Cargill Salt

Watkins Glen Plant
518 East 4th Street
Watkins Glen, NY 14891

U.S. ENVIRONMENTAL PROTECTION AGENCY
2014 OCT 16 AM 11:23
DECA-RCB-UST

October13th, 2014
Frank Brock
Underground Injection Control Section
U. S. Environmental Protection Agency Region 2
290 Broadway
New York, New York 10007-1866

Ref: UIC Permit NYU105431

Dear Mr. Brock:

The third quarter 2014 UIC report for our Watkins Glen, New York facility is enclosed.

If you have any questions, please email to Keith_Klug@Cargill.com.

I certify under penalty of law that this document and all attachments were prepared under my direction and assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Keith Klug
Plant Manager

Attechments: Benchmark Analytics lab results, monthly injection and production report
cc: M. Schumacher

Cargill Salt
518 East 4th Street
Watkins Glen, NY 14891

USEPA
Underground Injection Control Class III operating permit
Permit number NYU105431
Quarterly Monitoring Report
Third Quarter, 2014

Signature _____
Date 10/13/14

	West Gallery		South (Walmart) Gallery	
Injection Wells	25		27, 28, 29	
Production Wells		15		26
Date	Fluid Injected	Brine produced	Fluid Injected	Brine produced
01-Jul	467	459	343	341
02-Jul	428	426	340	327
03-Jul	474	456	355	350
04-Jul	488	477	368	351
05-Jul	438	436	355	353
06-Jul	454	441	318	316
07-Jul	334	325	328	319
08-Jul	383	381	240	239
09-Jul	472	458	257	261
10-Jul	424	415	345	330
11-Jul	439	423	303	304
12-Jul	455	451	330	314
13-Jul	469	453	329	328
14-Jul	454	446	342	330
15-Jul	421	422	343	340
16-Jul	443	422	299	308
17-Jul	443	435	311	285
18-Jul	461	447	311	266
19-Jul	409	402	330	225
20-Jul	466	451	291	345
21-Jul	449	439	334	322
22-Jul	422	409	319	312
23-Jul	466	448	296	254
24-Jul	445	434	328	347
25-Jul	455	460	317	318
26-Jul	335	241	325	334
27-Jul	385	439	213	161
28-Jul	447	435	264	314
29-Jul	422	411	311	320
30-Jul	406	327	298	292
31-Jul	369	412	284	239
Monthly total	13,422 thousand gallons	13,080 thousand gallons	9,728 thousand gallons	9,445 thousand gallons
Injected/produced volume	1.03		1.03	
High injection pressure	352 psi		310 psi	

Remarks :

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Quarterly Monitoring Report
Third Quarter, 2014

Signature _____
Date 10/13/14

	Park Gallery		East Gallery (Purge disposal)	
Injection Wells	19, 22, 30		14	
Production Wells		20, 24, 31		16
Date	Fluid Injected	Brine produced	Fluid Injected	Brine produced
01-Jul	482	472	0	0
02-Jul	424	430	0	0
03-Jul	453	428	0	0
04-Jul	474	449	0	0
05-Jul	456	444	0	0
06-Jul	463	432	0	0
07-Jul	396	326	0	0
08-Jul	407	436	0	0
09-Jul	466	418	0	0
10-Jul	497	430	0	0
11-Jul	424	468	0	0
12-Jul	451	450	0	0
13-Jul	472	449	0	0
14-Jul	455	446	0	0
15-Jul	461	570	0	0
16-Jul	455	474	0	0
17-Jul	459	452	0	0
18-Jul	450	439	0	0
19-Jul	445	447	0	0
20-Jul	424	409	0	0
21-Jul	459	500	0	0
22-Jul	499	511	0	0
23-Jul	482	483	0	0
24-Jul	505	471	0	0
25-Jul	452	470	0	0
26-Jul	303	433	0	0
27-Jul	459	416	0	0
28-Jul	598	417	0	0
29-Jul	566	455	0	0
30-Jul	449	380	0	0
31-Jul	411	440	0	0
Monthly total	14,197 thousand gallon	13,846 thousand gallons	0 thousand gallons	0 thousand gallo
Injected/produced volume	1.03		0.00	
High injection pressure	357 psi		237 psi	

Remarks: East Gallery offline for July1st-31st for MIT testing

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Third Quarter, 2014

Signature _____
Date 10/13/14

	West Gallery		South (Walmart) Gallery	
Injection Wells	25		27, 28, 29	
Production Wells		15		26
Date	Fluid Injected	Brine produced	Fluid Injected	Brine produced
01-Aug	432	427	249	283
02-Aug	436	418	306	308
03-Aug	446	437	312	299
04-Aug	454	437	324	321
05-Aug	440	436	331	326
06-Aug	443	426	319	317
07-Aug	453	440	321	307
08-Aug	432	422	330	317
09-Aug	457	445	312	302
10-Aug	466	449	337	326
11-Aug	460	454	346	337
12-Aug	451	436	340	333
13-Aug	454	444	327	355
14-Aug	463	451	331	326
15-Aug	445	431	339	336
16-Aug	441	429	322	317
17-Aug	455	445	321	290
18-Aug	400	393	315	324
19-Aug	405	380	278	275
20-Aug	405	401	284	269
21-Aug	440	426	280	271
22-Aug	456	445	310	306
23-Aug	391	382	324	358
24-Aug	437	412	267	264
25-Aug	461	447	312	294
26-Aug	415	405	340	335
27-Aug	418	408	329	320
28-Aug	266	254	303	301
29-Aug	380	367	180	182
30-Aug	361	349	267	265
31-Aug	349	338	234	227
Monthly total	13,211	12,833 thousand gallons	9,490 thousand gallons	9,393 thousand gallons
Injected/produced volume	1.03		1.01	
High injection pressure	299 psi		285 psi	
Remarks				

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Signature _____
Date 10/13/14

	Park Gallery		East Gallery (Purge disposal)	
Injection Wells	19, 22, 30		14	
Production Wells		20, 24, 31		16
Date	Fluid Injected	Brine produced	Fluid Injected	Brine produced
01-Aug	463	496	0	0
02-Aug	479	460	0	0
03-Aug	494	476	0	0
04-Aug	476	541	0	0
05-Aug	481	474	0	0
06-Aug	515	493	0	0
07-Aug	473	479	0	0
08-Aug	464	449	0	0
09-Aug	459	449	0	0
10-Aug	469	453	0	0
11-Aug	530	505	0	0
12-Aug	480	482	0	0
13-Aug	495	475	0	0
14-Aug	511	497	0	0
15-Aug	517	505	0	0
16-Aug	494	492	0	0
17-Aug	525	498	0	0
18-Aug	493	483	0	0
19-Aug	508	446	0	0
20-Aug	503	527	0	0
21-Aug	524	503	0	0
22-Aug	531	512	0	0
23-Aug	495	479	0	0
24-Aug	498	488	0	0
25-Aug	510	495	0	0
26-Aug	517	507	0	0
27-Aug	556	505	1	52
28-Aug	417	394	22	46
29-Aug	581	557	44	61
30-Aug	562	556	62	65
31-Aug	555	525	62	62
Monthly total	15,575 thousand gallons	15,201 thousand gallons	191 thousand gallor	285 thousand gallons
Injected/produced volume	1.02		0.67	
High injection pressure	352 psi		109 psi	
Remarks	East Gallery offline August 1st-28th for MIT testing			

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Date 10/13/14

	West Gallery		South (Walmart) Gallery	
Injection Wells	25		27, 28, 29	
Production Wells		15		26
Date	Fluid Injected	Brine produced	Fluid Injected	Brine produced
01-Sep	423	404	229	221
02-Sep	437	420	295	289
03-Sep	472	452	321	245
04-Sep	359	357	330	370
05-Sep	382	366	249	245
06-Sep	380	367	253	258
07-Sep	405	396	260	253
08-Sep	414	401	263	270
09-Sep	383	371	293	273
10-Sep	406	391	278	293
11-Sep	401	384	282	273
12-Sep	411	408	276	264
13-Sep	396	380	292	300
14-Sep	376	360	272	262
15-Sep	414	404	250	239
16-Sep	383	369	292	294
17-Sep	389	380	276	268
18-Sep	350	338	302	297
19-Sep	365	358	292	281
20-Sep	404	385	279	286
21-Sep	381	373	265	252
22-Sep	406	391	256	252
23-Sep	406	388	294	291
24-Sep	419	418	305	291
25-Sep	381	373	304	303
26-Sep	397	408	264	255
27-Sep	370	366	283	286
28-Sep	350	346	255	251
29-Sep	401	387	256	247
30-Sep	408	409	336	322
Monthly total	11,873	11,550 thousand gallons	8,402 thousand gallons	8,231 thousand gallons
Injected/produced volume	1.03		1.02	
High injection pressure	373 psi		350 psi	

Remarks:

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Signature _____
Date 10/13/14

	Park Gallery		East Gallery (Purge disposal)	
Injection Wells	19, 22, 30		14	
Production Wells		20, 24, 31		16
Date	Fluid Injected	Brine produced	Fluid Injected	Brine produced
01-Sep	586	555	60	72
02-Sep	594	574	61	59
03-Sep	595	570	63	58
04-Sep	552	550	61	68
05-Sep	520	514	61	61
06-Sep	514	488	60	57
07-Sep	546	525	59	54
08-Sep	548	523	59	61
09-Sep	564	549	59	56
10-Sep	534	520	60	59
11-Sep	543	520	41	56
12-Sep	575	534	59	65
13-Sep	572	555	59	54
14-Sep	572	546	59	54
15-Sep	561	551	59	56
16-Sep	576	550	59	70
17-Sep	507	472	59	56
18-Sep	572	554	59	52
19-Sep	581	574	57	57
20-Sep	575	566	60	58
21-Sep	555	542	60	48
22-Sep	562	542	50	55
23-Sep	566	528	63	72
24-Sep	562	538	62	60
25-Sep	569	535	64	60
26-Sep	569	533	61	66
27-Sep	553	538	65	62
28-Sep	595	561	66	59
29-Sep	485	501	65	68
30-Sep	560	515	64	65
Monthly total	16,761 thousand gallons	16,124 thousand gallons	1,792 thousand gallons	1,800 thousand gallons
Injected/produced volume	1.04		1.00	
High injection pressure	350 psi		104 psi	

Remarks:

BENCHMARK ANALYTICS
A MICROBAC LABORATORY

Benchmark Analytics Sayre, A Microbac Laboratory

CERTIFICATE OF ANALYSIS

S4I1289

Analytical Testing Parameters

Client Sample ID: Intake
Lab Sample ID: S4I1289-04
Sample Type: Composite

Collection Date: 09/11/14
Collection Time: 10:15
Collected By: Kevin Guiles

Benchmark Analytics Sayre, A Microbac Laboratory

	Result	PQL	Units	Note	Prepared	Analyzed	Analyst
Anions by Ion Chromatography							
Method: EPA 300.0, Rv 2.1							
Chloride	**201000**	1000	mg/L	**D**	09/22/14 1822	09/22/14 1822	NSF
Field Parameters							
Method: SM2550 B-2000							
Temperature	**23.3**		°C	**Y**	09/11/14 1015	09/11/14 1015	KJG
Method: SM4500 H+ B-2000							
pH	**7.02**	0.0100	pH Units	**Y**	09/11/14 1015	09/11/14 1015	KJG
Inorganics							
Method: SM2340 C-1997							
Total Dissolved Solids - TDS	**294000**	10.0	mg/L	**CC**	09/12/14 0940	09/12/14 0940	KED

BENCHMARK ANALYTICS
A MICROBAC LABORATORY

Benchmark Analytics Sayre, A Microbac Laboratory

CERTIFICATE OF ANALYSIS

S4I1289

Analytical Testing Parameters

Client Sample ID: BFI
Lab Sample ID: S4I1289-05
Sample Type: Composite

Collection Date: 09/11/14
Collection Time: 10:20
Collected By: Kevin Guiles

Benchmark Analytics (NY 11827)

	Result	PQL	Units	Note	Prepared	Analyzed	Analyst
Subcontracted (Center Valley - Metals)							
Method: EPA 200.7							
Sodium	**32200**	80.5	mg/L	**L**	09/18/14 0000	09/24/14 0945	KMG

Benchmark Analytics Sayre, A Microbac Laboratory

	Result	PQL	Units	Note	Prepared	Analyzed	Analyst
Anions by Ion Chromatography							
Method: EPA 300.0, Rv 2.1							
Chloride	**30900**	100	mg/L	**D**	09/22/14 1822	09/22/14 1822	NSF
Sulfate as SO4	**1020**	10.0	mg/L	**D**	09/22/14 1822	09/22/14 1822	NSF
Field Parameters							
Method: SM2550 B-2000							
Temperature	**30.2**		°C	**Y**	09/11/14 1020	09/11/14 1020	KJG
Method: SM4500 H+ B-2000							
pH	**7.70**	0.0100	pH Units	**Y**	09/11/14 1020	09/11/14 1020	KJG
Inorganics							
Method: SM2340 C-1997							
Total Dissolved Solids - TDS	**71100**	10.0	mg/L		09/12/14 0940	09/12/14 0940	KED

BENCHMARK ANALYTICS
A MICROBAC LABORATORY

Benchmark Analytics Sayre, A Microbac Laboratory

CERTIFICATE OF ANALYSIS

S4I1289

Analytical Testing Parameters

Client Sample ID:	Bleeds	**Collection Date:**	09/11/14
Lab Sample ID:	S4I1289-06	**Collection Time:**	10:45
Sample Type:	Composite	**Collected By:**	Kevin Guiles

Benchmark Analytics (NY 11827)

	Result	PQL	Units	Note	Prepared	Analyzed	Analyst
Subcontracted (Center Valley - Metals)							
Method: EPA 200.7							
Sodium	**30.7**	0.500	mg/L	**L**	09/18/14 0000	09/24/14 0945	KMG

Benchmark Analytics Sayre, A Microbac Laboratory

	Result	PQL	Units	Note	Prepared	Analyzed	Analyst
Anions by Ion Chromatography							
Method: EPA 300.0, Rv 2.1							
Chloride	**181000**	1000	mg/L	**D**	09/22/14 1822	09/22/14 1822	NSF
Sulfate as SO4	**126**	10.0	mg/L	**D**	09/22/14 1822	09/22/14 1822	NSF
Field Parameters							
Method: SM2550 B-2000							
Temperature	**28.9**		°C	**Y**	09/11/14 1045	09/11/14 1045	KJG
Method: SM4500 H+ B-2000							
pH	**6.29**	0.0100	pH Units	**Y**	09/11/14 1045	09/11/14 1045	KJG
Inorganics							
Method: SM2340 C-1997							
Total Dissolved Solids - TDS	**285000**	10.0	mg/L	**CC**	09/12/14 0940	09/12/14 0940	KED

Definitions

CC:	> 200mg dried residue was produced from TDS analysis
D:	Dilution performed on sample.
L:	Value above calibration range but within annually verified linear range
Y:	This analyte is not on the the laboratory's current Scope of Accreditation.
PQL:	Practical Quantitation Limit

Cooler Receipt Log:

Cooler ID:	Default Cooler		
Cooler Temp:	4.60 °C	Received On Ice (or not required):	Yes
COC/Labels Agree:	Yes	Preservation Correct (or not required):	Yes
Containers Intact:	Yes	Custody Seals Intact and/or No Evidence of Tampering	Yes

BENCHMARK ANALYTICS
A MICROBAC LABORATORY

Benchmark Analytics Sayre, A Microbac Laboratory

CERTIFICATE OF ANALYSIS

S4I1289

Project Requested Certification(s):

Certificate ID	Agency
Benchmark Analytics Sayre, A Microbac Laboratory NY-Sayre NYSDOH NY Lab ID No.: 11216	New York State Department of Health

Report Comments:

In accordance with NYSDOH-ELAP and NELAP, any non-conformance of these regulations are noted directly on the laboratory as qualifiers and/or noted in the case narrative.

Reviewed and Approved By:

Tracy Cole
Division Manager

Go Green:

Contact your project manager to set up email reporting and invoicing options.

For any feedback concerning our services, please contact your Project Manager listed above at 570-888-0169. You may also contact Trevor Boyce President, at president@microbac.com.

CHAIN OF CUSTODY

Benchmark Analytics, Inc.
2566 Pennsylvania Avenue • Sayre, PA 18840
Phone: (570) 888-0169
Fax: (570) 888-0717

PAGE_____OF_____

REPORT TO: CARG.11

CONTACT

PH#

FAX#

BILL TO:

PO#

PROJECT DESCRIPTION

SAMPLER SIGNATURE / AFFILIATION

REFRIGERATE SAMPLES AFTER COLLECTION.

TRANSPORT TO LABORATORY IN COOLER WITH ICE

DW	DRINKING WATER	SL	SLUDGE
GW	GROUND WATER	SO	SOIL
SW	SURFACE WATER	HZ	HAZARDOUS
WW	WASTE WATER	OTHER	
DE	DEIONIZED WATER	DI	DISTILLED WATER

RESULTS ARE BEING USED FOR:
NYDOH NYDEC PADEP
LANDFILL_____
PERSONAL OTHER_____

ARE SPECIAL DETECTION LIMITS NEEDED: YES / NO
IF YES, PLEASE ATTACH
IS A QC PACKAGE NEEDED?
YES NO
IF YES, PLEASE ATTACH REQUIREMENTS

H	HYDROCHLORIC ACID	OH	SODIUM HYDROXIDE
S	SULFURIC ACID	AS	ASCORBIC ACID
N	NITRIC ACID	AC	ACETIC ACID
SO_3	SODIUM SULFITE	NH_4	AMMONIUM CHLORIDE
Thio	SODIUM THIOSULFATE	ZN	ZINC ACETATE
–	NONE	Hg	MERCURIC CHLORIDE

PWS ID#_____
Location_____
Sample Point_____

An incomplete chain of custody may delay the processing of your sample(s).

Container	Sample Point No./Type	DATE SAMPLED	TIME OF SAMPLING	SAMPLE MATRIX	SAMPLE TYPE - GRAB / COMPOSITE	SAMPLER INITIALS	PRESERVATIVE	Chlorine Residual Total ☐ Free ☐	ANALYSIS TO BE PERFORMED (PER CONTAINER)	COMPOSITED ON RECEIPT	PRESERVATIVE ADDED
1	24 hr Composite	9/11	10:05	WW	C	KG			Cl Ph 8.19		
2	↓	↓	↓	↓	↓	↓			Cu Temp 22.6°C		
3	GRAB EFF		10:10		G				Cl Ph 8.37		
4	↓		↓		↓				Cu Temp 25.9		
5	LAKE		10:30						TDS Ph 7.38		
6	↓	↓	↓	↓	↓	↓			Cl, Sulfate Temp 24.6		
7											
8											
9											
10											
11											

Cargill, Inc.
S 4 1 1 2 8 9

LAB USE ONLY

DELIVERED BY: KG TEMPERATURE UPON RECEIPT: 4.6 °C ARRIVAL ON ICE (Y) N

RELINQUISHED BY:	DATE: 9/11/14	TIME: 11:50	RECEIVED BY:	DATE: 9/11/14	TIME: 10:30
RELINQUISHED BY:	DATE: / /	TIME:	RECEIVED BY:	DATE: / /	TIME:
RELINQUISHED BY:	DATE: / /	TIME:	RECEIVED BY:	DATE: 9/11/14	TIME:

Ad Graphics Printing 570-888-0685

CHAIN OF CUSTODY

Benchmark Analytics, Inc.
2566 Pennsylvania Avenue • Sayre, PA 18840
Phone: (570) 888-0169
Fax: (570) 888-0717

PAGE_____ OF_____

REPORT TO: CARGILL

CONTACT

PH#

FAX#

BILL TO:

PO#

PROJECT DESCRIPTION

SAMPLER SIGNATURE / AFFILIATION

REFRIGERATE SAMPLES AFTER COLLECTION

TRANSPORT TO LABORATORY IN COOLER WITH ICE

DW	DRINKING WATER	SL	SLUDGE
GW	GROUND WATER	SO	SOIL
SW	SURFACE WATER	HZ	HAZARDOUS
WW	WASTE WATER	OTHER	
DE	DEIONIZED WATER	DI	DISTILLED WATER

RESULTS ARE BEING USED FOR:
NYDOH NYDEC PADEP
LANDFILL_____
PERSONAL OTHER_____

ARE SPECIAL DETECTION LIMITS NEEDED: YES / NO
IF YES, PLEASE ATTACH
IS A QC PACKAGE NEEDED? YES NO
IF YES, PLEASE ATTACH REQUIREMENTS

H	HYDROCHLORIC ACID	OH	SODIUM HYDROXIDE
S	SULFURIC ACID	AS	ASCORBIC ACID
N	NITRIC ACID	AC	ACETIC ACID
SO_3	SODIUM SULFITE	NH_4	AMMONIUM CHLORIDE
Thio	SODIUM THIOSULFATE	ZN	ZINC ACETATE
–	NONE	Hg	MERCURIC CHLORIDE

PWS ID#_____
Location_____
Sample Point_____

An incomplete chain of custody may delay the processing of your sample(s).

Container	Sample Point No./Type	DATE SAMPLED	TIME OF SAMPLING	SAMPLE MATRIX	SAMPLE TYPE - GRAB / COMPOSITE	SAMPLER INITIALS	PRESERVATIVE	Chlorine Residual Total ☐ Free ☐	ANALYSIS TO BE PERFORMED (PER CONTAINER)	COMPOSITED ON RECEIPT	PR
1	INTAKE	9/1/14	10:15	WW	G	KG			Cl Ph 7.02		
2	↓	↓	↓	↓	↓	↓			TDS Temp 23.3		
3	BF I		10:20						TDS, Cl, Sulfate Ph 7.7		
4	↓		↓						Na Temp 30.2		
5	Bleeds		10:45						Cl Sulfate Ph 6.29		
6	↓	↓	↓	↓	↓	↓			TDS Temp 28.9		
7									Na		
8											
9											
10											
11											

Cargill, Inc.
S 4 1 1 2 8 9

LAB USE ONLY

DELIVERED BY KG

TEMPERATURE UPON RECEIPT 4.6 °C ARRIVAL ON ICE Y N

RELINQUISHED BY:	DATE: 9/1/14	TIME: 11:50	RECEIVED BY:	DATE: 9/1/14	TIME: 10:45
RELINQUISHED BY:	DATE: / /	TIME:	RECEIVED BY:	DATE: / /	TIME:
RELINQUISHED BY:	DATE: / /	TIME:	RECEIVED BY:	DATE: 9/1/14	TIME:

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