

Analytical Summary Report

Analysis Method: 7196A

ANALYST: Indiana

Parameter: Hexavalent Chromium

SUPERVISOR REVIEW BY: apatel

Run Number: LB100207

pH Meter ID: WC pH Meter-1

Reagent/Standard	Lot/Log #
Calibration Std. hexchrome 0.1 ppm	WP70752
Calibration Std. hexchrome 0.05 ppm	WP70751
5N sulfuric acid	WP70044
Hexavalent Chromium LCS Std	WP70756
Calibratation STD HexaChrome 1 PPM	WP70754
Calibratation STD Hexa Chrome 0.5 PPM	WP70753
calibration std. hexchrome 0.01 ppm	WP70749
calibration std. hexchrome 0 ppm	WP70748
Hexavalent Chromium ICV Std.	WP70755
Hexavalent Chromium CCV Std	WP70757
hexavalent chromium color reagent	WP70661
Calibration std Hexachrome, 0.025ppm	WP70750

Intercept: 0.0005

Slope: 0.772

Regression: 0.999979

Seq	Lab ID	True Value (mg/l)	DF	Initial Vol (ml/gm)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb. at 540		Absorbance Difference	Anal Date	Anal Time
								Backgrnd	Color			
1	CAL1	0	1	100	100		1.89	0.000	0.000	0.000	01/08/2019	07:40
2	CAL2	0.01	1	100	100		1.75	0.000	0.008	0.008	01/08/2019	07:40
3	CAL3	0.025	1	100	100		2.44	0.000	0.017	0.017	01/08/2019	07:41
4	CAL4	0.05	1	100	100		1.66	0.000	0.039	0.039	01/08/2019	07:41
5	CAL5	0.1	1	100	100		2.11	0.000	0.080	0.080	01/08/2019	07:42
6	CAL6	0.5	1	100	100		2.30	0.000	0.389	0.389	01/08/2019	07:42
7	CAL7	1	1	100	100		1.80	0.000	0.771	0.771	01/08/2019	07:43



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Seq	Lab ID	True Value (mg/l)	DF	Initial Vol (ml/gm)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb. at 540		Absorbance Difference	Result	Anal Date	Anal Time
								Backgrnd	Color				
1	ICV	0.5	1	100	100		1.78	0.000	0.391	0.391	0.506	01/08/2019	07:43
2	ICB		1	100	100		1.64	0.000	0.000	0.000	-0.001	01/08/2019	07:44
3	CCV1	0.5	1	100	100		1.59	0.000	0.390	0.390	0.505	01/08/2019	07:44
4	CCB1		1	100	100		2.12	0.000	0.000	0.000	-0.001	01/08/2019	07:45
5	LB100207BL		1	100	100		2.27	0.000	0.000	0.000	-0.001	01/08/2019	07:45
6	LB100207BS	0.5	1	100	100		1.60	0.000	0.372	0.372	0.481	01/08/2019	07:46
7	K1079-01		1	100	100		1.84	0.088	2.542	2.454	3.178	01/08/2019	07:46
8	K1079-03		1	100	100		2.11	0.008	0.008	0.000	-0.001	01/08/2019	07:47
9	K1079-05		1	100	100		2.19	0.010	0.165	0.155	0.200	01/08/2019	07:47
10	K1079-07		1	100	100		2.33	0.087	3.568	3.481	4.508	01/08/2019	07:48
11	K1079-09		1	100	100		1.75	0.063	4.777	4.714	6.106	01/08/2019	07:48
12	K1079-09DUP		1	100	100		1.81	0.064	4.780	4.716	6.108	01/08/2019	07:49
13	K1079-10	1	2	100	100		2.30	0.066	4.981	4.915	6.366	01/08/2019	07:49
14	K1079-11	1	2	100	100		2.21	0.066	4.979	4.913	6.363	01/08/2019	07:50
15	CCV2	0.5	1	100	100		1.95	0.000	0.372	0.372	0.481	01/08/2019	07:50
16	CCB2		1	100	100		2.04	0.000	0.000	0.000	-0.001	01/08/2019	07:51
17	K1079-15		1	100	100		2.35	0.168	0.168	0.000	-0.001	01/08/2019	07:51
18	K1079-17		1	100	100		2.46	0.042	0.044	0.002	0.002	01/08/2019	07:52
19	K1079-19		1	100	100		1.82	0.369	6.979	6.610	8.562	01/08/2019	07:52
20	K1079-01		100	100	100		1.84	0.002	0.248	0.246	0.318	01/08/2019	07:53
21	K1079-07		100	100	100		2.33	0.001	0.287	0.286	0.370	01/08/2019	07:53
22	K1079-09		100	100	100		1.75	0.000	0.360	0.360	0.466	01/08/2019	07:54
23	K1079-09DUP		100	100	100		1.81	0.000	0.360	0.360	0.466	01/08/2019	07:54
24	K1079-10	1	100	100	100		2.30	0.000	0.363	0.363	0.470	01/08/2019	07:55
25	K1079-11	1	100	100	100		2.21	0.001	0.363	0.362	0.468	01/08/2019	07:55
26	K1079-19		100	100	100		1.82	0.003	0.506	0.503	0.651	01/08/2019	07:56
27	CCV3	0.5	1	100	100		1.93	0.000	0.391	0.391	0.506	01/08/2019	07:56
28	CCB3		1	100	100		1.77	0.000	0.000	0.000	-0.001	01/08/2019	07:57

CHEMTECH

SOP ID: M3060A.7196A-Hex.Chromium

Revision #22

QA Control Code: A2040051

Effective Date: May 25, 2018

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Appendix A

01/08/19

IB

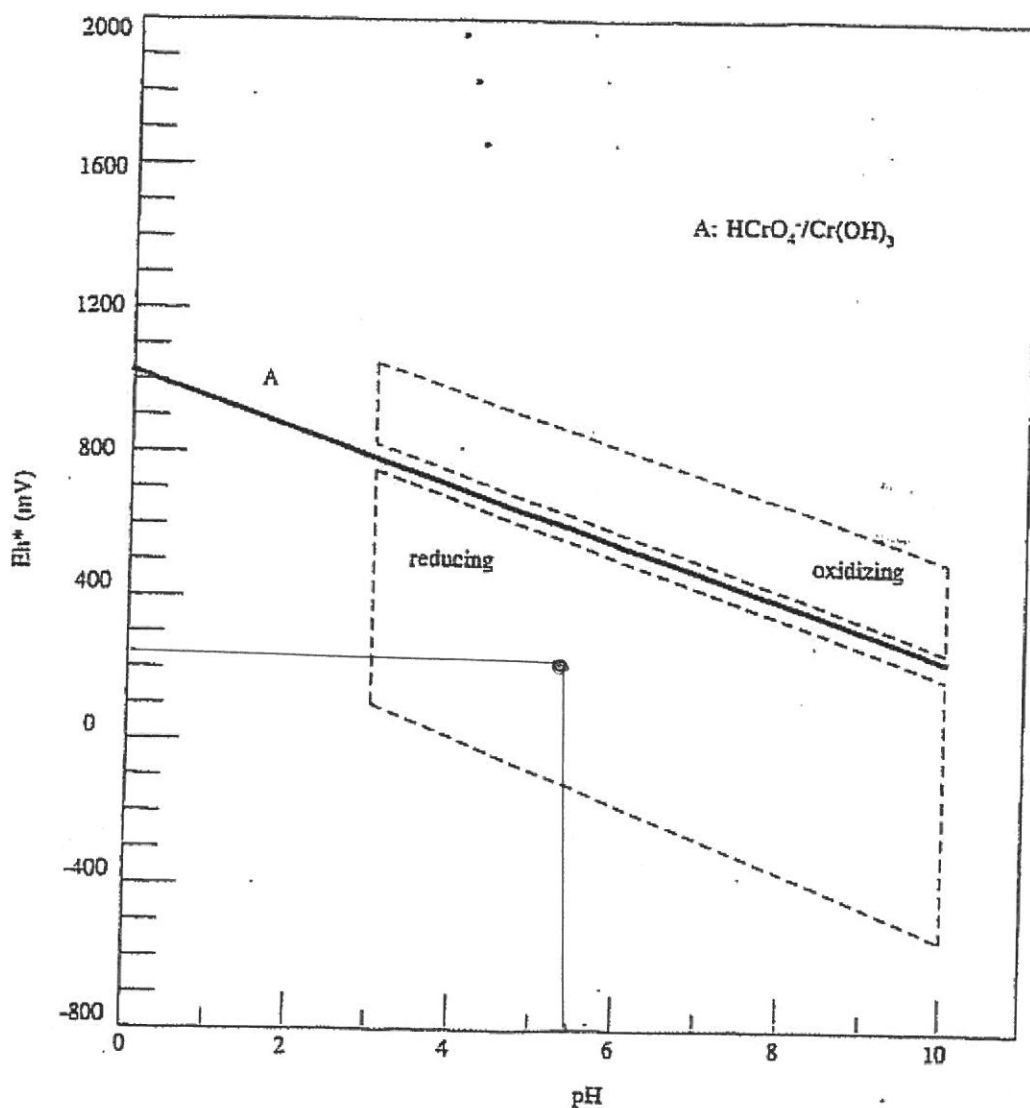
PH: 5.68

EH: 256

FIGURE 2
Eh/pH PHASE DIAGRAM

K1079-10

The dashed lines define Eh-pH boundaries commonly encountered in soils and sediments.



* Note the Eh values plotted on this diagram are corrected for the reference electrode voltage: 244 mV units must be added to the measured value when a separate calomel electrode is used, or 199 mV units must be added if a combination platinum electrode is used.

LB 100207

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Hex010819

WorkList ID : 121095

Date : 1/8/2019 7:20:32 AM

Due Date	Matrix	Sample	Test	Preservative	Customer	Storage Location	Customer Sample	Collect Date	Method
01/08/2019	Water	K1079-01	Hexavalent Chromium	Cool 4 deg C	JACO05	F12	D-01072019-01	01/07/2019	7196A
01/08/2019	Water	K1079-03	Hexavalent Chromium	Cool 4 deg C	JACO05	F12	EB-01072019-01	01/07/2019	7196A
01/08/2019	Water	K1079-05	Hexavalent Chromium	Cool 4 deg C	JACO05	F12	EPA-MW-29-BR-01072019	01/07/2019	7196A
01/08/2019	Water	K1079-07	Hexavalent Chromium	Cool 4 deg C	JACO05	F12	EPA-MW-29-OB-01072019	01/07/2019	7196A
01/08/2019	Water	K1079-09	Hexavalent Chromium	Cool 4 deg C	JACO05	F12	EPA-MW-39-OB-01072019	01/07/2019	7196A
01/08/2019	Water	K1079-10	Hexavalent Chromium	Cool 4 deg C	JACO05	F12	K1079-09MS	01/07/2019	7196A
01/08/2019	Water	K1079-11	Hexavalent Chromium	Cool 4 deg C	JACO05	F12	K1079-09MSD	01/07/2019	7196A
01/08/2019	Water	K1079-15	Hexavalent Chromium	Cool 4 deg C	JACO05	F12	EPA-MW-40-OB-01072019	01/07/2019	7196A
01/08/2019	Water	K1079-17	Hexavalent Chromium	Cool 4 deg C	JACO05	F12	EPA-MW-41-EF-01072019	01/07/2019	7196A
01/08/2019	Water	K1079-19	Hexavalent Chromium	Cool 4 deg C	JACO05	F12	EPA-MW-41-OB-01072019	01/07/2019	7196A

Date/Time 01/08/19 9:25
 Received by: IB
 Relinquished by: IB

Date/Time 01/08/19 11:00
 Received by: IB
 Relinquished by: IB