WATER WELL RECORD (WWC-5)

Constructed

KOLAR DOC ID 1765887 WELL ID MW-32D

✓ Original Record ☐ Correction ☐ Change in Well Use

LOCATION OF WATER WELL

Latitude	38.03481	Longitude	-97.88557	Section	20	Township	23	Range	5 ☐E ✓W	Fraction	NE ¼ NE ¼ SE ¼
Datum	WGS84	Elevation	1517	County	Reno						

WATER WELL OWNER

Name	
Business	Cargill Incorporated
Address	609 Avenue G Hutchinson Kans 67501
Well location ☐ at owner's address	Cargill Salt Field NW corner of US Highway 50 and South Halstead St. Hutchinson, KS 67501

CONSTRUCTION

Borehole interval: from 0 to 59 ft. from ____ to ____ ft.

Borehole diameter: 7.25 in. ____ in.

Casing height above land surface: 30 in.

If casing height is less than 12 in. has a variance been approved?* ☐ Yes ✓ No

*variance not required for monitoring or environmental remediation wells

Casing type: ThermalPlastic

Blank casing interval: 0 ft. to 49 ft.

Blank casing diameter: 2 in.

Casing joints: Threaded

Weight: ____ lbs/ft.

Wall thickness or gauge no.: 40

Blank casing interval: ____ ft. to ____ ft.

Blank casing diameter: ____ in.

Casing joints: ____

Weight: ____ lbs/ft.

Wall thickness or gauge no.: ____

Grout interval: 2 ft. to 47 ft.

Grout material: Bentonite

Grout interval: ____ ft. to ____ ft.

Grout material: ____

Screen / perforation material: PVC

Screen / perforation openings: Mill slot

Screen / perforation intervals:

From 49 ft. to 59 ft.

Slot size .01 unit inches

From ____ ft. to ____ ft.

Slot size ____ unit ____

Gravel pack intervals:

Gravel pack not used: ☐ Gravel size ____ in

From 47 ft. to 59 ft.

Gravel pack not used: ☐ Gravel size ____ in

From ____ ft. to ____ ft.

WELL WATER USE

Environmental Remediation / Monitoring Mc

COMPLETION

Depth of completed well: 59 ft.

Depth(s) groundwater encountered:

(1) 12 ft.; (2) ____ ft.;

(3) ____ ft.; (4) ☐ dry well

Static water level in well: 12.25 ft.

✓ measured below land surface on (mm/dd/yy): 02/19/2024

☐ measured above land surface on (mm/dd/yy): ____

Estimated yield: ____ gpm

Water level was: ____ ft. after ____ hours pumping ____ gpm

Pump installed? ☐ Yes ✓ No

Water well disinfected? ☐ Yes ☐ No

Date disinfected (mm/dd/yy): ____

Aquifer, if known:

NEAREST SOURCE OF POTENTIAL CONTAMINATION

Source: Other (please specify)

Distance from well: 500 Direction from well: N

Source description: Cargill Salt Operations

Source: ____

Distance from well: ____ Direction from well: ____

Source description: ____

☐ No potential source of contamination within 100 feet.

PERMIT & ID NUMBERS (AS REQUIRED)

DWR Application No.: ____

KDHE / EPA Project Code: c207870855

Site Name: Cargill Salt

KDHE UIC Class V Form Completed: ☐ Yes ☐ No

County Permit: ☐ Yes ☐ No Permit ID: ____

Lease Name & Well #: ____

# of boreholes: ____ # of dewatering wells: ____

LITHOLOGIC LOG

FROM	TO	LITHOLOGY INTERVALS
0	59	sand,medium to coarse,brown

COMMENTS

CONTRACTOR'S OR LANDOWNERS CERTIFICATION

This water well was constructed ✓ reconstructed ☐ pursuant to the stated water well contractor's license and was completed on 02/19/2024. I certify that this record is true to the best of my knowledge and belief. This water well record was completed on 03/02/2024 under the business name of Razek Environmental, LLC, Kansas Water Well Contractor's License No. 759 under the authority of the designated person as defined in K.A.R. 28-30-2(j) and signed and certified by the electronic signature of the designated person at its submittal: Anthony Poulter.

Send one copy to WATER WELL OWNER and retain one for your records. Fee of $5.00 for each constructed well.

AVENUE "G"

M-13S

M-13D

WW#6

BG-1

BG-2

M-29S

M-29D

SEVERANCE ST.

PLUM ST.

WW#5

WW#9

WW#8

WW#7

SINK HOLE

CARGILL SALT
FACILITY PROPERTY

M-15D

M-7S

M-1RD

M-1S

COW CREEK

M-9D

M-7D

M-15S

M-11

M-10

M-8RD

M-8

M-2S

M-12

M-24D

M-2RD

M-27S/D

M-18D

M-18S

M-3D

M-19D

M-19S

M-20D
M-20S

M-5D

M-28D

M-4RD

M-26D

M-25D

KS HWY. 61

AVENUE "G"

HALSTEAD BRINE
FIELD PROPERTY

MW-7S

MW-7D

SWP-17B

MW-2S
MW-2D

MW-6D
MW-6S

M-30S

M-30D

MW-19S
MW-19D

MW-1D

MW-1S

M-31S

M-31D

MW-5S

MW-5D

M-32S/D

HALSTEAD RD.

M-33S/D

M-36S/D

M-35S/D

M-34S/D

M-21D

US HWY. 50

LORRAINE ST.

ARKANSAS RIVER

M-23D

LEGEND

- APPROXIMATE EXTENT OF CARGILL PROPERTY
- S SHALLOW WELL
- D DEEP WELL
- CARGILL WATER SUPPLY WELL
- ACTIVE SOLUTION MINING
- FORMER BRINE WELL
- PROPOSED BRINE WELLS
- EXISTING MONITORING WELL DEEP WELL
- MONITORING PROGRAM WELL - EXISTING
- MONITORING PROGRAM WELL - NEW
- MONITORING PROGRAM WELL - PROPOSED

N

0 800' 1600'

SCALE IN FEET

BURNS McDONNELL

FIGURE 2
PROPOSED MONITORING PROGRAM WELLS
CARGILL SALT
HUTCHINSON, KANSAS

\\bmcd\dfs\Clients\ENS\Cargill\156778_HutchGW2023\Studies\Remediation\GWMP revision 2023\DWGS\Figure 2_Proposed Monitoring Program Wells.dwg 9/21/2015 ABMendhe

Drilling Log

Project Name: Cargill Class III	Project Number: 163813	Boring Number: M-32D	
Ground Elevation: N/A	Location: Hutchinson, KS	Page: 1 of 3/4	
Air Monitoring Equipment: N/A		Total Footage: 59'	

Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. of Samples	No. of Core Boxes
HSA	7.25"	59'	—	—	—

Drilling Company: Razek Environmental		Driller(s): Tony Poulter	
Drilling Rig: Geoprobe 7822DT		Type of Sampler: Macro Core	
Date: 02/19/24	To: 02/19/24	Field Observer(s): J. Schroeder	

Depth (feet)	Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	PID (ppm) BZ	PID (ppm) BH	PID (ppm) S	Remarks/ Water Levels
1	Sandy Clay, Clay w/ Sand, 80/20 Clay to Sand, Drk bn (3/2 7.5YR), Low moisture, High Plasticity									
2										
3				4'						
	Sandy Clay, Clay w/ Sand, 50/50 Clay to Sand, Lt. Olive bn (4/2 7.5YR), Low moisture, med plasticity.									
4	No Recovery	N/A								
5	Sandy Clay, Clay w/ Sand, 50/50 Clay to Sand, Lt. Olive bn (4/2 7.5YR), Low moisture, med. plasticity									
6	Clayey Sand, Sand w/ clay, 80/20 Sand to clay, Lt. bn (6/4 7.5YR), med. moisture, Low plasticity									
7	Silty Clay, Clay w/ Silt, 50/50 Clay to Silt, Lt. bn (6/2 7.5YR), med moisture, High plasticity.			5'						
8	Sandy Clay, Clay w/ Sand, 80/20 Clay to Sand, Drk. bn (3/2 7.5YR), med. moisture, high plasticity									
9										
10	Sandy Clay, Clay w/ Sand, 80/20 Clay to Sand, Drk. bn. (3/2 7.5YR), med. moisture, high plasticity.									
11	Clayey Sand, Sand w/ clay, 90/10 Sand to Clay, Lt. bn (6/4 7.5YR), High moisture, Low plasticity			3'						
12	Poorly Sorted sand to gravel sized grains, Lt. bn, (6/4 7.5YR), Wet, no plasticity									
13	No Recovery	N/A								
14										

BZ=Breathing Zone BH=Bore Hole S=Sample

051601 Form WCD-2-1

Burns & McDonnell SINCE 1898

Drilling Log Continuation

Boring Number MW-32D
Page 2 of 3 4
Project Name Cargill Class III
Date 02/19/24
Project Number 163813

Depth (feet)	Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	PID (ppm) BZ	PID (ppm) BH	PID (ppm) S	Remarks/ Water Levels
	No Recovery	N/A		3'						
15	Poorly Sorted Sand to gravel-sized grains, Coarsing downwards, Lt. bn (6/4 7.5YR), wet, no plasticity									
16										
17				3'						
18	No Recovery									
19		N/A								
20	Hole Collapsing too much, Switching to Logging from Cuttings									
21	Poorly Sorted Sand to gravel-Sized grains, Coarsing downwards, Lt. bn (6/4 7.5YR), wet, no plasticity									
22				N/A						
23										
24										
25	Poorly Sorted Sand to gravel, Coarsing downwards, Lt. bn. (6/4 7.5YR), wet, no plasticity.									
26										
27										
28				N/A						
29										
30	Poorly Sorted Sand to gravel. Coarsing downwards, Lt. bn (6/4 7.5YR), wet, no plasticity			N/A						
31										

BZ=Breathing Zone BH=Bore Hole S=Sample

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Form WCI-OP2-2

11/11/1992

Drilling Log Continuation

Boring Number M-32D
Project Name Cargill Class III
Page 3 of 4
Project Number 163813
Date 04-19-24

Depth (feet)	Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	PID (ppm) BZ	PID (ppm) BH	PID (ppm) S	Remarks/ Water Levels
32	Poorly Sorted Sand to gravel, coarsing downwards, Lt. bn (6/4 7.5YR), wet, no plasticity.			N/A						
33										
34										
35	Poorly Sorted Sand to gravel, Coarsing down, Lt. bn. (6/4 7.5YR), wet, no plasticity									
36										
37				N/A						
38										
39										
40	Poorly Sorted Sand to gravel, Coarsing down, Lt. bn (6/4 7.5YR), wet, no plasticity									
41										
42										
43				N/A						
44										
45	Poorly Sorted Sand to gravel, Coarsing down, Lt. bn (6/4 7.5YR), wet, no plasticity									
46				N/A						
47										
48										

BZ=Breathing Zone BH=Bore Hole S=Sample

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11/11/1992

Form WCI-OP2-2

Drilling Log Continuation

Boring Number M-32D
Project Name Cargill Class III
Page 4 of 4
Project Number 163813
Date 02/19/24

Depth (feet)	Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	PID (ppm) BZ	PID (ppm) BH	PID (ppm) S	Remarks/ Water Levels
49	Poorly Sorted Sand to gravel, coarsing down, Lt. bn (6/4 7.5YR), wet, no plasticity			N/A						
50										
51	Poorly Sorted Sand to gravel, coarsing down, Lt. bn (6/4 7.5YR), wet, no plasticity									
52										
53				N/A						
54										
55										
56	Poorly Sorted Sand to gravel, coarsing down, Lt. bn (6/4 7.5YR), wet, no plasticity									
57										
58				N/A						
59										
60	Well set TD: 59'									
61										
62										
63										
64										
65										

BZ=Breathing Zone BH=Bore Hole S=Sample

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11/11/1992

Form WCI-OP2-2