

MW-41B

KSA 82a-1212

Check: ☒ White Copy, ☐ Blue Copy, ☐ Pink Copy

**MWH****Drilling Log**Monitoring Well **MW-41B**

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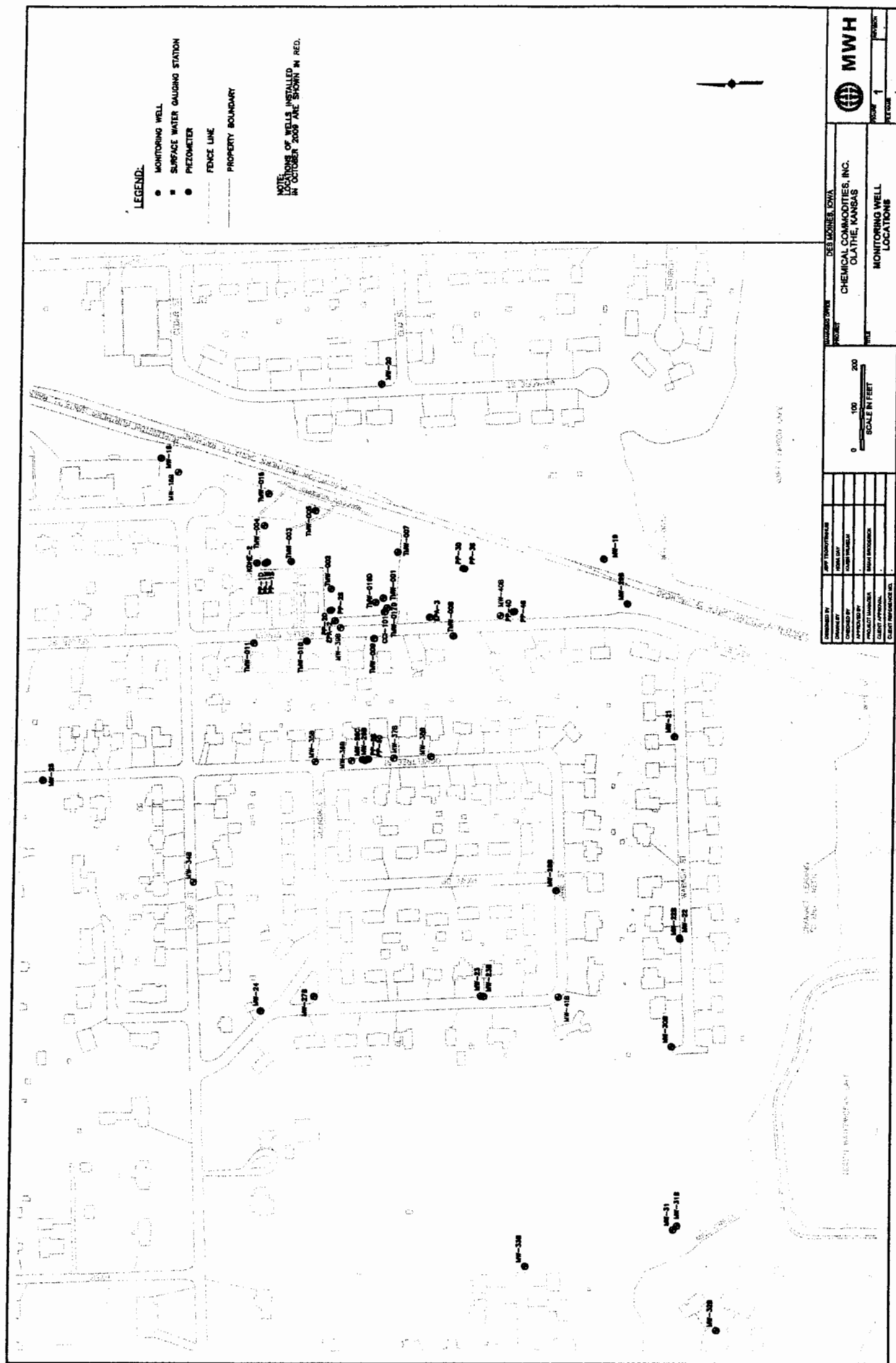
Project Chemical Commodities, Inc. SiteOwner The Boeing CompanyLocation Olathe, KSProject Number 1007630.0201Surface Elev. NANorth NAEast NATop of Casing NAWater Level Initial NAStatic 9.67Hole Depth 15.0 ft Screen: Diameter 4 in Length 5.0 ft Type/Size Sch. 40 PVC/0.010 slotHole Diameter 8.0 in Casing: Diameter 4 in Length 10.0 ft Type Sch. 40 PVCDrill Co. WDC Exploration and Wells Drilling Method Rotosonic Sand Pack 12/20 Silica SandDriller Ross Kight Driller Reg. # KS License 811 Log By Tim WinelandStart Date 10/6/2009Completion Date 10/6/2009Checked By Kevin Armstrong

Bentonite Grout
 Bentonite Granules
 Grout
 Portland Cement
 Sand Pack
 Sand Pack

COMMENTS

5-7/8" sonic boring with 8" overshot casing

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
0	0.3	100%			CH	Asphalt.	
	0.2	100%				FILL, limestone gravel (road base).	
5	0.0	100%			CH	Silty CLAY, dark grayish brown (10YR4/2), stiff, moist, high plasticity, no odor/no visual impacts.	
	0.0	100%				Silty CLAY, dark yellowish brown (10YR4/4), stiff, moist, high plasticity, some iron/manganese concretions (black), no odor/no visual impacts.	
10	0.2	100%			CL	Silty CLAY, brownish yellow (10YR6/6), friable, medium stiff, low plasticity, no odor/no visual impacts.	
	0.3	100%				LIMESTONE, carbonate bedrock (strong HCl reaction), gray (10YR5/1), medium crystal structure, thinly bedded, no odor/no visual impacts. South Bend Limestone.	
15						LIMESTONE, coarsely crystalline carbonate (strong HCl reaction), dark yellowish brown (10YR4/4), thinly bedded, very friable, no odor/no visual impacts. South Bend Limestone.	
						Friable carbonate (mild/moderate HCl reaction), possible calcareous shale, yellowish brown (10YR5/6), very thinly bedded w/poor field strength, no odor/no visual impacts. Rock Lake Shale.	
						End of boring = 15'	
20							
25							

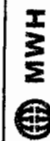


LEGEND:

- MONITORING WELL
- SURFACE WATER GAUGING STATION
- PIEZOMETER
- FENCE LINE
- PROPERTY BOUNDARY

NOTE:
LOCATIONS OF WELLS INSTALLED
IN OCTOBER 2008 ARE SHOWN IN RED.

DES MOINES, IOWA		PROJECT	
CHEMICAL COMMODITIES, INC.		MONITORING WELL LOCATIONS	
OLATHE, KANSAS		SCALE IN FEET	
0 100 200		0 100 200	
DATE: 10/20/08		DATE: 10/20/08	
DRAWN BY: J. L. HARRIS		CHECKED BY: J. L. HARRIS	
APPROVED BY: J. L. HARRIS		APPROVED BY: J. L. HARRIS	
PROJECT NUMBER: 08-001		PROJECT NUMBER: 08-001	
CLIENT: CHEMICAL COMMODITIES, INC.		CLIENT: CHEMICAL COMMODITIES, INC.	
CLIENT ADDRESS: 1000 N. 10TH ST.		CLIENT ADDRESS: 1000 N. 10TH ST.	
CLIENT PHONE: 515-281-1111		CLIENT PHONE: 515-281-1111	
CLIENT FAX: 515-281-1112		CLIENT FAX: 515-281-1112	
CLIENT EMAIL: J. L. HARRIS@CHEMICALCOMMODITIES.COM		CLIENT EMAIL: J. L. HARRIS@CHEMICALCOMMODITIES.COM	



FORM 1
REV. 10/08