

UNIFORM KENTUCKY WELL CONSTRUCTION RECORD

Use this form to report installation of monitoring or water wells.
Original copy must be submitted to Division of Water within 30 days of completion.
See instructions on reverse of form. Do not write in shaded areas.
Record must be typed or neatly printed or it will be returned to the driller as unacceptable.
One copy to Division of Water, one copy to owner, one copy to driller's files.

23

4. Owner name United States Department of Energy				1. Kentucky Well ID (AKGWA) Number <div style="border: 1px solid black; padding: 2px; display: flex; justify-content: space-between;"> 8 0 0 5 - 6 3 8 6 </div>																																							
5. Owner address 5600 Hobbs Road				2. Owner Well ID # MW-422 Shallow																																							
6. City West Paducah		7. State KY		8. Zip 42053		3. Attachments Required 1. Site plan or sketch map <input type="checkbox"/> 2. Well location On topographic map, OR <input checked="" type="checkbox"/> Obtained by GPS unit <input type="checkbox"/> Conditionally Required 3. Well diagram (monitoring well) <input type="checkbox"/> 4. Coliform analysis (if applicable) <input type="checkbox"/> 5. Signed variance (if applicable) <input type="checkbox"/> Optional 6. Other laboratory analysis report <input type="checkbox"/>																																					
If site name and address differ from owner name and address: 9. Site name Paducah Gaseous Diffusion Plant C-400 Building						31. Work start date Jun 05 2009 32. Work end date Jun 05 2009																																					
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14. Agency Interest (AI) Number 3059		15. Facility type & ID Number <input checked="" type="checkbox"/> CERCLA <input type="checkbox"/> Solid Waste <input type="checkbox"/> Drinking Water <input type="checkbox"/> RCRA <input type="checkbox"/> UST				Please report depths in feet below surface, not as relative elevations 33. Total depth (ft) 75.33 34. Depth to bedrock (ft) _____ 35. Static water level (ft) 50.00 36. Casing height above surface (in) 33.00																																					
16. Owner phone _____			17. Site phone _____			WATER WELLS ONLY 37. Estimated well yield _____ <input type="checkbox"/> gpm <input type="checkbox"/> gph <input type="checkbox"/> gpd 38. Well service _____ # of people served 39. Disinfectant amount _____ 40. Type _____ <input type="checkbox"/> oz <input type="checkbox"/> qts <input type="checkbox"/> cups <input type="checkbox"/> Hypo-chlorite <input type="checkbox"/> lbs <input type="checkbox"/> gal 41. Pitless adapter installed <input type="checkbox"/> Yes <input type="checkbox"/> No 42. Pump installed: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet <input type="checkbox"/> Turbine <input type="checkbox"/> Bailer or bucket <input type="checkbox"/> Hand <input type="checkbox"/> No pump 43. Depth to intake (ft) _____ 44. Apparent quality and odor: APPEARANCE <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Muddy <input type="checkbox"/> Turbid ODOR none slight mod high <input type="checkbox"/> Iron <input type="checkbox"/> Sulfur <input type="checkbox"/> Salt COLIFORM TEST 45. Coliform test type <input type="checkbox"/> fecal <input type="checkbox"/> fecal and total 46. Coliform test results <input type="checkbox"/> 0 or <1.0 <input type="checkbox"/> TNTC <input type="checkbox"/> Confluent or _____ # colonies per 100 ml 47. Date Sampled _____ Day _____ Year _____ 48. Date Analyzed _____ Month _____ Day _____ Year _____																																					
18. USGS topo map Heath		22. Physiographic Region <input type="checkbox"/> Bluegrass <input type="checkbox"/> Ohio River Alluvium <input type="checkbox"/> E. Coal Field <input type="checkbox"/> W. Coal Field <input type="checkbox"/> Miss. Plateau <input checked="" type="checkbox"/> Jackson Purchase																																									
19. County Mccracken		21. Elevation determined by <input type="checkbox"/> GPS <input checked="" type="checkbox"/> Map <input type="checkbox"/> Prior report <input type="checkbox"/> Survey <input type="checkbox"/> Prior well log																																									
20. Surface elevation (ft) 381.00		23. Well Use <input type="checkbox"/> Agriculture <input type="checkbox"/> Geothermal <input type="checkbox"/> Commercial <input type="checkbox"/> Heat pump <input type="checkbox"/> Domestic <input type="checkbox"/> HVAC <input type="checkbox"/> Industrial <input type="checkbox"/> Injection <input checked="" type="checkbox"/> Monitoring / Remed <input type="checkbox"/> Mining <input type="checkbox"/> Public <input type="checkbox"/> Unused																																									
24. Drilling method <input checked="" type="checkbox"/> Auger - HS <input type="checkbox"/> Jet wash <input type="checkbox"/> Auger - SS <input type="checkbox"/> Push/probe <input type="checkbox"/> Auger - bucket <input type="checkbox"/> Rotary - air <input type="checkbox"/> Auger - hand <input type="checkbox"/> Rotary - mud <input type="checkbox"/> Cable tool <input type="checkbox"/> Rotary - reverse <input type="checkbox"/> Core <input type="checkbox"/> Sand point <input type="checkbox"/> Driven casing <input type="checkbox"/> Sonic <input type="checkbox"/> Excavation <input type="checkbox"/> Unknown <input type="checkbox"/> Combined - HS auger & air rotary				25. Well status <input checked="" type="checkbox"/> Active <input type="checkbox"/> Inactive <input type="checkbox"/> Unsuitable for intended use 26. Wellhead <input type="checkbox"/> Flush <input type="checkbox"/> Locking <input checked="" type="checkbox"/> Well cap <input type="checkbox"/> Sanitary seal																																							
27. Well completion: Casing and screens <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>From depth, ft.</th> <th>To depth, ft.</th> <th>Borehole diameter</th> <th>Casing diameter</th> <th>Casing type</th> <th>Screen slot size</th> </tr> </thead> <tbody> <tr> <td>0.0</td> <td>71.0</td> <td>8</td> <td>2</td> <td>PVC</td> <td></td> </tr> <tr> <td>71.0</td> <td>73.0</td> <td>8</td> <td>2</td> <td>PVC screen</td> <td>0.010</td> </tr> <tr> <td>73.0</td> <td>75.33</td> <td>8</td> <td>2</td> <td>PVC</td> <td></td> </tr> </tbody> </table>				From depth, ft.	To depth, ft.	Borehole diameter	Casing diameter	Casing type	Screen slot size	0.0	71.0	8	2	PVC		71.0	73.0	8	2	PVC screen	0.010	73.0	75.33	8	2	PVC		28. Annulus fill and seal <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>From depth, ft.</th> <th>To depth, ft.</th> <th>Material</th> </tr> </thead> <tbody> <tr> <td>1.0</td> <td>55.67</td> <td>Bentonite</td> </tr> <tr> <td>55.67</td> <td>58.50</td> <td>Bentonite pellets</td> </tr> <tr> <td>58.50</td> <td>87.50</td> <td>Sand</td> </tr> </tbody> </table>				From depth, ft.	To depth, ft.	Material	1.0	55.67	Bentonite	55.67	58.50	Bentonite pellets	58.50	87.50	Sand
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49. Comments One of 3 nested wells completed in a common 8-inch borehole as MW-422. 4'X4'X12" concrete pad, 8-inch Sch 40 steel locking cover, 4 steel bollards.						Latitude 37.115996° Longitude 88.810863																																					
50. Affirmation: The work described above was done under my supervision, and this report is true and correct to the best of my knowledge. Note: the driller is not responsible for natural groundwater quality or quantity encountered while drilling or completing this well.						Lat/Long method <input type="checkbox"/> INT <input type="checkbox"/> GPS <input type="checkbox"/> SUR <input type="checkbox"/> REP																																					
Signature of certified driller <i>[Signature]</i>				Date signed Jun 30 2009		Date Received JUL 13 2009																																					
Certification number 0344-0454-00		Drilling company Chase Environmental Group, Inc.				Initials of reviewer _____																																					

JB

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UNIFORM KENTUCKY WELL CONSTRUCTION RECORD

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 See instructions on reverse of form. Do not write in shaded areas.
 Record must be typed or neatly printed or it will be returned to the driller as unacceptable.
 One copy to Division of Water, one copy to owner, one copy to driller's files.

Attach Well Identification Number
 Label Here (if applicable)
 Water wells: yellow labels

23

8002-3019

4. Owner name **United States Department of Energy**

5. Owner address **5600 Hobbs Road** 2. Owner Well ID # **MW-422 Intermed**

6. City **West Paducah** 7. State **KY** 8. Zip **42053**

If site name and address differ from owner name and address:
 9. Site name **Paducah Gaseous Diffusion Plant C-400 Building**

10. Site address **5600 Hobbs Road**

11. City **West Paducah** 12. State **KY** 13. Zip **42053**

14. Agency Interest (AI) Number **3059** 15. Facility type & ID Number
 CERCLA Solid Waste Drinking Water
 RCRA UST

16. Owner phone 17. Site phone

18. USGS topo map **Heath** 22. Physiographic Region
 Bluegrass Ohio River Alluvium
 E. Coal Field W. Coal Field
 Miss. Plateau Jackson Purchase

19. County **Mccracken** 20. Surface elevation (ft) **381.00** 21. Elevation determined by
 GPS Map Prior report
 Survey Prior well log

23. Well Use
 Agriculture Geothermal
 Commercial Heat pump
 Domestic HVAC
 Industrial Injection
 Monitoring / Ambient Monitor / Remed Mining
 Public Unused

24. Drilling method
 Auger - HS Jet wash
 Auger - SS Push/probe
 Auger - bucket Rotary - air
 Auger - hand Rotary - mud
 Cable tool Rotary - reverse
 Core Sand point
 Driven casing Sonic
 Excavation Unknown
 Combined - HS auger & air rotary

25. Well status
 Active
 Inactive
 Unsuitable for intended use

26. Wellhead
 Flush Locking
 Well cap Sanitary seal

27. Well completion: Casing and screens

From depth, ft.	To depth, ft.	Borehole diameter	Casing diameter	Casing type	Screen slot size
0.0	79.0	8	2	PVC	
79.0	81.0	8	2	PVC screen	0.010
81.0	83.33	8	2	PVC	

28. Annulus fill and seal

From depth, ft.	To depth, ft.	Material
1.0	55.67	Bentonite
55.67	58.50	Bentonite pellets
58.50	87.50	Sand

29. Lithologic log (if more space is needed, continue on separate page)

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0.0	17.8	Silt
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43.9	53.7	Silt
53.7	59.0	Fine Sand
59.0	85.5	Sandy Gravel
85.5	87.5	Silt

30. Sketch map

Show well location and distances from permanent structures, septic drain fields, major roads (include name or number) and intersections. INDICATE NORTH WITH AN ARROW.

31. Work start date **Jun 05 2009**

32. Work end date **Jun 05 2009**

33. Total depth (ft) **83.33**

34. Depth to bedrock (ft)

35. Static water level (ft) **50.00**

36. Casing height above surface (in) **33.00**

37. Estimated well yield
 gpm gph gpd

38. Well service # of people served

39. Disinfectant amount 40. Type
 oz qts cups Bleach
 lbs gal Hypo-chlorite

41. Pitless adapter installed Yes No

42. Pump installed:
 Submersible Jet Turbine
 Bailor or bucket Hand No pump

43. Depth to intake (ft)

44. Apparent quality and odor:
 APPEARANCE Clear Cloudy Muddy Turbid
 ODOR none slight mod high
 Iron Sulfur Salt

45. Coliform test type
 fecal fecal and total

46. Coliform test results
 0 or <1.0 TNTC Confluent
 or # colonies per 100 ml

47. Date Sampled Day Year

48. Date Analyzed Month Day Year

49. Comments
 One of 3 nested wells completed in a common 8-inch borehole as MW-422. 4'X4'X12" concrete pad, 8-inch Sch 40 steel locking cover, 4 steel bollards.

50. Affirmation: The work described above was done under my supervision, and this report is true and correct to the best of my knowledge. Note: the driller is not responsible for natural groundwater quality or quantity encountered while drilling or completing this well.

Signature of certified driller *[Signature]* Date signed **Jun 30 2009**

Certification number **0344-0454-00** Drilling company **Chase Environmental Group, Inc.**

Lat/Long method INT GPS SUR REP

Date Received **JUL 13 2009**

Latitude **37.115996** Longitude **88.810863**

JB

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Attach Well Identification Number
 Label Here (if applicable)

23

8002-3018

4. Owner name: United States Department of Energy

5. Owner address: 5600 Hobbs Road

6. City: West Paducah 7. State: KY 8. Zip: 42053

9. Site name: Paducah Gaseous Diffusion Plant C-400 Building

10. Site address: 5600 Hobbs Road

11. City: West Paducah 12. State: KY 13. Zip: 42053

14. Agency Interest (AI) Number: 3059

15. Facility type: CERCLA, RCRA, Solid Waste, UST, Drinking Water

16. Owner phone: [blank] 17. Site phone: [blank]

18. USGS topo map: Heath 19. County: Mccracken

20. Surface elevation (ft): 381.00 21. Elevation determined by: GPS, Map, Survey, Prior report, Prior well log

22. Physiographic Region: Bluegrass, Ohio River Alluvium, E. Coal Field, W. Coal Field, Miss. Plateau, Jackson Purchase

23. Well Use: Agriculture, Commercial, Domestic, Industrial, Monitoring / Ambient Monitor, Public, Geothermal, Heat pump, HVAC, Injection, Mining, Unused

24. Drilling method: Auger - HS, Auger - SS, Auger - bucket, Auger - hand, Cable tool, Core, Driven casing, Excavation, Combined - HS auger & air rotary, Jet wash, Push/probe, Rotary - air, Rotary - mud, Rotary - reverse, Sand point, Sonic, Unknown

25. Well status: Active, Inactive, Unsuitable for intended use

26. Wellhead: Flush, Locking, Well cap, Sanitary seal

27. Well completion: Casing and screens

From depth, ft.	To depth, ft.	Borehole diameter	Casing diameter	Casing type	Screen slot size
0.0	83.0	8	2	PVC	
83.0	85.0	8	2	PVC screen	0.010
85.0	87.33	8	2	PVC	

28. Annulus fill and seal

From depth, ft.	To depth, ft.	Material
1.0	55.67	Bentonite
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58.50	87.50	Sand

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43.9	53.7	Silt
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59.0	85.5	Sandy Gravel
85.5	87.5	Silt

30. Sketch map

31. Work start date: Jun 05 2009 32. Work end date: Jun 05 2009

33. Total depth (ft): 87.33 34. Depth to bedrock (ft): [blank] 35. Static water level (ft): 50.00 36. Casing height above surface (in): 33.00

37. Estimated well yield: [blank] 38. Well service: [blank] # of people served

39. Disinfectant amount: [blank] 40. Type: Bleach, Hypochlorite

41. Pitless adapter installed: [blank] Yes [blank] No

42. Pump installed: Submersible, Bailer or bucket, Jet, Hand, Turbine, No pump

43. Depth to intake (ft): [blank] 44. Apparent quality and odor: Clear, Cloudy, Muddy, Turbid

45. Coliform test type: fecal, fecal and total 46. Coliform test results: 0 or <1.0, TNTC, Confluent

47. Date Sampled: [blank] 48. Date Analyzed: [blank]

49. Comments: One of 3 nested wells completed in a common 8-inch borehole as MW-422. 4'X4'X12" concrete pad, 8-inch Sch 40 steel locking cover, 4 steel bollards.

50. Affirmation: The work described above was done under my supervision, and this report is true and correct to the best of my knowledge.

Signature of certified driller: [Signature] Date signed: Jun 30 2009

Certification number: 0344-0454-00 Drilling company: Chase Environmental Group, Inc.

Date Received: JUL 13 2009

Initials of reviewer: [blank]

JB

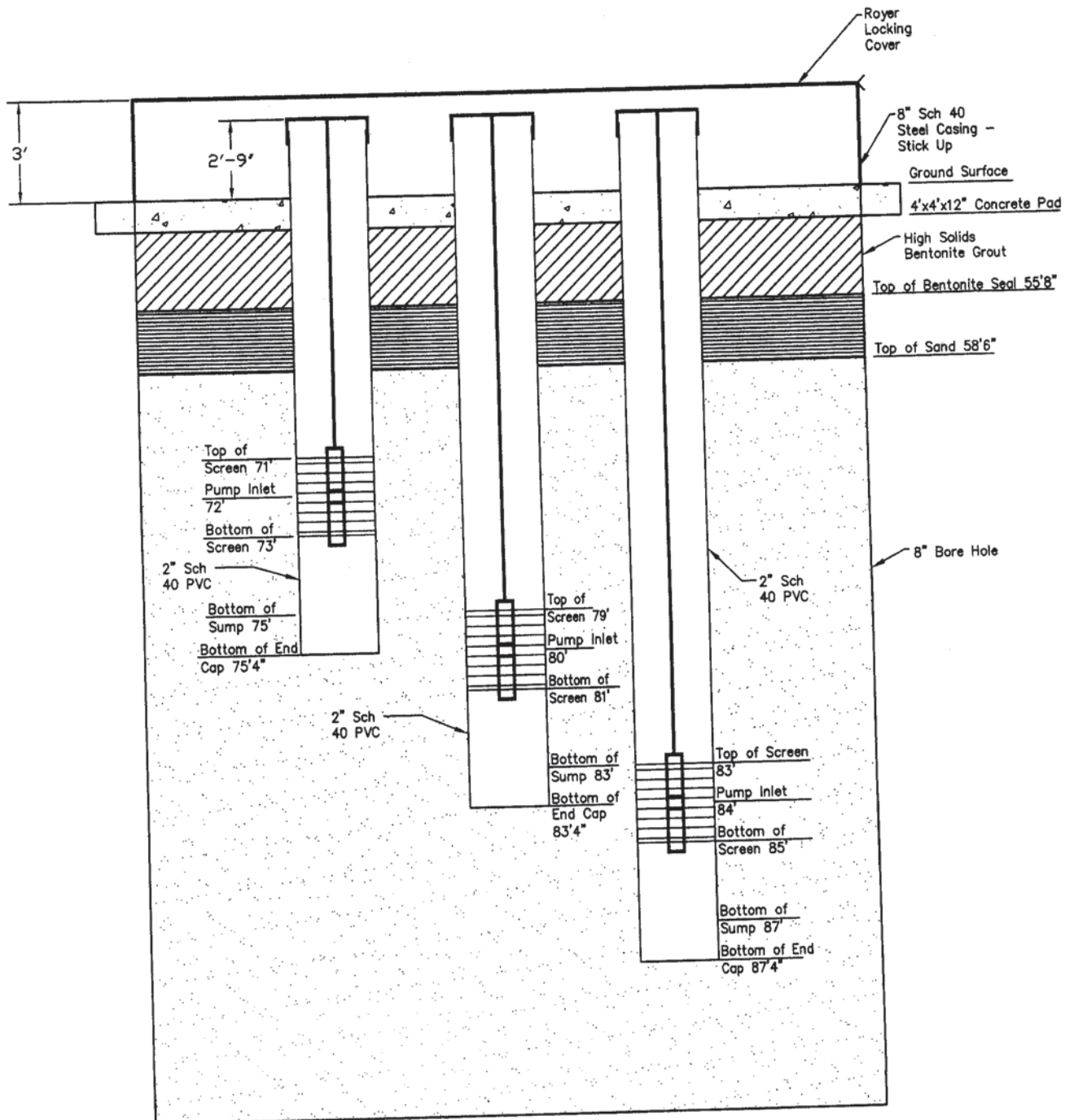
SLC

MONITORING WELL CONSTRUCTION LOG

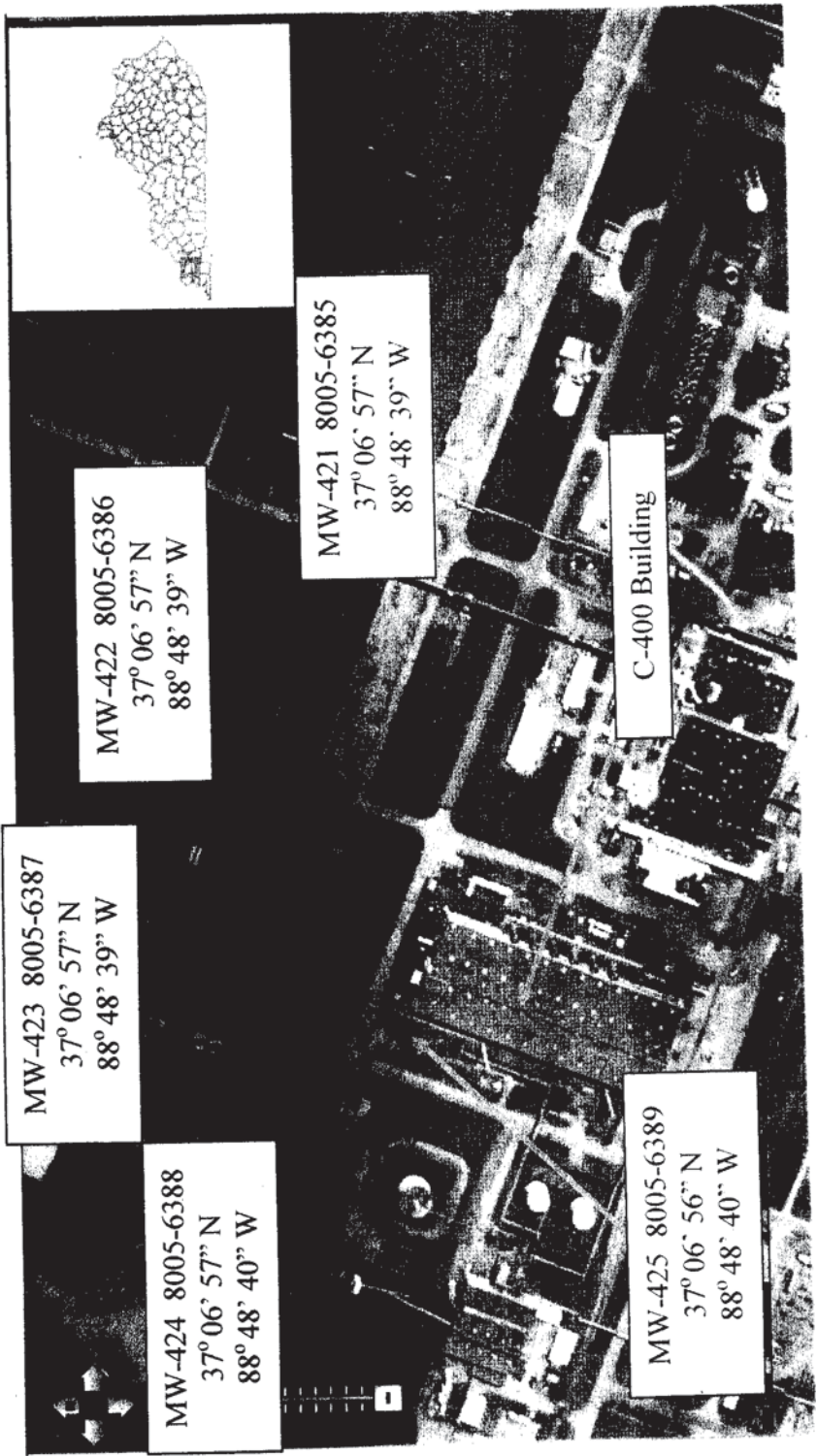
Location Name: Paducah Gaseous Diffusion Plant
 Address: 5600 Hobbs Road
 City/State/Zip: West Paducah, KY 42053

State Assigned # 8005-6386

Facility Assigned # MW-422



Comments: Drawing not to scale.



Title: Site Aerial Photograph
Paducah Gaseous Diffusion Plant - C-400 Building
5600 Hobbs Road, West Paducah, KY

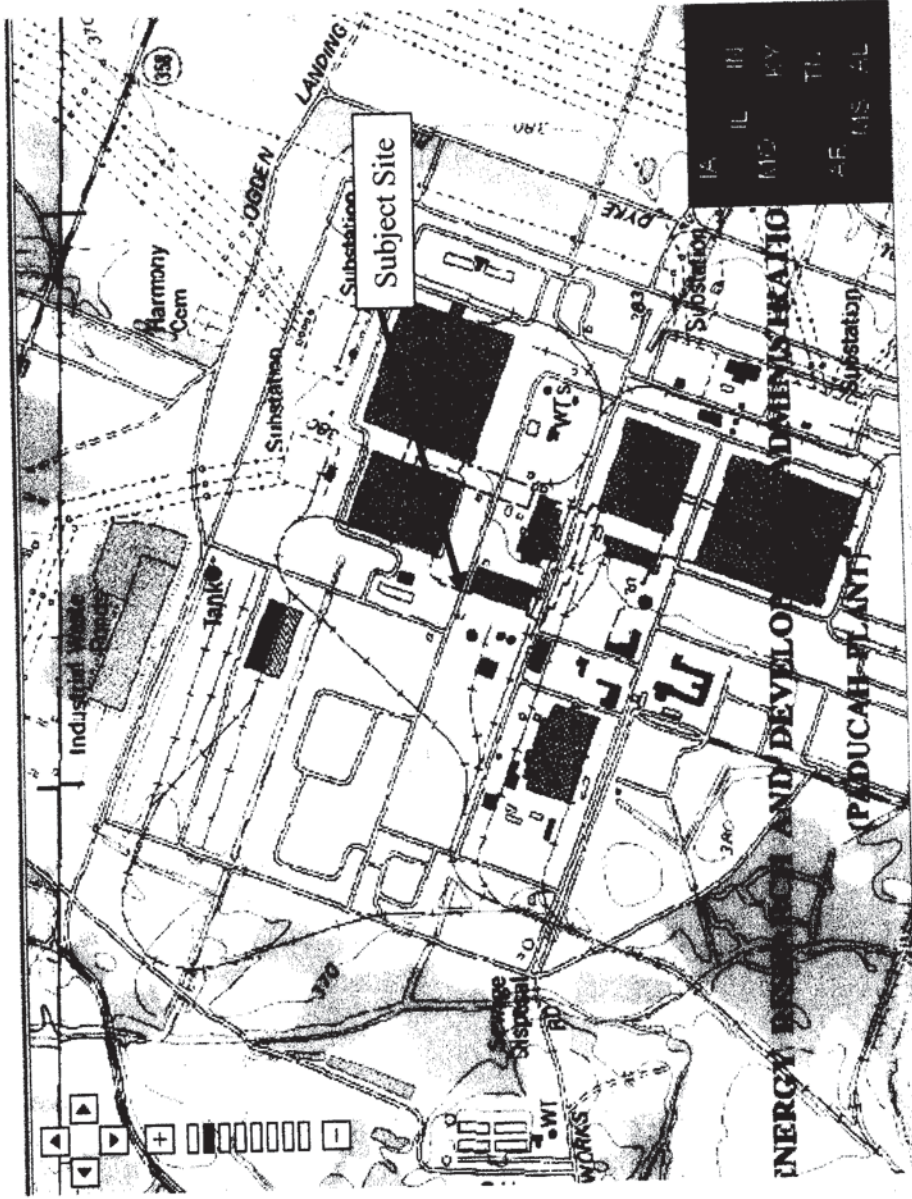
Comments: Approximate Scale: 1" = 150'
Coordinates taken from Google Earth

CHASE ENVIRONMENTAL GROUP, INC.
environmental engineering, remediation & consulting

Drawn By: Todd W. Mills

Date: June 30, 2009





Center: 37.1157°N 88.8113°W
 Elevation at center: 381 feet (116 meters)

Display format:
 Decimal Degrees



Drawn By: Todd W. Mills

Date: June 30, 2009

Title: Site Topographic Map
 Paducah Gaseous Diffusion Plant
 West Paducah, Kentucky

Comments: Scale: 1:24,000
 Source: USGS 7.5' Topographic Series Health Quadrangle