ENVIRONMENTAL FGL AGRICULTURAL
Analytical Chemists

January 16, 2015

City of Hanford
Attn: April Engen-Garza
900 S.10th Ave.
Hanford, CA 93230

VI 1540082:1 **COLIFORM BACTERIA ANALYSIS**
Customer ID : 4-15877

System Number :
Project Name : Sludge Monitoring

Sample Handling Information

ID	Sample Number	Sample Description	Sample Type/Reason	Sampled By	Employed By	Sampled	Started	Finished
1	VI 1540082-001	Sludge Stockpile	Waste-Other	Neil Jessup	FGL Environmental	01/08/2015 15:50	01/09/2015 11:12 LM	01/12/2015 LM

Analytical Results

ID	Sample Description	Chlorine Total/Free	Temp °C	Method	Units	Total	Fecal	E. Coli	Person Notified ‡	Date ‡ Notified	Time ‡ Notified	Foot Note
1	Sludge Stockpile	---	---	SM 9221B	MPN/g	243	2.20	---	N/R			

N/R Not Required. MPN Most Probable Number A/P Absence/Presence ‡ Client Notification details.

Analyses were performed using Standard Methods 22nd edition. If you have any questions regarding your results, please call.

RRH:SMH

Reviewed and Approved By **Raquel R. Harvey** Digitally signed by Raquel R. Harvey
Title: Tech Director Microbiology
Date: 2015-01-16

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February 4, 2015

City of Hanford
Attn: April Engen-Garza
900 S.10th Ave.
Hanford, CA 93230

Lab ID : VI 1540082
Customer : 4-15877

Laboratory Report

Introduction: This report package contains total of 9 pages divided into 3 sections:

Case Narrative	(3 pages)	: An overview of the work performed at FGL.
Sample Results	(1 page)	: Results for each sample submitted.
Quality Control	(5 pages)	: Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab ID #	Matrix
Sludge Stockpile	01/08/2015	01/08/2015	VI 1540082-001	Slg

Sampling and Receipt Information: The sample was performed by FGL using the following methods (where applicable):

Bacteriological Sampling	- SOP:200900141
Grab sampling for liquids	- SOP:200900137
Composite sampling for liquids	- SOP:200900139
Grab sampling for solids	- SOP:200900142
Composite sampling for solids	- SOP:200900143

All samples were received, prepared and analyzed within the method specified holding times. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to the following tables:

Inorganic - Metals QC

200.7	01/15/2015:200720 All analysis quality controls are within established criteria.
	01/26/2015:201262 All analysis quality controls are within established criteria.
245.1	01/15/2015:200765 All analysis quality controls are within established criteria.
3050	01/14/2015:200421 All preparation quality controls are within established criteria, except:

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February 4, 2015 | Lab ID : VI 1540082
City of Hanford | Customer : 4-15877

Inorganic - Metals QC

3050	The following note applies to Thallium, Vanadium: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery. The following note applies to Barium, Copper, Zinc: 430 Post Digestion Spike (PDS) not within Acceptance Range (AR) because of matrix interferences affecting this analyte.
7471	01/15/2015:200522 All preparation quality controls are within established criteria.

Inorganic - Wet Chemistry QC

2540G	01/13/2015:200402 All preparation quality controls are within established criteria.
300	01/12/2015:200341 All preparation quality controls are within established criteria, except: The following note applies to Nitrate: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.
300.0	01/14/2015:200642 All analysis quality controls are within established criteria.
351.2	01/27/2015:200945 All preparation quality controls are within established criteria.
4500HB	01/12/2015:200507 All analysis quality controls are within established criteria.
4500NH3B	01/16/2015:200560 All preparation quality controls are within established criteria.
4500NH3G	01/27/2015:201275 All analysis quality controls are within established criteria.
9045C	01/12/2015:200364 All preparation quality controls are within established criteria.
EPA351.2	01/29/2015:201446 All analysis quality controls are within established criteria.

Discussion of Analytical Results: Case Narrative

Results reported on a dry weight basis.

Results reported on a dry weight basis.

February 4, 2015 | Lab ID : VI 1540082
City of Hanford | Customer : 4-15877

Certification:: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature.

KD:DMB

Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2015-02-05

February 4, 2015

Lab ID : VI 1540082-001
Customer ID : 4-15877

City of Hanford
Attn: April Engen-Garza
900 S.10th Ave.
Hanford, CA 93230

Sampled On : January 8, 2015-15:50
Sampled By : Neil Jessup
Received On : January 8, 2015-19:00
Matrix : Sludge

Description : Sludge Stockpile
Project : Sludge Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	Units	Note	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Metals, Total[G:1]								
Antimony	ND	5.5*	mg/kg		3050	01/14/15:200421	200.7	01/26/15:201262
Arsenic	9.74	0.55	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Barium	246	1.7	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Beryllium	ND	0.33	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Cadmium	1.09	0.33	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Chromium	20.6	0.55	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Cobalt	3.88	0.55	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Copper	375	0.55	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Lead	17.1	0.55	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Mercury	0.816	0.033	mg/kg		7471	01/15/15:200522	245.1	01/15/15:200765
Molybdenum	11.6	1.1	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Nickel	17.9	0.55	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Selenium	5.67	0.55	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Silver	3.82	0.55	mg/kg		3050	01/14/15:200421	200.7	01/26/15:201262
Thallium	ND	0.55	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Vanadium	17.2	0.55	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Zinc	577	1.1	mg/kg		3050	01/14/15:200421	200.7	01/15/15:200720
Wet Chemistry[G:1]								
Nitrate Nitrogen	ND	1.1	mg/kg		300	01/12/15:200341	300.0	01/14/15:200642
Nitrogen, Organic	34700	--	mg/kg		4500NH3B	01/16/15:200560	4500NH3G	01/27/15:201275
Ammonia Nitrogen	5310	170*	mg/kg		4500NH3B	01/16/15:200560	4500NH3G	01/27/15:201275
Kjeldahl Nitrogen	40000	1900*	mg/kg		351.2	01/27/15:200945	EPA351.2	01/29/15:201446
Nitrogen, Total as Nitrogen	40000	--	mg/kg		351.2	01/27/15:200945	EPA351.2	01/29/15:201446
Nitrate + Nitrite as N	ND	1.1	mg/kg		300	01/12/15:200341	300.0	01/14/15:200642
Kjeldahl Nitrogen	40000	1900*	mg/kg		351.2	01/27/15:200945	EPA351.2	01/29/15:201446
pH	7.5	--*	units		9045C	01/12/15:200364	4500HB	01/12/15:200507
% Solids	90.6	0.1	%		2540G	01/13/15:200402	2540B	01/14/15:200658

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (G) Glass Jar Preservatives: N/A ‡Surrogate. * PQL adjusted for dilution.

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February 4, 2015 Lab ID : VI 1540082
City of Hanford Customer : 4-15877

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Antimony	200.7	01/26/15:201262AC	CCV	ppm	1.000	93.2 %	90-110	
			CCB	ppm		0.0034	0.01	
			CCV	ppm	1.000	93.8 %	90-110	
			CCB	ppm		0.0048	0.01	
Arsenic	200.7	01/15/15:200720AC	CCV	ppm	1.000	96.4 %	90-110	
			CCB	ppm		-0.0029	0.01	
			CCV	ppm	1.000	95.4 %	90-110	
			CCB	ppm		-0.0026	0.01	
Barium	200.7	01/15/15:200720AC	CCV	ppm	1.000	102 %	90-110	
			CCB	ppm		0.0002	0.03	
			CCV	ppm	1.000	101 %	90-110	
			CCB	ppm		.0000007	0.03	
Beryllium	200.7	01/15/15:200720AC	CCV	ppm	1.000	101 %	90-110	
			CCB	ppm		-0.00001	0.005	
			CCV	ppm	1.000	101 %	90-110	
			CCB	ppm		-0.00003	0.005	
Cadmium	200.7	01/15/15:200720AC	CCV	ppm	1.000	98.8 %	90-110	
			CCB	ppm		-0.00011	0.005	
			CCV	ppm	1.000	99.3 %	90-110	
			CCB	ppm		-0.00009	0.005	
Chromium	200.7	01/15/15:200720AC	CCV	ppm	1.000	100 %	90-110	
			CCB	ppm		-0.0006	0.01	
			CCV	ppm	1.000	101 %	90-110	
			CCB	ppm		-0.0015	0.01	
Cobalt	200.7	01/15/15:200720AC	CCV	ppm	1.000	101 %	90-110	
			CCB	ppm		0.0004	0.01	
			CCV	ppm	1.000	100 %	90-110	
			CCB	ppm		-0.0005	0.01	
Copper	200.7	01/15/15:200720AC	CCV	ppm	1.000	101 %	90-110	
			CCB	ppm		0.0009	0.01	
			CCV	ppm	1.000	101 %	90-110	
			CCB	ppm		0.0008	0.01	
Lead	200.7	01/15/15:200720AC	CCV	ppm	1.000	98.1 %	90-110	
			CCB	ppm		-0.0019	0.01	
			CCV	ppm	1.000	98.8 %	90-110	
			CCB	ppm		0.0001	0.01	
Molybdenum	200.7	01/15/15:200720AC	CCV	ppm	1.000	98.0 %	90-110	
			CCB	ppm		0.0047	0.01	
			CCV	ppm	1.000	98.4 %	90-110	
			CCB	ppm		0.0066	0.01	
Nickel	200.7	01/15/15:200720AC	CCV	ppm	1.000	101 %	90-110	
			CCB	ppm		0.001	0.01	
			CCV	ppm	1.000	101 %	90-110	
			CCB	ppm		0.0007	0.01	
Selenium	200.7	01/15/15:200720AC	CCV	ppm	1.000	95.6 %	90-110	
			CCB	ppm		-0.0015	0.01	
			CCV	ppm	1.000	95.5 %	90-110	
			CCB	ppm		-0.0050	0.01	
Silver	200.7	01/26/15:201262AC	CCV	ppm	1.000	110 %	90-110	
			CCB	ppm		0.0099	0.01	
			CCV	ppm	1.000	110 %	90-110	
			CCB	ppm		-0.0054	0.01	
Thallium	200.7	01/15/15:200720AC	CCV	ppm	1.000	99.9 %	90-110	
			CCB	ppm		0.0025	0.01	
			CCV	ppm	1.000	100 %	90-110	

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Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Thallium	200.7	01/15/15:200720AC	CCB	ppm		0.0002	0.01	
Vanadium	200.7	01/15/15:200720AC	CCV	ppm	1.000	99.6 %	90-110	
			CCB	ppm		0.00008	0.01	
			CCV	ppm	1.000	99.6 %	90-110	
			CCB	ppm		0.00001	0.01	
Zinc	200.7	01/15/15:200720AC	CCV	ppm	1.000	98.2 %	90-110	
			CCB	ppm		-0.0033	0.02	
			CCV	ppm	1.000	99.0 %	90-110	
			CCB	ppm		-0.0028	0.02	
Mercury	245.1	01/15/15:200765AC	CCV	ppb	4.000	105 %	90-110	
			CCB	ppb		0.03	20	
			CCV	ppb	4.000	94.0 %	90-110	
			CCB	ppb		0.03	20	
Antimony	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	24.00	96.3 %	85-115	
			MS	mg/kg	24.00	87.3 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	24.00	94.0 %	75-125	
			MSRPD	mg/kg	40.00	6.8%	≤20	
			PDS	mg/kg	24.00	95.7 %	75-125	
Arsenic	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	40.00	93.4 %	85-115	
			MS	mg/kg	40.00	88.6 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	40.00	94.3 %	75-125	
			MSRPD	mg/kg	40.00	5.9%	≤20	
			PDS	mg/kg	40.00	97.8 %	75-125	
Barium	3050	01/14/15:200421amb	Blank	mg/kg		ND	<1	
			LCS	mg/kg	40.00	98.2 %	85-115	
			MS	mg/kg	40.00	556 %	<¼	
		(CC 1580085-001)	MSD	mg/kg	40.00	581 %	<¼	
			MSRPD	mg/kg	40.00	1.6%	≤20	
			PDS	mg/kg	40.00	729 %	75-125	430
Beryllium	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.3	
			LCS	mg/kg	40.00	99.8 %	85-115	
			MS	mg/kg	40.00	88.6 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	40.00	95.0 %	75-125	
			MSRPD	mg/kg	40.00	7.0%	≤20	
			PDS	mg/kg	40.00	98.8 %	75-125	
Cadmium	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.3	
			LCS	mg/kg	40.00	94.7 %	85-115	
			MS	mg/kg	40.00	87.2 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	40.00	93.8 %	75-125	
			MSRPD	mg/kg	40.00	6.9%	≤20	
			PDS	mg/kg	40.00	98.4 %	75-125	
Chromium	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	40.00	99.4 %	85-115	
			MS	mg/kg	40.00	97.9 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	40.00	105 %	75-125	
			MSRPD	mg/kg	40.00	5.1%	≤20	
			PDS	mg/kg	40.00	110 %	75-125	
Cobalt	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	40.00	98.7 %	85-115	
			MS	mg/kg	40.00	85.7 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	40.00	92.0 %	75-125	
			MSRPD	mg/kg	40.00	6.8%	≤20	

February 4, 2015 Lab ID : VI 1540082
City of Hanford Customer : 4-15877

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Cobalt	3050	01/14/15:200421amb	PDS	mg/kg	40.00	95.8 %	75-125	
Copper	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	40.00	102 %	85-115	
			MS	mg/kg	40.00	471 %	<¼	
		(CC 1580085-001)	MSD	mg/kg	40.00	469 %	<¼	
			MSRPD	mg/kg	40.00	0.1%	≤20	
			PDS	mg/kg	40.00	585 %	75-125	430
Lead	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	40.00	94.6 %	85-115	
			MS	mg/kg	40.00	85.2 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	40.00	91.1 %	75-125	
			MSRPD	mg/kg	40.00	5.2%	≤20	
			PDS	mg/kg	40.00	97.2 %	75-125	
Molybdenum	3050	01/14/15:200421amb	Blank	mg/kg		ND	<1	
			LCS	mg/kg	24.00	101 %	85-115	
			MS	mg/kg	24.00	114 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	24.00	124 %	75-125	
			MSRPD	mg/kg	40.00	5.3%	≤20	
			PDS	mg/kg	24.00	119 %	75-125	
Nickel	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	40.00	99.2 %	85-115	
			MS	mg/kg	40.00	89.3 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	40.00	95.8 %	75-125	
			MSRPD	mg/kg	40.00	5.7%	≤20	
			PDS	mg/kg	40.00	98.4 %	75-125	
Selenium	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	40.00	93.3 %	85-115	
			MS	mg/kg	40.00	100 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	40.00	105 %	75-125	
			MSRPD	mg/kg	40.00	3.6%	≤20	
			PDS	mg/kg	40.00	113 %	75-125	
Silver	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	40.00	111 %	85-115	
			MS	mg/kg	40.00	110 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	40.00	117 %	75-125	
			MSRPD	mg/kg	40.00	5.9%	≤20	
			PDS	mg/kg	40.00	122 %	75-125	
Thallium	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	40.00	94.6 %	85-115	
			MS	mg/kg	40.00	74.1 %	75-125	435
		(CC 1580085-001)	MSD	mg/kg	40.00	80.2 %	75-125	
			MSRPD	mg/kg	40.00	8.0%	≤20	
			PDS	mg/kg	40.00	84.1 %	75-125	
Vanadium	3050	01/14/15:200421amb	Blank	mg/kg		ND	<0.5	
			LCS	mg/kg	40.00	99.9 %	85-115	
			MS	mg/kg	40.00	116 %	75-125	
		(CC 1580085-001)	MSD	mg/kg	40.00	126 %	75-125	435
			MSRPD	mg/kg	40.00	4.8%	≤20	
			PDS	mg/kg	40.00	123 %	75-125	
Zinc	3050	01/14/15:200421amb	Blank	mg/kg		ND	<1	
			LCS	mg/kg	40.00	93.7 %	85-115	
			MS	mg/kg	40.00	483 %	<¼	
		(CC 1580085-001)	MSD	mg/kg	40.00	506 %	<¼	
			MSRPD	mg/kg	40.00	1.2%	≤20	

February 4, 2015 | Lab ID : VI 1540082
City of Hanford | Customer : 4-15877

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Zinc	3050	01/14/15:200421amb	PDS	mg/kg	40.00	583 %	75-125	430
Mercury	7471	01/15/15:200522AC	Blank	mg/kg		ND	<0.03	
			LCS	mg/kg	0.2500	88.2 %	85-115	
			MS	mg/kg	0.2500	93.4 %	75-125	
		(STK1530390-001)	MSD	mg/kg	0.2500	86.2 %	75-125	
			MSRPD	mg/kg	0.2500	7.8%	≤20	
Wet Chem								
% Solids	2540G	01/13/15:200402jmg	Blank	%		ND	<0.1	
		(VI 1540082-001)	Dup	%		0.3%	23.9	
Nitrate	300	01/12/15:200341MCA	Blank	mg/kg		ND	<4	
			LCS	mg/kg	400.0	102 %	85-115	
			MS	mg/kg	199.2	15.0 %	19-212	435
		(VI 1540082-001)	MSD	mg/kg	198.8	14.4 %	19-212	435
			MSRPD	mg/kg	49.70	3.6%	≤33	
	300.0	01/14/15:200642KD	CCB	ppm		0.000	0.5	
			CCV	ppm	20.00	104 %	90-110	
			CCB	ppm		0.000	0.5	
			CCV	ppm	20.00	102 %	90-110	
Nitrogen, Total Kjeldahl	351.2	01/27/15:200945jmg	Blank	mg/kg		ND	<50	
			LCS	mg/kg	600.0	113 %	31-149	
			MS	mg/kg	517.2	-762 %	<¼	
		(SP 1500779-001)	MSD	mg/kg	517.2	-706 %	<¼	
			MSRPD	mg/kg	517.2	3.3%	≤80	
pH	4500HB	01/12/15:200507CJJ	CCV	units	8.000	99.5 %	95-105	
			CCV	units	8.000	100 %	95-105	
Ammonia Nitrogen	4500NH3B	01/16/15:200560CJJ	Blank	mg/kg		ND	<7.77	
			LCS	mg/kg	150.0	77.4 %	75-127	
			MS	mg/kg	142.9	487 %	<¼	
		(VI 1540082-001)	MSD	mg/kg	144.2	345 %	<¼	
			MSRPD	mg/kg	144.2	3.7%	≤26.5	
	4500NH3G	01/27/15:201275AMB	CCB	mg/L		0.000	0.2	
			CCV	mg/L	2.000	100 %	90-110	
			CCB	mg/L		0.000	0.2	
			CCV	mg/L	2.000	99.2 %	90-110	
pH	9045C	(SP 1500182-001)	Dup	units		0.5%	5.84	
Nitrogen, Total Kjeldahl	EPA351.2	01/29/15:201446AMB	CCB	mg/L		0.445	0.5	
			CCV	mg/L	5.000	104 %	90-110	
			CCB	mg/L		-0.108	0.5	
			CCV	mg/L	5.000	109 %	90-110	

Definition

PDS	: PDS failed, matrix - Post Digestion Spike (PDS) not within Acceptance Range (AR) because of matrix interferences affecting this analyte.
CCV	: Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
CCB	: Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
Blank	: Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS	: Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
MS	: Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSD	: Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyted. The recoveries are an indication of how that sample matrix affects analyte recovery.
Dup	: Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
MSRPD	: MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.

Quality Control - Inorganic

Definition	
ND	: Non-detect - Result was below the DQO listed for the analyte.
<¼	: High Sample Background - Spike concentration was less than one forth of the sample concentration.
DQO	: Data Quality Objective - This is the criteria against which the quality control data is compared.
Explanation	
430	: Post Digestion Spike (PDS) not within Acceptance Range (AR) because of matrix interferences affecting this analyte.
435	: Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.

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Laboratory Copy (1 of 3)

40524:10/08/2014

TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information

Client: City of Hanford - Wastewater Treatment
Address: City of Hanford
Attn: April Engen-Garza
900 S.10th Ave.
Hanford, CA 93230

Phone: (559)585-2576 Fax: (559)584-8633

Contact Person: April Engen-Garza

Project Name: **Sludge Monitoring**

Purchase Order Number:

Quote Number: VI20071009_01

Sampler(s) Neil Jessup

Sampling Fee: $25.00 Pickup Fee: _____

Compositor Setup Date: __/__/__ Time: __/__

Lab Number: VI 1540082 4-15877

Samp Num	Location Description	Date Sampled	Time Sampled	Method of Sampling: Composite(C) Grab(G)	Type of Sample **SEE REVERSE SIDE**	Potable(P) Non-Potable(NP) Ag Water(AgW)	Bacti Type: Other(O) System(SYS) Source(SR) Waste(W)	Bacti Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)	Coliform LTB-Series 35 Tube MPN/gm ***24 hour H/T*** NOTE: Please notify SP Bacti Lab prior to sampling 8oz(G)	Metals, Total-Sb,As,Ba,Be,Cd,Cr,Co,Cu,Pb,Hg,Mo,Ni,Se,Ag,Tl,V,Zn 8oz(G)	Wet Chemistry-NH3-N,NO3-N,N-Organic,Total N,pH 8oz(G)	Sampling Fee - See Quote	Wet Chemistry-% Solids 8oz(G)
1	Sludge Stockpile	1/8/15	1550	G	Slg	NP			1	1	1	X	1

Remarks:
NOTE: Please notify SP Bacti Lab prior to sampling

Relinquished	Date:	Time:	Relinquished	Date:	Time:	Relinquished	Date:	Time:
Neil Jessup	1/8/15	1900	[illegible]	1/9/15	950			
Received By:	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**
Ontrac	1/8/15	1900	[illegible]	1/9/15	950.			

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
Phone: (805) 392-2000
Env Fax: (805) 525-4172 / Ag Fax: (805) 392-2063

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Stockton, CA 95215
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Fax: (209) 942-0423

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563 E. Lindo
Chico, CA 95926
Phone: (530) 343-5818
Fax: (530) 343-3807

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San Luis Obispo, CA 93401
Phone: (805) 783-2940
Fax: (805) 783-2912

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
Phone: (559) 734-9473
Fax: (559) 734-8435

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # FS
2. Were samples received in a chilled condition? Temps: 8°C / ____ / ____ / ____ / ____
   Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10° C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

3. Do the number of bottles received agree with the COC?	Yes	No	N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.)	Yes	No	
5. VOAs checked for Headspace?	Yes	No	N/A
6. Were sample custody seals intact?	Yes	No	N/A
7. If required, was sample split for pH analysis?	Yes	No	N/A
8. Were all analyses within holding times at time of receipt?	Yes	No	
9. Verify sample date, time and sampler name	Yes	No	

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.
Sample Receipt Review completed by (initials): my

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 6 / ____ / ____ / ____ / ____
   Acceptable is above freezing to 6 C. If many packages are received at one time check for tests/H.T.'s/rushes/
2. Shipping tracking numbers: B103079184 17

3. Do the number of bottles received agree with the COC?	Yes	No	N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.)	Yes	No	
5. Were sample custody seals intact?	Yes	No	N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable?	Yes	No		
2. Did bottle labels correspond with the client's ID's?	Yes	No		
3. Were all bottles requiring sample preservation properly preserved? [Exception: Oil & Grease, VOA and CrVI verified in lab]	Yes	No	N/A	FGL
4. VOAs checked for Headspace?	Yes	No	N/A	
5. Have rush or project due dates been checked and accepted?	Yes	No	N/A	
6. Were all analyses within holding times at time of receipt?	Yes	No		

Attach labels to the containers and include a copy of the COC for lab delivery.
Sample Receipt, Login and Verification completed by (initials): ____

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: ____ Phone Number: ____
   Initiated By: ____ Date: ____
   Problem:
   Resolution:

2. Person Contacted: ____
   Initiated By: ____
   Problem:
   Resolution:

(4-15877)
City of Hanford - Wastewater Treatment
VI 1540082
IV-01/09/2015-08:58:19

(Please use the back of this sheet for additional comr ere contacts)