	7-9 ft	0	0	21.2	1950	8
Trench 1A	9-11 ft	0	0	20.2	3450	6
Trench 1A	11-13 ft	0	0	21.2	11610	6

19:00 - All partres of site for the day.

6/19/17 End of day

6/20/17 Reilly Tar & Chemical M. Patterson
0645 - START arrive at site. MP
0700 - Begin MultiRAE Bump calibration MP
- #~~9658~~ 965861
VOC (10 ppm)(10000 ppb) = ~~10300~~ 13450 ppb recal → ~~10090~~ 10000 ppb MP
H_2S (10 ppm) = 11.1 ppm MP
O_2 (18%) = 17.8% MP
LEL (50%) = 50% MP
CO (50 ppm) = 51 ppm MP
- #~~965861~~ MP 965860 MP
VOC (10 ppm)(10000 ppb) = ~~13450~~ 13300 ppb recal → ~~10090~~ 10000 ppb
H_2S (10 ppm) = 9.7 ppm recal → 10.0 ppm MP
O_2 (18%) = 20.5% recal → 20.7% recal → 20.7%
LEL (50%) = 0% recal → 50% MP
CO (50 ppm) = 48 ppm recal → 50 ppm MP
0832 - Trench 10A, depth of 4ft, color
- light brown/cover material 0-1 ft,
- black tar strip 1-1.5 ft, brown MP
- 1.5-2 ft, Clay 2-4 ft, smells slightly
- like petroleum products, tar at
- 1-1.5 ft, ground water hit @ 4 ft
0837 - Trench 11A, depth of 4 ft, color
- of soil: light brown 0-1 ft, brown
- 1-3 ft, Clay 3-4 ft, light petroleum
- smell, tar 2.5-3 ft at south end
- of polygon only, no ground water

6/20/17 Reilly Tar & Chemical M. Patterson
0939 - Trench 12A, depth 6 ft, light brown
- 0-2 ft, black 2-3 ft with pockets of ~~brown~~ tar
- tar within 2-4 ft, brown 3/4 ft-6 ft, Clay
- at 6 ft. Heavy smell of petroleum, MP
- hardened and oozing layer at 2-4 ft, MP
- hit groundwater at 6 ft MP
0952 - Trench 12B, depth 4 ft, light brown
0-2 ft, black 2-3 ft, brown 3-4 ft, light
smell of petroleum, no groundwater,
hardened black/tar layer at 2-3 ft,
tar pocket on NW corner.
↑ Backnote: 0914 - Trench 13A, depth 7 ft,
light brown 0-2 ft, brownish black 2-3 ft,
brown 3-6 ft, Clay 6-7 ft, petroleum smell
present, ~~no~~ groundwater at 7 ft, hardened
tar at 2-3 ft MP
* Backnote: 0928 - Trench 13B, depth 7 ft,
light brown 0-2 ft, brownish black 2-3 ft,
brown 3-3.5 ft, black 3.5-7 ft, Clay at 7 ft.
heavy smell of petroleum, large pocket of
petroleum products from 3.5-7 ft, hardened
tar layer at 2-3 ft. MP
1134 - Trench 14A, depth 4-6 ft, Soil - light
brown 0-2 ft, black 2-2.5 ft, brown 2.5-6 ft,
groundwater ~~@~~ at 6 ft on South end, Concrete

Rite in the Rain

6/20/17 Reilly Tar & Chemical Corp M. Patterson
1134 cont'd - concrete slab on north 3/4 of trench
- about 4 ft down. ——— MP
12:47 - Trench 15A, depth 6 ft, light brown
- 0-1 ft, brownish black 1-4 ft, brown 4-6 ft,
- Clay at 6 ft, heavy petroleum smell,
- hardened tar layer from 1-2 ft, tar-like
- materials at 2-4 ft, groundwater at 6 ft.
12:56 - Trench 16A, depth 4 ft, brown 0-1.5 ft
- black 1.5-2.5 ft, brown 2.5-4 ft, petroleum
- smell, no groundwater, coal & tar present
- at 1.5-2.5 ft, lots of vegetation (grasses
- and trees present) within fenced off
- area on east side of site. ——— MP
14:14 - Trench 17A, depth 3 ft, brown 0-1.5 ft
- black 1.5-2.5 ft, brown 2.5-3 ft ——— MP
- petroleum smell present, coal at 1.5-2.5 ft,
- no groundwater. ——— MP
14:23 - Trench 18A, depth 4 ft, light brown
- 0-2 ft, black 2.5-3 ft, brown 3-4 ft,
- light petroleum smell, no groundwater,
- hardened coal layer 2.5-3 ft. ——— MP
14:46 - Trench 19A, depth 4 ft, light brown
0-1.5 ft, black 1.5-2.5 ft, brownish
black 2.5-4 ft, Slight Petroleum smell,
no ground water, hit concrete slab at

6/20/17 Reilly Tar & Chemical Corp. M. Patterson
1446 cont'd - bottom, coal 1.5-2.5 ft with
Stripping of coal within 2.5-4 ft ——— MP
* Back note - 14:33 - Trench 20A, depth 13 ft,
light brown 0-0.5 ft, black 0.5-1 ft, brown
1-2.5 ft, black 2.5-10, brownish black
Clay 10-13 ft, heavy petroleum smell,
groundwater at 10 ft, tar 0.5-13 present.
* Back note - 14:38 - Trench 20B depth 7 ft,
light brown 0-2 ft, brown 2-7 ft, no
notable petroleum smell, groundwater
at 7 ft, bricks present from 4-7 ft.
12:50 MP - 14:50 - Trench 20C, depth 6 ft,
light brown 0-1 ft, blackish brown
1-3 ft, black 3-6 ft, heavy petroleum
smell, dark black tar at bottom (6 ft),
bricks mixed in from 2.5-6 ft. ——— MP
ground water at 4.5 ft. ——— MP
14:52 - Trench 20D, depth 6 ft, light brown
0-1 ft, black 1-1.5 ft, brown 1.5-2 ft,
black 2-6 ft, heavy petroleum smell,
groundwater at 5 ft, bricks mixed
in at 4-6 ft. ——— MP
14:56 - Trench 20E, depth 6 ft, light brown
0-1 ft, black 1-6 ft, heavy petroleum
smell, ground water at 5 ft, Sheen

Rite in the Rain

6/20/17 Reilly Tar & Chemical Corp M. Patterson
1456 cont'd - and oil in groundwater, bricks
— mixed in.
1503 - Trench 20F, depth 8ft, light brown 0-1ft
— black 1-8ft, heavy petroleum smell,
— groundwater at 8ft, tar at 1-8ft, brick mixed in
15:08 - Trench 20G, depth 13ft, light brown
— 0-0.5ft, black 0.5-13ft, heavy petroleum
— smell, no groundwater, bricks mixed in
— tar 0.5-13ft.
15:15 - Trench 20H, depth 4ft, light brown
— 0-1.5ft, black 1.5-4ft, heavy petroleum
— smell, ground water at 4ft, tar at 1.5-4ft
15:18 - Trench 21A, depth 10-13ft, light brown
— 0-1.5ft, black 1.5-10ft, brown clay 10-13ft.
— heavy sweet petroleum smell (different
— than others so far), no groundwater
— tar at 1.5-10ft.
15:36 - Trench 22A, depth 13ft, light brown
— 0-1ft, black 1-13ft, heavy smell of
— sweet petroleum, no groundwater,
— tar at 1-13ft.
16:07 - Trench 23A, depth 13ft, light brown
— 0-1.5ft, black 1.5-13ft, heavy sweet
— petroleum smell, groundwater at 13ft,
— tar present at 1.5-13ft.

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16:31 - Trench 24A, depth 4ft, brown
— 0-3ft, black 3-4ft, petroleum smell
— present, groundwater at 3.5ft, tar at 3-4ft.
16:34 - Trench 25A, depth 4ft, dark brown
— 0-4ft, no smell, groundwater at 3ft,
— clean wetland area soil. Back-ground
— Sample for UDEQ (Sample-02)
16:46 - Start collected site features for
— GIS - Railroad, loading/unloading points,
— concrete/building footprints
1805 - All parties off-site

Melissa Patt
6/20/17 End of day

Rain in the Rain

6/21/17 Reilly Tar & Chemical Corp. M. Patterson
0645 - START (M. Patterson) on-site.
0830 - Trench 26A, depth 5ft, light brown
- 0-1ft, black 1-5ft, heavy petroleum
- smell, groundwater at 4.5ft, heavy
- sheen and oil in ground water
0834 - Trench 27A, depth 5ft, light
- brown 0-1ft, black 1-5ft, heavy
- petroleum smell, groundwater at
- 4.5ft, heavy sheen and oil in groundwater
0838 - Trench 28A, depth 5ft, light brown
- 0-1ft, black 1-5ft, heavy petroleum
- smell, groundwater at 4.5ft, sheen
- and oil in groundwater.
0905 - Trench 29A, depth 4-8ft, light brown
- 0-1ft, black 1-8ft, lighter sweet
- petroleum smell, no groundwater,
- oozing oil at 3.5-4.5ft, tar from
- 1-8ft
0911 - Trench 29B, depth left, light brown
- 0-1ft, black 1-6ft, heavy sweet
- petroleum smell, groundwater at
- left on the west end, oozing layer
- at 3.5-4ft on the east end.
0932 - Trench 30A, depth 10ft, light
brown 1-3.5ft, black 3.5-10ft

6/21/17 Reilly Tar and Chemical Corp M. Patterson
~~1053~~ 0932 Cont'd - large amount of ground-
- water hit just on north side of pit/trench.
- No pipes, just groundwater at 4ft deep.
1053 - Trench 31A, depth 4-8ft, light brown
- 0-1ft, black 1-8ft, heavy petroleum
- smell, groundwater with heavy flow
- at 3.5ft, tar 1-7ft, brick-mixed layer
- 0.5-4ft, oozing tar layer at 4-5ft.
1110 - Trench 33A, depth 3ft, light brown
- 0-2.5ft, black 2.5-3ft, light petroleum
- smell, no groundwater, concrete wall
- footing approx. 4 inches bgs, the creek
- on site is north of this concrete wall.
1128 - Trench 32A, depth 8ft, light
- brown 0-1ft, black 1-8ft heavy sweet
- petroleum smell, groundwater with
- heavy flow at 4ft, oozing layer at 4ft
- (approx. 1ft thick)
11:36 - Trench 34A, depth 10ft, light brown
- 0-0.5ft, black 0.5-2ft, brown mixed
- with bricks 2-3ft, black 3-5ft,
- petroleum smell, groundwater at 4ft,
- hard tar 0.5-2ft, oozing tar at 3-5ft

Rita in the Rain

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11:49 - Trench 35A, depth 6ft, brown
- 0-4 ft, black ~~4.5~~ 4-5.5 ft, Clay at
- 5.5-6 ft, petroleum smell, groundwater
- at 4.5 ft, oozing layer at ~~4.5~~ 4-5.5ft
- groundwater with oil and sheen. ——— MP
1335 - Trench 36A, ~~6ft~~ MP light brown 0-0.5ft,
- brown 0.5-1.5 ft, black 1.5-5 ft, no
- smell, groundwater at 5 ft. ——— MP
1340 - Trench 37A (in the processing pad)
- depth 3 ft, dark brown 0-3, no smell,
- no groundwater, heavily vegetated
1458 - Trench 38A, depth 10ft, brown
- 0-8 ft, blackish rock 8-10ft, smell
- is similar to diesel, no tar, liquid
- with sheen seeping in from southern
- sidewall. ——— MP
1532 - Trench 39A, depth 7ft, light brown
- 0-1ft, brown-black strips 1-4ft, ——— MP
- black 4-7, petroleum smell, no ——— MP
- ground water, tar 4-7ft ——— MP
15:49 - Trench 40A, depth 7ft, light ——— MP
- brown 0-1.5 ft, black 1.5-7ft, ——— MP
- petroleum smell, no groundwater, ——— MP
- bricks mixed in from 3-5 ft. ——— MP

6/21/17 Reilly Tar and Chemical Corp M. Patterson
15:52 - Trench 41A, depth 8ft, light
- brown 0-1.5 ft, black 1-8 ft, Clay at 8ft.
- Petroleum smell, groundwater at ~~7~~ 7.5 ft,
- Sheen & Oil in groundwater, tar
- seeping at 7-8 ft. ——— MP
16:05 - Trench 42A, depth 8 ft, light ——— MP
- brown 0-1.5 ft, black 1.5-8 ft, ——— MP
- petroleum smell, no groundwater, ——— MP
- bricks mixed in at 2-4 ft. ——— MP
16:11 - Trench 43A, depth 6 ft, light ——— MP
- brown 0-2 ft, brown 2-5 ft, petroleum
- smell, groundwater at 4ft, groundwater
- ~~was~~ MP was visually clear until excavator
- removed soils at 6ft bgs, the groundwater
- became contaminated after ~~removal~~ MP ——— MP
16:22 - Trench 44A, depth 8ft, brown ——— MP
- 0-8 ft on the northern side/half, ——— MP
- brown 0-4ft on Southern Side/half, ——— MP
- black 4-8 ft on Southern side/half, ——— MP
- no smell, no groundwater, Tar appears
- only on southern half of pit. ——— MP
17:19 - Trench 45A, depth 8ft, brown
- 0-8 ft, no smell, ~~no groundwater~~ MP
- groundwater at 8 ft, trench is ——— MP
- visually free of petroleum products

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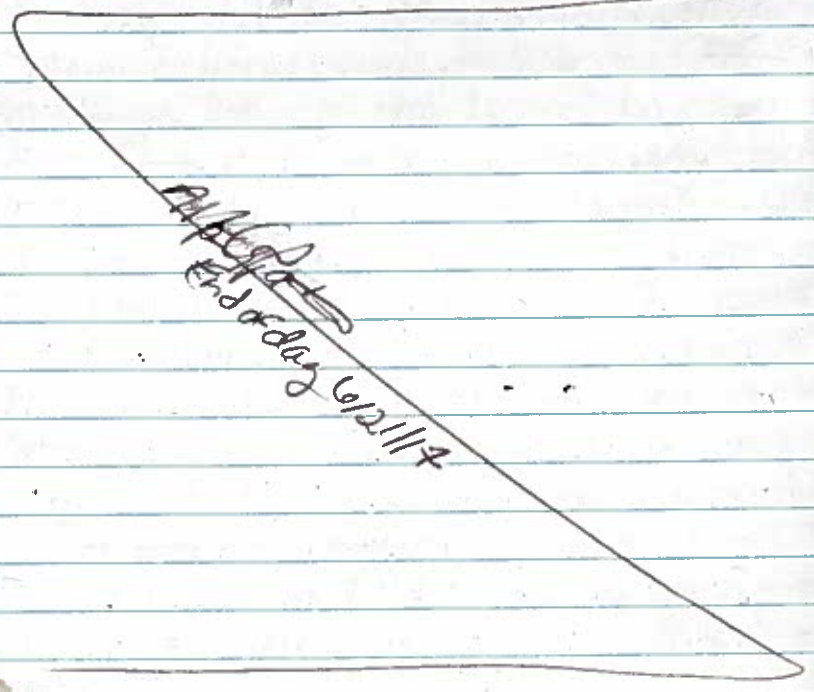
6/21/17 Reilly Tar and Chemical Corp M. Patterson
17:25 - Trench 46A, depth 8ft, brown — MP
— 0-6ft, Clay 6-8ft, no smell, — MP
— groundwater at 8ft, no tar visually — present in the trench. — MP
~~15 27~~ 17:27 - Trench 47A, depth 8ft, — MP
brown 0-8ft, no smell, groundwater — MP
at 8ft, no visual tar present. — MP
17:49 - Trench 48A, depth 7ft, brown
0-6ft, clay 6-7ft, no smell, no
groundwater, no tar visibly present
1905 - START + ~~All~~ parties off-site — MP



6/22/17 Reilly Tar and Chemical Corp. M. Patterson
0645 - START on-site — MP
0842 - Trench 49A, depth 7ft, light brown
0-1.5ft, brown 1.5-6ft, black 6-7ft,
petroleum smell, groundwater at 6ft,
oil and sheen present in groundwater
0846 - Trench 49B, depth 7ft, light brown
— 0-1.5ft, brown 1.5-5ft, brownish-
— black 5-7ft, petroleum smell,
— groundwater at 6ft, oil & Sheen present
0858 - Trench 50A, depth 1ft, light
— brown 0-1ft, no smell, no groundwater,
— Concrete pad at 1ft bgs — MP
0906 - Trench 51A, depth 1ft, light brown
— 0-1ft, no smell, no groundwater, — MP
— Concrete foundation at 1ft bgs. — MP
0931 - Trench 51B, depth 4ft, light
brown 0-0.5ft, black ~~1.5~~ 0.5-1.5ft
brown 1.5-2.5ft, black 2.5-3.5ft
09:19 - Trench 52A, depth 7ft, black
0-7ft, light petroleum smell, — MP
groundwater at 6.5ft, ~~Sam~~ trench
location within 'Stalls'. — MP
0922 - Trench 53A, depth 7ft, dark brown
0-2ft, black 2-7ft, no distinct smell,
groundwater at 7ft, Clay at 7ft. — MP

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0932 - Trench 54A, depth 8ft, black 0-8ft
— petroleum smell, groundwater at
— 7.5 ft, oozing tar layer at 6.5 ft,
— sheen and oil groundwater. ——MP
0939 - Trench 55A, depth 3ft, dark
— brown 0-3 ft, no smell, no groundwater,
— surface contamination only with
— coal-like hard substance. ——MP
0945 - Trench 56A, depth 8ft, dark
— brown 1-3ft, brownish black 3-5ft,
— black 5-7.5 ft, clay 7.5-8ft, light
— petroleum smell, no groundwater,
— tar chunks within soils. ——MP
0950 - START collected GPS/mobile ——MP
— mapping data for surface water
— samples collected by USGS for
— metals, cyanide, SVOC, VOC analysis
1209 - Trench 57A, depth 8ft, light
brown 0-2 ft, ~~light~~ dark brown 2-3ft,
black 3-8 ft, sweet petroleum smell,
groundwater at 8 ft, oozing tar at
7-8 ft, oil and sheen in groundwater.
1213 - Trench 57B, depth 8ft, light
brown 0-2ft, dark brown 2-3ft,
MP ~~sweet petro~~ black 3-8ft, sweet

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1213 contd - petroleum smell, groundwater at
— 7.5 ft, oozing tar at 4.5-8ft, oil and
— sheen in groundwater. ——MP
1215 - Trench 57C, depth 5ft, light brown
— 0-1 ft, dark brown 1-2ft, black 2-5ft,
— sweet petroleum smell, groundwater
— at 5ft, oozing tar at 4-5ft, oil and
— sheen in groundwater. ——MP
1218 - Trench 58A, depth 4ft, dark brown
— 0-1 ft, black 1-4ft, sweet petroleum
— smell, groundwater at 4ft, tar at
— 1-4ft (oozing), oil and sheen in ——MP
— groundwater. ——MP
1224 - Trench 58B, depth 4ft, dark brown
— 0-1ft, black 1-4ft, sweet petroleum
— smell, groundwater at 4ft, tar at
— 1-4 ft, oil and sheen in groundwater.
1226 - Trench 58C, depth 4ft, dark ——MP
— brown 0-1 ft, black 1-4ft, sweet ——MP
— petroleum smell, groundwater at
— 4ft, tar at 1-4ft, oil and sheen in
— groundwater. ——MP
1228 - Trench 58D, depth 4ft, black
0-4ft, sweet petroleum smell, ground-
water at 3ft, tar at 2-4ft, oil and

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1228 cont'd - Sheen in groundwater, — MP
oozing tar at 2-4ft. — MP

1319 - Trench 58E, depth 5ft, dark
- brown 0-1 ft, black 1-5 ft, sweet
- petroleum smell, groundwater
- at 5 ft, oil and sheen in groundwater,
- oozing tar at 4-5 ft. — MP

1325 - Trench 58F, depth 4ft, dark
- brown 0-1 ft, black 1-4ft, sweet
- petroleum smell, groundwater at 4ft,
- tar at 1-4ft, oil and sheen in — MP
- groundwater, oozing tar at 3-4ft.

1329 - Trench 59A, depth 5ft, dark
- brown 0-2ft, black 2-5 ft, petroleum
- smell, groundwater at 5ft, tar at
- 3-5 ft, oil and sheen in groundwater.

1335 - Trench 60A, depth 7ft, dark brown
- 0-2ft, black 2-7ft, petroleum smell,
- groundwater at 6.5 ft, tar at 2-7ft,
- Oil and sheen in groundwater — MP

1339 - Trench 61A, depth 6ft, dark
- brown 0-1 ft, black 1-6ft petroleum
- smell, groundwater at 6ft, oil and
- sheen in groundwater, oozing tar at
- various depths within 1-6ft. — MP

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1348 - Trench 62A, depth 4ft, dark brown
- 0-2ft, black 2-4ft, petroleum smell,
- ground water at 4ft, oil in groundwater.

1351 - Trench ~~63A~~ 62B, depth 5ft,
- dark brown 0-2ft, black 2-5ft,
- petroleum smell, groundwater at
- 5ft, some oozing material — MP

1400 - Trench 63A, depth 7ft, light
- brown 0-2 ft, dark brown 2-5ft,
- with intermittent black, light — MP
- petroleum smell, no groundwater -

1415 - START collected additional site
- features (ingress/egress points, fencelines)

1514 - Trench 64A, depth 4ft, light
- brown 0-1.5 ft, blackish brown
- 1.5-2 ft, black mixed with bricks
- 2-4 ft, no smell, groundwater at
- 3.5 ft, potential asphalt mixed
- in with bricks, but otherwise it
- appeared visually clear of source
- material/petroleum products — MP

1615 - START and all parties off-site
- for end of the fieldwork. — MP

Molly Post
6/22/17 End of day

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