

5/7/12

Partly Cloudy, High 91°F

Purpose: Purge and sample 5852213 (TXI), 5852314 (Mansville)
Wisian W1, Wisian W2, 58522 (Edgar), Buchheit

Equipment: Thin tape WL meter, LaMotte turbidity meter, YSI 556 Water Quality Meter (WQM), Submersible pump, dedicated tubing, Mettler Toledo pH meter, Jump Start battery

Crew: Kim Nguyen (KN - URS Austin)
Arthur Potts (AP - CoxMcLain)

0700 Load equipment at URS Austin office

0800 Arrive at LCRA lab to pick up coolers. Buy ice

0837 Sign in at TXI

0850 Calibrate LaMotte turbidity meter

StandardFinal

Turbidity = 0.0 NTU = 0.00 NTU

= 10.0 NTU = 9.70 NTU

0900 Set up on well 5852213 (TXI well). Download transducer data. Low flow controller not working. Discovered that the connection with the Jump Start battery was loose.

0941 Pump on at 5852213

1000 Collect CRCP-5852213-060. Decon pump and WL meter.

1030 Sign off at TXI.

1045 Set up on 5852314 well

1052 Pump on at 5852314

1105 Collect CRCP-5852314-060 / Decon WL meter.

1115 Take a break.

1140 AP collects air quality samples from Wisian property

1200 Set up on Wisian Well 1

1210 Pump on at Wisian Well 1

1220 Pump stopped possibly due to overheating

Project No. 41010113.102

Book No. 00835

TITLE CRCP-GWM-May 2012

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5/7/12 (cont.)

- 1240 Collect CRCP-Wisian W1-060 Decon pump and WL meter.
- 1250 Collect CRCP-Wisian W1-065 (EB).
- 1255 Set up on Wisian Well 2.
- 1307 Pump on at Wisian Well 2.
- 1325 Collect CRCP-Wisian W2-060 Decon WL meter. Rinse pump. Place pump with Wisian Well 2 tubing.
- 1345 AP collects air filter sample at ATF.
- 1410 Set up on well 58522 (Edgar)
- 1417 Pump on at 58522
- 1435 Collect CRCP-58522-060. Decon WL meter
- 1450 Set up on Buchbert well.
- 1500 Pump on at Buchbert well.
- 1515 Collect CRCP-Buchbert-060. Decon WL meter
- 1520 Load equipment. Drive to LCRA lab.
- 1550 Drop off samples at LCRA lab.

(a)

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Issued & Understood by me,

Date

5/7/12

Invented by:

Recorded by:

Date

5/8/12
Raining, High 81°F
(T-Storm last night)

Purpose: Purge and sample ATF Well 1, NTN Well 2, Holweger well, 221049 (King) well.

Equipment: Private pumps, thin tape WL meter, YSI 556 WQM, LaMotte turbidity meter, Mettler Toledo pH meter.

Crew: Kim Nguyen (KN - URS Austin)
Arthur Potts (AP - Cox McInain)

- 0730 Leave Austin Office for ATF Well 1. Buy Ice.
- 0845 Set up on ATF Well 1.
- 0851 Pump on ATF Well 1. WL meter not functioning properly. Will replace battery after finished w/ well.
- 0905 Collect CRCP-ATF1-060 Decon WL meter.
- 0925 Gauge NTN Well 1 - DTW = 27.96' BToc
Set up on NTN Well 2
- 0935 Pump on at NTN Well 2. WL meter not functioning.
- 0955 Collect CRCP-NTNW2-060
CRCP-NTNW2-061 (Dup)
Decon WL meter.
- 1000 Replace battery on WL meter.
- 1010 Set up on Holweger well.
- 1019 Pump on at Holweger well.
- 1035 Collect CRCP-Holweger-063 (MS/MSD) Decon WL meter.
- 1050 Set up on 221049 (King)
- 1055 Pump on 221049
- 1110 Collect CRCP-221049-060 Decon WL meter.
- 1120 Clean / put up equipment.
- 1145 Drop off samples at LCRA lab.
- 1215 Unload equipment at URS office.
- 1300 Drop off LaMotte turbidity meter at Ashtead.

(KN)

Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date: 10/19/11

Location: **Austin, TX**

Field Personnel: Kim Nguyen, Arthur Potts, Kevin Pasternak

Well Identification: 221049 well

Initial Water Level (ft. BTOC): 32.63'

Well Diameter: 5 inches

Well Depth (ft. BTOC): Unknown

Screen Interval: Unknown

Well Volume:

Pump/Purging Device: Dedicated pump

Pump Intake Depth: Unknown

Sample Time: 0840

Analyses/Notes: Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in)
Volume (gal/ft)
Volume (L/ft)

2	3	4	5	6	8	10	30
0.16	0.37	0.65	1.02	1.47	2.61	4.08	36.70
0.62	1.40	2.46	3.86	5.56	9.88	15.44	138.93

Project:	Travis County - Colorado River Corridor Plan	Date:	10/19/11
Location:	Austin, TX	Field Personnel:	Kim Nguyen, Arthur Potts, Kevin Pasternak
Well Identification:	58522 well (Edgar)	Initial Water Level (ft, BTOC):	Notable to measure 38.92' BTOC
Well Diameter:	4 inches	Well Depth (ft, BTOC):	~70
Screen Interval:		Well Volume:	
Pump/Purging Device:	Dedicated pump, hose	Pump Intake Depth:	Unknown ~39.50' BTOC

1150

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

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10/18/11

Kim Nguyen, Arthur Potts, Kevin Pasternak

29.84

36.38

Well Volume:

Twister Tempest Submersible Pump

Pump Intake Depth:

~ 34' BTOC

1330

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

(Kd)
1305
1308

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Date:

10/18/1

Field Personnel:

Kim Nguyen, Arthur Potts, Kevin Pasternak

Initial Water Level (ft. BTOC):

41.10' (Pump turned off,
Allowed to equilibrate)

Well Depth (ft, BTOC):

250

Well Volume:

Pump Intake Depth:

N/A

1455

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

Total purged = 3,340 gal
moved to tank

2	3	4	5	6	8	10	30
0.16	0.37	0.65	1.02	1.47	2.61	4.08	36.70
0.62	1.40	2.46	3.88	5.56	9.88	15.44	138.93

Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date: 10/19/11

Location: **Austin, TX**

Field Personnel: Kim Nguyen, Arthur Potts, Kevin Pasternak

Well Identification: ATF Well 1

Initial Water Level (ft, BTOC): 28.92' BTOC

Well Diameter: 16 inches

Well Depth (ft, BTOC): 50.58' BTOC

Screen Interval:

Well Volume:

Pump/Purging Device:

Pump Intake Depth:

Sample Time: 1355

Analyses/Notes: Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in)	2	3	4	5	6	8	10	30
Volume (gal/ft)	0.18	0.37	0.85	1.02	1.47	2.61	4.08	36.70
Volume (L/ft)	0.62	1.40	2.46	3.86	5.56	9.98	15.44	138.93

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Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

10/19/11

Location: **Austin, TX**

Kim Nguyen, Arthur Potts, Kevin Pasternak

Holwege well

32.82' BTDC

5 inches

39.75' BTDC

Screen Interval:

Well Volume:

Dedicated pump

Pump Intake Depth:

14505

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in)
Volume (gal/ft)
Volume (L/ft)

2
0.16
0.62

3
0.37
1.40

4
0.65
2.46

5
1.02
3.86

6
1.47
5.56

8
2.61
9.88

10
4.08
15.4

30
36.7
138.

Page 1 of 1

30' 7.5"
36' 1.75"

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L

Date: 10/18/11

Field Personnel: **Kim Nguyen, Arthur Potts, Kevin Pasternak**

Initial Water Level (ft. BTOC): 50.39

Well Depth (ft. BTOC): 6577

Weil Volume:

Pump/Purging Device: Twister Tempest submersible pump Pump Intake Depth: ~ 58' BTOC

Sample Time: 1010

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

2	3	4	5	6	8	10	30
0.16	0.37	0.65	1.02	1.47	2.61	4.08	36.70
0.62	1.40	2.46	3.86	5.56	9.88	15.44	138.93

Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date: 11/30/11

Location: **Austin, TX**

Field Personnel: Kim Nguyen, Arthur Potts, Kevin Pasternak

Well Identification: 221049 (Sarah King Well)

Initial Water Level (ft, BTOC): 22.94

Well Diameter: 5 inches

Well Depth (ft, BTOC):

Screen Interval:

Well Volume:

Pump/Purging Device: Private pump

Pump intake Depth:

Sample Time:

0815

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in)
Volume (gal/ft)
Volume (L/ft)

2
0.16
0.62

3
0.37
1.40

4
0.65
2.46

5
1.02
3.86

6
1.47
5.56

8
2.61
9.88

10
4.08
15.4

30
36.70
138.9

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Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date: 11/30/11

Location: **Austin, TX**

Field Personnel: **Kim Nguyen, Arthur Potts, Kevin Pasternak**

Well Identification: 5852314

Initial Water Level (ft, BTOC): 40.80

Well Diameter: inches

Well Depth (ft, BTOC): 60.00

Screen Interval:

Well Volume:

Pump/Purging Device: Private pump

Pump Intake Depth: Unknown

Sample Time:

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D).

[illegible]

Well Diameter (in)
Volume (gal/ft)
Volume (L/ft)

2	3	4	5	6	8	10	30
0.16	0.37	0.65	1.02	1.47	2.61	4.08	36.70
0.62	1.40	2.46	3.86	5.56	9.88	15.44	138.93

Project:	Travis County - Colorado River Corridor Plan	Date:	11/29/11
Location:	Austin, TX	Field Personnel:	Kim Nguyen, Arthur Potts, Kevin Pasternak
Well Identification:	ATF Well 1	Initial Water Level (ft, BTOC):	28.48
Well Diameter:	inches	Well Depth (ft, BTOC):	
Screen Interval:		Well Volume:	
Pump/Purging Device:	Dedicated private pump	Pump Intake Depth:	

Sample Time: 1325 Analyses/Notes: Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in)
Volume (gal/ft)
(L/ft)

2	3	4	5	6	8	10	30
0.16	0.37	0.65	1.02	1.47	2.61	4.08	36.70
0.62	1.40	2.46	3.86	5.56	9.88	15.44	138.93

Project:	Travis County - Colorado River Corridor Plan	Date:	11/30/11
Location:	Austin, TX	Field Personnel:	Kim Nguyen, Arthur Potts, Kevin Pasternak
Well Identification:	Buchheit well	Initial Water Level (ft, BTOC):	26.21 (used thin WL meter)
Well Diameter:	4 inches	Well Depth (ft, BTOC):	30.75
Screen Interval:		Well Volume:	4.54' x 0.65 = 2.95 gal
Pump/Purging Device:	Private pump	Pump Intake Depth:	Unknown

Sample Time: 1410 Analyses/Notes: Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

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Project:	Travis County - Colorado River Corridor Plan	Date:	11/29/11
Location:	Austin, TX	Field Personnel:	Kim Nguyen, Arthur Potts, Kevin Pasternak
Well Identification:	Glass Well	Initial Water Level (ft, BTOC):	47.28 (from top concrete lid)
Well Diameter:	30 inches	Well Depth (ft, BTOC):	47.50
Screen Interval:		Well Volume:	
Pump/Purging Device:		Pump Intake Depth:	None

Analyses/Notes:

[illegible]Page 1 of 1

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Project:	Travis County - Colorado River Corridor Plan	Date:	11/29/11
Location:	Austin, TX	Field Personnel:	Kim Nguyen, Arthur Potts, Kevin Pasternak
Well Identification:	Wisian Well 2	Initial Water Level (ft, BTOC):	45.50
Well Diameter:	6 inches	Well Depth (ft, BTOC):	62.18
Screen Interval:		Well Volume:	16.68' x 1.47 = 24.5 gal
Pump/Purging Device:	Submersible pump	Pump Intake Depth:	~50' from top of casing (marked on tubing w/ black marker)
Sample Time:	1420	Analyses/Notes:	Ammonia (EPA 350.1), Cl/F/N/ISO ₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO ₃ /CO ₃ (SM2320B), Total Suspended Solids (SM 2540D)

Time	Water Level (ft BTOC)	Purge Rate (mL/min)	(L) Volume Purged (gal)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	pH (SU) +/- 0.1	Turbidity (NTU) ≤10 NTU or +/- 10%	DO (mg/L)	ORPI (mV)	TDS (mg/L)	Comments
1402	-	-	-	-	-	-	-	-	-	-	Pump On
1405	45.50	160	-	21.80	1.031	7.88	5.58	0.06	12.5	-	Clear
1408	45.50	230	~3.5	22.07	1.041	7.93	7.22	0.04	3.6	-	"
1411	45.50	240	~5.0	22.21	1.046	7.95	6.57	0.04	-0.5	-	"
1414	45.50	250	~7.0	22.34	1.056	7.93	2.54	0.03	-4.6	-	"
1417	45.50	290	~8.5	22.27	1.058	7.93	2.61	0.03	-6.0	-	"
1420	Collect	CRCP Wistar W2-020									

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Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date: 1/5/12

Location: **Austin, TX**

Field Personnel:

Kim Nguyen, Arthur Potts

Well Identification: 58522 (Edgar)

Initial Water Level (ft, BTOC): 39.34

Well Diameter: 4 inches

Well Depth (ft, BTOC): 56.36

Screen interval: Unknown

Well Volume: $17.02' \times 0.65 = 11.06 \text{ gal}$

Pump/Purging Device: Private pump

Pump Intake Depth:	Unknown
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Sample Time:

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in)
Volume (gal/ft)
Volume (L/ft)

2	0.16	0.62
---	------	------

3
0.37
1.40

4
0.65
2.46

$$\begin{array}{r} 5 \\ 1.02 \\ 3.86 \end{array}$$

6
1.47
5.56

8
2.61
9.88

$$\begin{array}{r} 10 \\ 4.08 \\ 15.4 \end{array}$$

30
36.7
138.9

[illegible]

○ ○ ○

[illegible]

$\frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} f(x) e^{-x^2} dx = \frac{1}{\sqrt{\pi}}$

100

1000

100

1000

1000

100

1000

830

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

Well Diameter (in)	2	3	4	5	6	8	10	30
Volume (gal/ft)	0.16	0.37	0.65	1.02	1.47	2.61	4.08	36.70
Volume (L/ft)	0.62	1.40	2.46	3.86	5.56	9.88	15.44	138.93

Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date:

1/4/12

Location: **Austin, TX**

Field Personnel:

Kim Nguyen, Arthur Potts

Well Identification: 5852213 (Tx1)

Initial Water Level (ft, BTOC):

29.30

Well Diameter: 5 inches

Well Depth (ft, BTOC):

36.38

Screen Interval: Unknown

Well Volume:

$$7.08' \times 1.02 = 7.22 \text{ gal}$$

Pump/Purging Device: Submersible pump

Pump Intake Depth:

~ 3' from bottom

Sample Time:

1525

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in)
Volume (gal/ft)
Volume (L/ft)

2
0.18
0.62

3
0.37
1.40

4
0.65
2.46

-5
1.02
3.86

6
1.47
5.56

8
2.61
9.88

10
4.08
15.44

30
36.70
138.9

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Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date: 1/5/12

Location: **Austin, TX**

Field Personnel: **Kim Nguyen, Arthur Potts**

Well Identification: ATF Well 1

Initial Water Level (ft, BTOC): 28.16

Well Diameter: 16 inches

Well Depth (ft, BTOC): 50.58

Screen Interval: Unknown

Well Volume: $22.42' \times 10.44 = 234.06 \text{ gal}$

Pump/Purging Device: Private pump

Pump Intake Depth:	Unknown
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Sample Time:

950.

@ faucet

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in)

$$\frac{1}{2}$$

3

4

5

6

8

1

--	--

Volume (gal/ft)

0.16

0.37

0.65

1.02

1.47

2.61

4.01

36.

Volume (L/ft)

0.62

1.40

2.46

3.86

5.56

9.88

15.4

138

Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date: 1/5/12

Location: **Austin, TX**

Field Personnel: **Kim Nguyen, Arthur Potts**

Well Identification: Holweger well

Initial Water Level (ft, BTOC): 32.26

Well Diameter: 5 inches

Well Depth (ft, BTOC): 39.75

Screen Interval: Unknown

Well Volume: $7.49' \times 1.02 = 7.64 \text{ gal}$

Pump/Purging Device: Private pump

Pump Intake Depth: Unknown

Sample Time:

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date: 1/5/12

Location: **Austin, TX**

Field Personnel: **Kim Nguyen, Arthur Potts**

Well Identification: Buchheitwell

Initial Water Level (ft, BTOC): 26.52

Well Diameter: 4 inches

Well Depth (ft, BTOC): 30.75

Screen Interval: Unknown

Well Volume: $\textcircled{W} 3.4.23' \times 0.65 = 2.75 \text{ gal}$

Pump/Purging Device: Private pump

Pump Intake Depth: Unknown

Sample Time: 1215

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in).
Volume (gal/ft)
Volume (L/ft)

2. 1
0.16
0.82

3
0.37
1.40

$$\begin{array}{r} 4 \\ 0.65 \\ 2.46 \end{array}$$

5
1.02
3.86

6
1.4
5.5

8
2.6
9.8

10
4.0
15

30
36
13

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1/5/12 1000 NTN Well 1: DTW = 29.36' BTDC
TD = 36.19' BTDC

Project: **Travis County - Colorado River Corridor Plan**

Date: 1/5/12

Location: **Austin, TX**

Field Personnel: Kim Nguyen, Arthur Potts

Well Identification: **NTN Well 2**

Initial Water Level (ft, B+OC): 31.38

Well Diameter: 18 inches

Well Depth (ft, BTOC): 40.77

Screen Interval: Unknown

Well Volume: $9.39' \times 13.21 = 124.04 \text{ gal}$

Pump/Purging Device: Private pump

Pump Intake Depth:	Unknown
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Sample Time: 1040

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

Time	Water Level (ft BTOC)	(gal/min) Purge Rate (min/min)	Volume Purged (gal)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	pH (SU) +/- 0.1	Turbidity (NTU) <10 NTU or +/- 10%	DO (mg/L)	ORP (mV)	Purge rate was provided by Emily Brown	
											Comments
1021											Pump On
1023	36.88	375	—	20.98	1.607	6.42	0.13	0.05	78.5		pH on Toledo = 6.97
1025	36.88	375	—	21.31	1.617	7.44	0.08	0.05	60.4		" " " = 6.88
1027	36.89	375	—	21.36	1.616	7.86	3.76	0.05	54.2		" " " = 6.80
1029	36.89	375	—	21.38	1.615	8.26	0.00	0.05	46.8		" " " = 6.77
1031	36.88	375	—	21.38	1.617	8.42	5.41	0.05	43.4		" " " = 6.76
1033	36.89	375	4500	21.43	1.616	8.61	3.60	0.05	39.0		= 6.74
1040	Collect	CRCP-NTNW2-030									
		CRCP-NTNW2-031		(DUP)							

Well Diameter (in) 2

Volume (gal/ft) 0.16

Volume (L/ft) 0.62

3 0.37

4 0.65

5 1.02

6 1.47

8 2.61

10 4.08

30 36.70

1.40

2.46

3.86

5.56

9.88

15.44

138.93

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[illegible]

Date: 1/4/12

Field Personnel:	Kim Nguyen, Arthur Potts
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Initial Water Level (ft, BTOC): 45.54

Well Depth (ft, BTOC): 6218

Well Volume: $16.64' \times 1.47 = 24.5 \text{ gal}$

Pump Intake Depth:	~50' BTOL
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Sample Time: 1250

Analyses/Notes:	Ammonia (EPA 350.1), Cl/F/N/SO ₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO ₃ /CO ₃ (SM2320B), Total Suspended Solids (SM 2540D)
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[illegible]

Well Diameter (in)	
Volume (gal/ft)	
Volume (L/ft)	

2

C.

0.

3

0.

1.

4

①

2

5

1

3

1

1.

5

8

2

9.

10

4.

19

3

3

13

Monitoring Well Purging Form

Project: Travis County - Colorado River Corridor Plan

Date: 2/15/12

Location: Austin, TX

Well Identification: 58522 (Edgar)

Well Diameter: 4 inches

Screen Interval: Unknown

Pump/Purging Device: Private pump

Pump Intake Depth: Unknown

Well Volume: 17.66' x 0.65' = 11.5 gal

Well Depth (ft, BTOC): 56.36

Initial Water Level (ft, BTOC): 38.70

Field Personnel: Kim Nguyen, Arthur Potts

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₂ (SM2320B), Total Suspended Solids (SM 2540D)

Analyses/Notes:

Time	Water Level (ft, BTOC)	Purge Rate (gpm)	Volume Purged (gal)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	pH (SU) +/- 0.1	Turbidity (NTU) < 10 NTU or +/- 10%	DO (mg/L)	ORP (mv)	Comments
------	------------------------	------------------	---------------------	--------------------------	--------------------------------------	-----------------	-------------------------------------	-----------	----------	----------

1328										Pump On
1330	38.84	2.5	-	22.20	1.231	790	0.56	11.41	41.2	pH on Mettler Toledo = 6.78
1332	38.82	2.5	-	22.10	1.229	790	0.36	6.35	43.2	" " " " " "
1334	38.70	2.5	-	22.08	1.228	783	0.70	5.65	44.5	" " " " " "
1336	38.70	2.5	-	22.05	1.229	778	0.79	4.71	47.8	" " " " " "
1338	38.70	2.5	-	22.05	1.229	775	1.24	4.46	49.1	" " " " " "
1340	38.70	2.5	-	22.05	1.229	771	1.01	4.25	41.2	" " " " " "
1343	38.70	2.5	-	22.06	1.230	768	1.11	4.07	35.3	" " " " " "
1346	38.70	2.5	45	22.06	1.230	765	1.20	3.95	33.2	" " " " " "
1350	Collect CRCP-58522-0401									from spigot Sample for conductivity garden hose (w)

Well Diameter (in)

Volume (gal/in)

Volume (L/in)

0.62

0.16

1.40

0.37

2.46

0.65

3.86

1.02

5.56

1.47

9.88

2.61

15.44

4.08

138.93

38.70

Page

of

Date: _____

Project: Travis County - Colorado River Corridor Plan

Location: Austin, TX

Well Identification: 5852213 (TX1)

Well Diameter, 5 inches

Screen Interval: Unknown

Pump/Purging Device: Submersible pump

Sample Time: 1020

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

Pump Intake Depth:

~ 3, 82409 409

Well Depth (ft, BTOC):

36.38	(5):
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Initial Water Level (ft, BTOC):

29.87

Field Personnel:

Kim Nguyen, Arthur Potts

Time	Water Level (ft. BTOC)	Purge Rate (mL/min)	Volume Purged (L)	Temperature (°C) ± 1°C	Specific Conductivity (mS/cm) ± 5%	pH (SU) ± 0.1	Turbidity (NTU) ± 10% < 10 NTU or ORP (mV)	DO (mg/L)	ORP (mV)	Comments
1007										
1009	28.72	275	-	19.37	0.876	7.40	2.09	8.64	-232.1	Pump On Phon Meter Toledo = 6.75; 5 water
1011	28.74	275	-	19.45	0.883	7.33	2.64	6.98	-237.7	" " " " " " = 6.75
1013	28.74	275	-	19.60	0.889	7.30	1.81	6.08	-240.4	" " " " " " = 6.72
1015	28.73	275	-	19.72	0.894	7.30	1.43	5.33	-229.4	" " " " " " = 6.70
1017	28.73	275	-	19.75	0.897	7.29	1.63	5.04	-237.7	" " " " " " = 6.68
1019	28.73	275	330	19.77	0.898	7.28	-	4.76	-224.6	" " " " " " = 6.66
1020	Collect	CRCP-5852213-040								

Monitoring Well Purgings Form

Date:

Field Personnel:

221049 (Sachking)

inches

Unknown

Private pump

Shil

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

Time	Water Level (ft BTIG)	Purge Rate (gals/min) (gals/min)	Volume Purged (gal)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 0.5%	pH (SU) +/- 0.1	Turbidity (NTU) +/- 10%	DO (mg/L)	ORP (mV)	Comments
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8

4/6 L

11.2.1

[illegible]

11445	Collect CRCP-22	049-040
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Well Diameter (in)	Volume (gal/H)	Volume (L/H)
2	0.16	0.62
3	0.37	1.40
4	0.65	2.46
5	1.02	3.86
6	1.47	5.56
8	2.61	9.88
10	4.08	15.44
30	36.70	138.93

Page 1 of 1

Monitoring Well Purgings Form

Project: Travis County - Colorado River Corridor Plan

Date:

2/15/12

Kim Nguyen, Arthur Potts

Field Personnel:

Initial Water Level (ft, BTOC):

26.81

Well Depth (ft. BTOC):

85.05

Well Volume:

$$23.77' \times 10.44 = 248.2 \text{ g}$$

Pump Intake Depth:

Unknown

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

Analyses/Notes:

0920

Sample Time:

Well Identification:

ATF Well 1

Well Diameter:

6 inches

Screen Interval:

Unknown

Pump/Purging Device:

Private pump

Sample Time:

[illegible]

Monitoring Well Purging Form

Project: Travis County - Colorado River Corridor Plan

Date: 2/16/12

Field Personnel: Kim Nguyen, Arthur Potts

Location: Austin, TX

Well Identification: Buchheit well

Well Diameter: 4 inches

Screen Interval: Unknown

Pump/Purging Device: Private pump

Sample Time: 0850

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₂ (SM2320B), Total Suspended Solids (SM 2540D)

Pump Intake Depth: Unknown

Well Volume: 4.79' x 0.65 = 3.11 gal

Well Depth (ft. BTOC): 30.75

Initial Water Level (ft. BTOC): 25.96

Time	Water Level (ft. BTOC)	Purge Rate (gal/min)	Volume Purged (gal)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	pH (SU) +/- 0.1	Turbidity (NTU) <10 NTU or +/- 10%	DO (mg/L)	ORP (mV)	Comments
------	------------------------	----------------------	---------------------	--------------------------	--------------------------------------	-----------------	------------------------------------	-----------	----------	----------

0826										Pump On
0828	25.96	1.5	3.0	18.53	0.887	5.97	0.55	13.84	168.5	PhonMettler Toledo = 6.76
0830	25.96	1.5	6.0	18.89	0.892	6.20	0.28	11.30	144.0	" " " " " " = 6.67
0832	25.96	1.5	9.0	19.09	0.898	6.45	0.08	10.03	131.3	" " " " " " = 6.65
0834	25.96	1.5	12.0	19.22	0.901	6.61	0.11	9.16	122.4	" " " " " " = 6.61
0836	25.94	1.5	15.0	19.36	0.904	6.76	0.22	8.59	116.3	" " " " " " = 6.59; Pump kicked on
0838	26.10	1.5	18.0	20.04	0.916	6.85	0.22	8.03	111.5	" " " " " " = 6.57
0840	25.96	1.5	21.0	20.64	0.929	6.97	6.72	7.71	104.5	" " " " " " = 6.56
0842	25.94	1.5	24.0	20.72	0.933	7.05	0.18	7.48	99.6	" " " " " " = 6.57
0844	25.94	1.5	27.0	20.66	0.932	7.10	0.33	7.34	97.1	" " " " " " = 6.57

0850 Collect CCR-Buchheit-040

Well Diameter (in)	Volume (gal/ft)	Volume (L/ft)
2	0.16	0.62
3	0.37	1.40
4	0.65	2.46
5	1.02	3.88
6	1.47	5.56
8	2.61	9.88
10	4.08	15.44
30	36.70	138.93

Project: **Travis County - Colorado River Corridor Plan**

21/6/12

Date:

Field Personnel:

Kim Nguyen, Arthur Potts

Location: Austin, TX

Well Identification: Ho lunge well

Well Diameter: 5 inches

Screen Interval: Unknown

Pump/Purging Device: Private pump

Sample Time:

0935

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/ISO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

Time	Water Level (ft BIOC)	Purge Rate (gpm/min) (mcm/min)	Volume Purged (gal)	Temperature (°C) +/- 1°C	Specific Conductivity (ms/cm) +/- .5%	pH (SU) +/- 0.1	Turbidity (NTU) +/- 10% <10 NTU or	DO (mg/L)	ORP (mv)	Comments
0916										
0918	31.62	1.25	2.5	19.45	0.783	6.63	0.53	9.36	114.5	pH on Mettler Toledo = 7.35
0920	31.62	1.25	5.0	20.00	0.793	6.78	0.40	7.62	102.0	" " " " " "
0922	31.62	1.25	7.5	20.63	0.807	6.96	0.55	6.73	91.0	" " " " " "
0924	31.62	1.25	10	20.98	0.814	7.10	0.55	6.50	86.1	" " " " " "
0926	31.62	1.25	12.5	21.13	0.817	7.14	0.48	6.44	83.3	" " " " " "
0928	31.62	1.25	15	21.36	0.823	7.21	0.50	6.36	80.0	" " " " " "
0930	31.62	1.25	17.5	21.45	0.826	7.27	0.92	6.33	77.1	" " " " " "
0932	31.62	1.25	20	21.56	0.829	7.31	-	6.29	75.5	" " " " " "
0935										Collect CECF-Holweg - 043 (MS/MSD)

Monitoring Well Purgings Form

NTN Wall 1 - DTW - 28.15, 870C @ 1055 on 2/16/12

2/16/12

Date:

Kim Nguyen, Arthur Potts

Field Personnel:

NTN Well 2

Well identification:

8 inches

Well Diameter:

Unknown

Screen Interval:

Private pump

Pump/Purging Device:

Sh11

Sample Time:

at spigot/well

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7), HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

Time	Water Level (ft BTOC)	Purge Rate (gpm/min) (mL/min)	Volume Purged (gal)	Temperature (°C) ±0.1°C	Specific Conductivity (mS/cm) ±0.5%	pH (SU) ±0.1	Turbidity (NTU) ±10 NTU or DO (mg/L)	ORP (mv)	Comments
1122									
1125	36.98	~15	-	21.52	1.647	7.01	0.16	6.69	Pump On
1128	36.98	~15	-	21.57	1.649	7.18	6.32	7.08	" " " "
1131	36.98	~15	-	21.58	1.652	7.27	0.00	7.20	" " " "
1134	36.98	~15	-	21.59	1.659	7.34	0.06	7.20	" " " "
1137	36.98	~15	-	21.59	1.660	7.36	0.53	7.20	" " " "
1140	36.98	~15	270	21.60	1.663	7.38	4.40	7.18	" " " "
1145	Collect	CRCR-NTN/W2-040	CRCR-NTN/W2-041	at spigot					

Monitoring Well Purging Form

Project: Travis County - Colorado River Corridor Plan

3/27/12

Location: **.Austin, TX**

Kim Nguyen, Arthur Potts

58522 (Edgar)

38.54

4 inches.

56.36

Unknown

$$17.82' \times 0.65 = 11.6 \text{ gal}$$

Private pump

Unknown

1255

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

Time	Water Level (ft BTOC)	(gal/min) Purge Rate (ml/min)	Volume Purged (gal)	Temperature (°C) ± 1°C	Specific Conductivity (mS/cm) ± 5%	pH (SU) ± 0.1	Turbidity (NTU) ≤ 10 NTU or ± 10%	DO (mg/L)	ORP (mV)	Comments
1223										
1225	38.54	1.5	—	22.35	1.266	7.15	1.09	6.37	98.3	Pump On
1227	38.79	1.5	—	22.28	1.264	7.11	0.47	4.99	79.2	*pH measured on Mottler Toledo unit
1229	38.79	1.5	9	22.28	1.265	7.09	0.56	4.41	72.8	Water is clear
1231	38.79	1.5	—	22.28	1.265	7.08	0.36	3.73	61.2	
1233	38.54	1.5	—	22.27	1.265	7.07	0.72	3.48	56.0	
1235	38.54	1.5	18	22.27	1.265	7.06	0.74	3.23	51.4	
1238	38.54	1.5	—	22.28	1.265	7.06	0.90	3.00	46.0	
1241	38.54	1.5	27	22.29	1.266	7.05	1.01	2.82	41.8	
1244	38.54	1.5	—	22.32	1.265	7.05	1.34	2.71	38.5	
1247	38.54	1.5	36	22.29	1.266	7.05	1.34	2.65	37.0	
1255	Collect	CRCF-58522-050								

Well Diameter (in)
Volume (gal/ft)
Volume (L/ft)

2

0.37

0.65

10

3.86

14

5.56

3

9.88

14

154

367

138

138.93

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Monitoring Well Purging Form

Project: Travis County - Colorado River Corridor Plan

3/26/12

Location: **Austin, TX**

Kim Nguyen, Arthur Potts

Well Identification: 5852213 (TX1)

28.40

Well Diameter: 5 inches

36.38

Screen Interval: Unknown

$$7.98' \times 1.02 = 8.14 \text{ gal}$$

Pump/Purging Device: Submersible pump

Pump Intake Depth:

1210

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

3/26/12

Kim Nguyen, Arthur Potts

36.30

60.00

$$23.70' \times 5.87 = 139 \text{ gal}$$

Unknown

1350

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

Analyses/Notes: HCO ₃ /CO ₃ (SM2320B), Total Suspended Solids (SM 2540D)										
Time	Water Level (ft BTOC)	Purge Rate (gal/min)	Volume Purged (gal)	Temperature (°C) +/- 1°C	Specific Conductivity (mS/cm) +/- 5%	pH (SU) +/- 0.1	Turbidity (NTU) <10 NTU or +/- 10%	DO (mg/L)	ORP (mV)	Comments
1333	-	-	-	-	-	-	-	-	-	-
1335	-	320	-	20.05	1.363	6.92	11.3	9.46	2.1	Pump On ; 6 gal/min @ spigot
1337	-	320	-	20.03	1.362	6.90	3.75	7.05	11.3	* pH measured on Mottler Toledo
1339	-	320	-	20.05	1.360	6.90	1.37	6.77	13.6	WL meter is stuck - possibly by pump.
1341	39.50	320	-	20.11	1.357	6.90	1.11	5.99	16.8	WL measured w/ thin tape meter
1343	40.04	320	-	20.12	1.356	6.89	0.84	5.60	18.4	
1345	40.13	320	-	20.13	1.355	7.00	0.89	5.37	20.6	
1347	40.25	320	-	20.09	1.354	7.01	0.82	5.25	22.1	
1349	40.38	320	5120	20.09	1.353	7.01	0.59	5.17	23.2	
1350	Collect CRCP-5852314-050/									

2

10

4.0

4.0

Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date:

3/27/12

Location: **Austin, TX**

Field Personnel:

Kim Nguyen, Arthur Potts

Well Identification: ATF Well 1

Initial Water Level (ft, BTOC):

26.33

Well Diameter: 6 inches

Well Depth (ft, BTOC):

50.58

Screen Interval: Unknown

Well Volume:

$$24.25' \times 10.44 = 253.17 \text{ gal}$$

Pump/Purging Device: Private pump/Garden Hose

Pump Intake Depth:

Unknown

Sample Time:

0940

at spigot

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in)
Volume (gal/ft)
Volume (L/ft)

2
0.10
0.62

3
0.37
1.40

4
0.65
2.46

5
1.02
3.86

6
1.47
5.56

8
2.61
9.88

10
4.08
15.44

30
36.7
138.9

1

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1

Monitoring Well Purging Form

Project: **Travis County - Colorado River Corridor Plan**

Date: 3/26/12

Location: **Austin, TX**

Field Personnel: Kim Nguyen, Arthur Potts

Well Identification: Buchheit well

Initial Water Level (ft. BTOC): 25.33

Well Diameter: 4 inches

Well Depth (ft, BTOC): 30.75

Screen Interval: Unknown

Well Volume: $5.42 \times 0.65 = 3.5 \text{ gal}$

Pump/Purging Device: Private pump/Garden hose

Pump Intake Depth: Unknown

Sample Time:

1520

Analyses/Notes:

Ammonia (EPA 350.1), Cl/F/N/SO₄ (EPA 300.0), Ca/Mg/K/Na (EPA 200.7),
HCO₃/CO₃ (SM2320B), Total Suspended Solids (SM 2540D)

[illegible]

Well Diameter (in)
Volume (gal/ft)
Volume (L/ft)

2

3

4

5

6

2

40

22

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