

Analytical Sequence

Client: HDR, Inc.

SDG No.: Q3466

Project: PVWC Linear Construction

Instrument ID: ECD_O

GC Column: ZB-MR1

ID: 0.32 (mm)

Inst. Calib. Date(s): 10/09/2025

10/09/2025

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

CLIENT ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
IBLK	IBLK	10/09/2025	13:55	PO114312.D	9.93	4.36
AR1660ICC1000	AR1660ICC1000	10/09/2025	14:14	PO114313.D	9.93	4.36
AR1660ICC750	AR1660ICC750	10/09/2025	14:32	PO114314.D	9.93	4.36
AR1660ICC500	AR1660ICC500	10/09/2025	14:50	PO114315.D	9.93	4.36
AR1660ICC250	AR1660ICC250	10/09/2025	15:09	PO114316.D	9.93	4.36
AR1660ICC050	AR1660ICC050	10/09/2025	15:27	PO114317.D	9.93	4.36
AR1221ICC500	AR1221ICC500	10/09/2025	15:45	PO114318.D	9.93	4.36
AR1232ICC500	AR1232ICC500	10/09/2025	16:04	PO114319.D	9.93	4.36
AR1242ICC1000	AR1242ICC1000	10/09/2025	16:22	PO114320.D	9.93	4.36
AR1242ICC750	AR1242ICC750	10/09/2025	16:40	PO114321.D	9.93	4.36
AR1242ICC500	AR1242ICC500	10/09/2025	16:59	PO114322.D	9.93	4.36
AR1242ICC250	AR1242ICC250	10/09/2025	17:17	PO114323.D	9.93	4.36
AR1242ICC050	AR1242ICC050	10/09/2025	17:35	PO114324.D	9.93	4.36
AR1248ICC1000	AR1248ICC1000	10/09/2025	17:54	PO114325.D	9.93	4.36
AR1248ICC750	AR1248ICC750	10/09/2025	18:12	PO114326.D	9.93	4.36
AR1248ICC500	AR1248ICC500	10/09/2025	18:30	PO114327.D	9.93	4.36
AR1248ICC250	AR1248ICC250	10/09/2025	18:49	PO114328.D	9.93	4.36
AR1248ICC050	AR1248ICC050	10/09/2025	19:07	PO114329.D	9.93	4.36
AR1254ICC1000	AR1254ICC1000	10/09/2025	19:26	PO114330.D	9.93	4.36
AR1254ICC750	AR1254ICC750	10/09/2025	19:44	PO114331.D	9.93	4.36
AR1254ICC500	AR1254ICC500	10/09/2025	20:02	PO114332.D	9.93	4.36
AR1254ICC250	AR1254ICC250	10/09/2025	20:21	PO114333.D	9.93	4.36
AR1254ICC050	AR1254ICC050	10/09/2025	20:39	PO114334.D	9.93	4.36
AR1262ICC500	AR1262ICC500	10/09/2025	20:57	PO114335.D	9.93	4.36
AR1268ICC1000	AR1268ICC1000	10/09/2025	21:16	PO114336.D	9.93	4.36
AR1268ICC750	AR1268ICC750	10/09/2025	21:34	PO114337.D	9.93	4.36
AR1268ICC500	AR1268ICC500	10/09/2025	21:52	PO114338.D	9.93	4.36
AR1268ICC250	AR1268ICC250	10/09/2025	22:11	PO114339.D	9.93	4.36
AR1268ICC050	AR1268ICC050	10/09/2025	22:29	PO114340.D	9.93	4.36
AR1660CCC500	AR1660CCC500	10/28/2025	09:33	PO114694.D	9.93	4.35
IBLK	IBLK	10/28/2025	11:23	PO114699.D	9.93	4.35
SS-9R(4.5-5.0)MS	Q3461-01MS	10/28/2025	14:00	PO114707.D	9.93	4.35
SS-9R(4.5-5.0)MSD	Q3461-01MSD	10/28/2025	14:19	PO114708.D	9.93	4.35
AR1660CCC500	AR1660CCC500	10/28/2025	15:28	PO114709.D	9.93	4.35
IBLK	IBLK	10/28/2025	16:41	PO114713.D	9.93	4.35
IBLK	IBLK	10/21/2025	08:49	PP075887.D	10.42	4.64
AR1660ICC1000	AR1660ICC1000	10/21/2025	09:06	PP075888.D	10.42	4.65
AR1660ICC750	AR1660ICC750	10/21/2025	09:22	PP075889.D	10.42	4.64
AR1660ICC500	AR1660ICC500	10/21/2025	09:38	PP075890.D	10.42	4.64
AR1660ICC250	AR1660ICC250	10/21/2025	09:54	PP075891.D	10.42	4.65
AR1660ICC050	AR1660ICC050	10/21/2025	10:11	PP075892.D	10.42	4.65
AR1221ICC500	AR1221ICC500	10/21/2025	10:27	PP075893.D	10.42	4.64

Analytical Sequence

AR1232ICC500	AR1232ICC500	10/21/2025	10:43	PP075894.D	10.42	4.64
AR1242ICC1000	AR1242ICC1000	10/21/2025	10:59	PP075895.D	10.42	4.65
AR1242ICC750	AR1242ICC750	10/21/2025	11:16	PP075896.D	10.42	4.64
AR1242ICC500	AR1242ICC500	10/21/2025	11:48	PP075897.D	10.42	4.65
AR1242ICC250	AR1242ICC250	10/21/2025	12:04	PP075898.D	10.42	4.65
AR1242ICC050	AR1242ICC050	10/21/2025	12:21	PP075899.D	10.42	4.65
AR1248ICC1000	AR1248ICC1000	10/21/2025	12:41	PP075900.D	10.43	4.65
AR1248ICC750	AR1248ICC750	10/21/2025	12:57	PP075901.D	10.42	4.64
AR1248ICC500	AR1248ICC500	10/21/2025	13:13	PP075902.D	10.42	4.65
AR1248ICC250	AR1248ICC250	10/21/2025	13:30	PP075903.D	10.42	4.65
AR1248ICC050	AR1248ICC050	10/21/2025	13:46	PP075904.D	10.42	4.65
AR1254ICC1000	AR1254ICC1000	10/21/2025	14:02	PP075905.D	10.42	4.65
AR1254ICC750	AR1254ICC750	10/21/2025	14:18	PP075906.D	10.42	4.64
AR1254ICC500	AR1254ICC500	10/21/2025	14:35	PP075907.D	10.42	4.65
AR1254ICC250	AR1254ICC250	10/21/2025	14:51	PP075908.D	10.42	4.65
AR1254ICC050	AR1254ICC050	10/21/2025	15:07	PP075909.D	10.42	4.64
AR1262ICC500	AR1262ICC500	10/21/2025	15:40	PP075910.D	10.43	4.65
AR1268ICC1000	AR1268ICC1000	10/21/2025	15:56	PP075911.D	10.42	4.65
AR1268ICC750	AR1268ICC750	10/21/2025	16:12	PP075912.D	10.42	4.65
AR1268ICC500	AR1268ICC500	10/21/2025	16:29	PP075913.D	10.42	4.65
AR1268ICC250	AR1268ICC250	10/21/2025	16:45	PP075914.D	10.43	4.65
AR1268ICC050	AR1268ICC050	10/21/2025	17:01	PP075915.D	10.42	4.65
AR1660CCC500	AR1660CCC500	10/28/2025	14:35	PP076126.D	10.41	4.64
IBLK	IBLK	10/28/2025	15:57	PP076131.D	10.41	4.64
PB170282BL	PB170282BL	10/28/2025	16:13	PP076132.D	10.41	4.64
B8-0.0-1.0-20251023	Q3466-02	10/28/2025	17:02	PP076135.D	10.41	4.64
B9-0.0-1.0-20251023	Q3466-05	10/28/2025	17:18	PP076136.D	10.41	4.64
B7-1.0-2.0-20251023	Q3466-07	10/28/2025	17:34	PP076137.D	10.41	4.64
AR1660CCC500	AR1660CCC500	10/28/2025	19:44	PP076142.D	10.41	4.64
IBLK	IBLK	10/28/2025	21:21	PP076146.D	10.41	4.64
AR1660CCC500	AR1660CCC500	10/29/2025	09:48	PP076148.D	10.41	4.64
IBLK	IBLK	10/29/2025	10:53	PP076152.D	10.41	4.64
PB170282BS	PB170282BS	10/29/2025	11:10	PP076153.D	10.41	4.64
AR1660CCC500	AR1660CCC500	10/29/2025	13:54	PP076159.D	10.41	4.64
IBLK	IBLK	10/29/2025	14:59	PP076163.D	10.42	4.64

Analytical Sequence

Client: HDR, Inc.

SDG No.: Q3466

Project: PVWC Linear Construction

Instrument ID: ECD_O

GC Column: ZB-MR2

ID: 0.32 (mm)

Inst. Calib. Date(s): 10/09/2025

10/09/2025

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

CLIENT ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
IBLK	IBLK	10/09/2025	13:55	PO114312.D	8.67	3.66
AR1660ICC1000	AR1660ICC1000	10/09/2025	14:14	PO114313.D	8.67	3.66
AR1660ICC750	AR1660ICC750	10/09/2025	14:32	PO114314.D	8.67	3.66
AR1660ICC500	AR1660ICC500	10/09/2025	14:50	PO114315.D	8.67	3.66
AR1660ICC250	AR1660ICC250	10/09/2025	15:09	PO114316.D	8.67	3.66
AR1660ICC050	AR1660ICC050	10/09/2025	15:27	PO114317.D	8.67	3.66
AR1221ICC500	AR1221ICC500	10/09/2025	15:45	PO114318.D	8.67	3.66
AR1232ICC500	AR1232ICC500	10/09/2025	16:04	PO114319.D	8.67	3.66
AR1242ICC1000	AR1242ICC1000	10/09/2025	16:22	PO114320.D	8.67	3.66
AR1242ICC750	AR1242ICC750	10/09/2025	16:40	PO114321.D	8.67	3.66
AR1242ICC500	AR1242ICC500	10/09/2025	16:59	PO114322.D	8.67	3.66
AR1242ICC250	AR1242ICC250	10/09/2025	17:17	PO114323.D	8.67	3.66
AR1242ICC050	AR1242ICC050	10/09/2025	17:35	PO114324.D	8.67	3.66
AR1248ICC1000	AR1248ICC1000	10/09/2025	17:54	PO114325.D	8.67	3.66
AR1248ICC750	AR1248ICC750	10/09/2025	18:12	PO114326.D	8.67	3.66
AR1248ICC500	AR1248ICC500	10/09/2025	18:30	PO114327.D	8.67	3.66
AR1248ICC250	AR1248ICC250	10/09/2025	18:49	PO114328.D	8.67	3.66
AR1248ICC050	AR1248ICC050	10/09/2025	19:07	PO114329.D	8.67	3.66
AR1254ICC1000	AR1254ICC1000	10/09/2025	19:26	PO114330.D	8.67	3.66
AR1254ICC750	AR1254ICC750	10/09/2025	19:44	PO114331.D	8.67	3.66
AR1254ICC500	AR1254ICC500	10/09/2025	20:02	PO114332.D	8.67	3.66
AR1254ICC250	AR1254ICC250	10/09/2025	20:21	PO114333.D	8.67	3.66
AR1254ICC050	AR1254ICC050	10/09/2025	20:39	PO114334.D	8.67	3.66
AR1262ICC500	AR1262ICC500	10/09/2025	20:57	PO114335.D	8.67	3.66
AR1268ICC1000	AR1268ICC1000	10/09/2025	21:16	PO114336.D	8.67	3.66
AR1268ICC750	AR1268ICC750	10/09/2025	21:34	PO114337.D	8.67	3.66
AR1268ICC500	AR1268ICC500	10/09/2025	21:52	PO114338.D	8.67	3.66
AR1268ICC250	AR1268ICC250	10/09/2025	22:11	PO114339.D	8.67	3.66
AR1268ICC050	AR1268ICC050	10/09/2025	22:29	PO114340.D	8.67	3.66
AR1660CCC500	AR1660CCC500	10/28/2025	09:33	PO114694.D	8.65	3.65
IBLK	IBLK	10/28/2025	11:23	PO114699.D	8.65	3.65
SS-9R(4.5-5.0)MS	Q3461-01MS	10/28/2025	14:00	PO114707.D	8.65	3.65
SS-9R(4.5-5.0)MSD	Q3461-01MSD	10/28/2025	14:19	PO114708.D	8.65	3.65
AR1660CCC500	AR1660CCC500	10/28/2025	15:28	PO114709.D	8.65	3.65
IBLK	IBLK	10/28/2025	16:41	PO114713.D	8.65	3.65
IBLK	IBLK	10/21/2025	08:49	PP075887.D	8.78	3.78
AR1660ICC1000	AR1660ICC1000	10/21/2025	09:06	PP075888.D	8.78	3.78
AR1660ICC750	AR1660ICC750	10/21/2025	09:22	PP075889.D	8.78	3.78
AR1660ICC500	AR1660ICC500	10/21/2025	09:38	PP075890.D	8.78	3.78
AR1660ICC250	AR1660ICC250	10/21/2025	09:54	PP075891.D	8.78	3.78
AR1660ICC050	AR1660ICC050	10/21/2025	10:11	PP075892.D	8.78	3.78
AR1221ICC500	AR1221ICC500	10/21/2025	10:27	PP075893.D	8.78	3.78

Analytical Sequence

AR1232ICC500	AR1232ICC500	10/21/2025	10:43	PP075894.D	8.78	3.78
AR1242ICC1000	AR1242ICC1000	10/21/2025	10:59	PP075895.D	8.78	3.78
AR1242ICC750	AR1242ICC750	10/21/2025	11:16	PP075896.D	8.78	3.78
AR1242ICC500	AR1242ICC500	10/21/2025	11:48	PP075897.D	8.79	3.78
AR1242ICC250	AR1242ICC250	10/21/2025	12:04	PP075898.D	8.78	3.78
AR1242ICC050	AR1242ICC050	10/21/2025	12:21	PP075899.D	8.78	3.78
AR1248ICC1000	AR1248ICC1000	10/21/2025	12:41	PP075900.D	8.78	3.78
AR1248ICC750	AR1248ICC750	10/21/2025	12:57	PP075901.D	8.78	3.78
AR1248ICC500	AR1248ICC500	10/21/2025	13:13	PP075902.D	8.78	3.78
AR1248ICC250	AR1248ICC250	10/21/2025	13:30	PP075903.D	8.78	3.78
AR1248ICC050	AR1248ICC050	10/21/2025	13:46	PP075904.D	8.78	3.78
AR1254ICC1000	AR1254ICC1000	10/21/2025	14:02	PP075905.D	8.78	3.78
AR1254ICC750	AR1254ICC750	10/21/2025	14:18	PP075906.D	8.78	3.78
AR1254ICC500	AR1254ICC500	10/21/2025	14:35	PP075907.D	8.79	3.79
AR1254ICC250	AR1254ICC250	10/21/2025	14:51	PP075908.D	8.78	3.78
AR1254ICC050	AR1254ICC050	10/21/2025	15:07	PP075909.D	8.78	3.78
AR1262ICC500	AR1262ICC500	10/21/2025	15:40	PP075910.D	8.79	3.79
AR1268ICC1000	AR1268ICC1000	10/21/2025	15:56	PP075911.D	8.79	3.78
AR1268ICC750	AR1268ICC750	10/21/2025	16:12	PP075912.D	8.78	3.78
AR1268ICC500	AR1268ICC500	10/21/2025	16:29	PP075913.D	8.79	3.79
AR1268ICC250	AR1268ICC250	10/21/2025	16:45	PP075914.D	8.79	3.79
AR1268ICC050	AR1268ICC050	10/21/2025	17:01	PP075915.D	8.79	3.79
AR1660CCC500	AR1660CCC500	10/28/2025	14:35	PP076126.D	8.77	3.78
IBLK	IBLK	10/28/2025	15:57	PP076131.D	8.77	3.78
PB170282BL	PB170282BL	10/28/2025	16:13	PP076132.D	8.78	3.78
B8-0.0-1.0-20251023	Q3466-02	10/28/2025	17:02	PP076135.D	8.78	3.78
B9-0.0-1.0-20251023	Q3466-05	10/28/2025	17:18	PP076136.D	8.78	3.78
B7-1.0-2.0-20251023	Q3466-07	10/28/2025	17:34	PP076137.D	8.77	3.78
AR1660CCC500	AR1660CCC500	10/28/2025	19:44	PP076142.D	8.77	3.78
IBLK	IBLK	10/28/2025	21:21	PP076146.D	8.77	3.78
AR1660CCC500	AR1660CCC500	10/29/2025	09:48	PP076148.D	8.78	3.78
IBLK	IBLK	10/29/2025	10:53	PP076152.D	8.78	3.78
PB170282BS	PB170282BS	10/29/2025	11:10	PP076153.D	8.78	3.78
AR1660CCC500	AR1660CCC500	10/29/2025	13:54	PP076159.D	8.78	3.78
IBLK	IBLK	10/29/2025	14:59	PP076163.D	8.78	3.78