

## WATER WELL RECORD

## Form WWC-5

Division of Water Resources App. No. 

<b>1 LOCATION OF WATER WELL:</b> County: Cherokee		Fraction NW ¼ SW ¼ SW ¼ SE ¼	Section Number 34	Township No. T 31 S	Range Number R 24 <input checked="" type="checkbox"/> E <input type="checkbox"/> W																																																																		
Street/Rural Address of Well Location; if unknown, distance & direction from nearest town or intersection: If at owner's address, check here <input type="checkbox"/> 307 S. Lincoln Street, Weir, KS		<b>Global Positioning System (GPS) information:</b> Latitude: 37.3074722 (in decimal degrees) Longitude: -94.7740555 (in decimal degrees) Elevation: 96.89 arbitrary onsite benchmark used Datum: <input checked="" type="checkbox"/> WGS 84, <input type="checkbox"/> NAD 83, <input type="checkbox"/> NAD 27 Collection Method: <input checked="" type="checkbox"/> GPS unit (Make/Model: Garmin/Etrex) <input type="checkbox"/> Digital Map/Photo, <input type="checkbox"/> Topographic Map, <input type="checkbox"/> Land Survey Est. Accuracy: <input type="checkbox"/> <3 m, <input type="checkbox"/> 3-5 m, <input checked="" type="checkbox"/> 5-15 m, <input type="checkbox"/> >15 m																																																																					
<b>2 WATER WELL OWNER:</b> MFA Incorporated RR#, Street Address, Box #: 201 Rav Young Drive City, State, ZIP Code : Columbia, MO 65201																																																																							
<b>3 LOCATE WELL WITH AN "X" IN SECTION BOX:</b> <div style="text-align: center;">N</div> <table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">NW</td> <td style="padding: 5px;">NE</td> </tr> <tr> <td style="padding: 5px;">SW</td> <td style="padding: 5px;">SE</td> </tr> </table> <div style="text-align: center;">S</div> <div style="text-align: center;">-----1 mile-----</div>		NW	NE	SW	SE	<b>4 DEPTH OF COMPLETED WELL</b> 10.2 ft. Depth(s) Groundwater Encountered (1) NA ft. (2) ft. (3) ft. WELL'S STATIC WATER LEVEL NA ft. below land surface measured on mo/day/yr. 2/9/2010. Pump test data: Well water was NA ft. after hours pumping gpm EST. YIELD NA gpm. Well water was ft. after hours pumping gpm Bore Hole Diameter 8.25 in. to 10.2 ft., and in. to ft. WELL WATER TO BE USED AS: <input type="checkbox"/> Public water supply <input type="checkbox"/> Geothermal <input type="checkbox"/> Injection well <input type="checkbox"/> Domestic <input type="checkbox"/> Feedlot <input type="checkbox"/> Oil field water supply <input type="checkbox"/> Dewatering <input type="checkbox"/> Other (Specify below) <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="checkbox"/> Domestic-lawn & garden <input checked="" type="checkbox"/> Monitoring well (NAW) 3 Was a chemical/bacteriological sample submitted to Department? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, mo/day/yr sample was submitted NA Water well disinfected? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																																																	
NW	NE																																																																						
SW	SE																																																																						
<b>5 TYPE OF CASING USED:</b> <input type="checkbox"/> Steel <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other <b>CASING JOINTS:</b> <input type="checkbox"/> Glued <input type="checkbox"/> Clamped <input type="checkbox"/> Welded <input checked="" type="checkbox"/> Threaded Casing diameter 2 in. to 10.2 ft., Diameter in. to ft., Diameter in. to ft. Casing height above land surface 0 in., Weight lbs./ft., Wall thickness or gauge No. <b>TYPE OF SCREEN OR PERFORATION MATERIAL:</b> <input type="checkbox"/> Steel <input type="checkbox"/> Stainless Steel <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other (Specify) <input type="checkbox"/> Brass <input type="checkbox"/> Galvanized Steel <input type="checkbox"/> None used (open hole) <b>SCREEN OR PERFORATION OPENINGS ARE:</b> <input type="checkbox"/> Continuous slot <input type="checkbox"/> Mill slot <input type="checkbox"/> Gauze wrapped <input type="checkbox"/> Torch cut <input type="checkbox"/> Drilled holes <input type="checkbox"/> None (open hole) <input type="checkbox"/> Louvered shutter <input type="checkbox"/> Key punched <input type="checkbox"/> Wire wrapped <input type="checkbox"/> Saw cut <input type="checkbox"/> Other (specify) <b>SCREEN-PERFORATED INTERVALS:</b> From 5.2 ft. to 10.2 ft., From ft. to ft., From ft. to ft. <b>GRAVEL PACK INTERVALS:</b> From ft. to ft., From ft. to ft., From ft. to ft.																																																																							
<b>6 GROUT MATERIAL:</b> <input type="checkbox"/> Neat cement <input type="checkbox"/> Cement grout <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Other Grout Intervals: From 0.5 ft. to 4.2 ft., From ft. to ft., From ft. to ft. What is the nearest source of possible contamination: <input type="checkbox"/> Septic tank <input type="checkbox"/> Lateral lines <input type="checkbox"/> Pit privy <input type="checkbox"/> Livestock pens <input type="checkbox"/> Insecticide storage <input type="checkbox"/> Other (specify below) <input type="checkbox"/> Sewer lines <input type="checkbox"/> Cesspool <input type="checkbox"/> Sewage lagoon <input type="checkbox"/> Fuel storage <input type="checkbox"/> Abandoned water well <input type="checkbox"/> Watertight sewer lines <input type="checkbox"/> Seepage pit <input type="checkbox"/> Feedyard <input checked="" type="checkbox"/> Fertilizer storage <input type="checkbox"/> Oil well/gas well Direction from well northeast Distance from well 20 feet																																																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">FROM</th> <th style="width: 10%;">TO</th> <th style="width: 40%;">LITHOLOGIC LOG</th> <th style="width: 10%;">FROM</th> <th style="width: 10%;">TO</th> <th style="width: 20%;">LITHO. LOG (cont.) or PLUGGING INTERVALS</th> </tr> </thead> <tbody> <tr> <td>0'</td> <td>0.5'</td> <td>Concrete</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0.5'</td> <td>2'</td> <td>gravel</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2'</td> <td>8'</td> <td>gray clay w/ orange-brown mottling</td> <td></td> <td></td> <td></td> </tr> <tr> <td>8'</td> <td>10.2'</td> <td>gray clay</td> <td></td> <td></td> <td></td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>						FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS	0'	0.5'	Concrete				0.5'	2'	gravel				2'	8'	gray clay w/ orange-brown mottling				8'	10.2'	gray clay																																							
FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS																																																																		
0'	0.5'	Concrete																																																																					
0.5'	2'	gravel																																																																					
2'	8'	gray clay w/ orange-brown mottling																																																																					
8'	10.2'	gray clay																																																																					
<b>7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION:</b> This water well was <input checked="" type="checkbox"/> constructed, <input type="checkbox"/> reconstructed, or <input type="checkbox"/> plugged under my jurisdiction and was completed on (mo/day/year) 2/9/2010 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 772 This Water Well Record was completed on (mo/day/year) 2/15/2010 under the business name of Barker Lemar Engineering Consultants by (signature) <i>Leck Ellis</i>																																																																							
<b>INSTRUCTIONS:</b> Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks and check the correct answers. Send three copies (white, blue, pink) to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-5522. Send one copy to WATER WELL OWNER and retain one for your records. Include fee of \$5.00 for each constructed well. Visit us at <a href="http://www.kdheks.gov/waterwell/index.html">http://www.kdheks.gov/waterwell/index.html</a> .																																																																							

# SOIL BORING LOG & MONITORING WELL CONSTRUCTION DIAGRAM

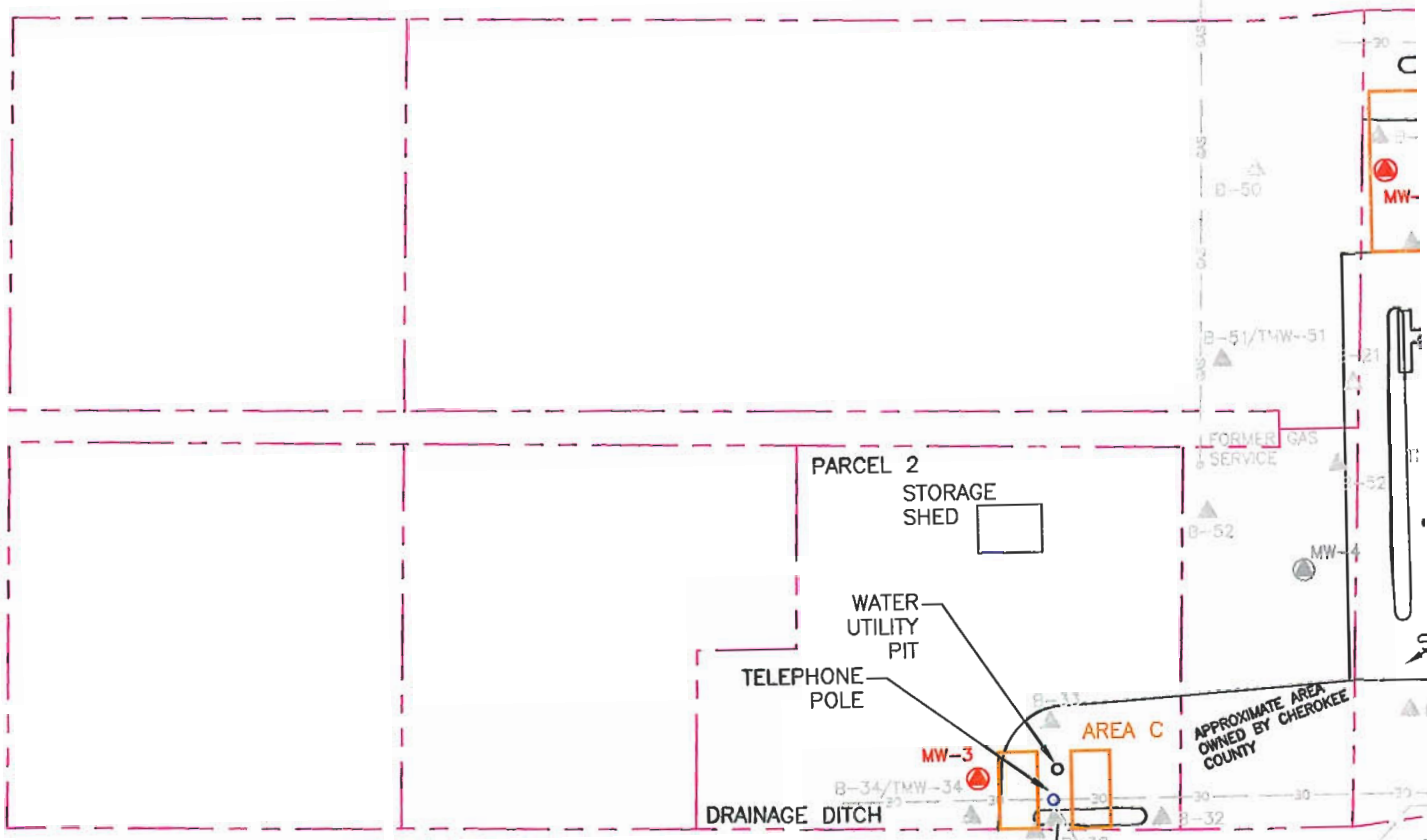
Boring / Well Number: <b>MW-3 (0144216)</b>		Facility <b>Former Cash Grain</b> Name: <b>- MFA Weir</b>		Facility <b>307 S. Lincoln</b> Street Address: <b>Street, Weir, KS</b>		
Boring Depth (ft) X Diameter (in): <b>10.2' x 8.25"</b>				Drilling Method: <b>Hollow Stem Auger</b>		
Well Contractor Name: <b>Sid Juwarker</b> Registration Number: <b>772</b>				Logged By: <b>Leah Calvert</b>		
Ground Surface Elevation (ASL): <b>97.49</b>			Top of Casing Elevation (ASL): <b>96.89</b>			
Date: <b>2/9/2010</b> Start Time: <b>11:00 am</b>		Date: <b>2/9/2010</b> End Time: <b>11:50 am</b>		UST Number		
				LUST Number		
Depth Feet	Well Construction Details	Blow Count if applicable	Sample No.	Type*	PID/FID Reading	Rock Formations, Soil Color and Classifications, Observations (moisture, odor, etc.) First column for USCS
0						CL 0 - 2' dark brown silty clay
1.25						
2.5						
3.75						
5						
6.25						CL 2 - 8' gray clay with orange-brown mottling, mottling decreases with depth, moisture decreases with depth
7.5						
8.75						
10						CL 8 -10.2' gray clay , trace silt, very dry, trace orange-brown mottling
11.25						Bottom of Boring at 10.2 feet
12.5						
13.75						
15						

\* SS (split spoon) HS (hollow stem auger) HA (hand auger)

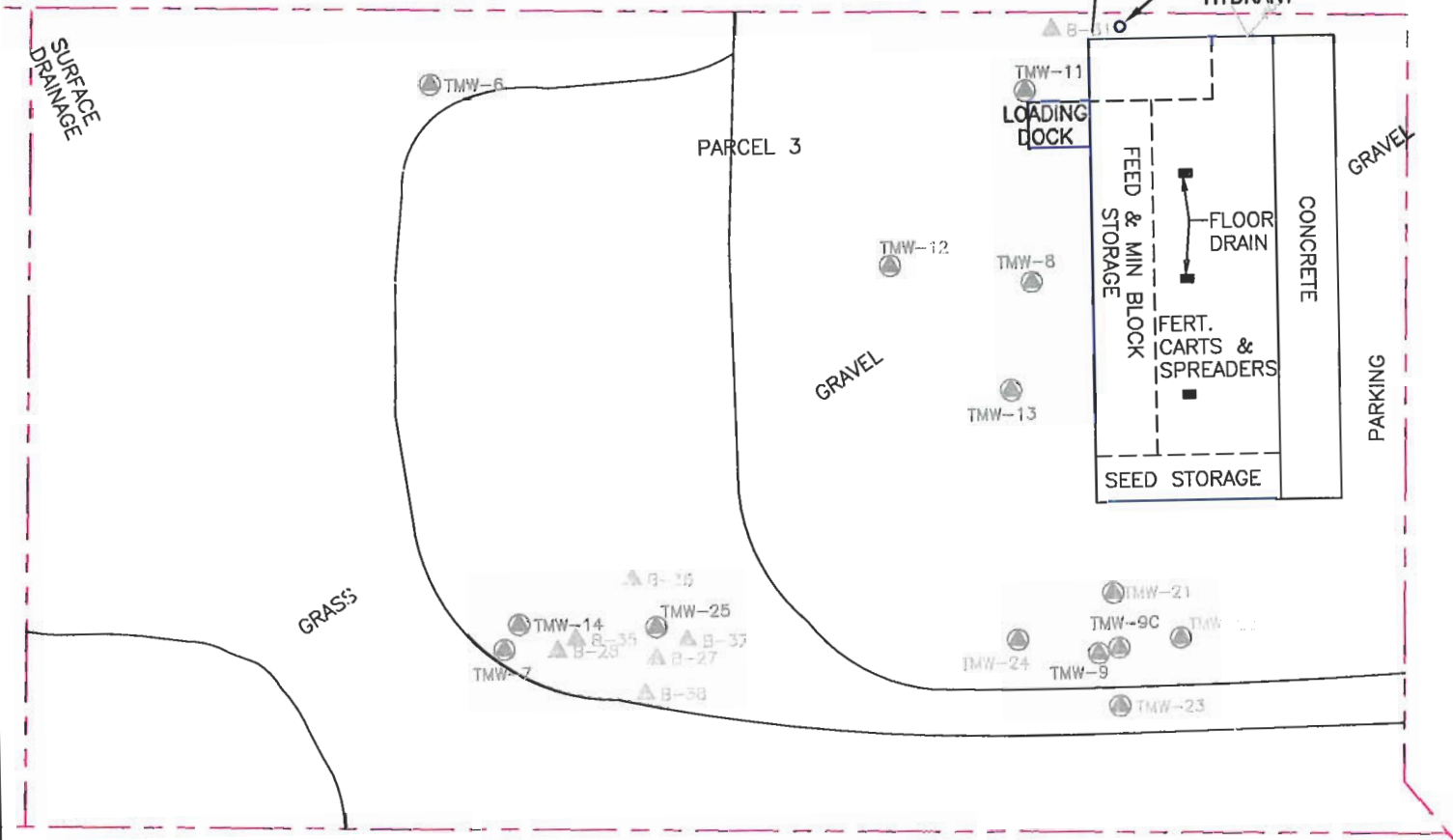
Observations	Date:	<b>2/9/2010</b>				
Water Levels (ASL)	Level:					
Static Water Level Symbol	Time:	<b>No Water</b>				

OAK STREET

VOGEL AVENUE



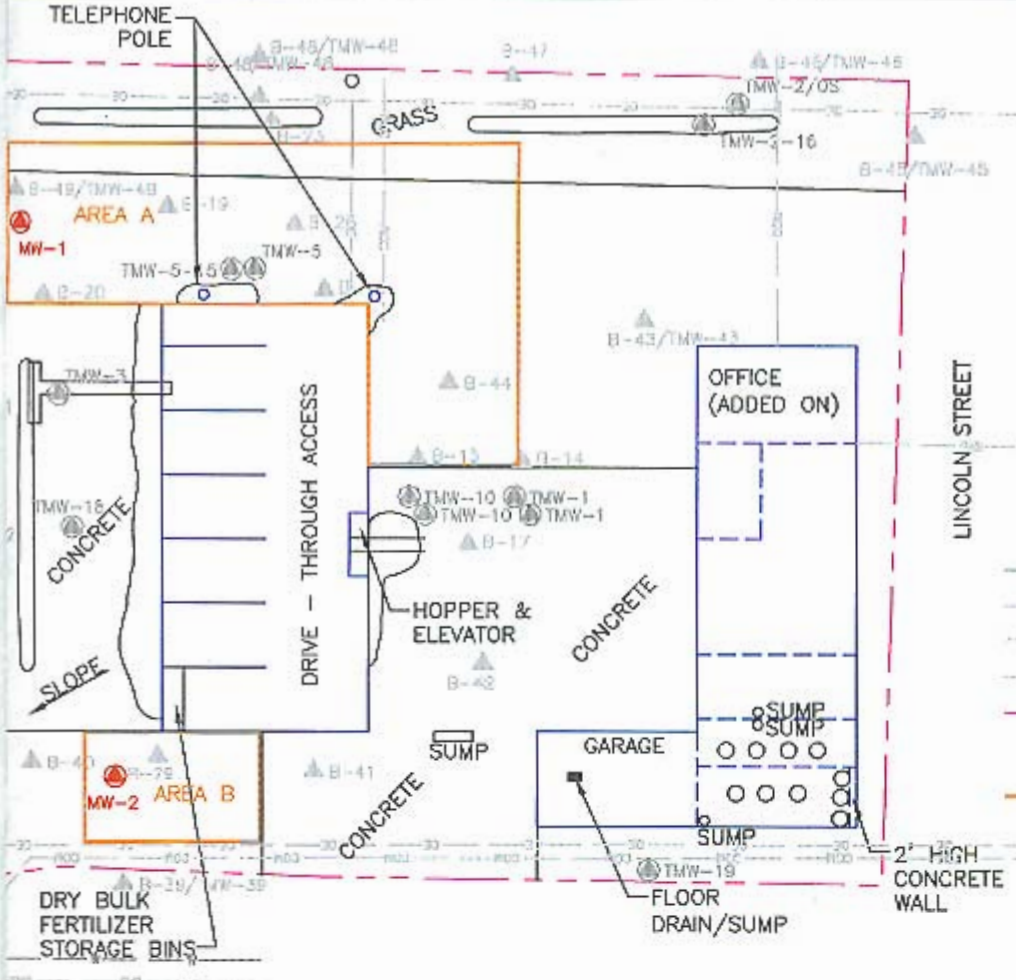
SYCAMORE STREET



TELEPHONE  
POLE

SCALE

0 60 FT.



# LEGEND

- APPROXIMATE MONITORING WELL LOCATION
- APPROXIMATE TEMPORARY MONITORING WELL LOCATION
- SOIL BORING LOCATION
- WATER LINE
- OVERHEAD ELEC LINE
- COMMUNICATIONS/TELEPHONE
- NATURAL GAS LINE
- PROPERTY BOUNDARY
- BUILDING
- EXCAVATION BOUNDARY



UPDATED SITE MAP  
FORMER CASH GRAIN  
307 S. LINCOLN, WEIR, KS  
PROJECT NO. MFAIN WE006  
FEBRUARY 2010

**BARKER LEMAR**

ENGINEERING CONSULTANTS

1801 Industrial Circle - West Des Moines, Iowa - 50265  
Phone: 515.256.8814 - Fax: 515.256.0152 - www.barkerlemar.com

FIGURE

2