

Analytical Sequence

Client: HDR, Inc.

SDG No.: Q3649

Project: PVWC Linear Construction

Instrument ID: ECD_O

GC Column: ZB-MR1

ID: 0.32 (mm)

Inst. Calib. Date(s): 11/04/2025

11/04/2025

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	11/04/2025	09:21	PO114870.D	9.93	4.35
AR1660ICC1000	AR1660ICC1000	11/04/2025	09:39	PO114871.D	9.93	4.35
AR1660ICC750	AR1660ICC750	11/04/2025	09:58	PO114872.D	9.93	4.35
AR1660ICC500	AR1660ICC500	11/04/2025	10:16	PO114873.D	9.93	4.35
AR1660ICC250	AR1660ICC250	11/04/2025	10:34	PO114874.D	9.93	4.35
AR1660ICC050	AR1660ICC050	11/04/2025	10:53	PO114875.D	9.93	4.35
AR1221ICC500	AR1221ICC500	11/04/2025	11:11	PO114876.D	9.93	4.35
AR1232ICC500	AR1232ICC500	11/04/2025	11:30	PO114877.D	9.93	4.35
AR1242ICC1000	AR1242ICC1000	11/04/2025	11:48	PO114878.D	9.93	4.35
AR1242ICC750	AR1242ICC750	11/04/2025	12:06	PO114879.D	9.93	4.35
AR1242ICC500	AR1242ICC500	11/04/2025	12:25	PO114880.D	9.93	4.35
AR1242ICC250	AR1242ICC250	11/04/2025	12:42	PO114881.D	9.93	4.35
AR1242ICC050	AR1242ICC050	11/04/2025	13:00	PO114882.D	9.93	4.35
AR1248ICC1000	AR1248ICC1000	11/04/2025	13:19	PO114883.D	9.93	4.35
AR1248ICC750	AR1248ICC750	11/04/2025	13:37	PO114884.D	9.93	4.35
AR1248ICC500	AR1248ICC500	11/04/2025	13:56	PO114885.D	9.93	4.35
AR1248ICC250	AR1248ICC250	11/04/2025	14:14	PO114886.D	9.93	4.35
AR1248ICC050	AR1248ICC050	11/04/2025	14:33	PO114887.D	9.93	4.35
AR1254ICC1000	AR1254ICC1000	11/04/2025	14:51	PO114888.D	9.93	4.35
AR1254ICC750	AR1254ICC750	11/04/2025	15:09	PO114889.D	9.93	4.35
AR1254ICC500	AR1254ICC500	11/04/2025	15:28	PO114890.D	9.93	4.35
AR1254ICC250	AR1254ICC250	11/04/2025	16:04	PO114891.D	9.93	4.35
AR1254ICC050	AR1254ICC050	11/04/2025	16:23	PO114892.D	9.93	4.35
AR1262ICC500	AR1262ICC500	11/04/2025	17:00	PO114893.D	9.95	4.37
AR1268ICC1000	AR1268ICC1000	11/04/2025	17:18	PO114894.D	9.93	4.35
AR1268ICC750	AR1268ICC750	11/04/2025	17:36	PO114895.D	9.93	4.35
AR1268ICC500	AR1268ICC500	11/04/2025	17:55	PO114896.D	9.93	4.35
AR1268ICC250	AR1268ICC250	11/04/2025	18:13	PO114897.D	9.93	4.35
AR1268ICC050	AR1268ICC050	11/04/2025	18:31	PO114898.D	9.93	4.35
AR1660CCC500	AR1660CCC500	11/17/2025	15:28	PO115139.D	9.93	4.35
IBLK	IBLK	11/17/2025	16:40	PO115143.D	9.93	4.35
B5-0.0-0.5-20251114	Q3649-01	11/17/2025	16:58	PO115144.D	9.93	4.35
DUPE-0.0-0.5-20251114	Q3649-03	11/17/2025	17:17	PO115145.D	9.93	4.35
B4-0.0-0.5-20251114	Q3649-06	11/17/2025	17:35	PO115146.D	9.93	4.35
B3-0.0-0.5-20251114	Q3649-08	11/17/2025	17:54	PO115147.D	9.93	4.35
AR1660CCC500	AR1660CCC500	11/17/2025	20:54	PO115154.D	9.93	4.35
IBLK	IBLK	11/17/2025	22:07	PO115158.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

Analytical Sequence

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
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	11/17/2025	15:33	PP076540.D	10.41	4.64
IBLK	IBLK	11/17/2025	16:38	PP076544.D	10.41	4.64
PB170574BL	PB170574BL	11/17/2025	17:43	PP076548.D	10.40	4.63
PB170574BS	PB170574BS	11/17/2025	18:00	PP076549.D	10.41	4.64
TR-05-111325MS	Q3641-01MS	11/17/2025	18:32	PP076551.D	10.40	4.64
TR-05-111325MSD	Q3641-01MSD	11/17/2025	18:48	PP076552.D	10.41	4.64
AR1660CCC500	AR1660CCC500	11/17/2025	20:26	PP076555.D	10.41	4.64
IBLK	IBLK	11/17/2025	21:31	PP076559.D	10.40	4.64

Analytical Sequence

Client: HDR, Inc.

SDG No.: Q3649

Project: PVWC Linear Construction

Instrument ID: ECD_O

GC Column: ZB-MR2

ID: 0.32 (mm)

Inst. Calib. Date(s): 11/04/2025

11/04/2025

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

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AR1660ICC1000	AR1660ICC1000	11/04/2025	09:39	PO114871.D	8.64	3.65
AR1660ICC750	AR1660ICC750	11/04/2025	09:58	PO114872.D	8.64	3.65
AR1660ICC500	AR1660ICC500	11/04/2025	10:16	PO114873.D	8.64	3.65
AR1660ICC250	AR1660ICC250	11/04/2025	10:34	PO114874.D	8.64	3.65
AR1660ICC050	AR1660ICC050	11/04/2025	10:53	PO114875.D	8.64	3.65
AR1221ICC500	AR1221ICC500	11/04/2025	11:11	PO114876.D	8.64	3.65
AR1232ICC500	AR1232ICC500	11/04/2025	11:30	PO114877.D	8.64	3.65
AR1242ICC1000	AR1242ICC1000	11/04/2025	11:48	PO114878.D	8.64	3.65
AR1242ICC750	AR1242ICC750	11/04/2025	12:06	PO114879.D	8.64	3.65
AR1242ICC500	AR1242ICC500	11/04/2025	12:25	PO114880.D	8.64	3.65
AR1242ICC250	AR1242ICC250	11/04/2025	12:42	PO114881.D	8.64	3.65
AR1242ICC050	AR1242ICC050	11/04/2025	13:00	PO114882.D	8.64	3.65
AR1248ICC1000	AR1248ICC1000	11/04/2025	13:19	PO114883.D	8.64	3.65
AR1248ICC750	AR1248ICC750	11/04/2025	13:37	PO114884.D	8.64	3.65
AR1248ICC500	AR1248ICC500	11/04/2025	13:56	PO114885.D	8.64	3.65
AR1248ICC250	AR1248ICC250	11/04/2025	14:14	PO114886.D	8.64	3.65
AR1248ICC050	AR1248ICC050	11/04/2025	14:33	PO114887.D	8.64	3.65
AR1254ICC1000	AR1254ICC1000	11/04/2025	14:51	PO114888.D	8.64	3.65
AR1254ICC750	AR1254ICC750	11/04/2025	15:09	PO114889.D	8.64	3.65
AR1254ICC500	AR1254ICC500	11/04/2025	15:28	PO114890.D	8.64	3.65
AR1254ICC250	AR1254ICC250	11/04/2025	16:04	PO114891.D	8.64	3.65
AR1254ICC050	AR1254ICC050	11/04/2025	16:23	PO114892.D	8.64	3.65
AR1262ICC500	AR1262ICC500	11/04/2025	17:00	PO114893.D	8.64	3.65
AR1268ICC1000	AR1268ICC1000	11/04/2025	17:18	PO114894.D	8.64	3.65
AR1268ICC750	AR1268ICC750	11/04/2025	17:36	PO114895.D	8.64	3.65
AR1268ICC500	AR1268ICC500	11/04/2025	17:55	PO114896.D	8.64	3.65
AR1268ICC250	AR1268ICC250	11/04/2025	18:13	PO114897.D	8.64	3.65
AR1268ICC050	AR1268ICC050	11/04/2025	18:31	PO114898.D	8.64	3.65
AR1660CCC500	AR1660CCC500	11/17/2025	15:28	PO115139.D	8.64	3.65
IBLK	IBLK	11/17/2025	16:40	PO115143.D	8.64	3.65
B5-0.0-0.5-20251114	Q3649-01	11/17/2025	16:58	PO115144.D	8.64	3.65
DUPE-0.0-0.5-20251114	Q3649-03	11/17/2025	17:17	PO115145.D	8.64	3.65
B4-0.0-0.5-20251114	Q3649-06	11/17/2025	17:35	PO115146.D	8.64	3.65
B3-0.0-0.5-20251114	Q3649-08	11/17/2025	17:54	PO115147.D	8.64	3.65
AR1660CCC500	AR1660CCC500	11/17/2025	20:54	PO115154.D	8.64	3.65
IBLK	IBLK	11/17/2025	22:07	PO115158.D	8.64	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

Analytical Sequence

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
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	11/17/2025	15:33	PP076540.D	8.77	3.78
IBLK	IBLK	11/17/2025	16:38	PP076544.D	8.77	3.78
PB170574BL	PB170574BL	11/17/2025	17:43	PP076548.D	8.77	3.77
PB170574BS	PB170574BS	11/17/2025	18:00	PP076549.D	8.77	3.78
TR-05-111325MS	Q3641-01MS	11/17/2025	18:32	PP076551.D	8.77	3.77
TR-05-111325MSD	Q3641-01MSD	11/17/2025	18:48	PP076552.D	8.77	3.78
AR1660CCC500	AR1660CCC500	11/17/2025	20:26	PP076555.D	8.77	3.78
IBLK	IBLK	11/17/2025	21:31	PP076559.D	8.77	3.77