

Water-Data Report 2012

344124086531401 Local number EHR-LUS18

Undefined Aquifer
Mississippian, Upper

Limestone County, AL

LOCATION.--Lat 34°41'24.2", long 86°53'13.6" referenced to North American Datum of 1927, in NW ¼ SW ¼ SE ¼ sec.18, T.4 S., R.3 W., Limestone County, AL, Hydrologic Unit 06030002.

GROUNDWATER RECORDS

**WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

[Measurement method: T, electric tape. Water-
level status: - - , static.]

| Date | Water level | Measurement method | Water- level status |
|-------------|--------------------|---------------------------|----------------------------|
| Mar 26 | 14.52 | T | -- |

Period of record highest: 3.8, May 14, 2009; lowest: 19.05, May 19, 2008

Record available from Dec 7, 1999, to Mar 26, 2012; 16 entries

WATER-QUALITY RECORDS

WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

| Date | Sample start time | Temperature, water, °C (00010) | Barometric pressure, mm Hg (00025) | Specific conductance, water, unfiltered, µS/cm at 25°C (00095) | Specific conductance, water, unfiltered, laboratory, µS/cm at 25°C (90095) | Dissolved oxygen, water, unfiltered, mg/L (00300) | Dissolved oxygen, unfiltered, % saturation (00301) | Caffeine, water, filtered, recoverable, µg/L (50305) | pH, water, unfiltered, field, standard units (00400) | Hydrogen ion, water, unfiltered, calculated, mg/L (00191) |
|------------|-------------------|--------------------------------|------------------------------------|--|--|---|--|--|--|---|
| 03-26-2012 | 1400 | 19.2 | 748 | 150 | 143 | 4.2 | 46 | < .08 | 6.2 | 0.00071 |

| Date | Sample start time | pH, water, unfiltered, laboratory, standard units (00403) | Carbon dioxide, water, unfiltered, mg/L (00405) | Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453) | Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (39086) | Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676) | Ammonia, water, filtered, mg/L as N (00608) | Nitrite, water, filtered, mg/L as N (00613) | Nitrate, water, filtered, mg/L as N (00618) |
|------------|-------------------|---|---|---|---|--|---|---|---|
| 03-26-2012 | 1400 | 6.9 | 69 | 60 | 49 | 2.4 | < .010 | < .0010 | 4.32 |

WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

| Date | Sample start time | Nitrate plus nitrite, water, filtered, mg/L as N (00631) | Ammonia, water, filtered, mg/L as NH ₄ (71846) | Nitrate, water, filtered, mg/L (71851) | Nitrite, water, filtered, mg/L (71856) | Hydrogen sulfide, water, unfiltered, mg/L (71875) | Orthophosphate, water, filtered, mg/L (00660) | Orthophosphate, water, filtered, mg/L as P (00671) | Total nitrogen, water, filtered, analytically determined, mg/L (62854) |
|------------|-------------------|--|---|--|--|---|---|--|--|
| 03-26-2012 | 1400 | 4.32 | < .013 | 19.1 | < .003 | 0.0 | 0.034 | 0.0111 | 4.22 |

344124086531401 Local number EHR-LUS18—Continued

| Date | Sample start time | Organic carbon, water, filtered, mg/L (00681) | Hardness, water, mg/L as CaCO ₃ (00900) | Non-carbonate hardness, water, filtered, mg/L as CaCO ₃ (00904) | Calcium, water, filtered, mg/L (00915) | Magnesium, water, filtered, mg/L (00925) | Sodium, water, filtered, mg/L (00930) | Sodium adsorption ratio, water, number (00931) | Sodium fraction of cations, water, percent in equivalents of major cations (00932) | Potassium, water, filtered, mg/L (00935) |
|------------|-------------------|---|--|--|--|--|---------------------------------------|--|--|--|
| 03-26-2012 | 1400 | 0.30 | 68.8 | 20 | 24.3 | 1.94 | 1.29 | 0.07 | 4 | 0.867 |

| Date | Sample start time | Chloride, water, filtered, mg/L (00940) | Sulfate, water, filtered, mg/L (00945) | Fluoride, water, filtered, mg/L (00950) | Silica, water, filtered, mg/L as SiO ₂ (00955) | Arsenic, water, filtered, µg/L (01000) | Barium, water, filtered, µg/L (01005) | Beryllium, water, filtered, µg/L (01010) | Boron, water, filtered, µg/L (01020) | Cadmium, water, filtered, µg/L (01025) |
|------------|-------------------|---|--|---|---|--|---------------------------------------|--|--------------------------------------|--|
| 03-26-2012 | 1400 | 2.43 | 1.00 | < .04 | 8.18 | 0.079 | 22.2 | < .006 | 4.54 | < .016 |

| Date | Sample start time | Chromium, water, filtered, µg/L (01030) | Cobalt, water, filtered, µg/L (01035) | Copper, water, filtered, µg/L (01040) | Iron, water, filtered, µg/L (01046) | Lead, water, filtered, µg/L (01049) | Manganese, water, filtered, µg/L (01056) | Thallium, water, filtered, µg/L (01057) | Molybdenum, water, filtered, µg/L (01060) | Nickel, water, filtered, µg/L (01065) |
|------------|-------------------|---|---------------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|--|---|---|---------------------------------------|
| 03-26-2012 | 1400 | 1.10 | 0.0391 | < .8 | 8.69 | 0.139 | 0.571 | < .010 | 0.0654 | 0.644 |

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 7 of 8

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

| Date | Sample start time | Silver, water, filtered, µg/L (01075) | Strontium, water, filtered, µg/L (01080) | Vanadium, water, filtered, µg/L (01085) | Zinc, water, filtered, µg/L (01090) | Antimony, water, filtered, µg/L (01095) | Aluminum, water, filtered, µg/L (01106) | Lithium, water, filtered, µg/L (01130) | Selenium, water, filtered, µg/L (01145) | Dissolved solids dried at 180°C, water, filtered, mg/L (70300) |
|------------|-------------------|---------------------------------------|--|---|-------------------------------------|---|---|--|---|--|
| 03-26-2012 | 1400 | < .005 | 29.1 | 0.184 | < 1.4 | < .027 | 16.9 | < .22 | 0.103 | 101 |

344124086531401 Local number EHR-LUS18—Continued

| Date | Sample start time | Dissolved solids, water, filtered, sum of constit- uents, mg/L (70301) | Dissolved solids, water, filtered, tons per acre-foot (70303) | Bromide, water, filtered, mg/L (71870) | Uranium (natural), water, filtered, µg/L (22703) |
|-------------|------------------------------|---|--|---|---|
| 03-26-2012 | 1400 | 89 | 0.14 | 0.0174 | 0.125 |

PESTICIDE ANALYSES
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

[µg/L, micrograms per liter; --, no data; <, less than; E, estimated]

| Date | Terbuthyl- azine, water, filtered, recover- able, µg/L (04022) | Propa- chlor, water, filtered, recover- able, µg/L (04024) | Hexa- zinone, water, filtered, recover- able, µg/L (04025) | Bromacil, water, filtered, recover- able, µg/L (04029) | Cycloate, water, filtered, recover- able, µg/L (04031) | Terbacil, water, filtered, recover- able, µg/L (04032) | Di- phenamid, water, filtered, recover- able, µg/L (04033) | Simazine, water, filtered, recover- able, µg/L (04035) | Prometryn, water, filtered, recover- able, µg/L (04036) | Prometon, water, filtered, recover- able, µg/L (04037) |
|------------|---|---|---|--|--|--|---|--|---|--|
| 03-26-2012 | < .008 | -- | < .012 | < .06 | < .04 | < .046 | < .04 | 0.0101 | 0.0036 | 0.0203 |

| Date | 2-Chloro-6- ethyl- amino-4- amino-s- triazine, water, filtered, recover- able, µg/L (04038) | 2-Chloro-4- isopropyl- amino-6- amino-s- triazine, water, filtered, recover- able, µg/L (04040) | Cyanazine, water, filtered, recover- able, µg/L (04041) | Fonofos, water, filtered, recover- able, µg/L (04095) | Dicamba, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (38442) | Linuron, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (38478) | MCPA, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (38482) | MCPB, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (38487) | Methio- carb, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (38501) | Propoxur, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (38538) |
|------------|---|---|---|---|--|--|---|---|--|---|
| 03-26-2012 | 0.047 | E .156 | < .022 | < .0048 | < .06 | < .04 | < .04 | < .2 | < .04 | < .06 |

| Date | Siduron, water, filtered, recover- able, µg/L (38548) | Bentazon, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (38711) | 2,4-DB, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (38746) | Fluome- turon, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (38811) | Oxamyl, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (38866) | Chlor- pyrifos, water, filtered, recover- able, µg/L (38933) | Dieldrin, water, filtered, recover- able, µg/L (39381) | Metola- chlor, water, filtered, recover- able, µg/L (39415) | Malathion, water, filtered, recover- able, µg/L (39532) | Diazinon, water, filtered, recover- able, µg/L (39572) |
|------------|---|---|---|---|---|---|--|--|---|--|
| 03-26-2012 | < .04 | < .06 | < .02 | 0.125 | < .12 | < .0036 | < .008 | 0.0117 | < .016 | < .0060 |

344124086531401 Local number EHR-LUS18—Continued

PESTICIDE ANALYSES
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
 [µg/L, micrograms per liter; -, no data; <, less than; E, estimated]

| Date | Atrazine, water, filtered, recover- able, µg/L (39632) | 2,4-D, water, filtered, recover- able, µg/L (39732) | Alachlor, water, filtered, recover- able, µg/L (46342) | Triclopyr, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49235) | Propham, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49236) | Aceto- chlor, water, filtered, recover- able, µg/L (49260) | Picloram, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49291) | Oryzalin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49292) | Nor- flurazon, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49293) | Neburon, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49294) |
|------------|--|---|--|--|--|---|---|---|---|--|
| 03-26-2012 | 0.0362 | < .06 | < .008 | < .08 | < .040 | < .010 | < .10 | < .04 | 0.023 | < .02 |

| Date | Methomyl, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49296) | Fenuron, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49297) | Diuron, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49300) | Dinoseb, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49301) | Dichlor- prop, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49302) | Dacthal monoacid, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49304) | Clopyralid, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49305) | 3-Hydroxy carbo- furan, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49308) | Carbo- furan, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49309) | Carbaryl, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49310) |
|------------|---|--|---|--|---|--|---|---|--|---|
| 03-26-2012 | < .12 | < .06 | 0.162 | < .04 | < .04 | < .04 | < .14 | < .06 | < .04 | < .04 |

| Date | Brom- oxynil, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49311) | Aldicarb, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49312) | Aldicarb sulfone, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49313) | Aldicarb sulfoxide, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49314) | Acifluor- fen, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (49315) | Bendio- carb, water, filtered, recover- able, µg/L (50299) | Benomyl, water, filtered, recover- able, µg/L (50300) | Chlori- muron- ethyl, water, filtered, recover- able, µg/L (50306) | Sulfo- meturon- methyl, water, filtered, recover- able, µg/L (50337) | 2-Hydroxy- 4-iso- propyl- amino-6- ethyl- amino-s- triazine, water, filtered, recover- able, µg/L (50355) |
|------------|--|---|--|--|--|---|---|--|--|---|
| 03-26-2012 | < .12 | < .12 | < .08 | < .08 | < .08 | < .04 | < .06 | < .08 | < .06 | 0.015 |

344124086531401 Local number EHR-LUS18—Continued

PESTICIDE ANALYSES
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
 [µg/L, micrograms per liter; --, no data; <, less than; E, estimated]

| Date | Imazaquin, water, filtered, recover- able, µg/L (50356) | Metalaxyl, water, filtered, recover- able, µg/L (50359) | Nico- sulfuron, water, filtered, recover- able, µg/L (50364) | Imaze- thapyr, water, filtered, recover- able, µg/L (50407) | 2,4-D methyl ester, water, filtered, recover- able, µg/L (50470) | 2,4-D plus 2,4-D methyl ester, sum on a molar basis, microgram s per liter as 2,4-D (66496) | Propicon- azole, water, filtered, recover- able, µg/L (50471) | Chlor- amben methyl ester, water, filtered, recover- able, µg/L (61188) | N-(4- Chloro- phenyl)- N'-methyl- urea, water, filtered, recover- able, µg/L (61692) | Ben- sulfuron- methyl, water, filtered, recover- able, µg/L (61693) |
|------------|---|---|---|--|--|--|--|--|--|---|
| 03-26-2012 | < .10 | < .04 | < .32 | < .08 | < .2 | < .06 | < .038 | < .20 | < .10 | < .06 |

| Date | Flumet- sulam, water, filtered, recover- able, µg/L (61694) | Imi- dacloprid, water, filtered, recover- able, µg/L (61695) | Metsul- furon- methyl, water, filtered, recover- able, µg/L (61697) | Metri- buzin, water, filtered, recover- able, µg/L (82630) | 2,6- Diethyl- aniline, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82660) | Trifluralin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82661) | Phorate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82664) | Methyl parathion, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82667) | EPTC, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82668) | Tebu- thiuron, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82670) |
|------------|--|---|---|---|--|--|--|--|---|---|
| 03-26-2012 | < .08 | < .08 | < .14 | < .012 | < .0060 | < .018 | < .020 | < .008 | < .0056 | < .028 |

| Date | Molinate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82671) | Ethoprop, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82672) | Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82673) | Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82674) | Terbufos, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82675) | Propyz- amide, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82676) | Disulfoton, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82677) | Propanil, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82679) | Carbaryl, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82680) |
|------------|---|---|---|--|---|---|---|---|---|
| 03-26-2012 | < .0040 | < .016 | < .014 | < .060 | < .018 | < .0036 | < .040 | < .010 | < .06 |

344124086531401 Local number EHR-LUS18—Continued

PESTICIDE ANALYSES
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

[µg/L, micrograms per liter; --, no data; <, less than; E, estimated]

| Date | Thioben-carb, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82681) | DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82682) | Pendi-methalin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82683) | Propargite, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82685) | Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82686) | cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82687) | 1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (49295) | 2-Chloro-2',6'-diethyl-acetanilide, water, filtered, recoverable, µg/L (61618) | 2-Ethyl-6-methyl-aniline, water, filtered, recoverable, µg/L (61620) | 3,4-Dichloro-aniline, water, filtered, recoverable, µg/L (61625) |
|------------|--|--|--|--|---|--|--|--|--|--|
| 03-26-2012 | < .016 | < .0076 | < .012 | < .020 | < .12 | < .010 | < .036 | < .010 | < .010 | E .0103 |

| Date | 3,5-Di-chloro-aniline, water, filtered, recoverable, µg/L (61627) | 4-Chloro-2-methyl-phenol, water, filtered, recoverable, µg/L (61633) | alpha-Endo-sulfan, water, filtered, recoverable, µg/L (34362) | Azinphos-methyl oxygen analog, water, filtered, recoverable, µg/L (61635) | Chlorpyrifos oxygen analog, water, filtered, recoverable, µg/L (61636) | cis-Propicon-azole, water, filtered, recoverable, µg/L (79846) | Cyfluthrin, water, filtered, recoverable, µg/L (61585) | lambda-Cyhalo-thrin, water, filtered, recoverable, µg/L (61595) | Cyper-methrin, water, filtered, recoverable, µg/L (61586) | Desulfinyl-fipronil, water, filtered, recoverable, µg/L (62170) |
|------------|---|--|---|---|--|--|--|---|---|---|
| 03-26-2012 | < .006 | < .008 | < .006 | < .042 | < .08 | < .008 | < .016 | < .010 | < .020 | < .012 |

| Date | Dicroto-phos, water, filtered, recoverable, µg/L (38454) | Dimetho-ate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82662) | Disulfoton sulfone, water, filtered, recoverable, µg/L (61640) | Endosulfan sulfate, water, filtered, recoverable, µg/L (61590) | Ethion monoxon, water, filtered, recoverable, µg/L (61644) | Ethion, water, filtered, recoverable, µg/L (82346) | Fenami-phos sulfone, water, filtered, recoverable, µg/L (61645) | Fenami-phos sulfoxide, water, filtered, recoverable, µg/L (61646) | Fenami-phos, water, filtered, recoverable, µg/L (61591) | Desulfinyl-fipronil amide, water, filtered, recoverable, µg/L (62169) |
|------------|--|---|--|--|--|--|---|---|---|---|
| 03-26-2012 | < .08 | < .010 | < .014 | < .016 | < .021 | < .010 | < .054 | < .08 | < .030 | < .029 |

344124086531401 Local number EHR-LUS18—Continued

PESTICIDE ANALYSES
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
 [µg/L, micrograms per liter; --, no data; <, less than; E, estimated]

| Date | Fipronil sulfide, water, filtered, recoverable, µg/L (62167) | Fipronil sulfone, water, filtered, recoverable, µg/L (62168) | Fipronil, water, filtered, recoverable, µg/L (62166) | Iprodione, water, filtered, recoverable, µg/L (61593) | Isofen-phos, water, filtered, recoverable, µg/L (61594) | Malaoxon, water, filtered, recoverable, µg/L (61652) | Metalaxyl, water, filtered, recoverable, µg/L (61596) | Methidathion, water, filtered, recoverable, µg/L (61598) | Methyl paraoxon, water, filtered, recoverable, µg/L (61664) | Myclobutanil, water, filtered, recoverable, µg/L (61599) |
|------------|--|--|--|---|---|--|---|--|---|--|
| 03-26-2012 | < .012 | < .024 | < .018 | < .014 | < .008 | < .022 | < .014 | < .012 | < .014 | < .010 |

| Date | Oxy-fluorfen, water, filtered, recoverable, µg/L (61600) | Phorate oxygen analog, water, filtered, recoverable, µg/L (61666) | Phosmet oxygen analog, water, filtered, recoverable, µg/L (61668) | Phosmet, water, filtered, recoverable, µg/L (61601) | Tefluthrin, water, filtered, recoverable, µg/L (61606) | Terbufos oxygen analog sulfone, water, filtered, recoverable, µg/L (61674) | trans-Propiconazole, water, filtered, recoverable, µg/L (79847) | Tribuphos, water, filtered, recoverable, µg/L (61610) | Dichlorvos, water, filtered, recoverable, µg/L (38775) |
|------------|--|---|---|---|--|--|---|---|--|
| 03-26-2012 | < .010 | < .027 | < .0511 | < .08 | < .014 | < .045 | < .018 | < .018 | < .04 |