Wilcox Oil Company Superfund Site
Bristow, Creek County, Oklahoma

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Date: 8/11/2020

# Ground Water Collection Field Form

Well ID: MW-01 Sample ID: MW-01 Sample Time: 1545

Casing diameter/type: 2" PVC
Well location: Wilcox
Weather: Partly Cloudy 83°
Screened interval(s):
Sampling personnel: AS, JS
Total depth:
Sampling method: Low-flow
Initial depth to water (w/o pump): 7.51'
Water level indicator: Heron
Final depth to water (w/o pump): 8.79'
Water quality meter: YSI 556 MPS
Measuring point: **North side of casing**
Pump depth setting:
Pump type/model: Pegasus Altais

| | Δ < 1° C | Δ < 3% | Δ <10% | Δ <10% | Δ < 0.1 pH | Δ < 10 mV | Δ < 0.3 ft | < 1L/min | Δ < 10 NTU | | Parameter Stabilization Limits (3 consecutive readings) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Time** | **Temp (°C)** | **Conductivity (mS/cm) or (µS/cm)** | **DO (%)** | **DO (mg/L)** | **pH** | **ORP (mV)** | **Water Level (feet btoc)** | **Flow Rate (L/min) or (mL/min)** | **Turbidity (NTU)** | **Purge Volume (L) or (mL)** | **Additional Comments** |
| 1507 | 21.88 | 0.446 | 18.4 | 1.54 | 6.49 | -47.7 | 8.26 | 300 | 43.3 | | |
| 1510 | 21.34 | 0.434 | 7.7 | 0.68 | 6.21 | 25.9 | 8.67 | 300 | 34.7 | | |
| 1513 | 21.14 | 0.428 | 6.6 | 0.58 | 6.19 | 25.5 | 9.09 | 300 | 36.9 | | |
| 1516 | 20.97 | 0.425 | 5.4 | 0.48 | 6.18 | 26.8 | 9.28 | 250 | 40.0 | | |
| 1519 | 20.87 | 0.427 | 4.9 | 0.43 | 6.17 | 28.3 | 9.48 | 250 | 39.1 | | |
| 1522 | 21.12 | 0.428 | 4.2 | 0.38 | 6.16 | 30.0 | 9.59 | 250 | 35.30 | | |
| 1525 | 20.96 | 0.429 | 3.8 | 0.34 | 6.12 | 31.5 | 9.70 | 250 | 29.0 | | |
| 1528 | 20.69 | 0.428 | 3.4 | 0.30 | 6.08 | 33.8 | 9.81 | 250 | 22.3 | | |
| 1531 | 20.81 | 0.429 | 3.1 | 0.28 | 6.08 | 34.8 | 9.59 | 250 | 24.5 | | |
| 1534 | 20.56 | 0.429 | 3.0 | 0.27 | 6.08 | 33.3 | 10.0 | 300 | 19.3 | | |
| 1537 | 20.63 | 0.428 | 2.9 | 0.26 | 6.08 | 33.5 | 10.02 | 275 | 19.1 | | |
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Note:
Parameter Stabilization Limits:
(3 consecutive readings) for percent difference type parameters
Percent difference formula =
ABS[((first reading - second reading)/first reading) x 100]
Ex: Readings 12, 16, 15, 13
((12-16)/12)*100 = 33% ((16-15)/16)*100 = 6%
((15-13)/15)*100 = 13% In example, stabilization has not occurred.

KS

Analyses: (circle those collected and indicate the number of containers)

| | | |
|---|---|---|
| VOCs | Metals | Pesticides |
| SVOCS | Hexavalent Chromium | Aroclors |

90103645

Recorded By:

Wilcox Oil Company Superfund Site
Bristow, Creek County, Oklahoma


Date: 8/13/2020

# Ground Water Collection Field Form

Well ID: MW-02 Sample ID: MW-02 Sample Time: 0855

Casing diameter/type: 2" PVC
Well location: Wilcox Oil Superfund Site
Weather: Partly Cloudy 75
Screened interval(s):
Sampling personnel: AS
Total depth:
Sampling method: Low-flow
Initial depth to water (w/o pump): 15.38'
Water level indicator: Heron
Final depth to water (w/o pump): 15.42'
Water quality meter: YSI 556 MPS
Measuring point: **North side of casing**
Pump depth setting:
Pump type/model: Pegasus Alexis

| | Δ < 1° C | Δ < 3% | Δ <10% | Δ <10% | Δ < 0.1 pH | Δ < 10 mV | Δ < 0.3 ft | < 1L/min | Δ < 10 NTU | | Parameter Stabilization Limits (3 consecutive readings) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | Temp (°C) | Conductivity (mS/cm) or (µS/cm) | DO (%) | DO (mg/L) | pH | ORP (mV) | Water Level (feet btoc) | Flow Rate (L/min) or (mL/min) | Turbidity (NTU) | Purge Volume (L) or (mL) | Additional Comments |
| 0830 | 18.37 | 0.374 | 9.0 | 0.83 | 6.22 | -146.3 | 15.60 | 150 | 17.4 | | |
| 0833 | 18.22 | 0.380 | 4.3 | 0.40 | 6.05 | -134.8 | 15.68 | 150 | 17.7 | | |
| 0836 | 18.16 | 0.388 | 3.8 | 0.36 | 6.02 | -134.7 | 15.78 | 150 | 15.5 | | |
| 0839 | 18.18 | 0.390 | 3.3 | 0.31 | 5.99 | -127.5 | 15.83 | 150 | 16.6 | | |
| 0842 | 18.02 | 0.380 | 3.2 | 0.30 | 5.97 | -121.6 | 15.90 | 150 | 14.1 | | |
| 0845 | 18.00 | 0.375 | 3.1 | 0.30 | 5.96 | -113.7 | 15.97 | 150 | 14.2 | | |
| 0848 | 18.09 | 0.365 | 2.9 | 0.27 | 5.93 | -111.3 | 16.02 | 150 | 13.9 | | |
| 0851 | 18.09 | 0.368 | 2.9 | 0.27 | 5.92 | -111.2 | 16.05 | 150 | 14.0 | | |
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| | | | | | | | | | | | * odor present * |
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Note:
Parameter Stabilization Limits:
(3 consecutive readings) for percent difference type parameters
Percent difference formula =
ABS[((first reading - second reading)/first reading) x 100]
Ex: Readings 12, 16, 15, 13
((12-16)/12)*100 = 33% ((16-15)/16)*100 = 6%
((15-13)/15)*100 = 13% In example, stabilization has not occurred.

Analyses: (circle those collected and indicate the number of containers)

| | | |
|---|---|---|
| VOCs | Metals | Pesticides |
| SVOCS | Hexavalent Chromium | Aroclors |

Recorded By: AS

Wilcox Oil Company Superfund Site
Bristow, Creek County, Oklahoma

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# Ground Water Collection Field Form

Well ID: MW-03 Sample ID: MW-03 Sample Time: 0940

Casing diameter/type: 2" PVC
Well location: Wilcox Superfund Site
Weather: Cloudy 83°
Screened interval(s):
Sampling personnel: AS
Total depth:
Sampling method: Low-flow
Initial depth to water (w/o pump): 11.231
Water level indicator: Heron
Final depth to water (w/o pump): 11.681
Water quality meter: YSI 556 MPS
Measuring point: **North side of casing**
Pump depth setting:
Pump type/model: Pegasus Maxis

| | Δ < 1° C | Δ < 3% | Δ <10% | Δ <10% | Δ < 0.1 pH | Δ < 10 mV | Δ < 0.3 ft | < 1L/min | Δ < 10 NTU | | Parameter Stabilization Limits (3 consecutive readings) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | Temp (°C) | Conductivity (mS/cm) or (µS/cm) | DO (%) | DO (mg/L) | pH | ORP (mV) | Water Level (feet btoc) | Flow Rate (L/min) or (mL/min) | Turbidity (NTU) | Purge Volume (L) or (mL) | Additional Comments |
| 0903 | 19.80 | 0.329 | 15.6 | 1.38 | 6.15 | 20.4 | 11.44 | 200 | 1641 AU | | |
| 0906 | 19.27 | 0.344 | 5.5 | 0.50 | 5.96 | 12.0 | 11.58 | 200 | 1340 AU | | |
| 0909 | 19.18 | 0.359 | 4.1 | 0.38 | 5.95 | 10.3 | 11.65 | 200 | 1216 AU | | |
| 0912 | 19.24 | 0.368 | 3.6 | 0.33 | 5.95 | 8.2 | 11.71 | 200 | 1161 AU | | |
| 0915 | 19.13 | 0.386 | 3.0 | 0.28 | 5.95 | 3.4 | 11.78 | 200 | 713 AU | | |
| 0918 | 19.13 | 0.396 | 2.9 | 0.26 | 5.96 | 2.4 | 11.80 | 225 | 163 | | |
| 0921 | 19.05 | 0.408 | 2.8 | 0.25 | 5.98 | -2.4 | 11.84 | 225 | 647 AU | | |
| 0924 | 19.09 | 0.420 | 2.6 | 0.24 | 6.00 | -6.9 | 11.87 | 225 | 78 | | * slight odor |
| 0927 | 18.93 | 0.430 | 2.7 | 0.25 | 6.01 | -6.7 | 11.92 | 225 | 83.7 | | |
| 0930 | 19.02 | 0.435 | 2.5 | 0.23 | 6.02 | -6.5 | 11.93 | 225 | 58.5 | | |
| 0933 | 19.00 | 0.442 | 2.2 | 0.21 | 6.02 | -9.0 | 11.95 | 225 | 55.6 | | *MS/MSD COLLECTED |
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Note:
Parameter Stabilization Limits:
(3 consecutive readings) for percent difference type parameters
Percent difference formula =
ABS[((first reading - second reading)/first reading) x 100]
Ex: Readings 12, 16, 15, 13
((12-16)/12)*100 = 33% ((16-15)/16)*100 = 6%
((15-13)/15)*100 = 13% In example, stabilization has not occurred.

Analyses: (circle those collected and indicate the number of containers)

| | | |
|---|---|---|
| VOCs | Metals | Pesticides |
| SVOCS | Hexavalent Chromium | Aroclors |

Recorded By: AS

Wilcox Oil Company Superfund Site
Bristow, Creek County, Oklahoma

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Date: 8/11/2020

# Ground Water Collection Field Form

Well ID: MW-4 Sample ID: MW-4 Sample Time: 1340

Casing diameter/type: 2" PVC
Well location: wilcox
Weather: Partly Cloudy 83
Screened interval(s):
Sampling personnel: AS, JS
Total depth:
Sampling method: Low Flow
Initial depth to water (w/o pump): 12.78
Water level indicator: Heron
Final depth to water (w/o pump): 14.11
Water quality meter: YSI 556 MPS
Measuring point: **North side of casing**
Pump depth setting:
Pump type/model: Pegasus Alexis

| | Δ < 1° C | Δ < 3% | Δ <10% | Δ <10% | Δ < 0.1 pH | Δ < 10 mV | Δ < 0.3 ft | < 1L/min | Δ < 10 NTU | | Parameter Stabilization Limits (3 consecutive readings) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | Temp (°C) | Conductivity (mS/cm) or (µS/cm) | DO (%) | DO (mg/L) | pH | ORP (mV) | Water Level (feet btoc) | Flow Rate (L/min) or (mL/min) | Turbidity (NTU) | Purge Volume (L) or (mL) | 12.62 12.78 | Additional Comments |
| 1304 | 20.45 | 0.726 | 22.5 | 2.04 | 6.74 | ~~-18.8~~ | 13.16 | 250 | 64.2 | | | |
| 1307 | 18.99 | 0.723 | 6.4 | 0.59 | 6.59 | ~~-11.4~~ | 13.36 | 225 | 52.0 | | 12.62 | Product ≈3" product |
| 1310 | 18.87 | 0.723 | 5.1 | 0.47 | 6.49 | ~~-6.4~~ | 13.67 | 225 | 37.0 | | 12.78 | DTW |
| 1313 | 19.41 | 0.721 | 4.0 | 0.37 | 6.48 | ~~-6.1~~ | 13.76 | 225 | 28.5 | | | |
| 1316 | 19.45 | 0.719 | 3.6 | 0.32 | 6.46 | -126.7 | 13.85 | 225 | 26.7 | | | – strong odor present |
| 1319 | 19.31 | 0.723 | 3.1 | 0.29 | 6.46 | -131.0 | 13.93 | 225 | 26.3 | | | |
| 1322 | 19.38 | 0.720 | 2.9 | 0.27 | 6.45 | -131.1 | 14.02 | 225 | 26.6 | | | |
| 1325 | 19.36 | 0.720 | 2.8 | 0.25 | 6.45 | -131.9 | 14.09 | 225 | 26.5 | | | |
| 1328 | 19.53 | 0.720 | 2.6 | 0.23 | 6.45 | -132.0 | 14.12 | 225 | 26.2 | | | |
| 1331 | 19.33 | 0.721 | 2.5 | 0.23 | 6.44 | -131.9 | 14.22 | 225 | 26.2 | | | |
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Note:
Parameter Stabilization Limits:
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Ex: Readings 12, 16, 15, 13
((12-16)/12)*100 = 33% ((16-15)/16)*100 = 6%
((15-13)/15)*100 = 13% In example, stabilization has not occurred.

Analyses: (circle those collected and indicate the number of containers)

| | | |
|---|---|---|
| VOCs | Metals | Pesticides |
| SVOCS | Hexavalent Chromium | Aroclors |

Recorded By: AS

Wilcox Oil Company Superfund Site
Bristow, Creek County, Oklahoma

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Date: 8/12/2020

# Ground Water Collection Field Form

Well ID: MW-05 Sample ID: MW-05 Sample Time: 1430

Casing diameter/type: 2" PVC
Well location: Wilcox Superfund Site
Weather: Partly Cloudy 85°
Screened interval(s):
Sampling personnel: AS
Total depth:
Sampling method: low-flow
Initial depth to water (w/o pump): 11.40'
Water level indicator: Heron
Final depth to water (w/o pump): 11.96'
Water quality meter: YSI 556 MPS
Measuring point: **North side of casing**
Pump depth setting:
Pump type/model: Pegasus Maxis

| | Δ < 1° C | Δ < 3% | Δ <10% | Δ <10% | Δ < 0.1 pH | Δ < 10 mV | Δ < 0.3 ft | < 1L/min | Δ < 10 NTU | | Parameter Stabilization Limits (3 consecutive readings) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | Temp (°C) | Conductivity (mS/cm) or (µS/cm) | DO (%) | DO (mg/L) | pH | ORP (mV) | Water Level (feet btoc) | Flow Rate (L/min) or (mL/min) | Turbidity (NTU) | Purge Volume (L) or (mL) | Additional Comments |
| 1354 | 19.03 | 0.878 | 7.0 | 0.64 | 6.47 | 36.9 | 11.69 | 250 | 79 | | |
| 1357 | 18.80 | 0.873 | 4.0 | 0.37 | 6.48 | 42.7 | 12.18 | 250 | 109.7 | | |
| 1400 | 18.62 | 0.869 | 3.7 | 0.34 | 6.47 | 42.8 | 12.26 | 250 | 92.2 | | |
| 1403 | 18.53 | 0.867 | 3.2 | 0.30 | 6.47 | 44.0 | 12.30 | 250 | 98 | | |
| 1406 | 18.66 | 0.864 | 2.8 | 0.28 | 6.48 | 44.6 | 12.32 | 250 | 124 | | |
| 1409 | 18.71 | 0.862 | 2.7 | 0.25 | 6.48 | 45.0 | 12.34 | 250 | 621 AV | | |
| 1412 | 18.13 | 0.861 | 2.4 | 0.23 | 6.49 | 46.5 | 12.38 | 250 | 708 AV | | |
| 1415 | 18.58 | 0.859 | 2.3 | 0.21 | 6.48 | 46.2 | 12.39 | 250 | 791 AV | | |
| 1418 | 18.36 | 0.860 | 2.2 | 0.20 | 6.47 | 44.6 | 12.40 | 250 | 804 AV | | |
| 1421 | 18.31 | 0.856 | 2.0 | 0.19 | 6.47 | 46.4 | 12.39 | 250 | 800 AV | | |
| 1424 | 18.27 | 0.855 | 1.9 | 0.18 | 6.47 | 45.6 | 12.39 | 250 | 787 AV | | |
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Note:
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((12-16)/12)*100 = 33% ((16-15)/16)*100 = 6%
((15-13)/15)*100 = 13% In example, stabilization has not occurred.

Analyses: (circle those collected and indicate the number of containers)

| | | |
|---|---|---|
| VOCs | Metals | Pesticides |
| SVOCS | Hexavalent Chromium | Aroclors |

Recorded By: AS

Wilcox Oil Company Superfund Site
Bristow, Creek County, Oklahoma


Date: 8/13/2020

# Ground Water Collection Field Form

Well ID: MW-06 Sample ID: MW-06 Sample Time: 1340

Casing diameter/type: 2" PVC
Well location: Wilcox Oil Superfund Site
Weather: Sunny 85°
Screened interval(s):
Sampling personnel: AS
Total depth:
Sampling method: Low-flow
Initial depth to water (w/o pump): 10.23'
Water level indicator: Heron
Final depth to water (w/o pump): 12.35
Water quality meter: YSI 556 MPS
Measuring point: **North side of casing**
Pump depth setting:
Pump type/model: Pegasus Alexis

| | Δ < 1° C | Δ < 3% | Δ <10% | Δ <10% | Δ < 0.1 pH | Δ < 10 mV | Δ < 0.3 ft | < 1L/min | Δ < 10 NTU | | Parameter Stabilization Limits (3 consecutive readings) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | Temp (°C) | Conductivity (~~mS/cm~~) or (µS/cm) | DO (%) | DO (mg/L) | pH | ORP (mV) | Water Level (feet btoc) | Flow Rate (~~L/min~~) or (~~mL/min~~) | Turbidity (NTU) | Purge Volume (L) or (mL) | Additional Comments |
| 1305 | 22.18 | 0.941 | 66.2 | 5.65 | 6.96 | -62.0 | 12.14 | 200 | 33.5 | | |
| 1308 | 20.14 | 0.935 | 9.4 | 0.84 | 6.23 | 38.7 | 12.31 | 200 | 31.6 | | |
| 1311 | 19.66 | 0.936 | 7.0 | 0.64 | 6.30 | 39.1 | 12.45 | 200 | 23.7 | | |
| 1314 | 19.43 | 0.943 | 5.9 | 0.54 | 6.32 | 43.3 | 12.52 | 200 | 19.4 | | |
| 1317 | 19.49 | 0.941 | 5.7 | 0.52 | 6.30 | 43.6 | 12.59 | 200 | 20.1 | | |
| 1320 | 19.47 | 0.935 | 4.3 | 0.40 | 6.27 | 46.2 | 12.67 | 200 | 18.0 | | |
| 1323 | 19.70 | 0.935 | 4.3 | 0.40 | 6.27 | 46.8 | 12.74 | 200 | 16.9 | | |
| 1326 | 19.64 | 0.932 | 3.8 | 0.34 | 6.27 | 47.4 | 12.79 | 200 | 16.0 | | |
| 1329 | 19.40 | 0.930 | 3.4 | 0.31 | 6.19 | 48.3 | 12.83 | 200 | 13.9 | | |
| 1332 | 19.55 | 0.924 | 3.1 | 0.28 | 6.18 | 47.6 | 12.86 | 200 | 15.0 | | |
| 1335 | 19.11 | 0.935 | 3.1 | 0.28 | 6.23 | 46.0 | 12.90 | 200 | 20.3 | | |
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Note:
Parameter Stabilization Limits:
(3 consecutive readings) for percent difference type parameters
Percent difference formula =
ABS[((first reading - second reading)/first reading) x 100]
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((12-16)/12)*100 = 33% ((16-15)/16)*100 = 6%
((15-13)/15)*100 = 13% In example, stabilization has not occurred.

Analyses: (circle those collected and indicate the number of containers)

| | | |
|---|---|---|
| VOCs | Metals | Pesticides |
| SVOCS | Hexavalent Chromium | Aroclors |

Recorded By: AS