

Site: PGE Topock
Topock, CA

MW-72BR-200-3V

Date	02/12/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	gal	Depth to Water (ft bmp)	58.27
Water Quality Meter	YSI	Gallons in Well	208.053
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	200
Casing Material	PVC	Odor	none
Casing Diameter (in)	6	Pump Intake Depth (ft bmp)	
Water Column in Well	141.730	Total Volume to Remove	
Comments	403 gallons to remove. 6in well turns into 4 in halfway down	EB Sample ID	MW-702-Q119
Did Well Dewater?	No	EB Time	16:00
Sample Date	02/12/2019	MS/MSD Sample ID	
Sample Time	15:30	MS/MSD Sample Time	
Sample ID	MW-72BR-200-3V-Q119	Double Filter Turbidity	
Single Filter Turbidity	1	Post Sampling Turbidity	
Without Filter Turbidity	5	Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:55	2	40	24.8	7.67	15160	-82	1.05	117	77.20	8.88	10.31
12:55	1.5	120	26.1	7.70	14611	-59	.53	45	78.29	8.52	10.25
13:55	2.3	256	26.6	7.74	14881	-66	.49	5	78.55	8.54	10.21
14:25	1.6	304	27.3	7.75	14714	-74	0.48	5	78.60	8.61	10.17
14:55	1.6	352	27.4	7.75	14735	-78	.47	5	78.60	8.63	10.18
15:25	1.8	406	27.5	7.76	14810	-79	.44	5	78.60	8.66	10.20

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		

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Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
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MW-72BR-200-LF_D

Date	02/12/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	58.27
Water Quality Meter	YSI	Gallons in Well	208.053
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	200
Casing Material	PVC	Odor	none
Casing Diameter (in)	6	Pump Intake Depth (ft bmp)	
Water Column in Well	141.730	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	02/12/2019	EB Time	
Sample Time	11:08	MS/MSD Sample ID	
Sample ID	MW-72BR-200-LF_D-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	3	Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:51	500	2000	22.4	7.23	15226	-188	.28	75	59.31	8.49	9.95
10:55	500	4000	23.8	7.25	14776	-173	.37	14	59.31	8.60	10.08
10:59	500	6000	24.0	7.30	14991	-166	.39	3	59.31	8.73	10.21
11:03	500	8000	23.9	7.37	15024	-163	.36	3	59.31	8.75	10.22
11:07	500	10000	24.0	7.39	15221	-160	.40	3	59.31	8.73	10.20

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

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Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
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MW-72BR-200-LF_S

Date	02/12/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	58.27
Water Quality Meter	YSI	Gallons in Well	208.053
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	200
Casing Material	PVC	Odor	none
Casing Diameter (in)	6	Pump Intake Depth (ft bmp)	
Water Column in Well	141.730	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	02/12/2019	EB Time	
Sample Time	10:24	MS/MSD Sample ID	
Sample ID	MW-72BR-200-LF_S-Q119	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	11	Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:03	500	2000	22.3	7.04	14568	-137	0.50	41	59.66	8.50	9.94
10:07	500	4000	22.5	7.22	14720	-140	.41	20	59.66	8.59	10.05
10:11	500	6000	23.2	7.25	14814	-142	.43	12	59.66	8.61	10.06
10:15	500	8000	23.7	7.29	14833	-143	.41	12	59.66	8.62	10.10
10:19	500	10000	23.7	7.30	14909	-147	.39	11	59.66	8.67	10.11
10:23	500	12000	23.8	7.33	14915	-148	.37	11	59.66	8.67	10.13

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

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Item	Yes	No	NA	Notes
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

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MW-60BR-245-3V

Date	02/14/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	3
Purge Volume Units	gal	Depth to Water (ft bmp)	100.00
Water Quality Meter	YSI	Gallons in Well	152.911
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	250
Casing Material	PVC	Odor	none
Casing Diameter (in)	5	Pump Intake Depth (ft bmp)	
Water Column in Well	150.000	Total Volume to Remove	458.733
Did Well Dewater?	No	EB Sample ID	MW-704-Q119
Sample Date	02/14/2019	EB Time	15:00
Sample Time	13:35	MS/MSD Sample ID	
Sample ID	MW-60BR-245-3V-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	3	Post Sampling Turbidity	
		Purge Date	02/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:10	2.5	60	28.7	7.58	16681	-34	.14	11	133.15	9.74	11.34
10:40	2	120	28.1	7.60	16661	-52	.13	8	177.60	9.78	11.35
11:10	2	180	28.0	7.60	16720	-60	.12	5	202.12	9.77	11.36
11:40	2	240	29.7	7.62	16712	-67	.12	3	210.63	9.72	11.36
12:10	2	300	29.8	7.64	16724	-77	.12	3	215.23	9.74	11.24
12:40	2	360	30.1	7.67	16936	-81	.15	3	216.39	9.65	11.25
13:10	2	420	30.5	7.68	16679	-80	.14	3	216.50	9.74	11.32
13:30	2	460	30.5	7.68	16722	-81	.15	3	216.61	9.69	11.30

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			

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Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

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MW-60BR-245-LF_D

Date	02/14/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	100.00
Water Quality Meter	YSI	Gallons in Well	152.911
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	250
Casing Material	PVC	Odor	none
Casing Diameter (in)	5	Pump Intake Depth (ft bmp)	
Water Column in Well	150.000	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	02/14/2019	EB Time	
Sample Time	09:28	MS/MSD Sample ID	
Sample ID	MW-60BR-245-LF_D-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	3	Post Sampling Turbidity	
		Purge Date	02/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:07	500	2000	24.1	7.19	15801	6	1.65	15	100.66	9.27	10.78
09:11	500	4000	25.2	7.47	15903	7	1.34	9	100.66	9.33	10.81
09:15	500	6000	25.7	7.75	16508	12	.88	6	100.66	9.61	11.16
09:19	500	8000	26.2	7.71	16447	13	.77	3	100.66	9.62	11.15
09:23	500	10000	26.1	7.63	16455	15	.60	3	100.66	9.62	11.17
09:27	500	12000	26.3	7.60	16461	16	.65	3	100.66	9.62	11.18

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

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Item	Yes	No	NA	Notes
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

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MW-60BR-245-LF_S

Date	<u>02/14/2019</u>	Sampler	<u>Jordan teramae</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>ml</u>	Depth to Water (ft bmp)	<u>100.0</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>152.911</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>250</u>
Casing Material	<u>PVC</u>	Odor	<u>none</u>
Casing Diameter (in)	<u>5</u>	Pump Intake Depth (ft bmp)	<u> </u>
Water Column in Well	<u>150.000</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>02/14/2019</u>	EB Time	<u> </u>
Sample Time	<u>08:37</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-60BR-245-LF_S-Q119</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>5</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>02/14/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:20	500	2000	21.4	7.25	15440	18	.97	65	100.78	9.08	10.56
08:24	500	4000	22.6	7.21	15948	12.6	0.85	11	100.91	9.39	10.9004
08:28	500	6000	23.5	7.23	16011	8.4	.72	5	100.91	9.40	10.9140
08:32	500	8000	24.0	7.25	16235	6.8	.60	5	100.91	9.49	11.0296
08:36	500	10000	25.5	7.32	16337	3.5	0.63	5	100.91	9.55	11.0976

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

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Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings

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MW-38S-SMT

Date	02/13/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Volume Units	gal	Casing Volume to Remove	3
Water Quality Meter	YSI	Depth to Water (ft bmp)	71.61
Sampling Type	Volume Purge – Grundfos RF2	Gallons in Well	3.815
Casing Material	PVC	Measured Well Depth (ft bmp)	95
Casing Diameter (in)	2	Odor	none
Water Column in Well	23.390	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	11.445
Sample Date	02/13/2019	EB Sample ID	
Sample Time	08:40	EB Time	
Sample ID	MW-38S-SMT-Q119	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter	2	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:27	1	3	32.0	7.61	1579	-27	.57	5	72.53	.77	1.04
08:30	1	6	31.0	7.52	1485	-29	.51	3	72.53	.79	1.04
08:33	1	9	30.8	7.50	1477	-32	.47	2	72.53	.74	1.05
08:36	1	12	30.7	7.48	1475	-33	.43	2	72.53	.76	1.03
08:39	1	15	30.6	7.44	1470	-35	.40	2	72.53	.75	1.02

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			
Action Completed?		X		

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Photos and Drawings

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C-BNS

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	15
Sample Time	11:35	Odor	None
Sample ID	C-BNS-Q119	Pump Intake Depth (ft bmp)	14
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:28			11.43	7.71	1110	33.5	10.05	2		0.55	0.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	
Action Completed?			X	

Photos and Drawings

Site: PGE Topock
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C-NR3-D

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	8
Sample Time	11:35	Odor	None
Sample ID	C-NR3-D-Q119	Pump Intake Depth (ft bmp)	7
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:33			10.0	7.87	961	100.2	9.17	2		0.48	0.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
Topock, CA

C-NR4-D

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	10
Sample Time	12:30	Odor	None
Sample ID	C-NR4-D-Q119	Pump Intake Depth (ft bmp)	9
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:29			10.1	7.87	963	96.3	9.71	2		0.48	0.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
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C-R22A-D

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	7
Sample Time	10:55	Odor	None
Sample ID	C-R22A-D-Q119	Pump Intake Depth (ft bmp)	6
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:53			13.61	7.77	1111	37.6	9.72	2		0.55	0.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-R27-D

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	6
Sample Time	12:05	Odor	None
Sample ID	C-R27-D-Q119	Pump Intake Depth (ft bmp)	5
Duplicate Sample ID	MW-908-Q119	Total Volume to Remove	
Dup Sample Time	12:15	EB Sample ID	
Single Filter Turbidity	1	EB Time	
Without Filter	2	MS/MSD Sample ID	
Turbidity		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:01			11.81	7.68	1109	37.1	10.76	2		0.55	0.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-TAZ-D

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	12
Sample Time	08:35	Odor	None
Sample ID	C-TAZ-D-Q119	Pump Intake Depth (ft bmp)	11
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:32			11.04	7.72	1153	30.6	10.76	2		0.57	0.74

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-34-100

Date	02/14/2019	Sampler	Jason mahn
Water Column in Well	92.7	Color	
Sample Date	02/14/2019	Casing Volume to Remove	
Sample Time	15:03	Depth to Water (ft bmp)	7.30
Sample ID	MW-34-100-Q119	Gallons in Well	15.12
		Measured Well Depth (ft bmp)	100
		Odor	
		Pump Intake Depth (ft bmp)	95
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:47			18.9	7.61	7605	-80.2	0.60		7.40		
14:51			18.9	7.62	7645	-84.4	0.55	2	7.40		
14:55			18.9	7.63	7652	-83.5	0.42		7.40		
14:59			18.9	7.63		-85.1			7.40		
15:02			18.9	7.63		-86.1	0.45		7.40		

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-38S

Date	<u>02/13/2019</u>	Sampler	<u>Jordan teramae</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>ml</u>	Depth to Water (ft bmp)	<u>71.61</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>3.815</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>95</u>
Casing Material	<u>PVC</u>	Odor	<u>none</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>85</u>
Water Column in Well	<u>23.390</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>02/13/2019</u>	EB Time	<u> </u>
Sample Time	<u>08:19</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-38S-Q119</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>3</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>02/13/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:58	500	2000	24.1	7.73	1692	-47	.84	17	72.12	.84	1.15
08:02	500	4000	25.1	7.65	1693	-49	.65	5	72.12	.86	1.16
08:06	500	6000	28.1	7.54	1647	-54	.40	3	72.12	.83	1.12
08:10	500	8000	30.7	7.55	1605	-60	.37	3	72.12	.78	1.08
08:14	500	10000	31.1	7.47	1550	-62	.27	3	72.12	.78	1.04
08:18	500	12000	31.3	7.45	1534	-66	.33	3	72.12	.75	1.09

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?		X		
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-57-050

Date	02/14/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	
Casing Material	PVC	Casing Volume to Remove	
Casing Diameter (in)	2	Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	52
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-58-065

Date	02/14/2019	Sampler	Jason mahn
Weather Conditions	Rain	Color	
Casing Material	PVC	Casing Volume to Remove	
		Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	67.36
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-58BR

Date	02/14/2019	Sampler	Jason mahn
Weather Conditions	Rain	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	68.10
Water Quality Meter	YSI	Gallons in Well	193.77
Sampling Type	Low Flow – QED Bladder Pump	Measured Well Depth (ft bmp)	200.10
Casing Material	PVC	Odor	None
Casing Diameter (in)	6	Pump Intake Depth (ft bmp)	
Water Column in Well	132.0	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	02/14/2019	EB Time	
Sample Time	13:45	MS/MSD Sample ID	
Sample ID	MW-58BR-Q119	MS/MSD Sample Time	
Single Filter Turbidity	5	Double Filter Turbidity	1
Without Filter Turbidity	25	Post Sampling Turbidity	
		Purge Date	02/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:28	500	2000	18.4	7.68	8879	23.1	0.16	36	68.10	5.78	7.10
13:32	500	4000	18.2	7.70	8881	25.2	0.05	35	68.1	5.78	7.10
13:36	500	6000	18.2	7.71	8923	27.8	0.06	28	68.10	5.79	7.10
13:40	500	8000	18.2	7.72	8918	28.1	0.09	26	68.10	5.80	7.10
13:44	500	10000	18.2	7.72	8911	28.4	0.08	26	68.1	5.80	7.11

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?	X			
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-62-065

Date	02/11/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	49.00
Water Quality Meter	YSI	Gallons in Well	2.528
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	64.5
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	15.500	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-701-Q119
Sample Date	02/11/2019	EB Time	15:45
Sample Time	15:16	MS/MSD Sample ID	
Sample ID	MW-62-065-Q119	MS/MSD Sample Time	
Single Filter Turbidity	3	Double Filter Turbidity	1
Without Filter Turbidity	12	Post Sampling Turbidity	
		Purge Date	02/11/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:55	200	800	25.9	7.11	7350	-67	1.61	35	49.60	4.04	4.99
14:59	200	1600	27.1	7.02	7271	-63	2.12	18	49.91	3.99	4.94
15:03	200	2400	27.4	6.99	7295	-60	2.29	7	50.22	4.00	4.95
15:07	200	3200	27.4	6.97	7389	-54	3.18	13	50.22	4.06	5.03
15:11	200	4000	27.4	6.96	7430	-59	3.09	12	50.22	4.09	5.06
15:15	200	4800	27.5	6.96	7411	-52	3.05	12	50.22	4.10	5.05

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-62-110

Date	02/13/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Volume Units	gal	Casing Volume to Remove	
Water Quality Meter	YSI	Depth to Water (ft bmp)	
Comments	Flute well	Gallons in Well	
Did Well Dewater?	Yes	Measured Well Depth (ft bmp)	
Sample Date	02/14/2019	Odor	none
Sample Time	14:30	Pump Intake Depth (ft bmp)	
Sample ID	MW-62-110-Q119	Total Volume to Remove	
Single Filter Turbidity	1	EB Sample ID	
Without Filter	2	EB Time	
Turbidity		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:08		2	27.4	7.28	8880	-65	.59	5		4.94	6.03
07:43		6	26.9	7.55	8922	-88	.33	4		5.12	6.19
14:30		8	26.9	7.31	10160	-50	.84	2		6.33	7.57
15:15		4	26.7	7.48	8913	-79	.33	4		5.24	6.29

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			
Action Completed?		X		

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-63-065

Date	02/14/2019	Sampler	Jason mahn
Weather Conditions	Rain	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	50.09
Water Quality Meter	YSI	Gallons in Well	2.59
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	65.96
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	60
Water Column in Well	15.87	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	02/14/2019	EB Time	
Sample Time	12:26	MS/MSD Sample ID	
Sample ID	MW-63-065-Q119	MS/MSD Sample Time	
Single Filter Turbidity	4	Double Filter Turbidity	1
Without Filter Turbidity	26	Post Sampling Turbidity	
		Purge Date	02/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:05	500	2000	21.4	6.52	7815	12.9	0.38	148	50.15	4.33	5.07
12:09	500	4000	22.8	6.78	7533	39.6	0.52	40	50.15	4.87	4.97
12:13	500	6000	22.7	6.82	7222	50.2	0.64	32	50.15	3.68	4.69
12:17	500	8000	22.6	6.82	7111	55.4	0.72	28	50.15	3.90	4.60
12:21	500	10000	22.6	6.84	7078	59.4	0.75	26	50.15	3.89	4.59
12:25	500	12000	22.6	6.86	7058	62.0	0.77	26	50.15	3.89	4.59

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-64BR

Date	02/13/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	120.55
Water Quality Meter	YSI	Gallons in Well	201.770
Sampling Type	Low Flow – QED Bladder Pump	Measured Well Depth (ft bmp)	258
Casing Material	PVC	Odor	none
Casing Diameter (in)	6	Pump Intake Depth (ft bmp)	
Water Column in Well	137.450	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	02/13/2019	EB Time	
Sample Time	10:00	MS/MSD Sample ID	
Sample ID	MW-64BR-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:39	300	1200	25.3	7.08	12753	-48	.32	8	122.66	7.30	8.66
09:43	300	2400	25.4	6.97	12891	-36	.28	4	123.10	7.38	8.74
09:47	300	3600	24.9	6.94	13048	-40	.25	2	123.33	7.45	8.87
09:51	300	4800	25.2	6.95	12956	-45	.24	2	123.51	7.44	8.82
09:55	300	6000	25.4	6.98	12938	-45	.20	2	123.51	7.44	8.84
09:59	300	7200	25.3	6.97	12976	-42	.22	2	123.51	7.42	8.85

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-65-160

Date	02/13/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	141.80
Water Quality Meter	YSI	Gallons in Well	3.050
Sampling Type	Low Flow – QED Bladder Pump	Measured Well Depth (ft bmp)	160.5
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	18.700	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	02/13/2019	EB Time	
Sample Time	12:36	MS/MSD Sample ID	
Sample ID	MW-65-160-Q119	MS/MSD Sample Time	
Single Filter Turbidity	3	Double Filter Turbidity	1
Without Filter Turbidity	8	Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:15	500	2000	25.0	6.98	3725	39	4.37	12	142.22	1.96	2.52
12:19	500	4000	25.5	6.89	3704	30	3.51	7	142.22	1.94	2.50
12:23	500	6000	25.6	6.80	3777	27	2.75	8	142.22	1.98	2.56
12:27	500	8000	26.0	6.80	3831	25	2.29	8	142.22	2.02	2.60
12:31	500	10000	26.2	6.79	3846	25	2.19	8	142.22	2.04	2.61
12:35	500	12000	26.3	6.79	3844	25	2.15	8	142.22	2.04	2.62

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-65-225

Date	02/13/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	141.21
Water Quality Meter	YSI	Gallons in Well	13.667
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	225
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	83.790	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	02/13/2019	EB Time	
Sample Time	13:31	MS/MSD Sample ID	
Sample ID	MW-65-225-Q119	MS/MSD Sample Time	
Single Filter Turbidity	4	Double Filter Turbidity	1
Without Filter Turbidity	14	Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:10	500	2000	27.9	6.96	6697	23	1.77	12	141.78	3.61	4.52
13:14	500	4000	28.5	6.81	7500	22	1.54	16	141.78	4.16	5.15
13:18	500	6000	29.2	6.80	7833	24	1.40	15	141.78	4.21	5.10
13:22	500	8000	29.5	6.80	8116	24	1.33	15	141.78	4.29	5.60
13:26	500	10000	29.6	6.80	8325	26	1.27	14	141.78	4.44	5.77
13:30	500	12000	29.8	6.79	8335	27	1.27	14	141.78	4.56	5.89

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-68-180

Date	02/13/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	yellow
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	166.10
Water Quality Meter	YSI	Gallons in Well	2.349
Sampling Type	Low Flow – QED Bladder Pump	Measured Well Depth (ft bmp)	180.5
Casing Material	PVC	Odor	sulphur
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	14.400	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	02/13/2019	EB Time	
Sample Time	11:37	MS/MSD Sample ID	
Sample ID	MW-68-180-Q119	MS/MSD Sample Time	
Single Filter Turbidity	9	Double Filter Turbidity	1
Without Filter Turbidity	49	Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:08	300	1200	24.8	7.06	4647	46	5.26	275	166.32	2.49	3.16
11:12	300	2400	27.6	7.12	4738	53	5.13	222	166.32	2.52	3.23
11:16	300	3600	27.6	6.94	4807	54	4.85	191	166.32	2.57	3.27
11:20	300	4800	28.2	6.99	4860	55	4.72	95	166.32	2.59	3.32
11:24	300	6000	28.5	7.02	4928	61	4.90	83	166.32	2.62	3.34
11:28	300	7200	28.1	6.97	5011	57	5.20	48	166.32	2.68	3.40
11:32	300	8400	28.4	7.02	5009	62	5.19	45	166.32	2.67	3.40
11:36	300	9600	28.4	6.95	5007	63	5.12	49	166.32	2.67	3.41

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-69-195

Date	02/13/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	175.78
Water Quality Meter	YSI	Gallons in Well	3.339
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	196.25
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	20.470	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-703-Q119
Sample Date	02/13/2019	EB Time	15:30
Sample Time	14:46	MS/MSD Sample ID	
Sample ID	MW-69-195-Q119	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	18	Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:25	500	2000	25.7	7.14	2832	31	3.77	28	176.67	1.46	1.91
14:29	500	4000	27.1	7.14	2798	32	3.42	22	176.67	1.47	1.91
14:33	500	6000	28.2	7.09	2838	35	3.64	20	176.67	1.45	1.92
14:37	500	8000	29.2	7.12	2844	40	3.50	19	176.67	1.51	1.92
14:41	500	10000	29.4	7.08	2846	41	3.48	19	176.67	1.47	1.94
14:45	500	12000	29.5	7.08	2857	43	3.43	18	176.67	1.55	1.96

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-72-080

Date	<u>02/11/2019</u>	Sampler	<u>Jordan teramae</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u></u>
Purge Volume Units	<u>ml</u>	Depth to Water (ft bmp)	<u>58.30</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>3.588</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>80.3</u>
Casing Material	<u>PVC</u>	Odor	<u>none</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u></u>
Water Column in Well	<u>22.000</u>	Total Volume to Remove	<u></u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u></u>
Sample Date	<u>02/11/2019</u>	EB Time	<u></u>
Sample Time	<u>14:17</u>	MS/MSD Sample ID	<u></u>
Sample ID	<u>MW-72-080-Q119</u>	MS/MSD Sample Time	<u></u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u></u>
Without Filter	<u>8</u>	Post Sampling Turbidity	<u></u>
Turbidity	<u></u>	Purge Date	<u>02/11/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:56	500	2000	27.6	7.20	25370	-42	.42	20	59.11	15.24	17.06
14:00	500	4000	28.6	7.15	23593	-97	.49	15	59.11	14.16	15.96
14:04	500	6000	28.5	7.13	22676	-110	.47	9	59.11	13.56	15.34
14:08	500	8000	28.7	7.15	22588	-125	.48	8	59.11	13.63	15.32
14:12	500	10000	28.9	7.17	22202	-119	.53	8	59.11	13.29	15.08
14:16	500	12000	29.0	7.18	22070	-112	.52	8	59.11	13.20	14.98

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-73-080

Date	02/11/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	50.50
Water Quality Meter	YSI	Gallons in Well	4.877
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	80.4
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	29.900	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	02/11/2019	EB Time	
Sample Time	13:26	MS/MSD Sample ID	
Sample ID	MW-73-080-Q119	MS/MSD Sample Time	
Single Filter Turbidity	3	Double Filter Turbidity	1
Without Filter Turbidity	14	Post Sampling Turbidity	
		Purge Date	02/11/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:45	500	2000	22.8	6.50	4561	-35	1.28	45	51.50	2.41	3.43
12:49	500	4000	23.5	6.55	5511	-43	0.88	27	51.80	3.19	4.78
12:53	500	6000	25.4	6.91	12276	-55	.82	23	53.49	8.12	9.99
12:57	500	8000	26.3	6.98	15997	-59	.57	17	55.22	11.12	12.30
13:01	500	10000	26.8	7.01	14375	-61	.51	16	56.69	11.64	12.44
13:05	500	12000	27.0	7.01	16713	-67	.84	15	57.82	11.70	12.69
13:09	500	14000	27.0	7.03	16721	-70	.86	15	58.77	11.84	12.90
13:13	500	16000	27.7	7.03	16802	-72	.87	15	59.68	11.90	12.94
13:17	500	18000	27.9	7.04	16877	-74	.85	14	60.62	11.90	12.98
13:21	500	20000	27.8	7.03	16902	-72	.86	14	60.90	12.01	13.02
13:25	500	22000	27.8	7.04	16894	-71	0.85	14	60.90	12.02	13.11

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			
Action Completed?		X	X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

PE-01

Date	02/14/2019	Sampler	Jason mahn
Did Well Dewater?	NA	Color	
Sample Date	02/14/2019	Casing Volume to Remove	
Sample Time	09:15	Depth to Water (ft bmp)	
Sample ID	PE-01-Q119	Gallons in Well	
		Measured Well Depth (ft bmp)	
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cum'l Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:22			13.8		3898	26.1				2.07	2.53

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?			X	
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

R-19

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	2
Sample Time	09:00	Odor	None
Sample ID	R-19-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:55			9.8	7.88	965	136.6	10.41	1		0.48	0.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

R-28

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	2
Sample Time	13:00	Odor	None
Sample ID	R-28-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	4	Total Volume to Remove	
Without Filter	36	EB Sample ID	Ambient blank 2-0219
Turbidity		EB Time	13:10
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:57			13.64	7.72	1106	39.2	10.03	36		0.55	0.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

R63

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	2
Sample Time	10:25	Odor	None
Sample ID	R63-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	4	EB Sample ID	Ambient blank 1-0219
Turbidity		EB Time	10:20
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:15			11.68	7.88	1125	37.5	10.60	5		0.56	0.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

RRB

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	2
Sample Time	09:55	Odor	None
Sample ID	RRB-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:53			9.9	7.88	981	124.5	8.91	2		0.49	0.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

SW1

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	Surface water	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	
Sample Time	14:30	Odor	None
Sample ID	SW1-Q119	Pump Intake Depth (ft bmp)	
Single Filter Turbidity	4	Total Volume to Remove	
Without Filter	28	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:17			13.02	7.66	1227	54.9	10.54	28		0.62	0.79

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?			X	
Standing or Pounded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

SW2

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	Surface water	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	
Sample Time	14:45	Odor	None
Sample ID	SW2-Q119	Pump Intake Depth (ft bmp)	
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:35			11.77	7.51	1174	49.4	9.97	1		0.59	0.76

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?			X	
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

TW-02D

Date	02/14/2019	Sampler	Jason mahn
Weather Conditions	Rain	Color	Clear
Purge Method	Extraction Port	Casing Volume to Remove	
Water Quality Meter	YSI	Depth to Water (ft bmp)	
Sampling Type	Extraction port	Gallons in Well	
Did Well Dewater?	NA	Measured Well Depth (ft bmp)	
Sample Date	02/14/2019	Odor	None
Sample Time	09:25	Pump Intake Depth (ft bmp)	
Sample ID	TW-02D-Q119	Total Volume to Remove	
Duplicate Sample ID	MW-901-Q119	EB Sample ID	
Dup Sample Time	09:35	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cum'l Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:32			18.6	7.66	4969	93.8	2.41	1		2.67	3.22

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?			X	
Standing or Pounded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
Topock, CA

TW-03D

Date	02/14/2019	Sampler	Jason mahn
Sample Date	02/14/2019	Color	
Sample Time	09:10	Casing Volume to Remove	
Sample ID	TW-03D-Q119	Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:13			11.5	8.15	7967	133.5				4.44	5.18

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

C-BNS-D

Date	02/12/2019	Sampler	
		Color	
		Casing Volume to Remove	
		Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-CON-D

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	Grab Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	10
Sample Time	10:15	Odor	None
Sample ID	C-CON-D-Q119	Pump Intake Depth (ft bmp)	9
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:13			9.7	7.81	969	117.6	9.62	2		0.48	0.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
Topock, CA

C-CON-S

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	10
Sample Time	10:30	Odor	None
Sample ID	C-CON-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:27			9.7	7.72	963	108.4	10.10	2		0.48	0.62

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-I-3-D

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	12
Sample Time	09:25	Odor	None
Sample ID	C-I-3-D-Q119	Pump Intake Depth (ft bmp)	11
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:24			10.88	7.82	1107	35.5	10.77	2		0.55	0.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-I-3-S

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	12
Sample Time	09:40	Odor	None
Sample ID	C-I-3-S-Q119	Pump Intake Depth (ft bmp)	1
Duplicate Sample ID	MW-906-Q119	Total Volume to Remove	
Dup Sample Time	09:50	EB Sample ID	
Single Filter Turbidity	1	EB Time	
Without Filter	2	MS/MSD Sample ID	
Turbidity		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:37			10.84	7.84	1105	28.2	10.81	2		0.55	0.71

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?			X	
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-MAR-D

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	4
Sample Time	08:15	Odor	None
Sample ID	C-MAR-D-Q119	Pump Intake Depth (ft bmp)	3
Single Filter Turbidity	3	Total Volume to Remove	
Without Filter	25	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:08			9.8	7.09	0.99	142.1	10.14	25		0.49	0.73

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?			X	
Standing or Pounded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-MAR-S

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	4
Sample Time	08:30	Odor	None
Sample ID	C-MAR-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	3	Total Volume to Remove	
Without Filter	20	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:27			9.9	7.79	973	137.2	10.22	20		0.48	0.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR1-D

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	7
Sample Time	10:55	Odor	None
Sample ID	C-NR1-D-Q119	Pump Intake Depth (ft bmp)	6
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:54			8.9	7.86	982	105.0	9.76	2		0.48	0.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR1-S

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	7
Sample Time	11:10	Odor	None
Sample ID	C-NR1-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:57			10.0	7.88	961	103.1	9.61	2		0.48	0.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR3-S

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	8
Sample Time	11:50	Odor	None
Sample ID	C-NR3-S-Q119	Pump Intake Depth (ft bmp)	1
Duplicate Sample ID	MW-907-Q119	Total Volume to Remove	
Dup Sample Time	12:00	EB Sample ID	
Single Filter Turbidity	1	EB Time	
Without Filter Turbidity	2	MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:40			9.9	7.89	964	98.4	9.64	2		0.46	0.62

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR4-S

Date	02/13/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/13/2019	Measured Well Depth (ft bmp)	10
Sample Time	12:45	Odor	None
Sample ID	C-NR4-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	Ambientblank-3-q119
Turbidity		EB Time	12:50
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:39			10.0	7.88	962	93.7	9.53	2.		0.48	0.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-R22A-S

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	7
Sample Time	11:10	Odor	None
Sample ID	C-R22A-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:10			11.83	7.64	1124	41.6	10.82	2		0.56	0.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
Topock, CA

C-R27-S

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	6
Sample Time	12:30	Odor	None
Sample ID	C-R27-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:26			11.75	7.73	1116	41.9	10.87	2		0.56	0.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-TAZ-S

Date	02/12/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	02/12/2019	Measured Well Depth (ft bmp)	12
Sample Time	08:50	Odor	None
Sample ID	C-TAZ-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	02/12/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:47			11.22	7.81	1107	31.6	10.89	2		0.55	0.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

TW-3D

Date	03/05/2019	Sampler	
Did Well Dewater?	NA	Color	Clear
Sample Date	03/05/2019	Casing Volume to Remove	
Sample Time	10:10	Depth to Water (ft bmp)	
Sample ID	TW-3D-Q119	Gallons in Well	
Single Filter Turbidity	1	Measured Well Depth (ft bmp)	
Without Filter Turbidity	2	Odor	None
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/05/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:44			21.7	7.21	9267	145.7	3.98	2		5.56	6.4285

Well Integrity Checklist

Item	Yes	No	NA	Notes
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Photos and Drawings

Site: PGE Topock
 Topock, CA

PE-01

Date	03/05/2019	Sampler	
Weather Conditions	Sunny	Color	Clear
Purge Method	Extraction Port	Casing Volume to Remove	
Sampling Type	Extraction port	Depth to Water (ft bmp)	
Did Well Dewater?	No	Gallons in Well	
Sample Date	01/03/2019	Measured Well Depth (ft bmp)	
Sample Time	11:40	Odor	None
Sample ID	PE-01-Q119	Pump Intake Depth (ft bmp)	
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/05/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:20			18.0	7.37	4169	32.0	3.20	1		2.84	3.419

Well Integrity Checklist

Item	Yes	No	NA	Notes
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Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-E-142-3V

Date	03/20/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Green
Purge Method	Low Flow	Casing Volume to Remove	3
Purge Volume Units	Gal	Depth to Water (ft bmp)	49.26
Water Quality Meter	YSI	Gallons in Well	15.44
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	143.90
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	100
Water Column in Well	94.64	Total Volume to Remove	46.32
Did Well Dewater?	No	EB Sample ID	
Sample Date	03/20/2019	EB Time	
Sample Time	09:12	MS/MSD Sample ID	
Sample ID	MW-E-142-3V-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	3	Post Sampling Turbidity	
Turbidity		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:51	2	10	29.8	7.31	13177	29.4	0.17	8	49.86	7.48	8.55
08:56	2	20	29.8	7.35	13204	29.4	0.20	6	49.86	7.54	8.57
09:01	2	30	29.5	7.37	13224	29.5	0.28	4	49.86	7.54	8.56
09:06	2	40	29.5	7.37	13226	29.5	0.28	3	49.86	7.54	8.56
09:11	2	50	29.5	7.37	13227	29.5	0.29	3	49.86	7.54	8.56

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-78-142

Date	03/20/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Green
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	49.26
Water Quality Meter	YSI	Gallons in Well	15.44
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	143.90
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	132
Water Column in Well	94.64	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	03/20/2019	EB Time	
Sample Time	08:26	MS/MSD Sample ID	
Sample ID	MW-E-142-LF-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	8	Post Sampling Turbidity	
Turbidity		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:05	0.2	0.8	28.6	6.91	12562	39.0	0.65	146	49.35	7.19	8.20
08:09	0.2	1.6	28.8	6.98	12791	38.2	0.56	92	49.35	7.29	8.30
08:13	0.2	2.4	29.0	7.08	13085	37.6	0.43	29	49.35	7.51	8.51
08:17	0.2	3.2	29.0	7.12	13108	36.8	0.40	9	49.35	7.49	8.52
08:21	0.2	4.0	29.0	7.15	13069	36.5	0.39	8	49.35	7.48	8.53
08:25	0.2	4.8	29.0	7.16	13100	36.2	0.39	8	49.35	7.48	8.50

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-78-072

Date	03/20/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	48.94
Water Quality Meter	YSI	Gallons in Well	4.02
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	73.61
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	60
Water Column in Well	24.67	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	03/20/2019	EB Time	
Sample Time	10:07	MS/MSD Sample ID	
Sample ID	MW-E-72-LF-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	9	Post Sampling Turbidity	
Turbidity		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:41	0.2	0.8	29.7	7.54	2613	86.9	5.76	254	49.02	1.34	1.69
09:45	0.2	1.6	29.9	7.55	2603	88.2	5.37	175	49.02	1.33	1.69
09:49	0.2	2.4	30.1	7.57	2585	89.9	5.64	61	49.02	1.32	1.67
09:53	0.2	3.2	30.0	7.57	2586	90.1	5.73	41	49.02	1.32	1.68
09:57	0.2	4.0	30.2	7.57	2584	90.3	5.75	10	49.02	1.32	1.68
10:01	0.2	4.8	30.3	7.57	2584	90.4	5.60	9	49.02	1.32	1.67
10:06	0.2	5.6	30.3	7.58	2584	91.2	5.58	9	49.02	1.32	1.67

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-E-72-3V

Date	03/20/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	3
Purge Volume Units	Gal	Depth to Water (ft bmp)	48.94
Water Quality Meter	YSI	Gallons in Well	4.02
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	73.61
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	60
Water Column in Well	24.67	Total Volume to Remove	12.06
Did Well Dewater?	No	EB Sample ID	MW-782-Q119
Sample Date	03/20/2019	EB Time	11:00
Sample Time	10:44	MS/MSD Sample ID	
Sample ID	MW-E-72-3V-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:27	0.75	3	29.8	7.58	2557	92.2	5.88	6	49.30	1.33	1.69
10:31	0.75	6	29.6	7.55	2558	95.3	5.90	3	49.30	1.32	1.67
10:35	0.75	9	29.6	7.55	2570	95.8	5.84	2	49.30	1.32	1.67
10:39	0.75	12	29.6	7.55	2573	95.9	5.82	2	49.30	1.32	1.67
10:43	0.75	15	29.6	7.55	2574	96.3	5.81	2	49.30	1.32	1.67

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-79-104

Date	03/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	47.04
Water Quality Meter	YSI	Gallons in Well	9.4
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	104.70
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	97
Water Column in Well	57.66	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	03/19/2019	EB Time	
Sample Time	10:48	MS/MSD Sample ID	
Sample ID	MW-F-104-Q119	MS/MSD Sample Time	
Duplicate Sample ID	MW-920-Q119	Double Filter Turbidity	1
Dup Sample Time	10:58	Post Sampling Turbidity	
Single Filter Turbidity	2	Purge Date	03/19/2019
Without Filter Turbidity	21		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:23	0.2	0.8	29.3	7.77	1293	-56.9	0.38	70	47.13	0.65	0.84
10:27	0.2	1.6	29.2	7.83	1413	-69.4	0.49	40	47.13	0.70	0.91
10:31	0.2	2.4	29.2	7.84	1415	-70.9	0.51	36	47.13	0.70	0.91
10:35	0.2	3.2	29.3	7.84	1416	-72.1	0.53	25	47.13	0.70	0.91
10:39	0.2	4.0	29.4	7.90	1618	-63.7	0.62	22	47.13	0.82	1.05
10:43	0.2	4.8	29.4	7.92	1620	-62.1	0.63	21	47.13	0.82	1.05
10:47	0.2	5.6	29.4	7.93	1620	-62.0	0.63	21	47.13	0.82	1.05

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-79-060

Date	03/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	47.22
Water Quality Meter	YSI	Gallons in Well	2.2
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	60.70
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	53
Water Column in Well	13.48	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	03/19/2019	EB Time	
Sample Time	12:10	MS/MSD Sample ID	
Sample ID	MW-F-60-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	8	Post Sampling Turbidity	
Turbidity		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:41	0.2	0.8	30.3	8.14	1248	-173.6	0.07	1000	47.28	0.62	0.80
11:45	0.2	1.6	30.6	8.07	1301	-177.4	0.07	561	47.28	0.64	0.84
11:49	0.2	2.4	30.5	8.00	1444	-171.6	0.08	106	47.28	0.71	0.90
11:53	0.2	3.2	30.7	7.98	1480	-163.6	0.10	43	47.28	0.74	0.96
11:57	0.2	4.0	30.7	7.98	1486	-161.9	0.10	14	47.28	0.74	0.96
12:01	0.2	4.8	30.8	7.98	1500	-162.9	0.11	9	47.28	0.74	0.97
12:05	0.2	5.6	30.8	7.98	1502	-159.6	0.11	8	47.28	0.74	0.97
12:09	0.2	6.4	30.8	7.98	1503	-158.0	0.12	8	47.28	0.74	0.97

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-80-057

Date	03/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	50.07
Water Quality Meter	YSI	Gallons in Well	1.64
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	60.10
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	54
Water Column in Well	10.03	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	03/19/2019	EB Time	
Sample Time	09:32	MS/MSD Sample ID	
Sample ID	MW-G-59-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	5	Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:15	0.2	0.8	29.7	7.52	5706	42.5	0.41	49	50.13	3.07	3.70
09:19	0.2	1.6	30.3	7.57	5743	37.0	0.59	14	50.13	3.06	3.73
09:23	0.2	2.4	30.3	7.60	5690	35.9	0.76	6	50.13	3.06	3.71
09:27	0.2	3.2	30.4	7.61	5692	35.1	0.78	5	50.13	3.06	3.71
09:31	0.2	4.0	30.4	7.61	5692	34.6	0.79	5	50.13	3.06	3.71

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-80-082

Date	03/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Green
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	50.11
Water Quality Meter	YSI	Gallons in Well	5.64
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	84.66
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	74.5
Water Column in Well	34.55	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	03/19/2019	EB Time	
Sample Time	08:42	MS/MSD Sample ID	
Sample ID	MW-G-84-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	8	Post Sampling Turbidity	
Turbidity		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:21	0.2	0.8	29.7	6.79	9306	74.4	2.68	23	50.23	5.16	6.04
08:25	0.2	1.6	29.8	6.83	9335	76.7	2.66	13	50.23	5.20	6.05
08:29	0.2	2.4	29.8	6.86	9339	77.3	2.65	9	50.23	5.20	6.05
08:33	0.2	3.2	29.9	6.92	9370	79.3	2.56	8	50.23	5.20	6.06
08:37	0.2	4.0	29.9	6.93	9373	79.9	2.54	8	50.23	5.20	6.06
08:41	0.2	4.8	29.9	6.93	9374	80.2	2.51	8	50.23	5.20	6.06

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-83-245

Date	03/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	76.31
Water Quality Meter	YSI	Gallons in Well	27.92
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	247.51
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	240
Water Column in Well	171.2	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-781-Q119
Sample Date	03/19/2019	EB Time	15:15
Sample Time	13:52	MS/MSD Sample ID	
Sample ID	MW-L-245-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	9	Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:23	0.2	0.8	29.0	9.39	19479	-28.6	0.47	369	76.39	11.52	12.64
13:27	0.2	1.6	29.4	9.21	20117	-35.1	0.25	145	76.39	11.86	13.00
13:31	0.2	2.4	29.8	9.34	20348	-50.6	0.21	91	76.39	11.92	13.07
13:35	0.2	3.2	29.8	9.35	20164	-58.4	0.19	50	76.39	11.95	13.09
13:39	0.2	4.0	29.8	9.33	20129	-60.1	0.18	30	76.39	11.95	13.09
13:43	0.2	4.8	30.1	9.36	20219	-63.3	0.18	10	76.39	11.99	13.14
13:47	0.2	5.6	30.1	9.36	20223	-64.0	0.18	9	76.39	11.99	13.14
13:51	0.2	6.4	30.1	9.36	20224	-64.3	0.18	9	76.39	11.99	13.14

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-BNS

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	15
Sample Time	11:30	Odor	None
Sample ID	C-BNS-Q119	Pump Intake Depth (ft bmp)	14
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:23			15.13	7.76	1008	105.2	10.48	1		0.50	0.654

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR3-D

Date	03/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/20/2019	Measured Well Depth (ft bmp)	10
Sample Time	12:20	Odor	None
Sample ID	C-NR3-D-Q119	Pump Intake Depth (ft bmp)	9
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:15			13.43	7.95	984	109.1	10.59	1		0.49	0.641

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR4-D

Date	03/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/20/2019	Measured Well Depth (ft bmp)	13
Sample Time	12:55	Odor	
Sample ID	C-NR4-D-Q119	Pump Intake Depth (ft bmp)	12
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:47			13.38	8.06	987	99.6	10.34	1		0.49	0.642

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-R22A-D

Date	03/19/2019	Sampler	Jason mahn
Water Quality Meter	YSI	Color	Clear
Sampling Type	River Sample	Casing Volume to Remove	
Casing Material	PVC	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	7
Sample Time	10:55	Odor	None
Sample ID	C-R22A-D-Q119	Pump Intake Depth (ft bmp)	6
Duplicate Sample ID	MW-910-Q119	Total Volume to Remove	
Dup Sample Time	11:05	EB Sample ID	
Single Filter Turbidity	1	EB Time	
Without Filter	1	MS/MSD Sample ID	
Turbidity		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:54			14.19	7.69	991	106.3	10.94	1		0.49	0.644

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-R27-D

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	6
Sample Time	11:55	Odor	None
Sample ID	C-R27-D-Q119	Pump Intake Depth (ft bmp)	5
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:43											

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

C-TAZ-D

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Volume Units	MI	Casing Volume to Remove	
Water Quality Meter	YSI	Depth to Water (ft bmp)	
Sampling Type	River Sample	Gallons in Well	
Did Well Dewater?	NA	Measured Well Depth (ft bmp)	12
Sample Date	03/19/2019	Odor	None
Sample Time	08:50	Pump Intake Depth (ft bmp)	11
Sample ID	C-TAZ-D-Q119	Total Volume to Remove	
Single Filter Turbidity	1	EB Sample ID	
Without Filter Turbidity	1	EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:46			13.73	8.31	993	104.2	11.05	1		0.49	0.645

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-09

Date	03/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	3
Purge Volume Units	Gal	Depth to Water (ft bmp)	80.97
Water Quality Meter	YSI	Gallons in Well	5.4
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	89.25
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	86
Water Column in Well	8.28	Total Volume to Remove	16.2
Did Well Dewater?	No	EB Sample ID	
Sample Date	03/18/2019	EB Time	
Sample Time	12:40	MS/MSD Sample ID	
Sample ID	MW-09-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	3	Post Sampling Turbidity	
Turbidity		Purge Date	03/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:19	0.2	0.8	30.9	6.79	3403	85.3	3.54	5	81.10	1.78	2.22
12:23	0.2	1.6	31.0	6.89	3348	86.7	3.51	4	81.23	1.71	2.14
12:27	0.2	2.4	31.1	7.03	3246	90.6	3.49	4	81.23	1.68	2.11
12:31	0.2	3.2	31.1	7.05	324	91.6	3.48	3	81.23	1.68	2.11
12:35	0.2	4.0	31.1	7.05	3247	92.0	3.48	3	81.23	1.68	2.11
12:39	0.2	4.8	31.1	7.06	3247	92.3	3.46	3	81.23	1.68	2.11

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-10

Date	03/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	75.53
Water Quality Meter	YSI	Gallons in Well	14.11
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	97.15
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	67
Water Column in Well	21.62	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	03/18/2019	EB Time	
Sample Time	13:38	MS/MSD Sample ID	
Sample ID	MW-10-Q119	MS/MSD Sample Time	
Duplicate Sample ID	MW-922-Q119	Double Filter Turbidity	
Dup Sample Time	13:48	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	03/18/2019
Without Filter Turbidity	7		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:09	0.2	0.8	29.7	7.20	3177	89.3	4.06	49	75.65	1.64	2.06
13:13	0.2	1.6	30.1	7.23	3082	91.1	4.06	30	75.65	1.60	2.01
13:17	0.2	2.4	30.1	7.24	3071	91.6	4.03	21	75.65	1.60	2.01
13:21	0.2	3.2	30.2	7.24	3068	92.6	4.05	13	75.65	1.60	2.01
13:25	0.2	4.0	30.2	7.24	3069	92.9	4.05	9	75.65	1.60	2.01
13:29	0.2	4.8	30.2	7.25	3069	93.2	4.06	7	75.65	1.60	2.01
13:33	0.2	5.6	30.2	7.25	3069	93.6	4.06	7	75.65	1.60	2.01
13:37	0.2	6.4	30.2	7.25	3070	93.9	4.06	7	75.56	1.60	2.01

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-11

Date	03/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	67.28
Water Quality Meter	YSI	Gallons in Well	11.96
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	85.61
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	74
Water Column in Well	18.33	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-780-Q119
Sample Date	03/18/2019	EB Time	14:45
Sample Time	14:26	MS/MSD Sample ID	
Sample ID	MW-11-Q119	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	7	Post Sampling Turbidity	
		Purge Date	03/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:09	0.2	0.8	30.7	7.34	2414	98.9	6.57	13	67.39	1.23	1.57
14:13	0.2	1.6	30.8	7.34	2408	99.5	6.58	8	67.39	1.23	1.57
14:17	0.2	2.4	30.8	7.34	2408	99.9	6.58	7	67.39	1.23	1.57
14:21	0.2	3.2	30.8	7.35	2408	100.3	6.60	7	67.39	1.23	1.57
14:25	0.2	4.0	30.8	7.35	2408	100.6	6.60	7	67.39	1.23	1.57

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

R-19

Date	03/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/20/2019	Measured Well Depth (ft bmp)	2
Sample Time	09:30	Odor	None
Sample ID	R-19-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:28			13.75	8.26	989	110.4	10.93	1		0.49	0.643

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

R-28

Date	03/19/2019	Sampler	
Did Well Dewater?	NA	Color	Clear
Sample Date	03/19/2019	Casing Volume to Remove	
Sample Time	12:25	Depth to Water (ft bmp)	
Sample ID	R-28-Q119	Gallons in Well	
Single Filter Turbidity	1	Measured Well Depth (ft bmp)	3
Without Filter Turbidity	1	Odor	None
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	Ambientblank-2-0319
		EB Time	12:30
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:21			14.32	7.85	992	106.7		1		0.49	0.645

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

R63

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	2
Sample Time	10:15	Odor	None
Sample ID	R63-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	Ambientblank-1-0319
Turbidity		EB Time	10:20
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:11			14.20	7.98	999	109.1	10.91	1		0.50	0.649

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

RRB

Date	03/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/20/2019	Measured Well Depth (ft bmp)	2
Sample Time	09:50	Odor	None
Sample ID	RRB-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	2	EB Sample ID	Ambientblank-3-0319
Turbidity		EB Time	09:55
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:08			13.66	8.12	1004	107.8	9.79	2		0.50	0.645

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

SW1

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	Surface water	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	2
Sample Time	14:00	Odor	None
Sample ID	SW1-Q119	Pump Intake Depth (ft bmp)	
Single Filter Turbidity	3	Total Volume to Remove	
Without Filter	34	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:00			14.1	7.98	1004	102.8	9.87	34		0.50	0.649

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

SW2

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	Surface water	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	
Sample Time	14:15	Odor	None
Sample ID	SW2-Q119	Pump Intake Depth (ft bmp)	
Single Filter Turbidity	2	Total Volume to Remove	
Without Filter	12	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:06			15.2	7.99	1002	89.6	10.10	12		0.50	0.349

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

C-BNS-D

Date	<u>03/19/2019</u>	Sampler	_____
		Color	_____
		Casing Volume to Remove	_____
		Depth to Water (ft bmp)	_____
		Gallons in Well	_____
		Measured Well Depth (ft bmp)	_____
		Odor	_____
		Pump Intake Depth (ft bmp)	_____
		Total Volume to Remove	_____
		EB Sample ID	_____
		EB Time	_____
		MS/MSD Sample ID	_____
		MS/MSD Sample Time	_____
		Double Filter Turbidity	_____
		Post Sampling Turbidity	_____
		Purge Date	<u>03/19/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-CON-D

Date	03/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/20/2019	Measured Well Depth (ft bmp)	10
Sample Time	11:00	Odor	None
Sample ID	C-CON-D-Q119	Pump Intake Depth (ft bmp)	9
Duplicate Sample ID	MW-911-Q119	Total Volume to Remove	
Dup Sample Time	11:10	EB Sample ID	
Single Filter Turbidity	1	EB Time	
Without Filter Turbidity	1	MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:00			13.50	8.04	991	106.7	10.53	1		0.49	0.644

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-CON-S

Date	03/20/2019	Sampler	
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/20/2019	Measured Well Depth (ft bmp)	10
Sample Time	10:45	Odor	None
Sample ID	C-CON-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:40			13.67	8.16	1001	103.4	10.56	1		0.50	0.649

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-I-3-D

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	11
Sample Time	09:30	Odor	None
Sample ID	C-I-3-D-Q119	Pump Intake Depth (ft bmp)	10
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:22			13.77	8.22	1000	110.4	10.60	1		0.50	0.649

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-I-3-S

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	11
Sample Time	09:45	Odor	None
Sample ID	C-I-3-S-Q119	Pump Intake Depth (ft bmp)	1
Duplicate Sample ID	MW-909-Q119	Total Volume to Remove	
Dup Sample Time	09:55	EB Sample ID	
Single Filter Turbidity	1	EB Time	
Without Filter Turbidity	1	MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:42			13.66	8.12	992	105.6	10.90	1		0.49	0.645

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-MAR-D

Date	03/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/20/2019	Measured Well Depth (ft bmp)	5
Sample Time	09:00	Odor	None
Sample ID	C-MAR-D-Q119	Pump Intake Depth (ft bmp)	4
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	3	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:05			13.96	8.26	991	106.3	10.93	3		0.49	0.644

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-MAR-S

Date	03/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Volume Units	MI	Casing Volume to Remove	
Water Quality Meter	YSI	Depth to Water (ft bmp)	
Sampling Type	River Sample	Gallons in Well	
Did Well Dewater?	NA	Measured Well Depth (ft bmp)	5
Sample Date	03/20/2019	Odor	None
Sample Time	08:50	Pump Intake Depth (ft bmp)	1
Sample ID	C-MAR-S-Q119	Total Volume to Remove	
Single Filter Turbidity	1	EB Sample ID	
Without Filter Turbidity	11	EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:46			13.99	8.38	993	109.2	11.22	13		0.49	0.645

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR1-D

Date	03/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/20/2019	Measured Well Depth (ft bmp)	8
Sample Time	11:35	Odor	None
Sample ID	C-NR1-D-Q119	Pump Intake Depth (ft bmp)	7
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:22			13.52	8.07	991	101.4	10.53	1		0.49	0.644

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

C-NR1-S

Date	03/20/2019	Sampler	
		Color	
		Casing Volume to Remove	
		Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	8
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:23											

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR3-S

Date	03/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/20/2019	Measured Well Depth (ft bmp)	10
Sample Time	12:30	Odor	None
Sample ID	C-NR3-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:17			13.39	7.99	987	100.4	10.43	1		0.50	0.641

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR4-S

Date	03/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/20/2019	Measured Well Depth (ft bmp)	13
Sample Time	13:05	Odor	None
Sample ID	C-NR4-S-Q119	Pump Intake Depth (ft bmp)	12
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:48			13.23	8.01	985	99.8	10.43	1		0.49	0.640

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-R22A-S

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	7
Sample Time	10:45	Odor	None
Sample ID	C-R22A-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:41			14.11	7.81	998	105.7	10.89	1		0.50	0.648

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-R27-S

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	6
Sample Time	12:05	Odor	None
Sample ID	C-R27-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:45			13.84	7.70	995	107.1	10.84	1		0.50	0.649

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-TAZ-S

Date	03/19/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	River Sample	Depth to Water (ft bmp)	
Did Well Dewater?	NA	Gallons in Well	
Sample Date	03/19/2019	Measured Well Depth (ft bmp)	12
Sample Time	09:05	Odor	None
Sample ID	C-TAZ-S-Q119	Pump Intake Depth (ft bmp)	1
Single Filter Turbidity	1	Total Volume to Remove	
Without Filter	1	EB Sample ID	
Turbidity		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	03/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:05			13.75	8.22	993	114.5	10.95	1		0.49	0.645

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-78-142

Date	04/17/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	46.64
Water Quality Meter	YSI	Gallons in Well	15.59
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	142.20
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	132
Water Column in Well	95.56	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-792-0419
Sample Date	04/17/2019	EB Time	10:40
Sample Time	10:08	MS/MSD Sample ID	
Sample ID	MW-E-142-LF-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-950-0419	Double Filter Turbidity	
Dup Sample Time	10:18	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	04/17/2019
Without Filter Turbidity	1		

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:43	500	2000	29.3	7.51	12406	88.6	0.26	25	46.70	7.12	8.10
09:55	500	8000	29.4	7.49	12625	90.4	0.20	10	46.73	7.21	8.22
09:59	500	10000	29.6	7.49	12670	90.9	0.17	3	46.75	7.22	8.23
10:03	500	12000	29.5	7.48	12600	92.0	0.17	1	46.75	7.22	8.24
10:07	5	14000	29.6	7.48	12642	92.6	0.16	1	46.75	7.24	8.24

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?			X	
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-78-072

Date	04/15/2019	Sampler	Garrett Graves
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	46.50
Water Quality Meter	YSI	Gallons in Well	4.16
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	71.98
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	60
Water Column in Well	25.48	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-793-0419
Sample Date	04/17/2019	EB Time	11:00
Sample Time	10:19	MS/MSD Sample ID	
Sample ID	MW-E-72-LF-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	04/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:58	500	2000	29.6	6.24	2815	103.6	5.82	44	46.60	1.44	1.86
10:02	500	4000	29.6	7.21	2444	105.8	5.66	15	46.60	1.22	1.51
10:06	500	6000	29.6	7.57	2453	109.4	6.17	8	46.60	1.24	1.53
10:10	500	8000	29.6	7.65	2515	112.8	6.30	3	46.60	1.28	1.63
10:14	500	10000	29.7	7.62	2505	113.2	6.32	2	46.50	1.28	1.63
10:18	500	12000	29.6	7.62	2504	115.1	6.33	2	46.50	1.28	1.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-79-104

Date	04/15/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	46.27
Water Quality Meter	YSI	Gallons in Well	9.53
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	104.67
Casing Diameter (in)	2	Odor	None
Water Column in Well	58.4	Pump Intake Depth (ft bmp)	100
Did Well Dewater?	NA	Total Volume to Remove	
Sample Date	04/15/2019	EB Sample ID	
Sample Time	13:03	EB Time	
Sample ID	MW-F-104-Q219	MS/MSD Sample ID	
Single Filter Turbidity	2	MS/MSD Sample Time	
Without Filter	12	Double Filter Turbidity	1
Turbidity		Post Sampling Turbidity	
		Purge Date	04/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:30	500	2000	29.9	7.83	7250	21.0	0.21	553	46.30	3.90	4.5500
12:34	500	4000	30.0	7.89	6740	43.0	0.23	204	46.30	3.72	4.45525
12:38	500	6000	29.9	7.89	7300	19.6	0.23	120	46.40	3.96	4.5525
12:42	500	8000	29.9	7.89	7366	29.0	0.30	70.1	46.40	4.04	4.7905
12:46	500	10000	30.0	7.83	7450	26.7	0.33	44.2	46.40	4.09	4.82
12:50	500	12000	30.1	7.89	7461	30.1	0.39	24.1	46.40	4.09	4.83
12:54	500	14000	30.1	7.89	7466	32.4	0.38	13	46.40	4.09	4.83
12:58	500	16000	30.1	7.89	7470	32.7	0.38	12	46.40	4.09	4.84
13:02	500	18000	30.1	7.89	7472	32.7	0.39	12	46.40	4.10	4.84

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-79-060

Date	04/15/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	46.37
Water Quality Meter	YSI	Gallons in Well	2.37
Sampling Type	Low Flow – QED Bladder Pump	Measured Well Depth (ft bmp)	60.87
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	48.50
Water Column in Well	14.5	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-790-0419
Sample Date	04/15/2019	EB Time	16:00
Sample Time	15:12	MS/MSD Sample ID	
Sample ID	MW-F-60-Q219	MS/MSD Sample Time	
Single Filter Turbidity	5	Double Filter Turbidity	2
Without Filter Turbidity	41	Post Sampling Turbidity	
		Purge Date	04/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:11	250	2000	29.1	7.93	2749	-65.9	0.24	700	46.50	1.41	1.78
14:15	250	3000	29.1	7.93	2755	-83.9	0.19	731	46.50	1.42	1.79
14:19	250	4000	29.1	7.90	2777	-87.2	0.19	700	46.50	1.43	1.80
14:23	250	5000	29.1	7.90	2793	-88.6	0.16	614	46.50	1.44	1.81
14:27	250	6000	29.2	7.90	2796	-75.0	0.19	540	46.50	1.44	1.82
14:39	250	9000	29.2	7.91	2805	-70.2	0.21	700	46.50	1.45	1.82
14:43	250	10000	29.2	7.91	2804	-65.7	0.22	422	46.50	1.44	1.82
14:47	250	11000	29.2	7.91	2804	-66.7	0.22	306	46.50	1.44	1.82
14:59	250	14000	29.2	7.90	2804	-67.1	0.20	50	46.50	1.44	1.82
15:03	250	15000	29.3	7.90	2806	-67.5	0.21	45	46.50	1.44	1.82
15:07	250	16000	29.3	7.89	2810	-67.6	0.19	43	46.50	1.44	1.82
15:08											
15:11	250	17000	29.3	7.89	2810	-67.1	0.19	41	46.50	1.44	1.82

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?			X	
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Concrete Pad Intact?	X			
Erosion Around Wellhead?			X	
Steel Casing Intact?		X		
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-80-057

Date	04/16/2019	Sampler	Jason Mahn
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	49.50
Water Quality Meter	YSI	Gallons in Well	1.89
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	61.10
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	52
Water Column in Well	11.6	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	04/16/2019	EB Time	
Sample Time	09:12	MS/MSD Sample ID	
Sample ID	MW-G-59-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	4	Post Sampling Turbidity	
		Purge Date	04/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:51	500	2000	29.9	7.93	5470	28.5	0.99	86	49.70	2.92	3.54
08:55	500	4000	29.8	7.93	5450	24.5	1.06	77	49.70	2.93	3.56
08:59	500	6000	30.1	7.92	5442	24.7	1.22	13	49.70	2.90	3.54
09:03	500	8000	30.0	7.91	5450	27.0	1.25	5	49.70	2.92	3.53
09:07	500	10000	30.1	7.90	5462	30.3	1.29	5	49.70	2.91	3.56
09:11	500	12000	30.1	7.90	5469	30.3	1.29	4	49.70	2.91	3.57

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Steel Casing Intact?		X		
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-80-082

Date	04/16/2019	Sampler	
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	49.41
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	84.93
Water Column in Well	35.52	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	76
Sample Time	09:43	Total Volume to Remove	
Single Filter Turbidity	1	EB Sample ID	
Without Filter	2	EB Time	
Turbidity		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	04/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:26	500	2000	29.3	7.48	9266	90.7	3.34	10	49.60	5.15	6.02
09:30	500	4000	29.4	7.48	9269	92.6	2.94	3	49.60	5.16	6.03
09:34	500	6000	29.3	7.48	9260	93.8	2.66	2	49.60	5.15	6.02
09:38	500	8000	29.3	7.49	9243	95.1	2.61	2	49.60	5.16	6.02
09:42	500	10000	29.3	7.49	9244	95.9	2.60	2	49.60	5.16	6.03

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-83-245

Date	04/16/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	74.21
Water Quality Meter	YSI	Gallons in Well	28.08
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	246.34
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	240
Water Column in Well	172.13	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-791-0419
Sample Date	04/16/2019	EB Time	16:15
Sample Time	16:01	MS/MSD Sample ID	
Sample ID	MW-L-245-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	04/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:30	500	2000	30.0	9.92	20007	46.2	0.19	8	74.30	11.84	13.00
15:34	500	4000	30.1	9.96	19996	35.7	0.16	1	74.33	11.85	13.00
15:38	500	6000	30.1	9.91	20013	16.6	0.12	1	74.35	11.86	13.03
15:42	500	8000	30.2	9.90	20070	5.5	0.11	1	74.35	11.90	13.01
15:46	500	10000	30.3	9.89	20066	-2.5	0.10	1	74.35	11.86	13.02
16:00	500	12000	30.3	9.82	20052	-2.7	0.10	1	74.35	11.85	13.02

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-83-90

Date	04/17/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	73.66
Water Quality Meter	YSI	Gallons in Well	2.93
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	91.62
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	80
Water Column in Well	17.96	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	04/17/2019	EB Time	
Sample Time	07:55	MS/MSD Sample ID	
Sample ID	MW-L-90-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	04/17/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:34	500	2000	29.1	7.50	2259	205.1	3.60	70	73.80	1.15	1.46
07:38	500	4000	29.3	7.48	2265	201.8	3.32	35	73.80	1.15	1.47
07:42	500	6000	29.3	7.47	2265	194.5	3.31	7	73.80	1.15	1.46
07:46	500	8000	29.3	7.47	2262	187.6	3.41	2	73.80	1.15	1
07:50	500	10000	29.3	7.47	2236	182.3	3.22	1	73.80	1.15	1.46
07:54	500	12000	29.3	7.46	2227	179.4	3.26	1	73.80	1.15	1.46

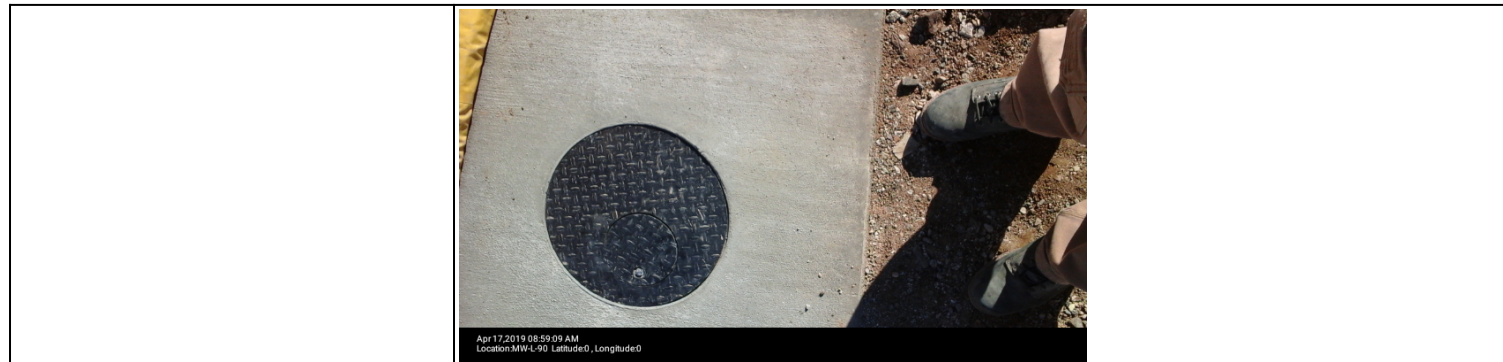
Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-83-180

Date	04/17/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	73.70
Water Quality Meter	YSI	Gallons in Well	17.59
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	181.52
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	170
Water Column in Well	107.82	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	04/17/2019	EB Time	
Sample Time	08:37	MS/MSD Sample ID	
Sample ID	MW-L-180-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	3	Post Sampling Turbidity	
		Purge Date	04/17/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:20	500	4000	30.0	7.98	12000	-66.1	0.29	100	73.82	6.60	7.58
08:24	500	6000	29.4	7.92	11670	-52.9	0.14	12	73.85	6.60	7.58
08:28	500	8000	29.3	7.92	11654	-55.9	0.13	10	73.85	6.59	7.57
08:32	500	10000	29.4	7.92	11645	-58.4	0.14	3	73.85	6.59	7.56
08:36	500	12000	29.4	7.92	11639	-61.2	0.12	3	73.85	6.57	7.55

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-83-225

Date	<u>04/16/2019</u>	Sampler	<u>Jason mahn</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>MI</u>	Depth to Water (ft bmp)	<u>74.57</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>24.44</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>224.42</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>215</u>
Water Column in Well	<u>149.85</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>04/16/2019</u>	EB Time	<u> </u>
Sample Time	<u>15:01</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-L-225-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>1</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>04/16/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:36	500	4000	29.8	8.62	16760	155.5	0.13	515	74.70	9.76	10.87
14:48	500	10000	30.0	8.60	16728	162.2	0.11	35	74.70	9.75	10.88
14:52	500	12000	30.0	8.60	16736	164.0	0.10	1	74.70	9.76	10.87
14:56	500	14000	30.1	8.59	16734	165.8	0.11	1	74.70	9.77	10.88
15:00	500	16000	30.1	8.58	16726	167.0	0.11	1	74.70	9.77	10.87

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-85-129

Date	04/16/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	114.70
Water Quality Meter	YSI	Gallons in Well	2.71
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	131.34
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	122
Water Column in Well	16.64	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	04/16/2019	EB Time	
Sample Time	13:49	MS/MSD Sample ID	
Sample ID	MW-N-129-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	04/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:32	500	4000	30.3	7.39	2019	77.7	5.75	31	114.80	1.02	1.30
13:36	500	6000	30.3	7.37	2014	82.8	5.63	1	114.82	1.01	1.31
13:40	500	8000	30.4	7.36	2017	86.6	5.54	1	114.85	1.02	1.31
13:44	500	10000	30.3	7.36	2017	87.1	5.56	1	114.85	1.02	1.31
13:48	500	12000	30.3	7.35	2020	87.5	5.56	1	114.85	1.02	1.31

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-85-217

Date	04/16/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	113.86
Water Quality Meter	YSI	Gallons in Well	16.99
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	218.02
Casing Diameter (in)	2	Odor	None
Water Column in Well	104.16	Pump Intake Depth (ft bmp)	206.5
Did Well Dewater?	NA	Total Volume to Remove	
Sample Date	04/16/2019	EB Sample ID	
Sample Time	11:35	EB Time	
Sample ID	MW-N-217-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter	8	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	04/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:50	500	2000	28.9	8.01	12850	-130.2	0.25	624	114.2	7.37	8.39
11:02	500	8000	30.1	7.93	12835	-176.5	0.17	302	114.2	7.31	8.33
11:06	500	10000	30.3	7.96	12800	-179.4	0.14	97	114.5	7.27	8.30
11:10	500	12000	30.5	7.99	12704	-169.9	0.12	50	114.5	7.23	8.27
11:14	500	14000	30.2	8.01	12600	-160.2	0.13	20	114.5	7.13	8.11
11:26	500	20000	30.1	8.00	12595	-155.5	0.12	10	114.5	7.11	8.09
11:30	500	22000	30.1	8.00	12595	-157.1	0.11	9	114.5	7.11	8.09
11:34	500	24000	30.1	7.99	12590	-151	0.11	9	114.5	7.11	8.09

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-85-237

Date	04/16/2019	Sampler	
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	113.90
Water Quality Meter	YSI	Gallons in Well	20.29
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	238.31
Casing Diameter (in)	2	Odor	None
Water Column in Well	124.41	Pump Intake Depth (ft bmp)	231.5
Did Well Dewater?	NA	Total Volume to Remove	
Sample Date	04/16/2019	EB Sample ID	
Sample Time	13:01	EB Time	
Sample ID	MW-N-237-Q219	MS/MSD Sample ID	
Single Filter Turbidity	11	MS/MSD Sample Time	
Without Filter	99	Double Filter Turbidity	1
Turbidity		Post Sampling Turbidity	
		Purge Date	04/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:00	500	4000	30.1	8.11	19025	70.4	0.25	120	114.02	11.24	12.38
12:04	500	6000	30.2	8.14	19029	54.6	0.18	100	114.05	11.23	12.38
12:08	500	8000	30.5	8.17	19015	20.5	0.15	102	114.05	11.21	12.36
12:20	500	14000	30.3	8.19	19020	-9.8	0.15	98	114.05	11.21	12.35
12:32	500	20000	30.6	8.20	18970	-12.7	0.16	97	114.05	11.16	12.31
12:44	500	26000	30.0	8.21	18954	-10.5	0.17	100	114.05	11.16	12.31
13:00	500	34000	30.1	8.24	18966	-10.9	0.16	99	114.05	11.16	12.31

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-90-031

Date	04/16/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	3.54
Water Quality Meter	YSI	Gallons in Well	4.73
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	32.51
Casing Diameter (in)	2	Odor	None
Water Column in Well	28.97	Pump Intake Depth (ft bmp)	26.5
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	04/16/2019	EB Sample ID	
Sample Time	08:05	EB Time	
Sample ID	MW-W-31-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter	1	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	04/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:48	500	4000	23.2	7.07	14800	-117.1	0.09	51	3.75	8.77	9.77
07:52	500	6000	23.3	7.06	15285	-119.5	0.07	21	3.75	8.89	9.89
07:56	500	8000	23.4	7.05	15570	-121.7	0.06	1	3.75	9.04	10.09
08:00	500	10000	23.4	7.05	15573	-123.3	0.05	1	3.75	9.18	10.23
08:04	500	12000	23.4	7.05	15583	-123.4	0.05	1	3.75	9.21	10.26

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

C-CON

Date	<u>04/23/2019</u>	Sampler	<u></u>
		Color	<u></u>
		Casing Volume to Remove	<u></u>
		Depth to Water (ft bmp)	<u></u>
		Gallons in Well	<u></u>
		Measured Well Depth (ft bmp)	<u></u>
		Odor	<u></u>
		Pump Intake Depth (ft bmp)	<u></u>
		Total Volume to Remove	<u></u>
		EB Sample ID	<u></u>
		EB Time	<u></u>
		MS/MSD Sample ID	<u></u>
		MS/MSD Sample Time	<u></u>
		Double Filter Turbidity	<u></u>
		Post Sampling Turbidity	<u></u>
		Purge Date	<u>04/23/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-22

Date	04/23/2019	Sampler	Jayson mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	5.60
Water Quality Meter	YSI	Gallons in Well	1.09
Sampling Type	Low Flow – Peristaltic Pump	Measured Well Depth (ft bmp)	12.3
Casing Material	PVC	Odor	Sulphur
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	6.7	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	04/23/2019	EB Time	
Sample Time	10:02	MS/MSD Sample ID	
Sample ID	MW-22-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:41	500	2000	21.7	6.92	15560	-62.1	0.65	279	5.60	9.01	10.00
09:45	500	4000	21.6	6.94	15324	-77.1	0.43	100	5.60	8.91	9.91
09:49	500	6000	21.7	6.97	15120	-91.1	0.21	28	5.60	8.96	10.09
09:53	500	8000	21.9	6.97	15600	-99.9	0.18	3	5.60	9.20	10.10
09:57	500	10000	21.9	6.97	15613	-100.4	0.18	1	5.60	9.19	10.12
10:01	500	12000	21.9	6.97	15619	-101.9	0.18	1	5.60	9.19	10.12

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-27-085

Date	04/22/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	5.25
Water Quality Meter	YSI	Gallons in Well	13.42
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	87.50
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	82.5
Water Column in Well	82.25	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-27-085-EB-Q219
Sample Date	04/22/2019	EB Time	13:00
Sample Time	12:55	MS/MSD Sample ID	
Sample ID	MW-27-085-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	04/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:38	500	2000	20.3	7.32	3790	139.3	1.10	1	5.50	2.02	2.47
12:42	500	4000	20.3	7.33	3920	123.7	0.41	1	5.50	2.09	2.56
12:46	500	6000	20.3	7.33	3941	120.4	0.39	1	5.50	2.10	2.57
12:50	500	8000	20.3	7.33	3945	121.9	0.41	1	5.50	2.11	2.57
12:54	500	10000	20.3	7.33	3951	122.1	0.41	1	5.50	2.11	2.56

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-32-035

Date	04/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	5.91
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	31.5
Did Well Dewater?	NA	Total Volume to Remove	
Sample Date	04/23/2019	EB Sample ID	MW-32-035-EB
Sample Time	13:44	EB Time	13:55
Sample ID	MW-32-035-Q219	MS/MSD Sample ID	
Single Filter Turbidity	2	MS/MSD Sample Time	
Without Filter Turbidity	14	Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:27	500	2000	25.8	7.04	13613	-33.0	0.78	30	6.00	7.92	8.92
13:31	500	4000	24.9	7.04	13760	-52.1	0.77	20	6.05	7.93	8.93
13:35	500	6000	25.2	7.04	13727	-57.9	.69	16	6.05	7.93	8.93
13:39	500	8000	25.2	7.04	13737	-52.4	0.61	15	6.05	7.93	8.93
13:43	500	10000	25.2	7.03	13730	-50.1	0.60	15	6.05	7.93	8.93

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-33-040

Date	04/23/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	31.71
Water Quality Meter	YSI	Gallons in Well	1.32
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	39.81
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	34
Water Column in Well	8.1	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-33-040-Q219
Sample Date	04/23/2019	EB Time	15:45
Sample Time	15:33	MS/MSD Sample ID	
Sample ID	MW-33-040-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:16	500	2000	27.1	7.83	10256	64.8	0.57	4	31.80	5.77	6.66
15:20	500	4000	27.2	7.82	10357	62.8	0.47	1	31.80	5.82	6.76
15:24	500	6000	27.4	7.80	10489	61.1	0.40	1	31.80	5.91	6.81
15:28	500	8000	27.4	7.75	10553	60.3	0.38	1	31.80	5.96	6.87
15:32	500	10000	27.5	7.76	10580	61.1	0.36	1	31.80	5.96	6.87

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-33-090

Date	04/22/2019	Sampler	Jason mahm
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	31.77
Water Quality Meter	YSI	Gallons in Well	9.52
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	90.11
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	79
Water Column in Well	58.34	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-700-Q219
Sample Date	04/22/2019	EB Time	16:00
Sample Time	15:01	MS/MSD Sample ID	
Sample ID	MW-33-090-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	27	Post Sampling Turbidity	
		Purge Date	04/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:40	500	2000	26.42	6.98	10365	82.8	1.51	131	31.90	5.85	6.74
14:44	500	4000	26.1	7.00	10375	81.0	1.05	40	31.90	5.85	6.74
14:48	500	6000	26.1	7.00	10345	76.2	0.74	30	31.90	5.85	6.77
14:56	500	10000	26.1	7.00	10420	59.9	0.72	30	31.90	5.85	6.80
15:00	500	12000	26.1	7.01	10500	57.9	0.71	27	31.90	5.72	6.60

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-33-150

Date	<u>04/22/2019</u>	Sampler	<u></u>
Weather Conditions	<u>Sunny</u>	Color	<u></u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u></u>
Purge Volume Units	<u>ml</u>	Depth to Water (ft bmp)	<u>32.40</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u></u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u></u>
		Odor	<u></u>
		Pump Intake Depth (ft bmp)	<u></u>
		Total Volume to Remove	<u></u>
		EB Sample ID	<u></u>
		EB Time	<u></u>
		MS/MSD Sample ID	<u></u>
		MS/MSD Sample Time	<u></u>
		Double Filter Turbidity	<u></u>
		Post Sampling Turbidity	<u></u>
		Purge Date	<u>04/22/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			
Action Completed?			X	

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-33-210

Date	<u>04/22/2019</u>	Sampler	<u>Jason mahn</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>MI</u>	Depth to Water (ft bmp)	<u>32.34</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>29.01</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>210.18</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>200</u>
Water Column in Well	<u>177.84</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>NA</u>	EB Sample ID	<u> </u>
Sample Date	<u>04/22/2019</u>	EB Time	<u> </u>
Sample Time	<u>14:07</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-33-210-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>1</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>04/22/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:50	500	2000	27.7	7.55	9203	140.2	0.31	1	32.40	5.13	5.97
13:54	500	4000	27.7	7.53	9210	138.1	0.33	1	32.40	5.13	5.99
13:58	500	6000	27.7	7.53	9290	132.1	0.29	1	32.40	5.20	6.01
14:02	500	8000	27.7	7.53	9310	130.1	0.32	1	32.40	5.21	6.01
14:06	500	10000	27.7	7.53	9319	131.4	0.33	1	32.40	5.21	6.03

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-34-080

Date	04/24/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	5.17
Water Quality Meter	YSI	Gallons in Well	51.56
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	84.20
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	78
Water Column in Well	79.03	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-34-080-EB-Q219
Sample Date	04/24/2019	EB Time	10:20
Sample Time	10:16	MS/MSD Sample ID	
Sample ID	MW-34-080-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	04/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:59	500	2000	19.6	7.17	8859	82.3	0.86	14	5.24	4.96	5.75
10:03	500	4000	19.7	7.15	8870	70.4	0.80	5	5.24	4.96	5.75
10:07	500	6000	19.7	7.13	8902	60.0	0.65	1	5.25	5.00	5.79
10:11	500	8000	19.8	7.12	8939	55.4	0.61	1	5.25	5.01	5.81
10:15	500	10000	19.9	7.12	8955	51.1	0.58	1	5.25	5.01	5.81

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-34-100

Date	<u>04/24/2019</u>	Sampler	<u>Garrett graves</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>ml</u>	Depth to Water (ft bmp)	<u>5.42</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>15.62</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>101.2</u>
Casing Material	<u>PVC</u>	Odor	<u>none</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>99</u>
Water Column in Well	<u>95.78</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u>MW-704-Q219</u>
Sample Date	<u>04/24/2019</u>	EB Time	<u>14:30</u>
Sample Time	<u>10:17</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-34-100-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>1</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>04/24/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:00	500	2000	18.1	7.67	9240	50.0	0.08	1	5.42	5.18	5.96
10:04	500	4000	18.0	7.63	9111	19.4	0.09	1	5.42	5.12	5.92
10:08	500	6000	18.1	7.61	9127	-1.9	0.08	1	5.42	5.21	6.00
10:12	500	8000	18.1	7.63	9145	-2.2	0.09	1	5.42	5.22	6.10
10:16	500	10000	18.1	7.61	9140	-2.2	0.08	1	5.42	5.23	6.09

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-36-090

Date	04/24/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	14.49
Water Quality Meter	YSI	Gallons in Well	3.18
Sampling Type	Low Flow – Peristaltic Pump	Measured Well Depth (ft bmp)	92.50
Casing Material	PVC	Odor	None
Casing Diameter (in)	1	Pump Intake Depth (ft bmp)	85
Water Column in Well	78.01	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	04/24/2019	EB Time	
Sample Time	08:51	MS/MSD Sample ID	
Sample ID	MW-36-090-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	04/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:34	500	2000	20.7	7.32	4568	7.1	2.19	4	14.55	2.45	2.97
08:38	500	4000	20.6	7.20	5012	12.5	1.29	1	14.55	2.70	3.25
08:42	500	6000	20.6	7.20	5049	16.4	1.06	1	14.55	2.72	3.28
08:46	500	8000	20.6	7.18	5051	19.2	0.98	1	14.55	2.73	3.28
08:50	500	10000	20.6	7.18	5060	20.2	0.90	1	14.55	2.73	3.28

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-36-100

Date	04/24/2019	Sampler	Garrett graves
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	14.50
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	
Casing Diameter (in)	2	Odor	none
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	88
Sample Date	04/24/2019	Total Volume to Remove	
Sample Time	08:59	EB Sample ID	
Sample ID	MW-36-100-Q219	EB Time	
Duplicate Sample ID	MW-905-Q219	MS/MSD Sample ID	
Dup Sample Time	09:09	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	1	Post Sampling Turbidity	
Turbidity		Purge Date	04/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:34	500	2000	18.8	7.54	11000	25.7	0.30	855	14.50	6.03	6.76
08:46	500	8000	18.9	7.53	7494	-52.5	0.11	35	14.50	4.13	4.84
08:50	500	10000	18.9	7.51	7442	-57.8	0.11	3	14.5	4.11	4.81
08:54	500	12000	18.9	7.51	7451	-58.1	0.12	1	14.50	4.15	4.88
08:58	500	14000	18.9	7.51	7455	-60.1	0.12	1	14.5	4.15	4.82

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Site: PGE Topock
Topock, CA

MW-39-100

Date	04/24/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	13.76
Water Quality Meter	YSI	Gallons in Well	16.95
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	117.71
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	90
Water Column in Well	103.95	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-703-Q219
Sample Date	04/24/2019	EB Time	14:45
Sample Time	14:33	MS/MSD Sample ID	
Sample ID	MW-39-100-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	8	Post Sampling Turbidity	
Turbidity		Purge Date	04/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:04	500	2000	26.6	7.01	13503	93.5	0.89	1000	13.85	7.84	8.90
14:08	500	4000	23.9	6.85	13213	78.7	0.52	634	13.87	7.55	8.51
14:12	500	6000	23.7	6.81	12604	71.1	0.58	154	13.87	7.22	8.17
14:16	500	8000	23.6	6.82	12011	64.8	0.52	52	13.87	6.86	7.75
14:20	500	10000	24.4	6.84	12009	58.6	0.46	24	13.87	6.86	7.88
14:24	500	12000	24.8	6.83	12225	56.2	0.46	9	13.87	6.86	7.88
14:28	500	14000	24.2	6.83	12274	56.4	0.42	8	13.87	7.03	7.97
14:32	500	16000	24.2	6.83	12301	54.2	0.41	8	13.87	7.06	7.97

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-42-055

Date	04/23/2019	Sampler	
Did Well Dewater?	No	Color	Clear
Sample Date	04/23/2019	Casing Volume to Remove	
Sample Time	14:39	Depth to Water (ft bmp)	
Sample ID	MW-42-055-Q219	Gallons in Well	
Single Filter Turbidity	1	Measured Well Depth (ft bmp)	
Without Filter Turbidity	1	Odor	none
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	42-55
		EB Time	14:49
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:22	500	2000	21.2	8.50	1031	-36.4	1.27	1	8.40	0.51	0.66
14:26	500	4000	21.5	8.37	1022	-34.0	0.90	1	8.40	0.51	0.66
14:30	500	6000	22.0	8.33	1038	-35.9	0.51	1	8.40	0.52	0.67
14:34	500	8000	21.7	8.33	1060	-36.1	0.50	1	8.40	0.53	0.69
14:38	500	10000	21.7	8.33	1037	-35.6	0.50	1	8.40	0.52	0.69

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-42-065

Date	04/23/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	7.84
Water Quality Meter	YSI	Gallons in Well	12.37
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	83.66
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	75.82	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-42-065-EB-Q219
Sample Date	04/23/2019	EB Time	14:45
Sample Time	14:38	MS/MSD Sample ID	
Sample ID	MW-42-065-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:21	500	2000	23.1	7.59	2611	7.2	0.63	16	7.90	1.36	1.70
14:25	500	4000	23.1	7.60	2711	0.3	0.47	4	7.90	1.41	1.77
14:29	500	6000	23.1	7.54	2802	-6.3	0.40	1	7.90	1.43	1.85
14:33	500	8000	22.9	7.52	2842	-8.1	0.39	1	7.90	1.48	1.85
14:37	500	10000	23.1	7.54	2892	-10.4	0.42	1	7.90	1.48	1.87

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-44-070

Date	04/24/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	16.29
Water Quality Meter	YSI	Gallons in Well	9.16
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	72.42
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	66
Water Column in Well	56.13	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-44-070-EB-Q219
Sample Date	04/24/2019	EB Time	12:10
Sample Time	12:00	MS/MSD Sample ID	
Sample ID	MW-44-070-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	3	Post Sampling Turbidity	
		Purge Date	04/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:35	500	2000	21.6	7.41	3110	6.8	0.75	110	16.40	1.55	2.05
11:39	500	4000	21.5	7.22	3393	-27.2	0.53	52	16.40	1.78	2.20
11:43	500	6000	21.6	7.20	3373	-46.0	0.48	34	16.40	1.77	2.19
11:47	500	8000	21.5	7.21	3315	-35.3	0.46	19	16.40	1.72	2.19
11:51	500	10000	22.4	7.22	2667	-51.1	0.41	5	16.40	1.38	1.73
11:55	500	12000	22.5	7.23	2663	-56.6	0.42	5	16.40	1.38	1.72
11:59	500	14000	22.6	7.23	2626	-60.2	0.40	4	16.40	1.38	1.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-44-115

Date	04/24/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	17.22
Water Quality Meter	YSI	Gallons in Well	15.95
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	115.0
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	110
Water Column in Well	97.78	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	04/24/2019	EB Time	
Sample Time	12:59	MS/MSD Sample ID	
Sample ID	MW-44-115-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	3	Post Sampling Turbidity	
		Purge Date	04/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:30	500	2000	21.5	6.79	11171	113.1	0.59	421	117.30	6.36	7.28
12:34	500	4000	21.5	6.94	11109	127.5	0.51	216	117.30	6.32	7.22
12:42	500	8000	21.5	7.35	11111	120.4	0.42	22	117.30	6.32	7.22
12:50	500	12000	21.3	7.51	11399	100.7	0.39	4	117.30	6.51	7.41
12:54	500	14000	21.3	7.50	11384	95.2	0.35	3	117.30	6.50	7.40
12:58	500	16000	21.4	7.49	11392	90.9	0.35	3	117.30	6.50	7.41

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-44-125

Date	04/24/2019	Sampler	
Did Well Dewater?	No	Color	Clear
Sample Date	04/24/2019	Casing Volume to Remove	
Sample Time	11:54	Depth to Water (ft bmp)	
Sample ID	MW-44-125-Q219	Gallons in Well	
Single Filter Turbidity	1	Measured Well Depth (ft bmp)	
Without Filter Turbidity	1	Odor	none
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	12:04
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	04/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:37	500	2000	20.2	7.87	2180	-33.9	1.00	1	16.84	1.78	2.26
11:41	500	4000	20.3	7.78	3200	-84.3	0.45	1	16.84	1.65	2.04
11:45	500	6000	20.4	7.72	3990	-86.6	0.44	1	16.84	1.78	2.24
11:49	500	8000	20.4	7.72	4110	-87.1	0.44	1	16.84	1.80	2.29
11:53	500	10000	20.4	7.72	4140	-87.9	0.45	1	16.84	1.80	2.49

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Location name: 'MW-44-125', Date: 2019-04-24 13:14:37, Azimuth: 24.5 NE, Latitude: 34.71925735505017,
Longitude: -114.4843688962798

Site: PGE Topock
Topock, CA



Site: PGE Topock
Topock, CA

MW-52D

Date	04/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	8.53
Water Quality Meter	YSI	Gallons in Well	3.2
Sampling Type	Low Flow – Peristaltic Pump	Measured Well Depth (ft bmp)	87
Casing Diameter (in)	1	Odor	None
Water Column in Well	78.47	Pump Intake Depth (ft bmp)	86
Did Well Dewater?	NA	Total Volume to Remove	
Sample Date	04/23/2019	EB Sample ID	
Sample Time	11:12	EB Time	
Sample ID	MW-52D-Q219	MS/MSD Sample ID	
Duplicate Sample ID	MW-908-Q219	MS/MSD Sample Time	
Dup Sample Time	11:22	Double Filter Turbidity	
Single Filter Turbidity	1	Post Sampling Turbidity	
Without Filter Turbidity	1	Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:55	500	2000	18.9	7.29	21659	-152.4	0.40	1	8.60	13.00	14.08
10:59	500	4000	19.0	7.34	21570	-153.7	0.25	1	8.60	13.00	14.08
11:03	500	6000	19.1	7.41	21642	-154.2	0.22	1	8.60	13.00	14.07
11:07	500	8000	19.1	7.46	21698	-155.2	0.21	1	8.60	13.00	14.07
11:11	500	10000	19.4	7.49	21738	-155.7	0.21	1	8.60	13.00	14.07

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-52M

Date	04/23/2019	Sampler	Garrett graves
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	8.10
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Peristaltic Pump	Measured Well Depth (ft bmp)	68
Casing Material	PVC	Odor	none
Casing Diameter (in)	1in	Pump Intake Depth (ft bmp)	
Water Column in Well	59.90	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	Mw-702-Q219
Sample Date	04/23/2019	EB Time	15:20
Sample Time	11:10	MS/MSD Sample ID	
Sample ID	MW-52M-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:54	500	2000	20.3	6.49	12626	12.3	1.07	1	8.10	7.29	8.23
10:58	500	4000	20.4	6.64	12800	10.1	1.02	1	8.10	7.39	8.34
11:02	500	6000	20.4	6.98	12979	-14.9	0.88	1	8.10	7.49	8.16
11:05	500	8000	20.4	7.01	13000	-16.1	0.86	1	8.10	7.41	8.29
11:09	500	10000	20.4	7.01	13014	-16.9	0.91	1	8.10	7.50	8.16

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
PVC Cap Present?	X			
Well Casing Intact?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-52S

Date	04/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	8.55
Water Quality Meter	YSI	Gallons in Well	1.65
Sampling Type	Low Flow – Peristaltic Pump	Measured Well Depth (ft bmp)	49
Casing Material	PVC	Odor	None
Casing Diameter (in)	1	Pump Intake Depth (ft bmp)	48
Water Column in Well	40.45	Total Volume to Remove	
Comments	Slant	EB Sample ID	
Did Well Dewater?	NA	EB Time	
Sample Date	04/23/2019	MS/MSD Sample ID	
Sample Time	11:45	MS/MSD Sample Time	
Sample ID	MW-52S-Q219	Double Filter Turbidity	
Single Filter Turbidity	1	Post Sampling Turbidity	
Without Filter Turbidity	1	Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:29	500	2000	19.2	7.29	13929	-127.2	0.84	1	8.70	8.10	9.07
11:33	500	4000	19.0	7.27	13276	-125.7	0.89	1	8.70	6.64	7.51
11:37	500	6000	19.0	7.14	10980	-106.3	1.31	1	8.70	6.25	7.12
11:41	500	8000	19.0	7.10	10857	-105.1	1.34	1	8.70	6.18	7.05
11:45	500	10000	19.1	7.07	10802	-106.1	1.38	1	8.70	6.18	7.03

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA



Apr 23, 2019 12:42:35 PM
Location: MW-52S Latitude: 34.716989, Longitude: -114.488197

Site: PGE Topock
 Topock, CA

MW-53D

Date	04/23/2019	Sampler	Garrett graves
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Peristaltic Pump	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	none
Casing Diameter (in)	1in	Pump Intake Depth (ft bmp)	124.5
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	04/23/2019	EB Sample ID	
Sample Time	12:35	EB Time	
Sample ID	MW-53D-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter	1	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:18	500	2000	17.8	7.68	26270	-123.4	0.09	1		16.13	17.09
12:22	500	4000	18.0	7.96	26444	-138.4	0.10	1		16.20	17.14
12:26	500	6000	20.0	8.27	26343	-130.6	1.45	1		16.20	17.16
12:30	500	8000	20.1	8.27	26351	-129.8	1.40	1		16.21	17.16
12:34	500	10000	20.1	8.28	26357	-130.2	1.42	1		16.22	17.17

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA



Location name: 'MW-53D', Date: 2019-04-23 12:21:00, Azimuth: 131.5 SE, Latitude: 0, Longitude: 0

Site: PGE Topock
Topock, CA

MW-53M

Date	04/23/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Peristaltic Pump	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	None
Casing Diameter (in)	1	Pump Intake Depth (ft bmp)	99
Did Well Dewater?	NA	Total Volume to Remove	
Sample Date	04/23/2019	EB Sample ID	MW-701-Q219
Sample Time	12:30	EB Time	15:55
Sample ID	MW-53M-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter	1	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:09	500	2000	20.2	7.17	10456	84.8	1.63	1		6.01	6.97
12:13	500	4000	20.6	7.43	12459	61.7	1.22	1		7.39	8.14
12:17	500	6000	21.8	7.50	15013	73.7	1.00	1		8.80	9.82
12:21	500	8000	21.3	7.56	15657	78.7	0.95	1		9.18	10.19
12:25	500	10000	21.6	7.60	15717	80.7	0.92	1		9.20	10.23
12:29	500	12000	21.5	7.64	15902	85.1	0.90	1		9.32	10.33

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
 Topock, CA

PE-01

Date	04/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Extraction Port	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Extraction port	Measured Well Depth (ft bmp)	
Did Well Dewater?	NA	Odor	None
Sample Date	04/23/2019	Pump Intake Depth (ft bmp)	
Sample Time	08:50	Total Volume to Remove	
Sample ID	PE-01-Q219	EB Sample ID	
Single Filter Turbidity	1	EB Time	
Without Filter Turbidity	2	MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:45		5	22.1	7.08	3268	178.8	1.01	2		1.70	2.11

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?			X	
Standing Water in Annulus?		X		
Well Casing Intact?			X	
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Site: PGE Topock
 Topock, CA

TW-02D

Date	04/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Extraction Port	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Extraction port	Measured Well Depth (ft bmp)	
Did Well Dewater?	NA	Odor	None
Sample Date	04/23/2019	Pump Intake Depth (ft bmp)	
Sample Time	09:00	Total Volume to Remove	
Sample ID	TW-02D-Q219	EB Sample ID	
Single Filter Turbidity	1	EB Time	
Without Filter Turbidity	2	MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:53			21.7	7.19	3841	186.5	1.02	2		2.03	2.45

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?			X	
Standing Water in Annulus?		X		
Well Casing Intact?			X	
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Apr 23, 2019 08:54:46 AM
Location: TW-02D Latitude: 34.719405, Longitude: -114.491498

Site: PGE Topock
Topock, CA

TW-03D

Date	04/23/2019	Sampler	
Did Well Dewater?	NA	Color	Clear
Sample Date	04/23/2019	Casing Volume to Remove	
Sample Time	08:40	Depth to Water (ft bmp)	
Sample ID	TW-03D-Q219	Gallons in Well	
Single Filter Turbidity	1	Measured Well Depth (ft bmp)	
Without Filter Turbidity	2	Odor	None
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
		5						2			

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?	X			
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?			X	
Steel Casing Intact?	X			
PVC Cap Present?			X	
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Site: PGE Topock
Topock, CA

C-BNS-D

Date	04/22/2019	Sampler	
		Color	
		Casing Volume to Remove	
		Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	04/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

C-CON-S

Date	04/23/2019	Sampler	
		Color	
		Casing Volume to Remove	
		Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	04/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

C-I-3-D

Date	<u>04/17/2019</u>	Sampler	<u></u>
		Color	<u></u>
		Casing Volume to Remove	<u></u>
		Depth to Water (ft bmp)	<u></u>
		Gallons in Well	<u></u>
		Measured Well Depth (ft bmp)	<u></u>
		Odor	<u></u>
		Pump Intake Depth (ft bmp)	<u></u>
		Total Volume to Remove	<u></u>
		EB Sample ID	<u></u>
		EB Time	<u></u>
		MS/MSD Sample ID	<u></u>
		MS/MSD Sample Time	<u></u>
		Double Filter Turbidity	<u></u>
		Post Sampling Turbidity	<u></u>
		Purge Date	<u>04/17/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-72BR-200-LF_S

Date	05/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	brown
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	56.57
Water Quality Meter	YSI	Gallons in Well	146.21
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	200
Casing Material	PVC	Odor	none
Casing Diameter (in)	5	Pump Intake Depth (ft bmp)	152
Water Column in Well	143.43	Total Volume to Remove	
Sample Date	05/23/2019	EB Sample ID	1600
Sample Time	15:34	EB Time	
Sample ID	MW-72BR-200-LF_S-Q219	MS/MSD Sample ID	
Single Filter Turbidity	15	MS/MSD Sample Time	
Without Filter	227	Double Filter Turbidity	1
Turbidity		Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:37	500	2000	26.8	8.01	10309	-107.1	0.42	23	56.60	5.70	6.75
14:41	500	4000	26.9	7.83	11089	-216.4	0.31	58	56.60	6.20	7.20
14:45	500	6000	27.0	7.86	11299	-228.3	0.29	134	56.60	6.47	7.37
14:53	500	10000	27.2	7.97	11815	-227.5	0.22	151	56.60	6.68	7.68
15:01	500	14000	27.0	7.98	11773	-201.3	0.29	200	56.60	6.66	7.66
15:12	500	20000	27.2	7.98	11811	-202.5	0.25	245	56.60	6.68	7.68
15:33	500	30,500	27.4	7.99	11818	-205.4	0.28	227	56.65	6.66	7.66

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
 Topock, CA

TW-04-LF

Date	05/16/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	28.84
Water Quality Meter	YSI	Gallons in Well	144.29
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	250.00
Casing Material	PVC	Odor	none
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	230
Water Column in Well	221.16	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/16/2019	EB Time	
Sample Time	11:23	MS/MSD Sample ID	
Sample ID	TW-04-LF-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:58	500	4000	28.6	7.36	11387	137.86	2.46	1	29.00	6.46	7.42
11:10	500	10000	29.6	7.53	11352	136.1	0.60	1	29.00	6.42	7.31
11:14	500	12000	28.6	7.53	10930	138.1	0.45	1	29.00	6.28	7.07
11:18	500	14000	28.5	7.52	10737	140.4	0.42	1	29.00	6.12	7.08
11:22	500	14000	28.5	7.53	10701	144.7	0.41	1	29.00	6.38	7.07

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-57-185-LF_S

Date	05/20/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	52.17
Water Quality Meter	YSI	Gallons in Well	86.01
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	184.00
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	150
Water Column in Well	131.83	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/20/2019	EB Time	
Sample Time	13:44	MS/MSD Sample ID	
Sample ID	MW-57-185-LF_S-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-909-Q219	Double Filter Turbidity	
Dup Sample Time	13:54	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	05/20/2019
Without Filter Turbidity	6		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:27	0.2	0.8	28.5	8.41	18905	22.0	0.68	13	52.35	11.18	12.34
13:31	0.2	1.6	28.5	8.68	19608	20.1	0.69	9	52.39	11.10	12.41
13:35	0.2	2.4	28.5	8.80	19143	19.8	0.67	7	52.39	10.98	12.36
13:39	0.2	3.2	28.5	8.84	19123	19.3	0.66	6	52.39	10.95	12.35
13:43	0.2	4.0	28.5	8.86	19098	18.6	0.66	6	52.39	10.92	12.33

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-70BR-225-LF

Date	05/21/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	82.73
Water Quality Meter	YSI	Gallons in Well	149.11
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	229.0
Casing Material	PVC	Odor	none
Casing Diameter (in)	5	Pump Intake Depth (ft bmp)	225
Water Column in Well	146.27	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-717-Q219
Sample Date	05/21/2019	EB Time	15:30
Sample Time	14:33	MS/MSD Sample ID	
Sample ID	MW-70BR-225-LF-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:16	500	4000	29.3	7.37	9199	128.4	0.32	2	82.85	5.03	5.93
14:20	500	6000	29.5	7.36	9154	122.8	0.28	1	82.85	5.07	5.94
14:24	500	8000	29.4	7.35	9132	121.9	0.29	1	82.85	5.05	5.88
14:28	500	10000	29.4	7.35	9140	119.7	0.27	1	82.85	5.04	5.90
14:32	500	12000	29.4	7.35	9093	118.1	0.28	1	82.85	5.01	5.88

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-60BR-245-3V

Date	05/22/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	98.70
Water Quality Meter	YSI	Gallons in Well	127.67
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	223.94
Casing Material	PVC	Odor	None
Casing Diameter (in)	5	Pump Intake Depth (ft bmp)	220
Water Column in Well	125.24	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-721-Q219
Sample Date	05/22/2019	EB Time	15:30
Sample Time	15:11	MS/MSD Sample ID	
Sample ID	MW-60BR-245-3V-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	7	Post Sampling Turbidity	
		Purge Date	05/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
01:13	2	156	28.7	7.84	18.37	68.5	0.60	7	194.80	21.20	22.05
12:33	3	78	27.2	7.96	18.21	96.4	0.92	5	137.60	21.60	22.41
13:52	2	234	29.7	7.83	18.41	52.5	0.67	7	205.67	21.82	22.69
14:31	2	312	31.4	7.91	18.45	63.8	0.55	7	209.88	21.82	22.71
15:10	2	391	31.7	7.94	18.49	67.6	0.51	7	200.08	21.82	22.71

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-60BR-245-LF_D

Date	05/23/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	98.72
Water Quality Meter	YSI	Gallons in Well	149.12
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	245.00
Casing Material	PVC	Odor	None
Casing Diameter (in)	5	Pump Intake Depth (ft bmp)	238
Water Column in Well	146.28	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/23/2019	EB Time	
Sample Time	14:30	MS/MSD Sample ID	
Sample ID	MW-60BR-245-LF_D-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:53	0.1	0.8	27.7	7.88	18171	5.9	2.04	2	98.93	10.64	11.78
14:01	0.1	1.6	27.6	7.90	18172	4.1	1.73	2	98.96	10.69	11.80
14:09	0.1	2.4	27.5	7.90	18249	3.4	1.58	1	98.96	10.72	11.84
14:17	0.1	3.2	27.5	7.91	18145	3.2	1.52	1	98.97	10.67	11.79
14:21	0.1	3.6	27.5	7.91	18140	3.0	1.50	1	98.97	10.63	11.79
14:25	0.1	4.0	27.5	7.91	18169	3.0	1.48	1	98.97	10.64	11.80
14:29	0.1	4.4	27.5	7.91	18172	3.1	1.48	1	98.97	10.64	11.80

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-60BR-245-LF_S

Date	05/23/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	98.72
Water Quality Meter	YSI	Gallons in Well	149.12
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	245.00
Casing Material	PVC	Odor	None
Casing Diameter (in)	5	Pump Intake Depth (ft bmp)	175
Water Column in Well	146.28	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/23/2019	EB Time	
Sample Time	13:26	MS/MSD Sample ID	
Sample ID	MW-60BR-245-LF_S-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:49	0.1	0.8	27.1	7.74	18144	-50.7	0.46	3	98.90	10.62	11.74
12:57	0.1	1.6	26.7	7.76	18474	-15.9	0.50	2	98.95	10.82	12.04
13:05	0.1	2.4	26.4	7.78	17866	-1.0	0.46	2	98.96	10.54	11.68
13:13	0.1	3.2	26.6	7.79	17910	3.9	0.44	1	98.96	10.52	11.66
13:17	0.1	3.6	26.6	7.79	17959	6.0	0.43	1	98.96	10.52	11.66
13:21	0.1	4.0	26.6	7.79	17970	7.3	0.40	1	98.97	10.52	11.66
13:25	0.1	4.4	26.7	7.80	18023	8.1	0.40	1	98.97	10.53	11.67

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

TW-05-LF

Date	05/20/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	40.52
Water Quality Meter	YSI	Gallons in Well	71.43
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	150.00
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	130
Water Column in Well	109.48	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-715-Q219
Sample Date	05/20/2019	EB Time	16:00
Sample Time	15:30	MS/MSD Sample ID	
Sample ID	TW-05-LF-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-913-Q219	Double Filter Turbidity	
Dup Sample Time	15:40	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	05/20/2019
Without Filter Turbidity	7		

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:13	0.2	0.8	28.8	7.57	12678	25.6	0.37	20	40.70	7.14	8.28
15:17	0.2	1.6	29.0	7.62	12716	22.4	0.33	14	40.70	7.24	8.26
15:21	0.2	2.4	29.1	7.63	12689	22.1	0.31	8	40.70	7.24	8.26
15:25	0.2	3.2	29.1	7.63	12692	21.6	0.30	7	40.70	7.24	8.26
15:29	0.2	4.0	29.2	7.63	12693	21.3	0.30	7	40.70	7.24	8.26

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-78-142

Date	05/15/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	46.31
Water Quality Meter	YSI	Gallons in Well	15.61
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	142.00
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	132
Water Column in Well	95.69	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/15/2019	EB Time	
Sample Time	12:27	MS/MSD Sample ID	
Sample ID	MW-E-142-LF-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:02	500	4000	30.2	7.34	12670	33.1	0.46	491	46.4	6.30	8.37
12:10	500	8000	30.3	7.30	13132	31.8	0.44	44	46.4	6.52	8.50
12:14	500	10000	30.4	7.30	13180	30.5	0.40	20	46.4	8.65	6.65
12:18	500	12000	30.4	7.29	13510	29.5	0.41	3	46.4	6.77	8.81
12:22	500	14000	30.4	7.29	13530	29.1	0.41	2	46.4	6.81	8.81
12:26	500	16000	30.5	7.28	13451	29.1	0.39	2	46.4	6.62	8.82

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-78-072

Date	05/15/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	46.04
Water Quality Meter	YSI	Gallons in Well	4.22
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	71.91
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	60
Water Column in Well	25.87	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/15/2019	EB Time	
Sample Time	13:26	MS/MSD Sample ID	
Sample ID	MW-E-72-LF-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	9	Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:57	500	2000	31.2	7.40	3532	57.8	7.24	321	46.10	0.29	2.29
13:01	500	4000	31.1	7.33	3491	65.4	6.88	190	46.10	0.26	0.27
13:13	500	10000	31.3	7.13	3436	84.9	6.88	26	46.1	0.24	2.24
13:17	500	12000	31.4	7.05	3461	91.6	6.91	10	46.10	0.24	2.24
13:21	500	14000	31.3	7.13	3440	88.2	6.87	9	46.10	0.24	2.24
13:25	500	16000	31.4	7.05	3451	91.4	6.91	9	46.10	0.25	2.26

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-79-104

Date	05/15/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	45.84
Water Quality Meter	YSI	Gallons in Well	9.58
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	104.57
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	100
Water Column in Well	58.73	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/15/2019	EB Time	
Sample Time	11:27	MS/MSD Sample ID	
Sample ID	MW-F-104-Q219	MS/MSD Sample Time	
Single Filter Turbidity	3	Double Filter Turbidity	1
Without Filter Turbidity	30	Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:50	500	4000	30.4	7.55	10605	-8.3	0.65	628	45.95	4.87	6.87
10:58	500	4000	30.4	7.52	10280	-44.2	0.55	73	45.95	4.72	6.66
11:10	500	12000	30.4	7.54	10733	-27.4	0.75	44	45.9	5.02	7.02
11:14	500	14000	30.6	7.54	13887	-21.5	0.86	36	45.95	7.03	9.03
11:18	500	16000	30.4	7.54	13788	18.0	0.72	32	45.95	5.02	7.02
11:22	500	18000	30.6	7.55	13777	-15.0	0.78	32	45.95	7.03	9.03
11:26	500	20000	30.4	7.55	13878	-13.2	0.72	30	45.96	5.02	7.02

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-79-060

Date	05/15/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	45.97
Water Quality Meter	YSI	Gallons in Well	2.36
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	60.41
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	58
Water Column in Well	14.44	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/15/2019	EB Time	
Sample Time	09:48	MS/MSD Sample ID	
Sample ID	MW-F-60-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	32	Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:19	500	4000	30.4	7.58	3903	80.0	1.18	800	46.10	1.19	2.51
09:27	500	8000	30.5	7.56	3870	69.0	1.34	100	46.10	1.21	2.54
09:35	500	12000	30.4	7.54	3902	60.0	1.50	40	46.10	1.23	2.52
09:39	500	14000	30.4	7.56	4000	56.0	1.53	35	46.10	1.21	2.54
09:43	500	14000	30.4	7.56	4010	56.2	1.56	32	46.10	1.21	2.53
09:47	500	16000	30.4	7.56	4014	54.9	1.50	32	46.10	1.24	2.55

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-80-057

Date	05/13/2019	Sampler	Garrett Graves
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	48.90
Water Quality Meter	YSI	Gallons in Well	1.83
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	60.11
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	11.21	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-705-Q219
Sample Date	05/13/2019	EB Time	16:25
Sample Time	16:12	MS/MSD Sample ID	
Sample ID	MW-G-59-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-919-Q219	Double Filter Turbidity	
Dup Sample Time	16:22	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	05/13/2019
Without Filter Turbidity	2		

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:55	500	2000	30.6	7.45	8477	40.2	3.66	28	49.00	4.20	6.92
15:59	500	4000	30.6	7.32	12048	37.8	3.46	4	49.00	6.50	7.85
16:03	500	6000	30.7	7.28	12111	35.2	3.59	2	49.0	6.6	7.67
16:07	500	8000	30.5	7.30	12135	33.6	3.53	2	49.00	6.20	7.89
16:11	500	10000	30.6	7.29	12134	31.9	3.42	2	49.10	6.2	7.87

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-80-082

Date	05/15/2019	Sampler	Jason Mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	49.00
Water Quality Meter	YSI	Gallons in Well	5.73
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	84.10
Casing Diameter (in)	2	Odor	none
Water Column in Well	35.10	Pump Intake Depth (ft bmp)	74.5
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	05/15/2019	EB Sample ID	
Sample Time	08:36	EB Time	
Sample ID	MW-G-84-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter	9	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:19	500	2000	29.6	6.95	11774	174.1	4.55	100	49.10	6.00	7.64
08:23	500	4000	30.0	7.12	15840	165.6	4.17	40	49.10	8.30	10.29
08:27	500	6000	30.2	7.17	15844	158.9	4.09	10	49.10	8.28	10.32
08:31	500	8000	30.2	7.13	15826	156.7	4.09	9	49.10	8.31	10.36
08:35	500	10000	30.1	7.17	15833	154.9	4.10	9	49.10	8.33	10.31

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-83-245

Date	05/14/2019	Sampler	Garrett graves
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	74.00
Water Quality Meter	YSI	Gallons in Well	28.07
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	246.10
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	240
Water Column in Well	172.1	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/14/2019	EB Time	
Sample Time	10:30	MS/MSD Sample ID	
Sample ID	MW-L-245-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:10	500	2000	29.6	7.57	31789	119.1	0.79	10	73.90	20.06	20.96
10:14	500	4000	29.8	6.73	33350	49.5	0.65	1	73.88	20.84	21.76
10:18	500	6000	29.8	6.60	33430	10.1	0.60	1	73.88	11.63	12.80
10:22	500	8000	29.8	6.41	19500	-42.9	0.60	1	73.88	11.52	12.74
10:26	500	10000	29.8	6.40	19403	-52.3	0.61	1	73.88	11.59	12.66
10:30	500	12000	29.8	6.38	19516	-60.3	0.62	1	73.88	11.66	12.94

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-83-90

Date	05/14/2019	Sampler	Garrett graves
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	73.07
Water Quality Meter	YSI	Gallons in Well	3.1
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	92.10
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	80
Water Column in Well	19.03	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-707-Q219
Sample Date	05/14/2019	EB Time	16:00
Sample Time	15:12	MS/MSD Sample ID	
Sample ID	MW-L-90-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	1
Without Filter Turbidity	18	Post Sampling Turbidity	
		Purge Date	05/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:51	500	2000	31.0	7.37	3516	-60.5	4.50	140	73.05	0.70	2.28
14:55	500	4000	30.9	7.34	3470	-57.2	4.54	57	73.05	0.68	2.26
14:59	500	6000	31.0	7.34	3463	-57.0	4.27	30	73.05	0.68	2.26
15:03	500	8000	30.9	7.34	3461	-57.4	4.30	20	73.05	0.70	2.28
15:07	500	10000	30.8	7.34	3500	-56.9	4.28	18	73.05	0.70	2.28
15:11	500	12000	30.8	7.34	3517	-57.1	4.26	18	73.05	0.68	2.26

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-83-180

Date	05/14/2019	Sampler	Garrett graves
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	73.22
Water Quality Meter	YSI	Gallons in Well	17.51
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	180.55
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	170
Water Column in Well	107.33	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/14/2019	EB Time	
Sample Time	14:18	MS/MSD Sample ID	
Sample ID	MW-L-180-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	26	Post Sampling Turbidity	
		Purge Date	05/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:54	500	4000	29.8	7.75	13193	-115.6	0.35	784	73.35	6.80	8.59
14:02	500	8000	30.1	7.74	13496	-119.9	0.31	79	73.35	7.01	8.80
14:10	500	12000	29.9	7.76	13606	-122.8	0.29	31	73.35	7.03	8.82
14:14	500	14000	30.0	7.75	13710	-125.8	0.33	29	73.35	7.06	8.84
14:17	500	16000	30.0	7.75	13719	-128.7	0.33	28	73.35	7.06	8.84

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-83-225

Date	05/14/2019	Sampler	Garrett graves
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	74.10
Water Quality Meter	YSI	Gallons in Well	24.6
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	224.90
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	215
Water Column in Well	150.8	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/14/2019	EB Time	
Sample Time	13:14	MS/MSD Sample ID	
Sample ID	MW-L-225-Q219	MS/MSD Sample Time	
Single Filter Turbidity	3	Double Filter Turbidity	1
Without Filter Turbidity	37	Post Sampling Turbidity	
		Purge Date	05/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:05	500	2000	29.8	8.07	28379	3.1	1.54	12	74.08	16.07	18.71
12:17	500	8000	30.1	8.14	28649	-54.4	0.37	500	74.05	15.97	18.60
12:29	500	14000	30.2	8.12	28687	-63.6	0.35	490	74.05	15.94	18.58
12:41	500	20000	30.4	8.16	27835	-81.9	0.30	840	74.05	15.90	18.14
12:53	500	26000	30.6	8.17	28567	-95.8	0.30	90	74.05	15.88	18.49
13:05	500	32000	30.6	8.17	28495	-100.3	0.31	40	74.05	15.87	18.48
13:09	500	34000	30.6	8.17	28476	-103.4	0.32	37	74.05	15.87	18.50
13:13	500	36000	30.6	8.16	28433	-105.8	0.32	37	74.05	15.90	18.46

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-85-129

Date	05/13/2019	Sampler	Garrett graves
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	114.25
Water Quality Meter	YSI	Gallons in Well	2.77
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	131.25
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	125
Water Column in Well	17.00	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/13/2019	EB Time	
Sample Time	15:16	MS/MSD Sample ID	
Sample ID	MW-N-129-Q219	MS/MSD Sample Time	
Single Filter Turbidity	6	Double Filter Turbidity	
Without Filter Turbidity	15	Post Sampling Turbidity	
		Purge Date	05/13/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:30	400	2000	31.5	7.93	3030	5.1	5.55	190	114.25	1.58	1.98
14:35	400	4000	31.5	8.05	3041	-21.8	5.38	170	114.27	1.56	1.96
14:45	400	8000	31.8	8.06	3040	-48.1	5.13	80	114.27	1.57	1.97
14:50	400	10000	33.9	7.88	3089	-47.1	5.70	140	114.27	1.58	2.00
14:55	400	12000	32.0	7.96	3096	-52.5	5.97	100	114.27	1.59	2.00
15:05	400	16000	31.6	8.00	3088	-60.0	6.40	20	114.27	1.59	2.00
15:10	400	18000	31.5	8.01	3091	-61.3	6.45	18	114.27	1.59	2.00
15:15	400	20000	31.5	8.05	3100	-60.8	6.48	15	114.27	1.58	2.01

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-85-217

Date	<u>05/13/2019</u>	Sampler	<u>Jacob Mathwig</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u>1</u>
Purge Volume Units	<u>Gal</u>	Depth to Water (ft bmp)	<u>113.66</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>16.86</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>217</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>206</u>
Water Column in Well	<u>103.34</u>	Total Volume to Remove	<u>16.86</u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u></u>
Sample Date	<u>05/13/2019</u>	EB Time	<u></u>
Sample Time	<u>14:50</u>	MS/MSD Sample ID	<u></u>
Sample ID	<u>MW-N-217-Q219</u>	MS/MSD Sample Time	<u></u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u>1</u>
Without Filter Turbidity	<u>20</u>	Post Sampling Turbidity	<u></u>
		Purge Date	<u>05/13/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:29	.25	1	31.6	7.17	11694	-37.1	0.78	217	113.78	6.90	7.97
14:34	.25	2	31.6	7.01	12996	-196.6	0.57	101	113.78	7.30	8.47
14:40	.25	3	31.8	7.03	12985	-193.8	0.55	21	113.78	7.36	8.46
14:44	.25	4	31.9	7.04	13008	-193.	0.65	20	113.78	7.41	8.43
14:49	.25	5	32	7.06	13041	-192.9	0.58	20	113.78	7.42	8.45

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



May 13, 2019 02:09:41 PM
Location: MW-N-217 Latitude: 34.718764, Longitude: -114.492478

Site: PGE Topock
Topock, CA

MW-85-237

Date	05/13/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	1
Purge Volume Units	Gal	Depth to Water (ft bmp)	113.74
Water Quality Meter	YSI	Gallons in Well	20.1
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	237
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	231
Water Column in Well	123.26	Total Volume to Remove	20.1
Did Well Dewater?	No	EB Sample ID	MW-706-2Q19
Sample Date	05/13/2019	EB Time	16:45
Sample Time	16:03	MS/MSD Sample ID	
Sample ID	MW-N-237-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-920-Q219	Double Filter Turbidity	1
Dup Sample Time	16:13	Post Sampling Turbidity	
Single Filter Turbidity	2	Purge Date	05/13/2019
Without Filter Turbidity	29		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:22	.25	1	31.8	7.75	17055	-134.6	0.66	1000	113.82	9.94	11.14
15:30	.25	3	31.9	7.27	19057	-150.6	0.53	812	113.82	11.31	12.4
15:38	.25	5	31.9	7.25	19305	-150.3	0.50	492	113.82	11.41	12.53
15:46	.25	7	32.3	7.19	19568	-149.5	0.47	205	113.82	11.53	12.73
15:54	.25	9	32.3	7.16	19632	-152.8	0.46	30	113.82	11.57	12.72
15:58	.25	10	32.3	7.17	19652	-154.6	0.44	31	113.82	11.59	12.77
16:02	.25	11	32.3	7.17	19677	-155.3	0.42	29	113.82	11.61	12.78

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?			X	

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-90-031

Date	05/23/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Green
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	3.12
Water Quality Meter	YSI	Gallons in Well	4.77
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	32.35
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	28
Water Column in Well	29.23	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/23/2019	EB Time	
Sample Time	09:50	MS/MSD Sample ID	
Sample ID	MW-W-31-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	9	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:21	0.2	0.8	23.6	7.15	12417	-94.6	0.18	61	3.30	7.19	8.16
09:25	0.2	1.6	23.6	7.11	13514	-100.1	0.14	54	3.33	7.86	8.86
09:29	0.2	2.4	23.7	7.10	14769	-105.9	0.11	40	3.34	8.60	9.61
09:33	0.2	3.2	23.7	7.11	14797	-106.1	0.11	33	3.34	8.61	9.63
09:37	0.2	4.0	23.7	7.10	15034	-105.7	0.10	19	3.34	8.76	9.78
09:41	0.2	4.8	23.8	7.09	15189	-103.9	0.08	10	3.34	8.87	9.89
09:45	0.2	5.6	23.8	7.09	15193	-102.6	0.08	9	3.34	8.87	9.89
09:49	0.2	6.4	23.8	7.08	15196	-102.3	0.08	9	3.34	8.87	9.89

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-F-60-3V

Date	05/15/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Extraction Port	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	46.10
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	60.41
Casing Material	PVC	Odor	None
Water Column in Well	14.31	Pump Intake Depth (ft bmp)	
Did Well Dewater?	NA	Total Volume to Remove	
Sample Date	05/15/2019	EB Sample ID	
Sample Time	10:18	EB Time	
Sample ID	MW-F-60-3V-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter	4	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cum'l Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:01	0.5	2	30.5	7.57	4046	33.8	1.79	30	47.10	0.61	2.61
10:04	0.5	4	30.4	7.54	5330	56.2	2.04	19	47.10	1.46	3.46
10:09	0.5	6	30.4	7.54	5320	55.0	2.08	5	47.10	1.46	3.46
10:13	0.5	8	30.4	7.53	5348	52.0	2.20	4	47.10	1.46	3.46
10:17	.5	10	30.4	7.53	5350	51.1	2.19	4	47.10	1.46	3.46

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-75-117

Date	05/15/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	16.57
Water Quality Meter	YSI	Gallons in Well	16.61
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	118.40
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	107
Water Column in Well	101.83	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/15/2019	EB Time	
Sample Time	15:21	MS/MSD Sample ID	
Sample ID	MW-B-117-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:20	500	12000	28.1	7.32	13175	-94.8	0.50	2	16.60	6.61	8.47
15:00	500	2000	28.2	7.09	12671	-122.4	1.11	511	16.60	6.47	8.47
15:08	500	6000	28.1	7.21	12606	-105.1	0.60	22	16.60	6.47	8.47
15:08	500	10000	28.1	7.26	13099	-100.4	0.55	3	16.60	6.61	8.47
15:16	500	10000	28.1	7.29	13206	-97.4	0.52	2	16.60	6.61	8.47

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-75-033

Date	05/15/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	16.27
Water Quality Meter	YSI	Gallons in Well	2.96
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	34.43
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	22.5
Water Column in Well	18.16	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/15/2019	EB Time	
Sample Time	15:22	MS/MSD Sample ID	
Sample ID	MW-B-33-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	18	Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:41	500	2000	27.2	7.44	7423	-19.2	0.51	1000	16.30	2.80	4.82
14:53	500	8000	27.3	7.41	7539	-48.7	0.76	140	16.30	2.90	4.96
15:01	500	12000	27.3	7.43	7526	-71.3	0.81	60	16.39	2.90	4.96
15:09	500	16000	27.5	7.50	7600	-100.7	0.81	24	16.30	3.01	5.10
15:13	500	18000	27.5	7.49	7816	-103.7	0.89	20	16.30	3.00	5.08
15:17	500	20000	27.5	7.47	7832	-103.8	0.91	18	16.30	2.99	5.07
15:21	500	22000	27.6	7.47	7830	-109.2	0.91	18	16.30	2.99	5.08

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-10D

Date	05/17/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	73.34
Water Quality Meter	YSI	Gallons in Well	8.45
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	125.15
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	114
Water Column in Well	51.81	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/17/2019	EB Time	
Sample Time	09:26	MS/MSD Sample ID	
Sample ID	MW-10D-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	18	Post Sampling Turbidity	
		Purge Date	05/17/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:05	500	2000	29.0	7.38	3014	228.0	0.85	1000	73.40	1.56	1.95
09:09	500	4000	29.4	7.35	3070	224.5	0.61	40	73.40	1.59	1.99
09:13	500	6000	29.5	7.35	3077	223.4	0.60	22	73.40	1.59	2.00
09:17	500	8000	29.5	7.35	3097	220.8	0.59	20	73.4	1.60	2.01
09:21	500	10000	29.5	7.35	3110	217.8	0.58	20	73.40	1.61	2.02
09:25	500	12000	29.5	7.35	3141	216.1	0.57	19	73.40	1.60	2.03

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-89-183

Date	<u>05/22/2019</u>	Sampler	<u>Nara Tep</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>Gal</u>	Depth to Water (ft bmp)	<u>130.37</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>8.87</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>184.75</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>178</u>
Water Column in Well	<u>54.38</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>05/22/2019</u>	EB Time	<u> </u>
Sample Time	<u>14:38</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-U-183-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter	<u>9</u>	Post Sampling Turbidity	<u> </u>
Turbidity	<u> </u>	Purge Date	<u>05/22/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:13	0.2	1.6	31.7	7.64	7500	-26.9	0.92	231	130.43	4.13	4.86
14:21	0.2	3.2	31.7	7.64	7459	-24.9	0.91	73	130.43	4.07	4.87
14:25	0.2	4.0	31.8	7.66	7577	-22.7	0.92	36	130.43	4.05	4.90
14:29	0.2	4.8	31.8	7.66	7579	-20.9	0.92	10	130.43	4.05	4.90
14:33	0.2	5.6	31.8	7.66	7581	-19.3	0.91	9	130.43	4.05	4.90
14:37	0.2	6.4	31.8	7.66	7583	-18.6	0.91	9	130.43	4.05	4.90

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-89-273

Date	05/22/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	130.31
Water Quality Meter	YSI	Gallons in Well	23.57
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	274.80
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	268
Water Column in Well	144.49	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/22/2019	EB Time	
Sample Time	13:16	MS/MSD Sample ID	
Sample ID	MW-U-273-Q219	MS/MSD Sample Time	
Single Filter Turbidity	3	Double Filter Turbidity	1
Without Filter Turbidity	31	Post Sampling Turbidity	
		Purge Date	05/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:43	0.2	1.6	30.3	7.89	7640	40.4	3.33	223	130.40	4.19	4.97
12:51	0.2	3.2	31.1	7.90	7664	43.9	3.29	91	130.40	4.19	4.96
12:59	0.2	4.8	31.1	7.90	7663	45.7	3.35	53	130.40	4.21	4.97
13:03	0.2	5.6	31.1	7.90	7645	40.4	3.31	39	130.40	4.20	4.97
13:07	0.2	6.4	31.1	7.91	7657	40.6	3.36	34	130.40	4.18	4.97
13:11	0.2	7.2	31.1	7.92	7660	40.9	3.37	32	130.40	4.18	4.97
13:15	0.2	8.0	31.1	7.92	7661	40.5	3.35	31	130.40	4.18	4.97

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

C-BNS

Date	<u>05/17/2019</u>	Sampler	<u></u>
		Color	<u></u>
		Casing Volume to Remove	<u></u>
		Depth to Water (ft bmp)	<u></u>
		Gallons in Well	<u></u>
		Measured Well Depth (ft bmp)	<u></u>
		Odor	<u></u>
		Pump Intake Depth (ft bmp)	<u></u>
		Total Volume to Remove	<u></u>
		EB Sample ID	<u></u>
		EB Time	<u></u>
		MS/MSD Sample ID	<u></u>
		MS/MSD Sample Time	<u></u>
		Double Filter Turbidity	<u></u>
		Post Sampling Turbidity	<u></u>
		Purge Date	<u>05/17/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-09

Date	05/17/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	80.30
Water Quality Meter	YSI	Gallons in Well	1.45
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	89.21
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	84
Water Column in Well	8.91	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/17/2019	EB Time	
Sample Time	10:10	MS/MSD Sample ID	
Sample ID	MW-09-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/17/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:53	500	2000	28.8	7.46	2735	203.9	5.03	1	80.40	1.41	1.78
09:57	500	4000	29.0	7.45	2742	204.2	5.04	1	80.40	1.41	1.78
10:01	500	6000	29.3	7.44	2739	203.0	5.02	1	80.4	1.41	1.78
10:05	500	8000	29.3	7.43	2718	202.2	4.80	1	80.4	1.39	1.76
10:09	500	10000	29.4	7.42	2703	201.2	4.89	1	80.4	1.39	1.76

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-10

Date	05/14/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	74.74
Water Quality Meter	YSI	Gallons in Well	14.59
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	97.10
Casing Material	PVC	Odor	none
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	84
Water Column in Well	22.36	Total Volume to Remove	
Sample Date	05/17/2019	EB Sample ID	
Sample Time	08:53	EB Time	
Sample ID	MW-10-Q219	MS/MSD Sample ID	
Duplicate Sample ID	MW-901-Q219	MS/MSD Sample Time	
Dup Sample Time	09:03	Double Filter Turbidity	1
Single Filter Turbidity	5	Post Sampling Turbidity	
Without Filter Turbidity	46	Purge Date	05/14/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:36	500	2000	28.3	7.16	2640	255.7	4.99	55	74.80	1.36	1.72
08:40	500	4000	28.6	7.26	2653	249.9	4.89	48	74.80	1.36	1.72
08:44	500	6000	28.7	7.29	2647	246.1	4.73	46	74.80	1.36	1.72
08:48	500	8000	28.8	7.32	2633	242.8	4.81	49	74.80	1.35	1.70
08:52	500	10000	28.9	7.33	2652	239.7	4.66	47	74.8	1.35	1.70

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-11

Date	05/17/2019	Sampler	
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	66.42
Water Quality Meter	YSI	Gallons in Well	3.10
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	85.43
Casing Diameter (in)	2	Odor	none
Water Column in Well	19.01	Pump Intake Depth (ft bmp)	72
Did Well Dewater?	NA	Total Volume to Remove	
Sample Date	05/17/2019	EB Sample ID	MW-712-Q219
Sample Time	10:57	EB Time	11:05
Sample ID	MW-11-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter	1	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	05/17/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:40	500	2000	29.5	7.44	2182	185.7	6.37	1	66.50	1.08	1.38
10:44	500	4000	29.9	7.40	2130	166.7	7.48	1	66.50	1.09	1.38
10:48	500	6000	30.0	7.38	2131	187.2	7.53	1	66.50	1.08	1.38
10:52	500	8000	30.0	7.37	2132	187.6	7.43	1	66.50	1.09	1.38
10:56	500	10000	30.0	7.36	2130	187.9	7.40	1	66.50	1.08	1.38

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-12

Date	05/22/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Green
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	28.22
Water Quality Meter	YSI	Gallons in Well	14.15
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	49.91
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	39
Water Column in Well	21.69	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-722-Q219
Sample Date	05/22/2019	EB Time	16:20
Sample Time	15:28	MS/MSD Sample ID	
Sample ID	MW-12-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	3	Post Sampling Turbidity	
Turbidity		Purge Date	05/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:11	0.2	0.8	29.7	8.07	7561	12.9	2.59	8	28.36	4.12	4.90
15:15	0.2	1.6	29.8	8.09	7560	25.9	2.55	6	28.36	4.13	4.92
15:19	0.2	2.4	29.8	8.09	7556	27.9	2.53	4	28.36	4.13	4.92
15:23	0.2	3.2	29.8	8.08	7559	29.0	2.51	4	28.36	4.13	4.92
15:27	0.2	4.0	29.8	8.08	7558	29.6	2.50	3	28.36	4.13	4.92

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-14

Date	05/15/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	114.41
Water Quality Meter	YSI	Gallons in Well	10.82
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	131
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	
Water Column in Well	16.59	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/15/2019	EB Time	
Sample Time	13:15	MS/MSD Sample ID	
Sample ID	MW-14-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:58	.5	2	31	7.00	3282	-84.6	4.78	5	114.69	1.71	2.14
13:02	.5	4	31.2	6.99	3291	-83.8	4.76	4	114.69	1.70	2.14
13:06	.5	6	31.4	6.98	3239	-77.9	4.78	4	114.69	1.67	2.10
13:10	.5	8	31.5	6.96	3214	-69.2	4.76	3	114.69	1.65	2.07
13:14	.5	10	31.6	6.96	3174	-66.3	4.79	3	114.69	1.63	2.05

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-19

Date	05/15/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	44.11
Water Quality Meter	YSI	Gallons in Well	14.28
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	66.00
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	
Water Column in Well	21.89	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-709-Q219
Sample Date	05/15/2019	EB Time	15:30
Sample Time	15:16	MS/MSD Sample ID	
Sample ID	MW-19-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:59	.5	2	29.6	6.87	2246	-28.9	4.91	2	44.18	1.14	1.45
15:03	.5	4	29.8	6.85	2238	-25	4.88	2	44.19	1.13	1.44
15:07	.5	6	29.8	6.81	2229	-25.3	4.83	2	44.19	1.13	1.45
15:11	.5	8	29.8	6.81	2226	-25	4.84	2	44.19	1.13	1.44
15:15	.5	10	29.7	6.80	2224	-23.1	4.83	2	44.19	1.13	1.44

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-20-070

Date	05/24/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Green
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	45.71
Water Quality Meter	YSI	Gallons in Well	15.43
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	69.36
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	60
Water Column in Well	23.65	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/24/2019	EB Time	
Sample Time	08:52	MS/MSD Sample ID	
Sample ID	MW-20-070-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	4	Post Sampling Turbidity	
Turbidity		Purge Date	05/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:35	0.2	0.8	30.5	7.60	2070	66.4	6.97	7	45.73	1.05	1.28
08:39	0.2	1.6	30.8	7.66	1972	66.9	6.96	6	45.73	1.01	1.31
08:43	0.2	2.4	30.8	7.67	1979	67.2	7.03	4	45.73	1.01	1.35
08:47	0.2	3.2	30.8	7.67	1978	68.9	7.06	4	45.73	1.01	1.35
08:51	0.2	4.0	30.9	7.67	1978	69.1	7.07	4	45.73	1.01	1.35

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-20-100

Date	<u>05/24/2019</u>	Sampler	<u>Nara Tep</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Green</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>Gal</u>	Depth to Water (ft bmp)	<u>47.66</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>34.54</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>100.60</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>4</u>	Pump Intake Depth (ft bmp)	<u>95</u>
Water Column in Well	<u>52.94</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>05/24/2019</u>	EB Time	<u> </u>
Sample Time	<u>08:14</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-20-100-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>2</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>05/24/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:57	0.2	0.8	30.2	6.89	2404	57.6	4.99	5	47.71	1.23	1.56
08:01	0.2	1.6	30.3	6.98	2421	58.1	4.78	3	47.71	1.24	1.57
08:05	0.2	2.4	30.3	7.02	2434	58.4	4.73	2	47.71	1.24	1.57
08:09	0.2	3.2	30.3	7.04	2432	60.1	4.70	2	47.71	1.24	1.57
08:13	0.2	4.0	30.3	7.05	2432	60.6	4.69	2	47.71	1.24	1.57

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



May 24, 2019 07:46:30 AM
Location: MW-20-100 Latitude: 34.719216, Longitude: -114.491125

Site: PGE Topock
 Topock, CA

MW-20-130

Date	05/24/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Green
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	45.48
Water Quality Meter	YSI	Gallons in Well	56.17
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	131.57
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	126
Water Column in Well	86.09	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-726-Q219
Sample Date	05/24/2019	EB Time	09:50
Sample Time	09:32	MS/MSD Sample ID	
Sample ID	MW-20-130-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-902-Q219	Double Filter Turbidity	
Dup Sample Time	09:42	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	05/24/2019
Without Filter Turbidity	7		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:15	0.2	0.8	29.3	7.50	11680	-52.9	0.76	23	45.52	6.63	7.59
09:19	0.2	1.6	30.1	7.49	11568	-3.0	0.51	12	45.52	6.50	7.50
09:23	0.2	2.4	30.0	7.49	11534	14.1	0.49	8	45.52	6.53	7.50
09:27	0.2	3.2	30.0	7.49	11530	16.0	0.48	7	45.52	6.53	7.50
09:31	0.2	4.0	30.1	7.49	11526	17.3	0.48	7	45.52	6.53	7.50

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-21

Date	<u>05/22/2019</u>	Sampler	<u>Matt trainotti</u>
Weather Conditions	<u>Cloudy</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>MI</u>	Depth to Water (ft bmp)	<u>49.94</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>5.48</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>58.34</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>4</u>	Pump Intake Depth (ft bmp)	<u>57</u>
Water Column in Well	<u>8.4</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>Yes</u>	EB Sample ID	<u>MW-21-EB-Q219</u>
Sample Date	<u>05/23/2019</u>	EB Time	<u>08:20</u>
Sample ID	<u>MW-21-Q219</u>	MS/MSD Sample ID	<u> </u>
		MS/MSD Sample Time	<u> </u>
		Double Filter Turbidity	<u> </u>
		Post Sampling Turbidity	<u> </u>
		Purge Date	<u>05/22/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:35	500	2000	28.3	7.13	13.10	-62.6	0.74	17	51.20	14.28	15.36
08:39	500	4000	28.2	7.14	13.12	-71.0	0.55	15	51.90	14.53	15.63
08:43	500	6000	28.8	7.13	13.12	-73.8	0.47	10	52.65	14.68	15.81
08:47	500	8000	28.7	7.13	13.14	-75.0	0.41	10	53.52	14.72	15.83
08:51	500	10000	28.6	7.12	13.15	-83.0	0.38	8	54.62	14.85	15.96
09:01	250	12500	28.8	7.10	13.18	-78.5	0.32	6	55.08	14.92	16.03
09:31	250	20000	28.8	7.09	13.20	-74.5	0.28	5	56.89	14.96	16.05
14:20	0	0	26.2	7.27	12.21	83.0	2.33	22	54.61	14.41	15.96


Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?			X	
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



May 23, 2019 02:55:52 PM
Location: MW-21 Latitude: 0, Longitude: 0

Site: PGE Topock
Topock, CA

MW-23-060

Date	<u>05/21/2019</u>	Sampler	<u>Nara Tep</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u></u>
Purge Volume Units	<u>Gal</u>	Depth to Water (ft bmp)	<u>50.92</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>1.5</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>60.09</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>56</u>
Water Column in Well	<u>9.17</u>	Total Volume to Remove	<u></u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u></u>
Sample Date	<u>05/21/2019</u>	EB Time	<u></u>
Sample Time	<u>13:48</u>	MS/MSD Sample ID	<u></u>
Sample ID	<u>MW-23-060-Q219</u>	MS/MSD Sample Time	<u></u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u></u>
Without Filter Turbidity	<u>2</u>	Post Sampling Turbidity	<u></u>
		Purge Date	<u>05/21/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:31	0.1	0.4	30.8	9.36	17852	-90.0	2.38	3	51.03	10.45	11.63
13:35	0.1	0.8	31.3	9.37	17596	-26.9	2.45	2	51.03	10.47	11.60
13:39	0.1	1.2	31.5	9.40	17875	5.0	2.37	2	51.03	10.55	11.61
13:43	0.1	1.6	31.5	9.41	17883	8.5	2.34	2	51.03	10.55	11.61
13:47	0.1	2.0	31.6	9.41	17889	10.1	2.33	2	51.03	10.55	11.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-23-080

Date	<u>05/21/2019</u>	Sampler	<u>Nara Tep</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u></u>
Purge Volume Units	<u>Gal</u>	Depth to Water (ft bmp)	<u>48.63</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>5.22</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>80.61</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>77.5</u>
Water Column in Well	<u>31.98</u>	Total Volume to Remove	<u></u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u></u>
Sample Date	<u>05/21/2019</u>	EB Time	<u></u>
Sample Time	<u>13:04</u>	MS/MSD Sample ID	<u></u>
Sample ID	<u>MW-23-080-Q219</u>	MS/MSD Sample Time	<u></u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u></u>
Without Filter	<u>8</u>	Post Sampling Turbidity	<u></u>
Turbidity		Purge Date	<u>05/21/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:47	0.1	0.4	29.1	9.10	18217	-198.6	0.26	20	48.85	10.86	12.16
12:51	0.1	0.8	30.8	9.56	18609	-163.0	0.12	14	48.91	10.88	12.01
12:55	0.1	1.2	31.0	9.65	18088	-121.6	0.11	9	48.93	10.79	11.93
12:59	0.1	1.6	31.0	9.67	18101	-118.9	0.11	8	48.93	10.79	11.93
13:03	0.1	2.0	31.1	9.68	18106	-116.9	0.10	8	48.93	10.79	11.93

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-24A

Date	05/17/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	111.11
Water Quality Meter	YSI	Gallons in Well	8.41
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	124
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	
Water Column in Well	12.89	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/17/2019	EB Time	
Sample Time	10:21	MS/MSD Sample ID	
Sample ID	MW-24A-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	
Without Filter Turbidity	5	Post Sampling Turbidity	
		Purge Date	05/17/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:04	.25	1	29.7	7.98	1625	-76.3	2.13	9	111.28	0.81	1.04
10:08	.25	2	30.6	7.89	1635	-84.9	1.04	5	111.28	0.81	1.06
10:12	.25	3	30.9	7.90	1647	-86	0.89	6	111.28	0.82	1.06
10:16	.25	4	31.4	7.91	1650	-86.4	0.77	5	111.28	0.82	1.07
10:20	.25	5	31.3	7.90	1651	-87.6	0.78	5	111.28	0.82	1.07

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Site: PGE Topock
Topock, CA

MW-24B

Date	05/17/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	108.85
Water Quality Meter	YSI	Gallons in Well	67.95
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	213
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	
Water Column in Well	104.15	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-713-Q219
Sample Date	05/17/2019	EB Time	11:15
Sample Time	10:59	MS/MSD Sample ID	
Sample ID	MW-24B-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-903-Q219	Double Filter Turbidity	
Dup Sample Time	11:09	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	05/17/2019
Without Filter Turbidity	5		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:42	.25	1	30.1	7.35	20474	-95.1	1.73	8	108.96	12.14	13.29
10:46	.25	2	30.7	7.39	20502	-95.2	1.03	7	108.96	12.16	13.33
10:50	.25	3	31	7.40	20510	-95.6	0.82	7	108.96	12.16	13.33
10:54	.25	4	31.1	7.40	20515	-96.5	0.77	5	108.96	12.16	13.33
10:58	.25	5	31	7.39	20485	-96.9	0.75	5	108.96	12.15	13.32

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-25

Date	05/15/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	87.01
Water Quality Meter	YSI	Gallons in Well	11.74
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	105
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	
Water Column in Well	17.99	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/15/2019	EB Time	
Sample Time	14:24	MS/MSD Sample ID	
Sample ID	MW-25-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:07	.5	2	30.8	6.78	2183	-71.9	5.07	2	87.07	1.10	1.41
14:11	.5	4	31.1	6.77	2175	-69.4	4.98	2	87.07	1.10	1.41
14:15	.8	6	31.3	6.75	2170	-65.6	5.03	2	87.07	1.10	1.41
14:19	.5	8	31.4	6.75	2165	-65.4	5.00	2	87.07	1.09	1.10
14:23	.5	10	31.2	6.73	2160	-64.4	5.01	2	87.07	1.09	1.40

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?	X			
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-26

Date	05/22/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	46.57
Water Quality Meter	YSI	Gallons in Well	14.83
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	69.30
Casing Material	PVC	Odor	none
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	61
Water Column in Well	22.73	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/22/2019	EB Time	
Sample Time	14:24	MS/MSD Sample ID	
Sample ID	MW-26-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	1
Without Filter Turbidity	16	Post Sampling Turbidity	
		Purge Date	05/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:03	500	2000	29.3	7.38	3995	50.6	6.50	27	46.70	2.10	2.59
14:07	500	4000	29.6	7.31	2959	61.9	6.31	20	46.70	2.10	2.59
14:15	500	8000	29.8	7.28	2952	69.5	6.41	18	46.75	1.52	1.91
14:19	500	10000	29.9	7.27	2911	75.0	6.44	17	46.75	1.52	1.91
14:23	500	12000	29.7	7.27	2989	76.8	6.51	17	46.75	1.51	1.91

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-28-025

Date	05/21/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	9.98
Water Quality Meter	YSI	Gallons in Well	1.88
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	21.50
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	18
Water Column in Well	11.52	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-28-025-EB-Q219
Sample Date	05/21/2019	EB Time	09:44
Sample Time	09:36	MS/MSD Sample ID	
Sample ID	MW-28-025-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:19	500	2000	22.1	7.34	1057	94.4	1.82	3	10.12	0.99	1.25
09:23	500	4000	22.3	7.37	1054	92.9	1.53	3	10.12	0.99	1.25
09:27	500	6000	21.9	7.42	1050	87.8	1.33	2	10.12	0.99	1.25
09:31	500	8000	21.9	7.47	1047	82.8	1.21	2	10.12	0.96	1.22
09:35	500	10000	21.9	7.48	1043	80.9	1.17	2	10.12	0.96	1.22

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-28-090

Date	05/21/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	10.93
Water Quality Meter	YSI	Gallons in Well	14.20
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	97.97
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	80
Water Column in Well	87.04	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-28-090-EB-Q219
Sample Date	05/21/2019	EB Time	09:40
Sample Time	09:38	MS/MSD Sample ID	
Sample ID	MW-28-090-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	1
Without Filter Turbidity	16	Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:17	500	2000	20.8	7.10	3019	56.9	1.37	27	11.05	1.58	1.96
09:21	500	4000	20.9	7.08	3067	22.1	1.04	21	11.05	1.60	1.99
09:25	500	6000	20.8	7.09	3083	-3.3	1.05	19	11.05	1.62	2.00
09:29	500	8000	21.0	7.08	3109	-17.1	0.89	17	11.05	1.63	2.02
09:33	500	10000	20.9	7.08	3126	-20.2	0.82	17	11.05	1.62	2.02
09:37	500	12000	21.0	7.08	3133	-25.2	0.85	16	11.05	1.63	2.02

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-29

Date	05/21/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	28.90
Water Quality Meter	YSI	Gallons in Well	1.73
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	39.5
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	10.6	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-29-EB-Q219
Sample Date	05/21/2019	EB Time	13:30
Sample Time	13:21	MS/MSD Sample ID	
Sample ID	MW-29-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:04	500	2000	25.0	7.33	3350	-157.6	1.08	4	29.0	3.80	4.56
13:08	500	4000	25.0	7.37	3360	-157.6	0.84	2	29.0	3.75	4.44
13:12	500	6000	25.2	7.38	3363	-158.9	0.64	2	29.0	3.71	4.39
13:16	500	8000	25.2	7.41	3366	-162.2	0.52	2	29.0	3.69	4.31
13:20	500	10000	25.2	7.42	3362	-164.0	0.49	2	29.0	3.67	4.33

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-31-060

Date	05/20/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	41.18
Water Quality Meter	YSI	Gallons in Well	13.26
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	61.5
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	53
Water Column in Well	20.32	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/20/2019	EB Time	
Sample Time	14:42	MS/MSD Sample ID	
Sample ID	MW-31-060-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-904-Q219	Double Filter Turbidity	
Dup Sample Time	14:52	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	05/20/2019
Without Filter Turbidity	16		

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:25	500	2000	28.4	7.48	4106	70.7	4.58	18	41.22	4.13	4.90
14:29	500	4000	28.7	7.48	4087	70.1	4.39	16	41.22	4.13	4.90
14:33	500	6000	28.8	7.48	4044	69.4	4.30	16	41.22	4.13	4.90
14:37	500	8000	28.8	7.48	4026	68.9	4.26	16	41.22	4.12	4.88
14:41	500	10000	28.9	7.48	4016	68.4	4.21	16	41.22	4.12	4.88

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-33-150

Date	05/21/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	31.79
Water Quality Meter	YSI	Gallons in Well	19.61
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	152
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	142
Water Column in Well	120.21	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/21/2019	EB Time	
Sample Time	12:34	MS/MSD Sample ID	
Sample ID	MW-33-150-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	20	Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:17	500	2000	26.8	7.59	15.47	102.7	0.79	28	31.96	17.97	18.97
12:21	500	4000	27.0	7.56	15.48	98.8	0.60	24	31.96	17.95	18.92
12:25	500	6000	27.2	7.54	15.50	92.2	0.55	22	31.96	17.76	18.76
12:29	500	8000	27.2	7.52	15.52	88.5	0.55	20	31.96	17.72	18.72
12:33	500	10000	27.3	7.51	15.54	84.0	0.54	20	31.96	17.75	18.76

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-35-060

Date	05/24/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	27.74
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	51
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	05/24/2019	EB Sample ID	
Sample Time	09:43	EB Time	
Sample ID	MW-35-060-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter Turbidity	24	Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	05/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:26	500	2000	27.6	7.48	5858	95.0	2.10	77	27.86	6.40	7.35
09:30	500	4000	27.7	7.48	5849	90.8	1.88	57	27.86	6.40	7.35
09:34	500	6000	27.9	7.47	5849	88.4	1.58	28	27.86	6.39	7.34
09:38	500	8000	27.9	7.48	5844	85.0	1.53	26	27.86	6.39	7.34
09:42	500	10000	27.9	7.49	5840	82.9	1.50	24	27.86	6.39	7.34

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-35-135

Date	05/24/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	27.69
Water Quality Meter	YSI	Gallons in Well	17.67
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	136
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	126
Water Column in Well	108.31	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-727-Q219
Sample Date	05/24/2019	EB Time	10:50
Sample Time	10:31	MS/MSD Sample ID	
Sample ID	MW-35-135-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	8	Post Sampling Turbidity	
Turbidity		Purge Date	05/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:14	500	2000	27.2	7.64	11.55	112.7	1.06	33	27.72	13.28	14.36
10:18	500	4000	27.2	7.67	11.51	105.2	0.73	27	27.72	13.20	14.30
10:22	500	6000	27.1	7.69	11.49	97.7	0.57	10	27.72	13.20	14.30
10:26	500	8000	27.1	7.70	11.49	96.6	0.52	8	27.72	13.20	14.30
10:30	500	10000	27.1	7.71	11.49	95.4	0.50	8	27.73	13.20	14.30

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-37D

Date	05/20/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	30.39
Water Quality Meter	YSI	Gallons in Well	110.66
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	200
Casing Material	PVC	Odor	None
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	190
Water Column in Well	169.61	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-716-Q219
Sample Date	05/20/2019	EB Time	16:30
Sample Time	15:53	MS/MSD Sample ID	
Sample ID	MW-37D-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	3	Post Sampling Turbidity	
		Purge Date	05/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:36	500	2000	28.0	7.77	14.19	108.2	1.87	7	30.42	15.82	16.91
15:40	500	4000	28.3	7.75	14.19	99.2	1.54	5	30.42	15.82	16.91
15:44	500	6000	28.4	7.73	14.19	96.8	1.35	3	30.42	15.82	16.91
15:48	500	8000	29.0	7.73	14.19	92.1	1.08	3	30.42	15.92	17.03
15:52	500	10000	28.5	7.74	14.20	86.1	1.02	3	30.42	16.01	17.07

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-38D

Date	05/17/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	70.27
Water Quality Meter	YSI	Gallons in Well	18.39
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	183
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	112.73	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/17/2019	EB Time	
Sample Time	09:17	MS/MSD Sample ID	
Sample ID	MW-38D-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	9	Post Sampling Turbidity	
		Purge Date	05/17/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:00	.25	1	29.7	9.33	22404	-105.6	1.65	11	70.33	13.41	14.57
09:04	.25	2	30.2	8.11	22682	-96.7	1.00	10	70.33	13.57	14.72
09:08	.25	3	30	7.85	22750	-93	0.84	8	70.33	13.64	14.78
09:12	.25	4	30.1	7.80	22775	-93.1	0.77	9	70.33	13.64	14.78
09:16	.25	5	30.20	7.79	22774	-94	0.74	9	70.339	13.61	14.74

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Lock in Place?	X			
Evidence of well subsidence?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Site: PGE Topock
 Topock, CA

MW-38S

Date	05/17/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	70.32
Water Quality Meter	YSI	Gallons in Well	4.03
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	95
Casing Diameter (in)	2	Odor	None
Water Column in Well	24.68	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	05/17/2019	EB Sample ID	
Sample Time	08:34	EB Time	
Sample ID	MW-38S-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter	5	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	05/17/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:17	.25	1	29.4	7.75	1776	-53.3	2.01	6	70.39	0.89	1.15
08:21	.25	2	29.7	7.55	1777	-69.8	1.67	5	70.39	0.89	1.15
08:25	.25	3	30.2	7.57	1782	-72.2	1.53	5	70.39	0.89	1.15
08:29	.25	4	30.7	7.48	1732	-66.2	1.49	5	70.39	0.87	1.12
08:33	.25	5	30.8	7.43	142	-68.4	1.48	5	70.39	0.87	1.13

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



May 17, 2019 08:14:49 AM
Location: MW-38S Latitude: 0, Longitude: 0

Site: PGE Topock
Topock, CA

MW-40D

Date	05/22/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	110.20
Water Quality Meter	YSI	Gallons in Well	24.43
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	260.00
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	250
Water Column in Well	149.8	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/22/2019	EB Time	
Sample Time	10:14	MS/MSD Sample ID	
Sample ID	MW-40D-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-906-Q219	Double Filter Turbidity	
Dup Sample Time	10:24	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	05/22/2019
Without Filter Turbidity	6		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:49	0.2	0.8	29.2	7.42	16136	-145.0	0.41	8	110.30	9.77	10.49
09:53	0.2	1.6	29.8	7.25	16378	-108.6	0.36	24	110.30	9.63	10.46
09:57	0.2	2.4	30.3	7.45	16845	-73.0	0.38	13	110.30	9.88	10.66
10:01	0.2	3.2	30.3	7.46	16786	-69.0	0.38	9	110.30	9.87	10.64
10:05	0.2	4.0	30.5	7.46	16735	-64.3	0.37	7	110.30	9.83	10.63
10:09	0.2	4.8	30.5	7.48	16730	-62.9	0.37	6	110.30	9.83	10.63
10:13	0.2	5.6	30.5	7.48	16728	-61.9	0.36	6	110.30	9.83	10.63

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-40S

Date	05/22/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	109.62
Water Quality Meter	YSI	Gallons in Well	3.93
Sampling Type	Hydrasleeve	Measured Well Depth (ft bmp)	133.73
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	24.11	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/22/2019	EB Time	
Sample Time	10:45	MS/MSD Sample ID	
Sample ID	MW-40S-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	1
Without Filter Turbidity	15	Post Sampling Turbidity	
		Purge Date	05/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:45			24.0	7.35	2335	26.3	1.81	15		1.20	1.52

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Site: PGE Topock
Topock, CA

MW-41D

Date	05/15/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	23.55
Water Quality Meter	YSI	Gallons in Well	43.62
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	291
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	267.45	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/15/2019	EB Time	
Sample Time	11:50	MS/MSD Sample ID	
Sample ID	MW-41D-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	2	Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:33	.5	2	29.2	6.94	19993	-63.4	0.94	2	23.59	11.85	13.0
11:37	.5	4	29.3	7.04	20025	-70.5	0.66	2	23.59	11.96	13.04
11:41	.5	6	29.3	7.05	20062	-73	0.65	2	23.59	11.96	13.03
11:45	.5	8	29.3	7.11	20073	-76.9	0.59	2	23.59	11.89	13.03
11:49	.5	10	29.4	7.11	20050	-78.5	0.56	2	23.59	11.90	13.07

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-46-175

Date	05/21/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	26.71
Water Quality Meter	YSI	Gallons in Well	24.19
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	175.00
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	170
Water Column in Well	148.29	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/21/2019	EB Time	
Sample Time	10:56	MS/MSD Sample ID	
Sample ID	MW-46-175-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:31	500	2000	21.1	8.17	4862	127.0	1.01	30	26.90	2.60	3.14
10:39	500	6000	21.2	7.86	4901	136.1	0.55	17	26.90	2.64	3.18
10:43	500	8000	21.2	7.77	4962	137.4	0.52	5	26.90	2.67	3.22
10:47	500	10000	21.3	7.61	5034	140.6	0.44	1	26.90	2.72	3.28
10:51	500	12000	21.4	7.58	5064	142.9	0.42	1	26.90	2.67	3.24
10:55	500	14000	21.3	7.52	5010	143.2	0.41	1	26.9	2.72	3.28

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-46-205

Date	05/21/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	27.15
Water Quality Meter	YSI	Gallons in Well	29.17
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	206
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	201
Water Column in Well	178.85	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/21/2019	EB Time	
Sample Time	10:48	MS/MSD Sample ID	
Sample ID	MW-46-205-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	2	Post Sampling Turbidity	
Turbidity		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:31	500	2000	22.4	8.32	20.85	131.1	0.57	8	27.77	22.11	22.82
10:35	500	4000	22.4	8.33	20.85	122.5	0.54	5	27.77	22.15	22.89
10:39	500	6000	22.6	8.34	20.85	114.0	0.52	2	27.77	22.19	22.96
10:43	500	8000	22.6	8.35	20.86	109.2	0.51	2	27.77	22.31	23.04
10:47	500	10000	22.6	8.35	20.86	106.9	0.49	2	27.77	22.31	23.04

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-47-055

Date	05/16/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	27.66
Water Quality Meter	YSI	Gallons in Well	4.75
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	56.77
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	50
Water Column in Well	29.11	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/16/2019	EB Time	
Sample Time	10:12	MS/MSD Sample ID	
Sample ID	MW-47-055-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-907-Q219	Double Filter Turbidity	1
Dup Sample Time	10:17	Post Sampling Turbidity	
Single Filter Turbidity	2	Purge Date	05/16/2019
Without Filter Turbidity	13		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:47	500	4000	28.6	7.44	4851	126.8	2.13	112	27.7	2.58	3.15
09:55	500	8000	28.9	7.42	4937	123.4	1.97	20	27.70	2.63	3.21
09:59	500	10000	28..8	7.41	4989	119.3	2.06	17	27.70	2.66	3.24
10:03	500	12000	29.1	7.41	5001	116.1	1.89	15	27.70	2.67	3.25
10:07	500	14000	29.1	7.41	4989	114.6	1.99	15	27.70	2.66	3.24
10:11	500	16000	29.0	7.41	5001	115.2	1.88	14	27.70	2.66	3.25

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-47-115

Date	05/16/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	28.11
Water Quality Meter	YSI	Gallons in Well	14.24
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	115.41
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	110
Water Column in Well	87.30	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/16/2019	EB Time	
Sample Time	09:20	MS/MSD Sample ID	
Sample ID	MW-47-115-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	27	Post Sampling Turbidity	
		Purge Date	05/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:47	500	4000	28.2	7.22	4623	182.1	0.87	543	28.25	2.49	3.02
08:55	500	8000	28.2	7.37	4516	169.9	0.39	108	28.25	2.40	2.94
09:07	500	14000	28.4	7.43	9288	154.6	0.33	37	28.35	6.17	6.03
09:11	500	16000	28.4	7.44	9306	151.1	0.31	30	28.25	5.18	6.05
09:15	500	18000	28.4	7.44	9337	149.4	0.32	28	28.2	5.21	6.07
09:19	500	20000	28.5	7.44	9363	147.5	0.30	28	28.25	5.18	6.08

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-48

Date	05/21/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	30.76
Water Quality Meter	YSI	Gallons in Well	17.17
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	136.05
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	130
Water Column in Well	105.29	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/23/2019	EB Time	
Sample Time	15:20	MS/MSD Sample ID	
Sample ID	MW-48-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	1
Without Filter Turbidity	8	Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:27	0.1	0.8	28.8	8.17	18990	66.1	1.20	5	32.99	11.32	12.42
14:35	0.1	1.6	29.0	8.18	19209	44.4	0.62	7	35.80	11.13	12.34
14:43	0.1	2.4	29.2	8.13	18927	18.0	1.00	19	39.16	11.35	13.29
14:53	1	10.4	30.0	7.84	18838	30.9	1.62	6	89.09	11.08	12.22
15:01	1	18.4	30.9	7.80	18801	38.8	2.18	5	133.25	11.06	12.24
15:20			28.7	7.93	18660	76.9	3.21	8	84.10	11.05	12.24

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-50-095

Date	05/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	40.40
Water Quality Meter	YSI	Gallons in Well	9.14
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	96.41
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	90
Water Column in Well	56.01	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/20/2019	EB Time	
Sample Time	13:39	MS/MSD Sample ID	
Sample ID	MW-50-095-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	14	Post Sampling Turbidity	
		Purge Date	05/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:06	500	2000	28.4	7.84	3484	215.4	1.75	388	40.50	1.82	2.26
13:10	500	4000	29.2	7.80	3501	215.4	1.60	140	40.50	1.83	2.30
13:14	500	6000	29.2	7.78	3580	215.8	1.56	104	40.50	1.87	2.32
13:18	500	8000	29.3	7.77	3577	212.8	1.50	51	40.50	1.86	2.32
13:22	500	10000	29.3	7.77	3573	212.0	1.49	30	40.50	1.86	2.32
13:26	500	12000	29.2	7.76	3578	211.1	1.48	21	40.50	1.86	2.32
13:30	500	14000	29.3	7.76	3551	209.2	1.48	15	40.50	1.86	2.31
13:34	500	16000	29.4	7.76	3563	208.7	1.47	14	40.50	1.86	2.31
13:38	500	18000	29.4	7.76	3542	208.4	1.46	14	40.50	1.86	2.31

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-50-200

Date	05/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	40.86
Water Quality Meter	YSI	Gallons in Well	26.59
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	203.90
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	195
Water Column in Well	163.04	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-714-Q219
Sample Date	05/20/2019	EB Time	16:00
Sample Time	12:41	MS/MSD Sample ID	
Sample ID	MW-50-200-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:24	500	4000	29.1	7.72	21706	264.9	2.15	214	40.90	13.01	14.15
12:28	500	6000	29.2	7.74	22477	262.0	1.98	21	40.9	13.47	14.61
12:32	500	8000	29.3	7.76	22448	257.0	1.87	1	40.90	13.47	14.61
12:36	500	10000	29.4	7.76	22377	253.1	1.77	1	40.90	13.40	14.54
12:40	500	12000	29.4	7.76	22356	252.1	1.75	1	40.90	13.38	14.52

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-51

Date	05/22/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	46.07
Water Quality Meter	YSI	Gallons in Well	44.03
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	113.56
Casing Material	PVC	Odor	none
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	104
Water Column in Well	67.49	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-720-Q219
Sample Date	05/22/2019	EB Time	15:30
Sample Time	15:20	MS/MSD Sample ID	
Sample ID	MW-51-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:59	500	2000	29.3	7.36	13071	103.3	0.86	1	46.10	7.47	8.50
15:07	500	6000	29.6	7.33	8606	94.4	0.99	1	46.10	4.76	5.59
15:11	500	8000	29.6	7.33	8631	92.9	1.06	1	46.10	4.77	5.61
15:15	500	10000	29.7	7.34	8686	90.2	1.29	1	46.10	4.81	5.59
15:19	500	12000	29.6	7.35	8711	89.1	1.18	1	46.10	4.82	5.66

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-54-085

Date	05/23/2019	Sampler	Matt trainotti
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	9.47
Water Quality Meter	YSI	Gallons in Well	12.53
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	86.28
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	82
Water Column in Well	76.81	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-54-085-EB-Q219
Sample Date	05/23/2019	EB Time	07:20
Sample Time	07:50	MS/MSD Sample ID	
Sample ID	MW-54-085-Q219	MS/MSD Sample Time	
Single Filter Turbidity	12	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:33	500	2000	26.7	7.55	8932	4.8	0.69	30	9.50	9.90	10.97
07:37	500	4000	26.8	7.58	8857	-25.7	0.59	14	9.50	9.76	10.83
07:41	500	6000	26.8	7.59	8780	-70.2	0.52	12	9.50	9.67	10.75
07:45	500	8000	26.8	7.59	8792	-75.9	0.48	12	9.50	9.67	10.75
07:49	500	10000	26.8	7.59	8801	-82.0	0.44	12	9.50	9.67	10.75

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?			X	
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-54-140

Date	05/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	9.55
Water Quality Meter	YSI	Gallons in Well	21.36
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	140.50
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	133
Water Column in Well	130.95	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-54-140-EB-Q219
Sample Date	05/23/2019	EB Time	08:50
Sample Time	08:44	MS/MSD Sample ID	
Sample ID	MW-54-140-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:23	500	2000	26.8	7.72	8743	-53.6	0.31	114	9.60	4.86	5.68
08:31	500	6000	26.6	7.70	8754	-60.6	0.26	14	9.60	4.87	5.69
08:35	500	8000	26.8	7.70	8750	-64.6	0.24	1	9.60	4.87	5.68
08:39	500	10000	26.6	7.71	8762	-66.6	0.21	1	9.60	4.87	5.69
08:43	500	12000	26.8	7.69	8762	-66.6	0.22	1	9.60	4.87	5.69

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?	X			
Steel Casing Intact?		X		
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-54-195

Date	05/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	10.48
Water Quality Meter	YSI	Gallons in Well	30.10
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	195.00
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	190
Water Column in Well	184.52	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-54-195-EB-Q219
Sample Date	05/23/2019	EB Time	07:25
Sample Time	08:01	MS/MSD Sample ID	
Sample ID	MW-54-195-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:32	500	2000	26.7	8.09	10417	6.6	0.80	39	10.55	5.87	6.77
07:36	500	4000	26.6	8.09	10504	-39.5	0.60	38	10.55	5.92	6.83
07:40	500	6000	26.7	8.08	10585	-80.2	0.55	20	10.5	5.87	6.77
07:44	500	8000	26.7	8.08	10585	-100.2	0.40	19	10.55	5.97	5.88
07:48	500	10000	26.6	8.08	10624	-144.4	0.32	1	10.55	5.99	6.90
07:52	500	12000	26.7	8.08	10634	-155.5	0.38	1	10.55	6.00	6.91
07:56	500	14000	26.7	8.08	10671	-157.5	0.35	1	10.55	6.02	6.93
08:00	500	16000	26.7	8.08	10674	-159.2	0.34	1	10.55	6.02	6.91

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-55-045

Date	05/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	gal	Depth to Water (ft bmp)	8.70
Water Quality Meter	YSI	Gallons in Well	6.65
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	49.45
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	42
Water Column in Well	40.75	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	MW-55-045-EB-Q219
Sample Date	05/23/2019	EB Time	11:15
Sample Time	11:10	MS/MSD Sample ID	
Sample ID	MW-55-045-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:45	500	2000	27.4	7.77	1419	-29.7	4.31	345	8.80	0.66	0.92
10:49	500	4000	27.5	7.75	1415	-47.4	4.30	114	8.80	0.66	0.92
10:53	500	6000	27.6	7.75	1414	-51.0	3.46	39	8.80	0.66	0.92
10:57	500	8000	27.6	7.74	1412	-62.3	3.22	17	8.80	0.65	0.92
11:01	500	10000	27.7	7.74	1415	-69.9	3.03	4	8.80	0.66	0.92
11:05	500	12000	27.8	7.73	1412	-74.0	2.95	1	8.80	0.65	0.91
11:09	500	14000	27.5	7.73	1412	-77.7	2.96	1	8.80	0.66	0.92

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-55-120

Date	<u>05/23/2019</u>	Sampler	<u>Matt trainotti</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>MI</u>	Depth to Water (ft bmp)	<u>8.88</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>18.19</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>120.41</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>115</u>
Water Column in Well	<u>111.53</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>05/23/2019</u>	EB Time	<u> </u>
Sample Time	<u>11:49</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-55-120-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>12</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>05/23/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:32	500	2000	27.1	8.02	8125	93.7	1.79	28	8.88	8.60	9.66
11:36	500	4000	27.3	8.02	8338	90.6	1.41	20	8.88	9.18	10.26
11:40	500	6000	27.4	8.03	8300	88.0	1.38	14	8.88	9.22	10.29
11:44	500	8000	27.4	8.03	8285	85.4	1.29	12	8.88	9.14	10.19
11:48	500	10000	27.3	8.03	8267	82.8	1.27	12	8.88	9.04	10.10

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-56D

Date	05/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Peristaltic Pump	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	none
Casing Diameter (in)	1	Pump Intake Depth (ft bmp)	
Comments	SIAnt well	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/23/2019	EB Time	
Sample Time	13:23	MS/MSD Sample ID	
Sample ID	MW-56D-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:06	500	2000	22.1	7.20	11564	-41.6	0.33	1		6.50	7.53
13:10	500	4000	22.1	7.25	11582	-52.5	0.36	1		6.55	7.58
13:14	500	6000	22.3	7.28	11857	-63.4	0.42	1		6.71	7.71
13:18	500	8000	22.3	7.28	11913	-68.9	0.31	1		6.75	7.75
13:22	500	10000	22.3	7.28	11937	-71.0	0.38	1		6.71	7.71

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-56M

Date	05/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Peristaltic Pump	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	none
Casing Diameter (in)	1	Pump Intake Depth (ft bmp)	
Comments	SIAnt well	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/23/2019	EB Time	
Sample Time	13:02	MS/MSD Sample ID	
Sample ID	MW-56M-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:45	500	2000	23.3	7.03	4449	-73.9	0.49	1		1.77	2.91
12:49	500	4000	22.6	7.03	4546	-77.1	0.72	1		1.77	2.91
12:53	500	6000	23.2	7.02	4520	-77.7	0.78	2		1.80	2.93
12:57	500	8000	23.1	7.03	4521	-79.2	0.83	1		1.77	2.93
13:01	500	10000	23.2	7.02	4542	--80.9	0.85	1		1.80	2.93

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-56S

Date	05/23/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Peristaltic Pump	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	none
Casing Diameter (in)	1	Pump Intake Depth (ft bmp)	
Comments	SIAnt well	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/23/2019	EB Time	
Sample Time	12:40	MS/MSD Sample ID	
Sample ID	MW-56S-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:22	500	2000	22.9	7.05	3550	-101.2	1.21	1		1.50	2.34
12:27	500	4000	23.1	7.01	3622	-112.3	0.78	1		1.50	2.35
12:31	500	6000	22.6	7.00	3511	-112.2	0.92	1		1.47	2.27
12:35	500	8000	22.7	7.00	3517	-112.0	0.89	1		1.45	2.28
12:39	500	10000	22.6	7.00	3511	-111.1	0.88	1		1.47	2.25

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-57-050

Date	05/20/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	51.75
Water Quality Meter	YSI	Gallons in Well	0.0
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	51.75
Casing Material	PVC	Odor	
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	0.0	Total Volume to Remove	
Comments	Well is dry	EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	05/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:06											

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Site: PGE Topock
Topock, CA

MW-57-070

Date	05/20/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	52.95
Water Quality Meter	YSI	Gallons in Well	2.55
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	68.61
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	61.5
Water Column in Well	15.66	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/20/2019	EB Time	
Sample Time	14:34	MS/MSD Sample ID	
Sample ID	MW-57-070-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	8	Post Sampling Turbidity	
		Purge Date	05/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:17	0.2	0.8	31.2	7.78	2804	33.9	3.40	17	53.06	1.42	1.82
14:21	0.2	1.6	32.0	7.60	2824	49.9	3.66	12	53.12	1.45	1.82
14:25	0.2	2.4	32.3	7.57	2817	52.3	4.05	9	53.14	1.45	1.85
14:29	0.2	3.2	32.4	7.55	2816	53.6	3.98	9	53.14	1.45	1.85
14:33	0.2	4.0	32.4	7.54	2813	54.0	3.93	8	53.14	1.45	1.85

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-58-065

Date	05/20/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	67.14
Water Quality Meter	YSI	Gallons in Well	0.09
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	67.72
Casing Material	PVC	Odor	
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	0.58	Total Volume to Remove	
Comments	Insufficient water to purge or sample	EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	05/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:58											

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Site: PGE Topock
Topock, CA

MW-58BR

Date	05/21/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	66.70
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – QED Bladder Pump	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	None
Casing Diameter (in)	6	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	05/21/2019	EB Sample ID	
Sample Time	15:36	EB Time	
Sample ID	MW-58BR-Q219	MS/MSD Sample ID	
Single Filter Turbidity	5	MS/MSD Sample Time	
Without Filter Turbidity	44	Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:19	500	2000	28.5	7.78	8780	71.7	0.90	50	66.74	9.69	10.79
15:23	500	4000	28.7	7.74	8801	62.7	0.47	44	66.74	9.60	10.70
15:27	500	6000	28.5	7.72	8845	48.7	0.35	40	66.74	9.71	10.80
15:31	500	8000	28.5	7.70	8867	39.9	0.29	42	66.74	9.71	10.80
15:35	500	10000	28.5	7.70	8882	34.3	0.29	43	66.74	9.74	10.83

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-59-100

Date	05/20/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	85.36
Water Quality Meter	YSI	Gallons in Well	2.51
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	100.75
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	93
Water Column in Well	15.39	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/20/2019	EB Time	
Sample Time	13:08	MS/MSD Sample ID	
Sample ID	MW-59-100-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-910-Q219	Double Filter Turbidity	
Dup Sample Time	13:18	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	05/20/2019
Without Filter Turbidity	15		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:51	500	2000	29.8	6.82	14.04	132.5	5.15	25	85.54	16.4	15.98
12:55	500	4000	30.0	6.88	14.04	122.8	5.01	20	85.54	16.4	15.98
12:59	500	6000	30.0	6.93	14.04	118.6	4.71	16	85.54	16.4	15.98
13:03	500	8000	30.1	6.95	14.04	114.2	4.67	15	85.54	16.4	15.98
13:07	500	10000	30.1	6.96	14.04	112.9	4.62	15	85.54	16.4	15.98

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-60-125

Date	<u>05/22/2019</u>	Sampler	<u>Matt trainotti</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>MI</u>	Depth to Water (ft bmp)	<u>98.79</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>3.72</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>121.58</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>113</u>
Water Column in Well	<u>22.79</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>05/22/2019</u>	EB Time	<u> </u>
Sample Time	<u>10:28</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-60-125-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter	<u>33</u>	Post Sampling Turbidity	<u> </u>
Turbidity		Purge Date	<u>05/22/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:11	500	2000	28.1	7.43	10.20	44.1	1.25	31	102.20	11.16	12.26
10:15	500	4000	28.4	7.41	9997	44.1	1.77	35	102.20	11.18	12.30
10:19	500	6000	28.9	7.39	9750	44.5	2.35	33	102.20	10.90	12.01
10:23	500	8000	28.9	7.39	9688	44.7	2.44	33	102.20	10.90	12.01
10:27	500	10000	28.9	7.36	9688	46.9	2.57	31	102.20	10.91	12.03

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?			X	
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-61-110

Date	05/23/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	87.44
Water Quality Meter	YSI	Gallons in Well	4.01
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	112.02
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	102
Water Column in Well	24.58	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/23/2019	EB Time	
Sample Time	12:18	MS/MSD Sample ID	
Sample ID	MW-61-110-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	7	Post Sampling Turbidity	
Turbidity		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:01	0.2	0.8	29.3	7.61	17483	-161.9	0.24	13	87.60	10.23	11.40
12:05	0.2	1.6	30.9	7.49	17432	-107.9	0.22	10	87.63	10.19	11.37
12:09	0.2	2.4	31.1	7.46	17469	-98.0	0.21	8	87.63	10.20	11.36
12:13	0.2	3.2	31.3	7.44	17473	-96.0	0.21	7	87.63	10.20	11.36
12:17	0.2	4.0	31.3	7.44	17475	-94.3	0.20	7	87.63	10.20	11.36

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-62-065

Date	05/21/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	47.35
Water Quality Meter	YSI	Gallons in Well	2.68
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	63.76
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	56
Water Column in Well	16.41	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/21/2019	EB Time	
Sample Time	12:10	MS/MSD Sample ID	
Sample ID	MW-62-065-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	7	Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:53	0.2	0.8	28.7	7.48	6304	-4.3	2.89	21	47.50	3.27	4.26
11:57	0.2	1.6	30.2	7.45	6391	50.3	3.25	11	47.51	3.39	4.19
12:01	0.2	2.4	30.5	7.44	6321	58.9	3.31	8	47.51	3.36	4.13
12:05	0.2	3.2	30.7	7.44	6329	61.0	3.35	7	47.51	3.36	4.12
12:09	0.2	4.0	30.7	7.44	6331	62.1	3.36	7	47.51	3.36	4.12

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-62-110

Date	05/21/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Grab Sample	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	None
Casing Diameter (in)	1	Pump Intake Depth (ft bmp)	
Comments	Flute well	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/22/2019	EB Time	
Sample Time	16:10	MS/MSD Sample ID	
Sample ID	MW-62-110-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	1	Post Sampling Turbidity	
Turbidity		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:01	0.5	4.0	27.8	7.59	13782	-62.9	0.17	1		7.89	8.89
10:09	0.5	1.5	28.1	7.37	12381	-13.9	0.09	2		7.03	8.01
16:01	0.5	3.0	28.3	7.65	13572	-57.2	0.10	1		7.78	8.80
16:10			27.3	7.51	13872	-60.9	0.20	1		8.01	9.01

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?			X	
Standing or Pondered Water?		X		
Lock in Place?		X		
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



May 21, 2019 09:49:15 AM
Location: MW-62-110 Latitude: 34.713501, Longitude: -114.487747

Site: PGE Topock
 Topock, CA

MW-62-190

Date	05/21/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Grab Sample	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	None
Casing Diameter (in)	1	Pump Intake Depth (ft bmp)	
Comments	Flute well	Total Volume to Remove	
Sample Date	05/22/2019	EB Sample ID	
Sample Time	16:00	EB Time	
Sample ID	MW-62-190-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter Turbidity	2	Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:53	0.5	4.0	27.9	7.70	19506	-95.3	0.19	2		11.55	12.65
10:03	0.5	1.5	27.1	7.08	18816	-39.9	0.28	2		11.13	12.23
15:50	0.5	3.0	28.3	7.69	19124	-99.6	0.11	2		11.25	12.23
16:00			27.6	7.69	19441	-93.6	0.21	2		11.57	12.66

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?			X	
Standing or Pondered Water?		X		
Lock in Place?			X	
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Site: PGE Topock
Topock, CA

MW-63-065

Date	05/21/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	47.90
Water Quality Meter	YSI	Gallons in Well	2.5
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	63.21
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	56
Water Column in Well	15.31	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/21/2019	EB Time	
Sample Time	10:54	MS/MSD Sample ID	
Sample ID	MW-63-065-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	9	Post Sampling Turbidity	
Turbidity		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:37	0.2	0.8	30.2	6.98	6847	-53.9	4.05	55	48.03	3.83	4.53
10:41	0.2	1.6	30.4	7.00	7085	-33.3	3.89	31	48.05	3.92	4.55
10:45	0.2	2.4	30.5	7.09	7046	10.3	3.66	10	48.05	3.84	4.49
10:49	0.2	3.2	30.5	7.11	7049	13.6	3.61	9	48.06	3.84	4.49
10:53	0.2	4.0	30.5	7.12	7.051	14.5	3.60	9	48.06	3.84	4.49

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-64BR

Date	05/21/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	119.10
Water Quality Meter	YSI	Gallons in Well	203.9
Sampling Type	Low Flow – QED Bladder Pump	Measured Well Depth (ft bmp)	258.00
Casing Material	PVC	Odor	None
Casing Diameter (in)	6	Pump Intake Depth (ft bmp)	
Water Column in Well	138.9	Total Volume to Remove	
Comments	Dedicated QED	EB Sample ID	
Did Well Dewater?	No	EB Time	
Sample Date	05/21/2019	MS/MSD Sample ID	
Sample Time	09:18	MS/MSD Sample Time	
Sample ID	MW-64BR-Q219	Double Filter Turbidity	
Single Filter Turbidity	1	Post Sampling Turbidity	
Without Filter Turbidity	5	Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:33	0.1	0.8	26.8	7.16	14331	-54.1	0.26	45	119.40	8.28	9.31
08:41	0.1	1.6	26.7	7.09	14336	-60.6	0.18	20	119.43	8.29	9.32
08:49	0.1	2.4	26.4	7.13	14360	-65.0	0.17	8	119.45	8.30	9.32
08:57	0.1	3.2	26.5	7.17	14370	-65.9	0.15	6	119.45	8.31	9.34
09:05	0.1	4.0	26.7	7.21	14351	-68.1	0.13	6	119.45	8.30	9.33
09:09	0.1	4.4	26.7	7.22	14353	-68.9	0.13	5	119.46	8.30	9.33
09:13	0.1	4.8	26.7	7.22	14355	-69.0	0.12	5	119.46	8.30	9.33
09:17	0.1	5.2	26.8	7.23	14356	-69.3	0.12	5	119.46	8.30	9.33

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-65-160

Date	05/16/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	140.21
Water Quality Meter	YSI	Gallons in Well	13.83
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	225
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	220
Water Column in Well	84.79	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-710-Q219
Sample Date	05/16/2019	EB Time	16:15
Sample Time	15:13	MS/MSD Sample ID	
Sample ID	MW-65-160-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	20	Post Sampling Turbidity	
		Purge Date	05/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:44	500	2000	29.7	7.38	9843	136.6	0.59	1000	140.3	5.18	6.01
14:52	500	6000	31.7	7.33	9440	125.3	0.54	151	140.0	5.27	6.16
14:56	500	8000	31.9	7.35	9555	119.6	0.48	40	140.0	5.31	6.22
15:00	500	10000	32.1	7.35	9593	115.3	0.42	32	140.0	5.32	6.22
15:04	500	12000	32.1	7.33	9618	111.1	0.41	22	140.0	5.30	6.22
15:08	500	14000	32.2	7.33	9601	105.2	0.40	20	140.3	5.36	6.24
15:12	500	16000	32.2	7.33	9613	101.7	0.40	20	140.0	5.37	6.23

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-65-225

Date	05/16/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	140.33
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – QED Bladder Pump	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Comments	Dedicated QED	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/16/2019	EB Time	
Sample Time	13:32	MS/MSD Sample ID	
Sample ID	MW-65-225-Q219	MS/MSD Sample Time	
Single Filter Turbidity	3	Double Filter Turbidity	1
Without Filter Turbidity	27	Post Sampling Turbidity	
		Purge Date	05/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:47	250	1000	29.8	7.30	4419	123.8	4.19	246	140.4	2.29	2.80
12:51	250	2000	29.5	7.22	4211	121.1	1.88	140	140.4	2.22	2.73
12:55	250	3000	29.6	7.19	4218	118.1	1.96	103	140.40	2.22	2.74
13:07	250	6000	29.6	7.19	2983	113.3	1.66	51	140.4	1.54	1.94
13:15	250	8000	29.5	7.19	2990	111.4	1.72	40	140.4	1.54	1.93
13:19	250	9000	29.2	7.18	2977	108.8	1.71	34	140.44	1.54	1.93
13:23	250	10000	29.1	7.18	2977	107.0	1.70	30	140.4	1.54	1.93
13:27	250	11000	29.2	7.18	2973	106.1	1.59	29	140.40	1.53	1.93
13:31	250	12000	29.1	7.18	2974	105.5	1.60	27	140.4	1.55	1.93

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-66-165

Date	05/16/2019	Sampler	Jacob mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	129.99
Water Quality Meter	YSI	Gallons in Well	5.71
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	165
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	35.01	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/16/2019	EB Time	
Sample Time	11:08	MS/MSD Sample ID	
Sample ID	MW-66-165-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-911-Q219	Double Filter Turbidity	1
Dup Sample Time	11:18	Post Sampling Turbidity	
Single Filter Turbidity	2	Purge Date	05/16/2019
Without Filter Turbidity	45		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:27	0.25	1	30.7	6.91	4348	-26.7	4.14	176	130.04	2.33	2.86
10:31	.25	2	29.9	6.83	4461	-26.6	4.29	195	130.04	2.36	2.91
10:35	.25	3	30.3	6.84	4460	-25.1	4.23	416	130.04	2.36	2.89
10:43	.25	5	33.3	6.96	4399	-26.1	3.97	281	130.04	2.31	2.86
10:51	.25	7	33.2	6.93	4346	-25.3	3.89	123	130.04	2.27	2.82
10:59	.25	9	33	6.90	4288	-24.4	3.84	45	130.04	2.25	2.78
11:03	.25	10	33.4	6.92	4265	-22.2	3.94	46	130.04	2.23	2.77
11:07	.25	11	33.3	6.95	4262	-24.2	3.89	45	130.04	2.23	2.76

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-66-230

Date	05/16/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Yellow
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	130.30
Water Quality Meter	YSI	Gallons in Well	16.26
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	230.00
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	99.7	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/16/2019	EB Time	
Sample Time	09:34	MS/MSD Sample ID	
Sample ID	MW-66-230-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	3	Post Sampling Turbidity	
		Purge Date	05/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:12	.25	1	30.3	7.24	19237	-54.2	1.39	5	130.22	11.35	12.53
09:17	.25	2	30.6	7.30	19412	-70.3	1.27	4	130.25	11.47	12.62
09:21	.25	3	30.7	7.35	19960	-90.4	1.02	4	130.25	11.84	13.00
09:25	.25	4	30.9	7.37	20121	-92.9	0.91	3	130.25	11.94	13.12
09:29	.25	5	30.8	7.39	20372	-92.9	.90	3	130.25	12.07	13.24
09:33	.25	6	30.6	7.39	20406	-91.8	0.91	3	130.28	12.11	13.29

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-66BR-270

Date	05/20/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Extraction Port	Casing Volume to Remove	
Purge Volume Units	gal	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	none
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	
Comments	Ded pump	Total Volume to Remove	
Did Well Dewater?	NA	EB Sample ID	
Sample Date	05/22/2019	EB Time	
Sample Time	12:40	MS/MSD Sample ID	
Sample ID	MW-66BR-270-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/20/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:40			31.0	9.63	2432	-298.1	0.16	1		1.24	1.58
14:24	5	20	30.8	9.24	10148	18.1	0.20	10		5.70	6.62
14:28	5	40	30.6	9.33	10336	-8.7	0.20	5		6.80	6.74
14:33	4	60	30.6	9.35	10429	-27.6	0.15	4		5.84	6.77
14:38	4	80	30.2	9.33	10477	-43.0	0.20	2		5.88	6.81

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-67-185

Date	05/16/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	169.60
Water Quality Meter	YSI	Gallons in Well	2.51
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	185
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	15.4	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/16/2019	EB Time	
Sample Time	12:33	MS/MSD Sample ID	
Sample ID	MW-67-185-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	
Without Filter Turbidity	6	Post Sampling Turbidity	
		Purge Date	05/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:12	.25	1	30.1	6.94	8040	-23.1	4.31	69	169.74	4.41	5.22
12:20	.25	3	34.3	6.79	8319	-23.5	4.15	8	169.74	4.56	5.46
12:24	.25	4	34.3	6.79	8330	-22.8	4.16	6	169.74	4.60	5.40
12:28	.25	5	34.3	6.83	8388	-22.1	4.17	6	169.74	4.57	5.40
12:32	.25	6	34.4	6.88	8337	-21.5	4.16	5	169.74	4.58	5.42

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA



May 16, 2019 12:10:00 PM
Location: MW-67-185 Latitude: 0, Longitude: 0

Site: PGE Topock
Topock, CA

MW-67-225

Date	05/16/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	169.63
Water Quality Meter	YSI	Gallons in Well	9.03
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	225
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	55.37	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/16/2019	EB Time	
Sample Time	14:00	MS/MSD Sample ID	
Sample ID	MW-67-225-Q219	MS/MSD Sample Time	
Single Filter Turbidity	5	Double Filter Turbidity	2
Without Filter Turbidity	45	Post Sampling Turbidity	
		Purge Date	05/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:35	.25	2	32.2	7.26	6533	-30.4	3.02	266	169.79	3.53	4.25
13:43	.25	4	33.1	7.20	7056	-34.9	2.51	109	169.79	3.83	4.60
13:51	.25	6	33.5	7.19	7282	-35.6	2.41	47	169.79	3.95	4.72
13:55	.25	7	33.6	7.19	7354	-35.3	2.36	45	169.79	3.99	4.78
13:58											
13:59	.25	8	33.6	7.18	7355	-35.3	2.36	45	169.79	4.01	4.79

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

May 16, 2019 01:50:43 PM
Location: MW-67-225 Latitude: 0, Longitude: 0

Site: PGE Topock
Topock, CA

MW-67-260

Date	05/16/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	169.69
Water Quality Meter	YSI	Gallons in Well	14.73
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	260
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	90.31	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/16/2019	EB Time	
Sample Time	14:48	MS/MSD Sample ID	
Sample ID	MW-67-260-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	05/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:31	.25	1	31.9	8.17	14232	-71.1	2.99	1	169.89	8.14	9.24
14:35	.25	2	32.7	8.40	17911	-66.9	1.86	1	169.89	10.90	11.84
14:39	.25	3	33.2	8.37	18867	-61.3	.86	1	169.89	11.07	12.29
14:43	.25	4	33.2	8.36	18974	-60.2	0.78	1	169.89	11.15	12.33
14:47	.25	5	33.4	8.38	19062	-54.3	0.79	1	169.89	11.21	12.41

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-68-180

Date	05/22/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	163.89
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – QED Bladder Pump	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	173
Did Well Dewater?	NA	Total Volume to Remove	
Sample Date	05/22/2019	EB Sample ID	
Sample Time	12:12	EB Time	
Sample ID	MW-68-180-Q219	MS/MSD Sample ID	
Single Filter Turbidity	2	MS/MSD Sample Time	
Without Filter Turbidity	46	Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	05/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:35	250	1000	28.5	7.61	2133	210	5.94	413	163.89	1.62	2.00
11:39	250	2000	28.6	7.52	3003	48.0	5.93	291	163.89	1.67	2.00
11:43	250	3000	28.8	7.50	2983	47.1	6.02	1	163.89	1.62	2.00
11:47	250	4000	28.7	7.50	3010	46.8	6.08	140	163.89	2.10	1.70
11:51	250	5000	29.0	7.50	3021	46.8	6.04	70	163.89	1.62	2.08
11:59	250	7000	28.9	7.49	2920	45.2	6.10	55	163.89	1.62	2.00
12:03	250	6000	29.1	7.49	3018	42.2	6.02	49	163.89	1.62	2.08
12:07	250	8000	28.9	7.48	3018	42.9	6.06	46	163.89	1.62	2.00
12:11	250	9000	29.1	7.48	3021	41.9	6.04	46	163.89	1.62	2.08

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-68-240

Date	05/23/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	165.15
Water Quality Meter	YSI	Gallons in Well	12.16
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	239.71
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	230
Water Column in Well	74.56	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/23/2019	EB Time	
Sample Time	11:08	MS/MSD Sample ID	
Sample ID	MW-68-240-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-912-Q219	Double Filter Turbidity	1
Dup Sample Time	11:18	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	05/23/2019
Without Filter Turbidity	15		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:51	0.2	0.8	29.4	7.09	17820	-111.0	0.43	38	165.25	10.17	11.30
10:55	0.2	1.6	30.6	6.97	17958	-75.3	0.41	21	165.25	10.34	11.34
10:59	0.2	2.4	31.0	6.95	17990	-65.9	0.39	16	165.25	10.34	11.34
11:03	0.2	3.2	31.3	6.95	17996	-61.9	0.38	15	165.25	10.34	11.34
11:07	0.2	4.0	31.4	6.94	17998	-60.1	0.38	15	165.25	10.34	11.34

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pounded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-68BR-280

Date	05/22/2019	Sampler	Jason Mahn
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	gal	Depth to Water (ft bmp)	163.40
Water Quality Meter	YSI	Gallons in Well	118.86
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	280
Casing Material	PVC	Odor	none
Casing Diameter (in)	5	Pump Intake Depth (ft bmp)	
Water Column in Well	116.60	Total Volume to Remove	
Comments	Ded pump	EB Sample ID	
Did Well Dewater?	NA	EB Time	
Sample Date	05/22/2019	MS/MSD Sample ID	
Sample Time	11:10	MS/MSD Sample Time	
Sample ID	MW-68BR-280-Q219	Double Filter Turbidity	
Single Filter Turbidity	1	Post Sampling Turbidity	
Without Filter Turbidity	1	Purge Date	05/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:46	2	40	31.0	9.37	22076	-15.1	0.14	36	222.50	13.17	14.35
09:58	2	64	31.4	9.64	22167	-42.1	0.11	66	232.1	13.24	14.42
10:44	0.10	64.5	29.6	8.70	11436	-41.0	1.46	1	228.10	6.47	7.43
10:49	0.10	65	29.4	8.87	11457	-52.9	1.30	1	228.10	6.48	7.44
10:54	0.10	65.5	29.4	8.84	11470	-58.7	1.17	1	228.10	6.51	7.45
10:59	0.10	66	29.3	8.82	11457	-51.5	1.23	1	228.10	6.49	7.44
11:04	0.10	66.5	29.3	8.82	11467	-56.2	1.12	1	228.10	6.48	7.44
11:09	0.10	67	29.3	8.82	11453	-54.4	1.34	1	228.10	6.49	7.43

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-69-195

Date	05/16/2019	Sampler	Jacob Mathwig
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	174.43
Water Quality Meter	YSI	Gallons in Well	-0.89
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	169
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	-5.43	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-711-Q219
Sample Date	05/16/2019	EB Time	16:20
Sample Time	15:57	MS/MSD Sample ID	
Sample ID	MW-69-195-Q219	MS/MSD Sample Time	
Single Filter Turbidity	2	Double Filter Turbidity	1
Without Filter Turbidity	19	Post Sampling Turbidity	
		Purge Date	05/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:39	.25	1	31.5	7.62	2709	-33.3	3.72	25	174.55	1.41	1.76
15:44	.25	2	31.0	7.31	2775	-25	3.65	27	174.55	1.42	1.80
15:48	.25	3	32.2	7.27	2782	-21.6	3.84	18	174.55	1.42	1.82
15:52	.25	4	32.4	7.23	2822	-18.7	3.92	19	174.55	1.45	1.33
15:56	.25	5	32.6	7.22	2813	-18.4	3.91	19	174.55	1.43	1.33

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-70-105

Date	05/21/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	84.23
Water Quality Meter	YSI	Gallons in Well	3.43
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	105.25
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	95
Water Column in Well	21.02	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-718-Q219
Sample Date	05/21/2019	EB Time	15:40
Sample Time	14:26	MS/MSD Sample ID	
Sample ID	MW-70-105-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	10	Post Sampling Turbidity	
		Purge Date	05/21/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:09	500	2000	30.0	7.75	3518	58.9	1.86	33	84.37	3.65	4.37
14:13	500	4000	30.1	7.77	3522	55.9	1.90	25	84.37	3.65	4.37
14:17	500	6000	30.3	7.77	3532	52.0	1.74	13	84.37	3.70	4.44
14:21	500	8000	30.3	7.77	3555	50.2	1.67	10	84.37	3.70	4.44
14:25	500	10000	30.3	7.77	3570	48.3	1.60	10	84.37	3.75	4.48

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-71-035

Date	05/22/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	28.11
Water Quality Meter	YSI	Gallons in Well	1.21
Sampling Type	Grab Sample	Measured Well Depth (ft bmp)	35.51
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	34
Water Column in Well	7.4	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	05/23/2019	EB Time	
Sample Time	15:45	MS/MSD Sample ID	
Sample ID	MW-71-035-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	1
Without Filter Turbidity	15	Post Sampling Turbidity	
		Purge Date	05/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:25	0.2	0.8	28.9	7.08	15108	31.5	1.06	11	31.09	8.75	9.82
08:29	0.2	1.6	30.1	7.09	15116	28.6	1.09	10	33.89	8.75	9.82
15:45			66.4	7.20	15189	65.9	1.72	15	29.35	8.80	9.86

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



May 22, 2019 08:15:07 AM
Location: MW-71-035 Latitude: 34.714849, Longitude: -114.490958

Site: PGE Topock
Topock, CA

MW-72-080

Date	<u>05/24/2019</u>	Sampler	<u>Matt trainotti</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>MI</u>	Depth to Water (ft bmp)	<u>57.07</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>3.61</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>79.18</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>70</u>
Water Column in Well	<u>22.11</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>05/24/2019</u>	EB Time	<u> </u>
Sample Time	<u>08:28</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-72-080-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>21</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>05/24/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:11	500	2000	27.0	7.28	16.80	184.9	0.95	39	57.22	18.78	19.76
08:15	500	4000	27.5	7.64	17.05	158.7	0.55	30	57.22	19.32	20.25
08:19	500	6000	27.7	7.70	17.10	146.3	0.44	24	57.22	19.36	20.31
08:23	500	8000	27.8	7.73	17.11	134.5	0.40	20	57.22	19.46	20.41
08:27	500	10000	27.8	7.75	17.12	123.2	0.39	21	57.22	19.65	20.58

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?			X	
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-73-080

Date	05/23/2019	Sampler	Nara Tep
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	49.34
Water Quality Meter	YSI	Gallons in Well	4.94
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	79.65
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	70
Water Column in Well	30.31	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-725-Q219
Sample Date	05/23/2019	EB Time	16:00
Sample Time	15:18	MS/MSD Sample ID	
Sample ID	MW-73-080-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	8	Post Sampling Turbidity	
		Purge Date	05/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:01	0.1	0.4	28.2	7.52	11963	21.8	0.70	23	49.50	7.25	7.89
15:05	0.1	0.8	28.6	7.51	12008	22.9	0.73	15	49.53	7.43	7.83
15:09	0.1	1.2	29.3	7.52	12169	24.9	0.85	9	49.55	6.84	7.91
15:13	0.1	1.6	29.6	7.52	12196	25.1	0.82	8	49.55	6.86	7.93
15:17	0.1	2.0	29.9	7.52	12209	25.3	0.82	8	49.56	6.86	7.93

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?	X			
Steel Casing Intact?		X		
PVC Cap Present?	X			
Standing Water in Annulus?	X			
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



May 23, 2019 02:43:12 PM
Location: MW-73-080 Latitude: 34.714849, Longitude: -114.490958

Site: PGE Topock
Topock, CA

MW-74-240

Date	<u>05/20/2019</u>	Sampler	<u>Jason mahn</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>ml</u>	Depth to Water (ft bmp)	<u>215.52</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u> </u>
Sampling Type	<u>Low Flow – QED Bladder Pump</u>	Measured Well Depth (ft bmp)	<u> </u>
Casing Material	<u>PVC</u>	Odor	<u>none</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u> </u>
Did Well Dewater?	<u>NA</u>	Total Volume to Remove	<u> </u>
Sample Date	<u>05/22/2019</u>	EB Sample ID	<u> </u>
Sample Time	<u>13:15</u>	EB Time	<u> </u>
Sample ID	<u>MW-74-240-Q219</u>	MS/MSD Sample ID	<u> </u>
Single Filter Turbidity	<u>15</u>	MS/MSD Sample Time	<u> </u>
Without Filter	<u>86</u>	Double Filter Turbidity	<u>1</u>
Turbidity		Post Sampling Turbidity	<u> </u>
		Purge Date	<u>05/20/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:14			27.7	8.41	821	-45.6	1.02	86	215.98	0.40	0.53
15:04	400	4000	28.0	7.93	913	16.5	2.23	111	220.10	0.45	0.59
15:14	400	8000	28.0	8.69	890	10.0	0.42	99	224.80	0.43	0.57
15:24	300	11000	28.2	8.67	884	10.3	0.36	73	225.60	0.43	0.57
15:34	300	14000	28.0	8.66	890	14.1	0.38	56	226.70	0.43	0.57
15:44	200	16000	28.2	8.60	871	10.1	0.32	40	227.50	0.43	0.57
15:54	200	18000	28.2	8.60	842	21.9	0.36	45	229.10	0.43	0.57

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

PE-01

Date	05/09/2019	Sampler	Andrew Pham
Weather Conditions	Sunny	Color	Clear
Purge Method	Extraction Port	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Extraction port	Measured Well Depth (ft bmp)	
Casing Material	Stainless Steel	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	
Sample Date	05/09/2019	Total Volume to Remove	
Sample Time	12:05	EB Sample ID	
Sample ID	PE-01-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter	2	MS/MSD Sample Time	
Turbidity		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	05/09/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:05	1	5	24.5	7.39	2822	174.2	1.23	2		1.85	2.20

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?			X	
Standing or Poned Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?	X			
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?	X			
Photo Taken?		X		
Action Completed?			X	

Photos and Drawings

Site: PGE Topock
Topock, CA



Apr 23, 2019 08:51:47 AM
Location: PE-01 Latitude: 34.719431, Longitude: -114.490933

Site: PGE Topock
Topock, CA

TW-01

Date	05/24/2019	Sampler	Jason mahn
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	none
Casing Diameter (in)	4	Pump Intake Depth (ft bmp)	
Did Well Dewater?	NA	Total Volume to Remove	
Sample Date	05/24/2019	EB Sample ID	
Sample Time	08:50	EB Time	
Sample ID	TW-01-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter Turbidity	1	Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	05/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:06	6	66	29.8	7.19	6723	165.0	1.18	28		3.3	4.35
08:17	6	132	29.8	7.18	6774	157.4	1.02	1		3.4	4.42
08:27	6	200	29.7	7.17	4612	148.2	0.95	1		2.00	3.00
08:37	6	266	29.8	7.18	4662	152.8	0.98	1		2.00	3.00
08:49	6	333	29.7	7.17	4662	146.1	0.95	1		2.00	3.00

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
 Topock, CA

TW-03D

Date	05/09/2019	Sampler	Andrew Pham
Weather Conditions	Sunny	Color	Clear
Purge Method	Extraction Port	Casing Volume to Remove	
Purge Volume Units	Gal	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Extraction port	Measured Well Depth (ft bmp)	
Casing Material	Stainless Steel	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	
Sample Date	05/09/2019	Total Volume to Remove	
Sample Time	11:55	EB Sample ID	
Sample ID	TW-03D-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter	2	MS/MSD Sample Time	
Turbidity		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	05/09/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:54	1		25.7	7.20	4003					0.02	0.02
11:55	1	5	25.7	7.20	4003	188.3	3.20	2		0.02	0.40

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?			X	
Standing or Pondered Water?			X	
Lock in Place?			X	
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?	X			
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?	X			
Photo Taken?		X		
Action Completed?			X	

Photos and Drawings

Site: PGE Topock
Topock, CA



Site: PGE Topock
Topock, CA

C-BNS-D

Date	05/16/2019	Sampler	
		Color	
		Casing Volume to Remove	
		Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	05/16/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

C-CON-D

Date	05/15/2019	Sampler	
		Color	
		Casing Volume to Remove	
		Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	05/15/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-79-104

Date	06/26/2019	Sampler	Matt Trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	45.62
Water Quality Meter	YSI	Gallons in Well	9.59
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	104.43
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	100
Water Column in Well	58.81	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-780-0619
Sample Date	06/26/2019	EB Time	15:00
Sample Time	13:03	MS/MSD Sample ID	
Sample ID	MW-F-104-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	7	Post Sampling Turbidity	
		Purge Date	06/26/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:46	500	2000	31.0	7.56	8518	44.6	0.69	103	45.74	5.22	6.09
12:50	500	4000	31.0	7.57	8531	41.2	0.62	21	45.74	5.21	6.09
12:54	500	6000	31.1	7.57	8493	37.0	0.63	12	45.74	5.22	6.09
12:58	500	8000	31.1	7.57	8467	39.4	0.64	10	45.74	5.21	6.09
13:02	500	2000	31.1	7.58	8497	31.7	0.64	7	45.74	5.22	6.09

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-79-060

Date	06/26/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Green
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	45.75
Water Quality Meter	YSI	Gallons in Well	2.42
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	60.61
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	60
Water Column in Well	14.86	Total Volume to Remove	
Sample Date	06/26/2019	EB Sample ID	
Sample Time	13:16	EB Time	
Sample ID	MW-F-60-Q219	MS/MSD Sample ID	
Single Filter Turbidity	1	MS/MSD Sample Time	
Without Filter	7	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	06/26/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:53	500	2000	31.3	8.07	3335	47.2	1.55	121	45.80	1.73	2.17
12:57	500	4000	31.2	8.06	3345	49.6	1.99	43	45.80	1.74	2.19
13:01	500	6000	31.1	8.05	3388	50.2	2.13	17	45.80	1.76	2.17
13:06	500	8000	31.1	8.05	3352	50.6	2.16	8	45.80	1.75	2.18
13:11	500	10000	31.1	8.05	3356	51.1	2.17	7	45.80	1.75	2.18
13:15	500	12000	31.1	8.05	3359	51.9	2.17	7	45.80	1.75	2.18

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Jun 26, 2019 01:53:53 PM
Location: MW-F-60 Latitude: 34.717777, Longitude: -114.4913

Site: PGE Topock
Topock, CA

MW-80-057

Date	06/24/2019	Sampler	Matt trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	48.58
Water Quality Meter	YSI	Gallons in Well	1.88
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	60.08
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	54
Water Column in Well	11.5	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	06/24/2019	EB Time	
Sample Time	13:42	MS/MSD Sample ID	
Sample ID	MW-G-57-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	9	Post Sampling Turbidity	
		Purge Date	06/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:25	500	2000	32.0	7.79	5634	70.0	2.44	48	48.70	3.03	3.61
13:29	500	4000	31.8	7.81	5612	68.9	2.21	24	48.70	3.00	3.61
13:33	500	6000	31.6	7.83	5557	67.2	2.09	10	48.70	2.97	3.60
13:37	500	8000	31.4	7.82	5540	64.4	2.19	9	48.70	2.97	3.60
13:41	500	10000	31.3	7.83	5536	62.9	2.22	9	48.70	2.97	3.60

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-80-082

Date	06/24/2019	Sampler	
Weather Conditions	Sunny	Color	
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	48.67
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	84.70
Casing Material	PVC	Odor	
Water Column in Well	36.03	Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA



Jun 24, 2019 01:09:50 PM
Location: MW-G-82 Latitude: 34.716671, Longitude: -114.490928

Site: PGE Topock
 Topock, CA

MW-83-90

Date	06/25/2019	Sampler	Matt Trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	73.00
Water Quality Meter	YSI	Gallons in Well	3.08
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	91.90
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	82
Water Column in Well	18.90	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	06/25/2019	EB Time	
Sample Time	10:20	MS/MSD Sample ID	
Sample ID	MW-L-90-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	9	Post Sampling Turbidity	
Turbidity		Purge Date	06/25/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:03	500	2000	29.6	7.94	2312	49.3	3.97	59	73.14	1.17	1.50
10:07	500	4000	29.8	7.92	2288	51.7	3.82	33	73.14	1.16	1.48
10:11	500	6000	30.1	7.90	2282	53.2	3.79	12	73.17	1.17	1.49
10:15	500	8000	30.1	7.88	2305	53.9	3.76	9	73.17	1.17	1.49
10:19	500	10000	30.0	7.87	2312	54.4	3.91	9	73.17	1.16	1.49

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-83-180

Date	<u>06/25/2019</u>	Sampler	<u>Nara Tep</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>MI</u>	Depth to Water (ft bmp)	<u>73.00</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>17.7</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>181.49</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>170</u>
Water Column in Well	<u>108.49</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>06/25/2019</u>	EB Time	<u> </u>
Sample Time	<u>09:48</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-L-180-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter	<u>5</u>	Post Sampling Turbidity	<u> </u>
Turbidity	<u> </u>	Purge Date	<u>06/25/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:23	500	2000	30.7	8.15	12057	-24.0	0.26	117	73.11	6.84	7.80
09:27	500	4000	30.7	8.15	12078	-19.1	0.25	41	73.11	6.84	7.84
09:31	500	6000	30.8	8.17	12083	-3.9	0.26	26	73.11	6.84	7.83
09:35	500	8000	30.8	8.17	12055	3.1	0.26	15	73.11	6.84	7.83
09:39	500	10000	30.8	8.18	12055	6.0	0.24	6	73.11	6.84	7.83
09:43	500	12000	30.8	8.18	12056	6.9	0.24	5	73.11	6.84	7.83
09:47	500	14000	30.8	8.18	12058	7.3	0.24	5	73.11	6.84	7.83

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-83-225

Date	06/25/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	73.85
Water Quality Meter	YSI	Gallons in Well	24.6
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	224.65
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	215
Water Column in Well	150.8	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	06/25/2019	EB Time	
Sample Time	08:54	MS/MSD Sample ID	
Sample ID	MW-L-225-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	8	Post Sampling Turbidity	
		Purge Date	06/25/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:21	500	2000	29.5	8.35	16944	29.6	0.29	690	73.90	9.91	11.01
08:25	500	4000	30.2	8.40	16970	24.9	0.17	296	73.90	9.92	11.02
08:29	500	6000	30.4	8.40	16977	25.9	0.17	144	73.90	9.92	11.04
08:33	500	8000	30.4	8.40	16983	25.6	0.17	90	73.90	9.92	11.04
08:37	500	10000	30.5	8.40	16970	26.0	0.16	41	73.90	9.92	11.04
08:41	500	12000	30.5	8.40	16981	26.6	0.16	23	73.90	9.92	11.04
08:45	500	14000	30.5	8.40	16986	26.9	0.16	9	73.90	9.92	11.04
08:49	500	16000	30.5	8.40	19690	27.0	0.16	8	73.90	9.92	11.04
08:53	500	18000	30.5	8.40	19693	27.3	0.16	8	73.90	9.92	11.04

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-85-129

Date	06/25/2019	Sampler	Matt Trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	114
Water Quality Meter	YSI	Gallons in Well	2.77
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	131
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	121
Water Column in Well	17.00	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	06/25/2019	EB Time	
Sample Time	11:46	MS/MSD Sample ID	
Sample ID	MW-N-129-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-922-Q219	Double Filter Turbidity	
Dup Sample Time	11:56	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	06/25/2019
Without Filter Turbidity	9		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:29	500	2000	30.5	7.27	2261	40.7	4.29	33	114.13	1.14	1.47
11:33	500	4000	31.1	7.27	2252	38.5	4.24	22	114.13	1.14	1.46
11:37	500	6000	32.7	7.24	2252	38.0	4.22	11	114.13	1.14	1.46
11:41	500	8000	32.8	7.23	2261	36.4	4.30	9	114.13	1.14	1.46
11:45	500	10000	33.0	7.23	2254	35.8	4.34	9	114.13	1.14	1.46

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?		X		
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-85-217

Date	<u>06/25/2019</u>	Sampler	<u>Nara Tep</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>MI</u>	Depth to Water (ft bmp)	<u>113.20</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>17.08</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>217.93</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>206</u>
Water Column in Well	<u>104.73</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>06/25/2019</u>	EB Time	<u> </u>
Sample Time	<u>12:50</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-N-217-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>7</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>06/25/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:33	500	2000	31.5	8.32	13060	38.9	0.18	49	113.40	7.45	8.49
12:37	500	4000	31.7	8.29	13047	40.1	0.13	13	113.40	7.47	8.50
12:41	500	6000	31.7	8.28	13049	41.6	0.12	8	113.40	7.47	8.50
12:45	500	8000	31.8	8.28	13053	43.0	0.12	7	113.40	7.47	8.50
12:49	500	10000	31.8	8.28	13058	43.3	0.11	7	113.40	7.48	8.50

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-85-237

Date	<u>06/25/2019</u>	Sampler	<u>Nara Tep</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Green</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>MI</u>	Depth to Water (ft bmp)	<u>113.39</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>20.39</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>238.38</u>
Casing Material	<u>PVC</u>	Odor	<u>None</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>231</u>
Water Column in Well	<u>124.99</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>06/25/2019</u>	EB Time	<u> </u>
Sample Time	<u>11:56</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-N-237-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter	<u>7</u>	Post Sampling Turbidity	<u> </u>
Turbidity		Purge Date	<u>06/25/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:31	500	2000	31.1	8.37	18673	38.7	0.20	98	113.50	10.95	12.14
11:35	500	4000	31.8	8.34	18588	37.4	0.19	37	113.50	10.91	12.05
11:39	500	6000	31.8	8.34	18522	37.9	0.19	13	113.50	10.91	12.05
11:43	500	8000	31.9	8.34	18574	36.9	0.20	8	113.50	10.91	12.05
11:47	500	10000	31.9	8.34	18579	36.5	0.20	7	113.50	10.91	12.05
11:51	500	12000	31.9	8.34	18583	36.0	0.20	7	113.50	10.91	12.05
11:55	500	14000	31.9	8.34	18585	36.0	0.20	7	113.50	10.91	12.05

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-90-031

Date	06/24/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	3.38
Water Quality Meter	YSI	Gallons in Well	4.67
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	31.99
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	26.5
Water Column in Well	28.61	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-776-0619
Sample Date	06/24/2019	EB Time	15:00
Sample Time	14:34	MS/MSD Sample ID	
Sample ID	MW-W-31-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	7	Post Sampling Turbidity	
		Purge Date	06/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:17	500	2000	24.7	7.22	12279	-116.8	0.07	38	3.45	7.16	8.15
14:21	500	4000	24.7	7.23	14579	-117.9	0.05	18	3.45	8.47	9.49
14:25	500	6000	24.6	7.23	14612	-115.0	0.05	8	3.45	8.51	9.54
14:26	500	8000	24.6	7.23	14620	-114.3	0.05	7	3.45	8.51	9.54
14:33	500	10000	24.6	7.23	14623	-114.3	0.05	7	3.45	8.51	

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-F-60-3V

Date	06/26/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Green
Purge Method	Low Flow	Casing Volume to Remove	3
Purge Volume Units	Gal	Depth to Water (ft bmp)	45.75
Water Quality Meter	YSI	Gallons in Well	2.42
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	60.61
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	52
Water Column in Well	14.86	Total Volume to Remove	7.26
Did Well Dewater?	No	EB Sample ID	MW-779-0619
Sample Date	06/26/2019	EB Time	15:00
Sample Time	13:42	MS/MSD Sample ID	
Sample ID	MW-F-60-3V-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	5	Post Sampling Turbidity	
		Purge Date	06/26/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:25	0.5	2	31.3	8.05	3325	52.2	2.35	19	45.85	1.76	2.17
13:29	0.5	4	31.4	8.02	3380	57.1	2.40	7	45.85	1.74	2.17
13:33	0.5	6	31.4	8.02	3383	58.0	2.43	5	45.85	1.74	2.17
13:37	0.5	8	31.4	8.02	3385	58.6	2.45	5	45.85	1.74	2.17
13:41	0.5	10	31.5	8.02	3386	59.0	2.46	5	45.85	1.74	2.17

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-75-117

Date	<u>06/27/2019</u>	Sampler	<u>Matt Trainotti</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>ml</u>	Depth to Water (ft bmp)	<u>16.53</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>16.51</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>117.77</u>
Casing Material	<u>PVC</u>	Odor	<u>none</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u> </u>
Water Column in Well	<u>101.24</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u>MW-782-0619</u>
Sample Date	<u>06/27/2019</u>	EB Time	<u>09:07</u>
Sample Time	<u>07:52</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-B-117-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>5</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>06/27/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:35	500	2000	27.7	7.74	11337	-47.0	0.67	53	16.67	6.84	7.92
07:39	500	4000	27.8	7.76	11289	-84.7	0.54	22	16.67	6.83	7.91
07:43	500	6000	27.8	7.77	11248	--113.8	0.45	7	16.67	6.82	7.91
07:47	500	8000	27.8	7.79	11222	-120.2	0.41	5	16.67	6.84	7.87
07:51	500	10000	27.8	7.80	11238	-108.2	0.37	5	16.67	6.84	7.87

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?			X	
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-75-033

Date	06/27/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	16.50
Water Quality Meter	YSI	Gallons in Well	2.94
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	34.50
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	25
Water Column in Well	18.0	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-781-0619
Sample Date	06/27/2019	EB Time	08:50
Sample Time	07:57	MS/MSD Sample ID	
Sample ID	MW-B-33-Q219	MS/MSD Sample Time	
Duplicate Sample ID	MW-921-Q219	Double Filter Turbidity	
Dup Sample Time	08:06	Post Sampling Turbidity	
Single Filter Turbidity	1	Purge Date	06/27/2019
Without Filter Turbidity	9		

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:35	500	2000	27.4	7.93	5494	18.6	0.32	307	16.55	2.94	3.54
07:39	500	4000	27.5	7.91	5503	19.6	0.30	90	16.55	2.94	3.54
07:43	500	6000	27.5	7.90	5507	20.1	0.30	37	16.55	2.94	3.54
07:47	500	8000	27.4	7.95	5320	25.9	0.35	10	16.55	2.86	3.45
07:51	500	10000	27.4	7.95	5323	26.6	0.38	9	16.55	2.86	3.45
07:55	500	12000	27.4	7.96	5324	27.1	0.38	9	16.55	2.86	3.45

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-10D

Date	06/26/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	72.70
Water Quality Meter	YSI	Gallons in Well	8.57
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	125.25
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	116
Water Column in Well	52.55	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	06/26/2019	EB Time	
Sample Time	11:52	MS/MSD Sample ID	
Sample ID	MW-10D-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	8	Post Sampling Turbidity	
		Purge Date	06/26/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:31	500	2000	30.8	7.86	4125	30.6	0.65	150	72.86	2.19	2.71
11:35	500	4000	30.7	7.86	4201	33.1	0.67	42	72.86	2.18	2.68
11:39	500	6000	30.7	7.86	4206	35.9	0.67	23	72.86	2.18	2.68
11:43	500	8000	30.8	7.87	4146	36.8	0.68	9	72.86	2.19	2.70
11:47	500	10000	30.8	7.87	4149	37.3	0.68	8	72.86	2.19	2.70
11:51	500	12000	30.8	7.88	4152	38.3	0.68	8	72.86	2.19	2.70

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-89-183

Date	06/26/2019	Sampler	Matt Trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	130.22
Water Quality Meter	YSI	Gallons in Well	8.88
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	184.68
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	173
Water Column in Well	54.46	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	06/26/2019	EB Time	
Sample Time	09:32	MS/MSD Sample ID	
Sample ID	MW-U-183-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	12	Post Sampling Turbidity	
		Purge Date	06/26/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:15	500	2000	31.2	7.36	7448	--60.1	2.43	77	130.29	4.39	5.18
09:19	500	4000	31.5	7.35	7426	-35.0	2.39	20	130.29	4.40	5.21
09:23	500	6000	31.6	7.36	7445	-22.3	2.34	14	130.29	4.39	5.18
09:27	500	8000	31.6	7.37	7460	-14.1	2.27	14	130.29	4.45	5.22
09:31	500	10000	31.6	7.38	7453	-11.9	2.22	12	130.29	4.41	5.21

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-89-273

Date	06/26/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	130.25
Water Quality Meter	YSI	Gallons in Well	23.57
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	274.75
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	263
Water Column in Well	144.5	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	06/26/2019	EB Time	
Sample Time	10:14	MS/MSD Sample ID	
Sample ID	MW-U-273-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	6	Post Sampling Turbidity	
Turbidity		Purge Date	06/26/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:53	500	2000	31.4	8.26	7778	63.9	4.89	98	130.35	4.29	5.09
09:57	500	4000	31.6	8.28	7811	64.3	4.87	43	130.35	4.26	5.05
10:01	500	6000	31.6	8.28	7816	64.9	4.88	13	130.35	4.26	5.05
10:05	500	8000	31.6	8.29	7801	65.3	4.85	7	130.35	4.27	5.07
10:09	500	10000	31.6	8.29	7806	65.9	4.83	6	130.35	4.27	5.07
10:13	500	12000	31.6	8.29	7807	66.2	4.81	6	130.35	4.27	5.07

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?			X	
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-84-057

Date	06/26/2019	Sampler	Matt Trainotti
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	44.43
Water Quality Meter	YSI	Gallons in Well	2.43
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	59.32
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	52
Water Column in Well	14.89	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	06/26/2019	EB Time	
Sample Time	07:54	MS/MSD Sample ID	
Sample ID	MW-M-57-Q219	MS/MSD Sample Time	
Dup Sample Time	07:38	Double Filter Turbidity	
Single Filter Turbidity	1	Post Sampling Turbidity	
Without Filter Turbidity	19	Purge Date	06/26/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:29	500	2000	30.5	7.66	2109	30.9	1.82	191	44.53	1.17	1.51
07:33	500	4000	30.9	7.65	2113	24.7	1.68	140	44.53	1.17	1.51
07:37	500	6000	30.8	7.65	2117	22.7	1.66	90	44.53	1.17	1.51
07:41	500	8000	30.8	7.64	2114	17.0	1.63	48	44.53	1.17	1.51
07:45	500	10000	30.8	7.64	2116	11.0	1.64	22	44.53	1.17	1.51
07:49	500	12000	30.9	7.64	2117	3.8	1.66	20	44.53	1.17	1.51
07:53	500	14000	30.9	7.64	2118	1.2	1.64	19	44.53	1.17	1.51

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Standing Water in Annulus?		X		
Well Casing Intact?			X	
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-84-095

Date	06/26/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	44.56
Water Quality Meter	YSI	Gallons in Well	8.59
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	97.22
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	85
Water Column in Well	52.66	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	06/26/2019	EB Time	
Sample Time	07:40	MS/MSD Sample ID	
Sample ID	MW-M-95-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	7	Post Sampling Turbidity	
		Purge Date	06/26/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:23	500	2000	29.9	8.05	5910	-119.6	0.11	103	44.69	3.17	3.84
07:27	500	4000	30.2	8.05	5919	-130.6	0.10	23	44.69	3.17	3.84
07:31	500	6000	30.3	8.04	5890	-135.3	0.10	8	44.69	3.17	3.84
07:35	500	8000	30.3	8.04	5897	-138.9	0.10	7	44.69	3.17	3.84
07:39	500	10000	30.3	8.04	5896	-139.3	0.10	7	44.69	3.17	3.84

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Jun 26, 2019 06:59:25 AM
Location: MW-M-95 Latitude: 34.718927, Longitude: -114.494468

Site: PGE Topock
Topock, CA

MW-84-132

Date	<u>06/25/2019</u>	Sampler	<u>Matt Trainotti</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u> </u>
Purge Volume Units	<u>ml</u>	Depth to Water (ft bmp)	<u>44.57</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>14.65</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>134.38</u>
Casing Material	<u>PVC</u>	Odor	<u>none</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u>122</u>
Water Column in Well	<u>89.81</u>	Total Volume to Remove	<u> </u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u>MW-778-0619</u>
Sample Date	<u>06/25/2019</u>	EB Time	<u>15:00</u>
Sample Time	<u>14:10</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>MW-M-132-Q219</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u> </u>
Without Filter	<u>9</u>	Post Sampling Turbidity	<u> </u>
Turbidity	<u> </u>	Purge Date	<u>06/25/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:53	500	2000	30.8	7.59	8249	110.2	0.57	121	44.73	5.03	5.86
13:57	500	4000	31.0	7.61	8479	133.2	0.51	33	44.73	5.06	5.90
14:01	500	6000	31.0	7.63	8711	143.5	0.41	11	44.73	5.09	5.93
14:05	500	8000	31.0	7.62	8864	145.4	0.37	9	44.73	5.10	5.96
14:09	500	10000	31.0	7.62	8905	148.8	0.35	9	44.73	5.11	5.97

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?		X		
Erosion Around Wellhead?			X	
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?			X	
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-84-193

Date	06/25/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	44.60
Water Quality Meter	YSI	Gallons in Well	24.63
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	195.59
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	183
Water Column in Well	150.99	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	MW-777-0619
Sample Date	06/25/2019	EB Time	15:05
Sample Time	14:22	MS/MSD Sample ID	
Sample ID	MW-M-193-Q219	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	9	Post Sampling Turbidity	
		Purge Date	06/25/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:49	500	2000	31.1	8.19	12586	-28.6	0.22	386	44.75	7.15	8.17
13:53	500	4000	31.3	8.19	12610	-35.9	0.14	167	44.75	7.16	8.19
13:57	500	6000	31.3	8.20	12598	-42.3	0.13	92	44.75	7.16	8.19
14:01	500	8000	31.3	8.20	12601	-47.9	0.13	64	44.75	7.17	8.20
14:05	500	10000	31.3	8.20	12603	-49.0	0.13	42	44.75	7.17	8.20
14:09	500	12000	31.3	8.20	12605	-49.6	0.13	23	44.75	7.17	8.20
14:13	500	14000	31.4	8.21	12623	-52.1	0.13	10	44.75	7.17	8.20
14:17	500	16000	31.4	8.21	12626	-53.6	0.13	9	44.75	7.17	8.20
14:21	500	18000	31.4	8.21	12628	-53.9	0.13	9	44.75	7.17	8.20

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

C-BNS

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	17
Comments	2102138.25 N, 7616948.50 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	16
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	11:55	EB Sample ID	
Sample ID	C-BNS-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:54	500		20.7	8.06	942	98.6	7.69	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

C-CON

Date	06/18/2019	Sampler	
		Color	
		Casing Volume to Remove	
		Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

C-I-3

Date	06/18/2019	Sampler	
		Color	
		Casing Volume to Remove	
		Depth to Water (ft bmp)	
		Gallons in Well	
		Measured Well Depth (ft bmp)	
		Odor	
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR3-D

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	11
Comments	2106756.24 N, 7611726.55 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	10
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	12:05	EB Sample ID	
Sample ID	C-NR3-D-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:04	500		20.8	8.12	941	92.6	7.76	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR4-D

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	13
Comments	2108625.46 N, 7607998.61 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	12
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	13:00	EB Sample ID	
Sample ID	C-NR4-D-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:59	500		20.9	8.20	941	94.6	7.66	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-R22A-D

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	7
Comments	2101637.34 N, 7616971.68 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	6
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	10:50	EB Sample ID	
Sample ID	C-R22A-D-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter	2	MS/MSD Sample Time	
Turbidity		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:49	500		21.2	8.10	938	90.6	8.07	2		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-R27-D

Date	06/18/2019	Sampler	
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	8
Comments	2102559.11 N, 7616720.16 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	7
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	12:25	EB Sample ID	
Sample ID	C-R27-D-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:24	500		20.8	8.11	940	106.1	7.70	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-TAZ-D

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	15
Comments	2100869.16 N, 7618858.54 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	14
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	08:40	EB Sample ID	
Sample ID	C-TAZ-D-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:39	500		21.1	7.86	938	94.5	8.15	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

PE-01

Date	06/05/2019	Sampler	
Sample Date	06/05/2019	Color	Clear
Sample Time	11:30	Casing Volume to Remove	
Sample ID	PE-01-Q219	Depth to Water (ft bmp)	
Single Filter Turbidity	1	Gallons in Well	
Without Filter Turbidity	1	Measured Well Depth (ft bmp)	
		Odor	None
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	06/05/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
								1			

Well Integrity Checklist

Item	Yes	No	NA	Notes
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Photos and Drawings

Site: PGE Topock
 Topock, CA

R-19

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	3
Comments	2103321.41 N, 7616191.00 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	2
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	08:00	EB Sample ID	
Sample ID	R-19-Q219	EB Time	
Duplicate Sample ID	MW-918-Q219	MS/MSD Sample ID	
Dup Sample Time	08:10	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:59	500		21.3	7.89	939	93.6	8.13	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

R-28

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	3
Comments	2103078.66 N, 7616318.24 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	2
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	13:10	EB Sample ID	
Sample ID	R-28-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter	2	MS/MSD Sample Time	
Turbidity		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:09			21.6	8.13	567	98.0	8.17	2		0.27	0.37

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

R63

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	4
Comments	2100787.09 N, 7617355.92 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	3
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	10:20	EB Sample ID	
Sample ID	R63-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	2	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:19	500		22.1	8.09	939	96.0	8.01	2		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

RMP-AB1

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Comments	2100869.16 N, 7618858.54 E	Casing Volume to Remove	
Did Well Dewater?	No	Depth to Water (ft bmp)	
Sample Date	06/18/2019	Gallons in Well	
Sample Time	08:50	Measured Well Depth (ft bmp)	
Sample ID	RMP-AB1-Q219	Odor	None
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:50											

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

RMP-AB2

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Comments	2103078.66 N, 7616318.24 E	Casing Volume to Remove	
Did Well Dewater?	No	Depth to Water (ft bmp)	
Sample Date	06/18/2019	Gallons in Well	
Sample Time	13:15	Measured Well Depth (ft bmp)	
Sample ID	RMP-AB2-Q219	Odor	None
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:15											

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

RMP-AB3

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Comments	2108625.46 N, 7607998.61 E	Casing Volume to Remove	
Did Well Dewater?	No	Depth to Water (ft bmp)	
Sample Date	06/19/2019	Gallons in Well	
Sample Time	13:30	Measured Well Depth (ft bmp)	
Sample ID	RMP-AB3-Q219	Odor	None
		Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:30											

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

RRB

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	3
Comments	2104538.12 N, 7615235.54 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	2
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	09:25	EB Sample ID	
Sample ID	RRB-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter	2	MS/MSD Sample Time	
Turbidity		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:24	500		22.1	8.07	954	93.0	7.59	2		0.47	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

SW1

Date	06/18/2019	Sampler	
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Water Quality Meter	YSI	Depth to Water (ft bmp)	
Sampling Type	Surface water	Gallons in Well	
Comments	2101306.08 N, 7616723.85 E	Measured Well Depth (ft bmp)	
Did Well Dewater?	No	Odor	None
Sample Date	06/18/2019	Pump Intake Depth (ft bmp)	
Sample Time	14:10	Total Volume to Remove	
Sample ID	SW1-Q219	EB Sample ID	
Single Filter Turbidity	1	EB Time	
Without Filter Turbidity	4	MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:10			22.1	7.76	1015	70.3	3.98	4		0.50	0.66

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

SW2

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Water Quality Meter	YSI	Casing Volume to Remove	
Sampling Type	Surface water	Depth to Water (ft bmp)	
Comments	2101075.06 N, 7616906.10 E	Gallons in Well	
Did Well Dewater?	No	Measured Well Depth (ft bmp)	
Sample Date	06/18/2019	Odor	None
Sample Time	15:30	Pump Intake Depth (ft bmp)	
Sample ID	SW2-Q219	Total Volume to Remove	
Single Filter Turbidity	1	EB Sample ID	
Without Filter Turbidity	2	EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:30			22.2	7.70	1003	72.6	4.02	2		0.50	0.65

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

TW-03D

Date	06/05/2019	Sampler	Spencer Doolittle
Weather Conditions	Sunny	Color	Clear
Purge Method	Extraction Port	Casing Volume to Remove	
Purge Volume Units	Na	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Extraction port	Measured Well Depth (ft bmp)	
Sample Date	06/05/2019	Odor	None
Sample Time	11:20	Pump Intake Depth (ft bmp)	
Sample ID	TW-03D-Q219	Total Volume to Remove	
Single Filter Turbidity	1	EB Sample ID	
Without Filter Turbidity	1	EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	06/05/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:20			27.5	7.78	8289	111.3	2.15	1			

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-CON-D

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	13
Comments	2105632.06 N, 7614087.16 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	12
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	09:55	EB Sample ID	
Sample ID	C-CON-D-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:54	500		20.5	8.06	940	98.6	8.01	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-CON-S

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	13
Comments	2105632.06 N, 7614087.16 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	1
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	10:15	EB Sample ID	
Sample ID	C-CON-S-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:14	500		20.6	8.06	943	98.0	8.10	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-I-3-D

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	13
Comments	2101056.87 N, 7617744.96 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	12
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	09:35	EB Sample ID	
Sample ID	C-I-3-D-Q219	EB Time	
Duplicate Sample ID	MW-916-Q219	MS/MSD Sample ID	
Dup Sample Time	09:45	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	1	Post Sampling Turbidity	
Turbidity		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:34	500		20.6	7.99	940	92.6	8.11	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-I-3-S

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	13
Comments	2101056.87 N, 7617744.96 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	1
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	09:55	EB Sample ID	
Sample ID	C-I-3-S-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
09:54	500		20.5	8.04	938	93.6	8.05	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-MAR-D

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	6
Comments	2102572.32 N, 7617738.57 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	5
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	08:35	EB Sample ID	
Sample ID	C-MAR-D-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	8	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:34	500		21.4	8.10	966	91.6	8.29	8		0.47	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-MAR-S

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	6
Comments	2102572.32 N, 7617738.57 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	1
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	08:55	EB Sample ID	
Sample ID	C-MAR-S-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	4	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:54	500		21.4	8.12	942	95.0	8.17	4		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR1-D

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	8
Comments	2106026.84 N, 7613284.60 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	7
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	11:00	EB Sample ID	
Sample ID	C-NR1-D-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:59	500		20.6	8.06	940	94.6	7.60	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR1-S

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	8
Comments	2106026.84 N, 7613284.60 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	1
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	11:15	EB Sample ID	
Sample ID	C-NR1-S-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:14	500		20.6	8.07	941	96.6	7.57	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR3-S

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	11
Comments	2106756.24 N, 7611726.55 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	1
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	12:25	EB Sample ID	
Sample ID	C-NR3-S-Q219	EB Time	
Duplicate Sample ID	MW-917-Q219	MS/MSD Sample ID	
Dup Sample Time	12:35	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter	1	Post Sampling Turbidity	
Turbidity		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:24	500		20.7	8.13	941	95.5	7.56	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-NR4-S

Date	06/19/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	13
Comments	2108625.46 N, 7607998.61 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	1
Sample Date	06/19/2019	Total Volume to Remove	
Sample Time	13:20	EB Sample ID	
Sample ID	C-NR4-S-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/19/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:19	500		21.1	8.15	942	95.5	7.63	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-R22A-S

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	7
Comments	2101637.34 N, 7616971.68 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	1
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	11:10	EB Sample ID	
Sample ID	C-R22A-S-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
11:09	500		21.2	8.12	940	100.7	8.14	1		0.46	0.610

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-R27-S

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	8
Comments	2102559.11 N, 7616720.16 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	1
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	12:40	EB Sample ID	
Sample ID	C-R27-S-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:39	500		21.0	8.08	590	95.6	8.01	1		0.27	0.36

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

C-TAZ-S

Date	06/18/2019	Sampler	Nara Tep
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	River Sample	Measured Well Depth (ft bmp)	15
Comments	2100869.16 N, 7618858.54 E	Odor	None
Did Well Dewater?	No	Pump Intake Depth (ft bmp)	1
Sample Date	06/18/2019	Total Volume to Remove	
Sample Time	09:00	EB Sample ID	
Sample ID	C-TAZ-S-Q219	EB Time	
Single Filter Turbidity	1	MS/MSD Sample ID	
Without Filter Turbidity	1	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	06/18/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:59	500		21.0	7.96	940	94.9	8.16	1		0.46	0.61

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-79-060

Date	07/25/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	45.71
Water Quality Meter	YSI	Gallons in Well	2.38
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	60.28
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	14.57	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	07/25/2019	EB Time	
Sample Time	07:28	MS/MSD Sample ID	
Sample ID	MW-F-60-Q319	MS/MSD Sample Time	
Single Filter Turbidity	6	Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	07/25/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:07	500	2000	30.0	7.00	3530	128	1.24	177	45.90	1.83	2.39
07:11	500	4000	32.1	7.18	3538	134	1.56	110	45.90	1.84	2.41
07:15	500	6000	32.8	7.20	3537	133	1.68	63	45.90	1.83	2.40
07:19	500	8000	32.6	7.14	3531	132	1.90	48	45.90	1.83	2.39
07:23	500	10000	31.9	7.10	3507	130	2.09	44	45.90	1.93	2.36
07:27	500	12000	31.5	7.09	3506	131	2.14	43	45.90	1.83	2.39

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?		X		
Concrete Pad Intact?		X		
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-83-180

Date	07/25/2019	Sampler	KT
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	73.10
Water Quality Meter	YSI	Gallons in Well	17.66
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	181.36
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	108.26	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	EB-776-Q319
Sample Date	07/25/2019	EB Time	09:30
Sample ID	MW-L-180-0719	MS/MSD Sample ID	
Duplicate Sample ID	MW-907-O319	MS/MSD Sample Time	
Dup Sample Time	08:55	Double Filter Turbidity	
Single Filter Turbidity	3	Post Sampling Turbidity	
Without Filter Turbidity	30	Purge Date	07/25/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:24	500	2000	29.6	7.08	12484	62.9	0.56	134	73.15	7.10	8.48
08:28	500	4000	31.1	7.24	12516	94.8	0.40	77	73.15	7.11	8.50
08:32	500	6000	31.1	7.26	12519	99.2	0.39	47	73.15	7.11	8.51
08:36	500	8000	31.0	7.25	12533	97.8	0.38	44	73.15	7.11	8.52
08:40	500	10000	31.0	7.26	12516	96.7	0.41	43	73.15	7.11	8.51
08:44	500	12000	31.1	7.25	12537	99.6	0.39	42	73.15	7.12	8.53

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Poned Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Well Casing Intact?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-85-217

Date	07/23/2019	Sampler	KT
Weather Conditions	Cloudy	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	113.27
Water Quality Meter	YSI	Gallons in Well	17.11
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	218.15
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	104.88	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	07/23/2019	EB Time	
Sample Time	07:55	MS/MSD Sample ID	
Sample ID	MW-N-217-Q319	MS/MSD Sample Time	
Single Filter Turbidity	3	Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	07/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:40	500	4000	30.1	7.65	5201	77.5	0.67	42	113.32	2.77	3.53
07:44	500	6000	30.1	7.64	5189	78.1	0.58	41	113.32	2.77	3.53
07:48	500	8000	30.1	7.67	5185	78.7	0.55	40	113.32	2.77	3.53
07:52	500	10000	30.1	7.65	5187	78.9	0.54	40	113.32	2.77	3.53
07:56											

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-F-60-3V

Date	07/25/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Volume Units	gal	Casing Volume to Remove	3
Water Quality Meter	YSI	Depth to Water (ft bmp)	45.71
Sampling Type	Volume Purge – Grundfos RF2	Gallons in Well	2.38
Casing Material	PVC	Measured Well Depth (ft bmp)	60.28
Casing Diameter (in)	2	Odor	none
Water Column in Well	14.57	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	7.14
Sample Date	07/25/2019	EB Sample ID	
Sample Time	07:44	EB Time	
Sample ID	MW-F-60-3V-Q319	MS/MSD Sample ID	
Single Filter Turbidity	7	MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	07/25/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:35	1	2	31.1	7.09	3513	130	3.10	40	46.60	1.83	2.36
07:37	1	4	31.2	7.08	3511	129	3.23	33	46.60	1.83	2.39
07:39	1	6	30.8	7.09	3493	129	3.13	30	46.60	1.83	2.38
07:41	1	8	31.0	7.08	3506	127	3.22	30	46.60	1.82	2.36
07:43	1	10	30.8	7.09	3488	126	3.20	28	46.60	1.82	2.36

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?		X		
Concrete Pad Intact?		X		
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		
Action Completed?		X		

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-75-117

Date	07/23/2019	Sampler	Kt
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	16.44
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	07/23/2019	EB Sample ID	
Sample Time	11:08	EB Time	
Sample ID	MW-B-117-Q319	MS/MSD Sample ID	
Single Filter Turbidity	4	MS/MSD Sample Time	
Without Filter	40	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	07/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:50	500	2000	28.5	7.87	11309	-244.4	0.32	50	16.48	6.42	7.40
10:54	500	4000	28.7	7.85	11749	-176.2	0.28	46	16.49	6.67	7.64
10:58	500	6000	29.0	7.83	11735	-169.9	0.25	43	16.49	6.67	7.65
11:02	500	8000	29.1	7.82	11738	-167.2	0.24	42	16.49	6.67	7.65
11:06	500	10000	29.1	7.82	11736	-165.3	0.23	42	16.49	6.67	7.65

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Pondered Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-75-033

Date	07/23/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	16.36
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	07/23/2019	EB Sample ID	
Sample Time	11:18	EB Time	
Sample ID	MW-B-33-0719	MS/MSD Sample ID	
Duplicate Sample ID	MW-906-0719	MS/MSD Sample Time	
Dup Sample Time	11:28	Double Filter Turbidity	5
Single Filter Turbidity	1	Post Sampling Turbidity	
		Purge Date	07/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:57	500	2000	27.3	6.74	5540	72	0.30	158	16.60	2.98	3.76
11:01	500	4000	27.2	6.80	5499	65	0.33	49	16.60	2.95	3.73
11:05	500	6000	27.2	6.80	5468	59	0.36	40	16.60	2.93	3.71
11:09	500	8000	27.2	6.80	5480	55	0.32	38	16.60	2.90	3.72
11:13	500	10000	27.3	6.81	5476	55	0.30	37	16.60	2.90	3.75
11:17	500	12000	27.4	6.81	5477	52	0.35	37	16.60	2.90	3.75

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?		X		
Erosion Around Wellhead?		X		
Steel Casing Intact?		X		
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-10D

Date	07/24/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	72.63
Water Quality Meter	YSI	Gallons in Well	8.58
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	125.23
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	52.60	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	07/24/2019	EB Time	
Sample Time	08:23	MS/MSD Sample ID	
Sample ID	MW-10D-Q319	MS/MSD Sample Time	
Single Filter Turbidity	5	Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	07/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:02	500	2000	29.6	6.90	3877	114	1.89	68	72.95	2.04	2.65
08:06	500	4000	30.5	7.07	3907	109	1.50	49	72.95	2.05	2.65
08:10	500	6000	30.9	7.29	3915	130	1.40	41	72.95	2.05	2.65
08:14	500	8000	30.9	7.25	3978	122	1.21	38	72.95	2.10	2.69
08:18	500	10000	31.1	7.32	4007	117	1.16	36	72.95	2.12	2.70
08:22	500	12000	31.5	7.34	4054	112	1.09	34	72.95	2.12	2.72

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?		X		
Concrete Pad Intact?		X		
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-89-183

Date	07/24/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	130.19
Water Quality Meter	YSI	Gallons in Well	8.94
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	185.00
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	54.81	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	07/24/2019	EB Time	
Sample Time	10:41	MS/MSD Sample ID	
Sample ID	MW-U-183-Q319	MS/MSD Sample Time	
Single Filter Turbidity	4	Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	07/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:20	500	2000	31.6	6.72	7908	125	2.41	90	130.44	4.33	5.37p
10:24	500	4000	32.3	6.80	7917	127	2.80	55	130.44	4.33	3.38
10:28	500	6000	32.5	6.84	7929	128	2.87	23	130.44	4.33	5.38
10:32	500	8000	32.5	6.89	7924	124	2.92	25	130.44	4.34	5.39
10:36	500	10000	32.6	6.90	7930	124	2.84	25	130.44	4.34	5.39
10:40	500	12000	32.7	6.91	7933	122	2.91	26	130.44	4.36	5.40

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-89-273

Date	07/24/2019	Sampler	KT
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	130.27
Water Quality Meter	YSI	Gallons in Well	23.60
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	274.95
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	144.68	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	07/24/2019	EB Time	
Sample Time	10:38	MS/MSD Sample ID	
Sample ID	MW-U-273-0719	MS/MSD Sample Time	
Single Filter Turbidity	3	Double Filter Turbidity	
Without Filter Turbidity	46	Post Sampling Turbidity	
		Purge Date	07/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
10:17	500	2000	30.4	7.20	7688	27.9	2.48	112	130.27	4.47	5.25
10:21	500	4000	31.9	7.45	8134	54.6	2.87	78	130.28	4.47	5.25
10:25	500	6000	31.8	7.44	8140	56.7	2.90	56	130.28	4.46	5.25
10:29	500	8000	32.0	7.44	8150	58.8	2.90	47	130.28	4.47	5.25
10:33	500	10000	32.0	7.44	8149	62.3	2.91	46	130.28	4.46	5.25
10:37	500	12000	32.1	7.44	8153	64.1	2.90	46	130.28	4.47	5.25

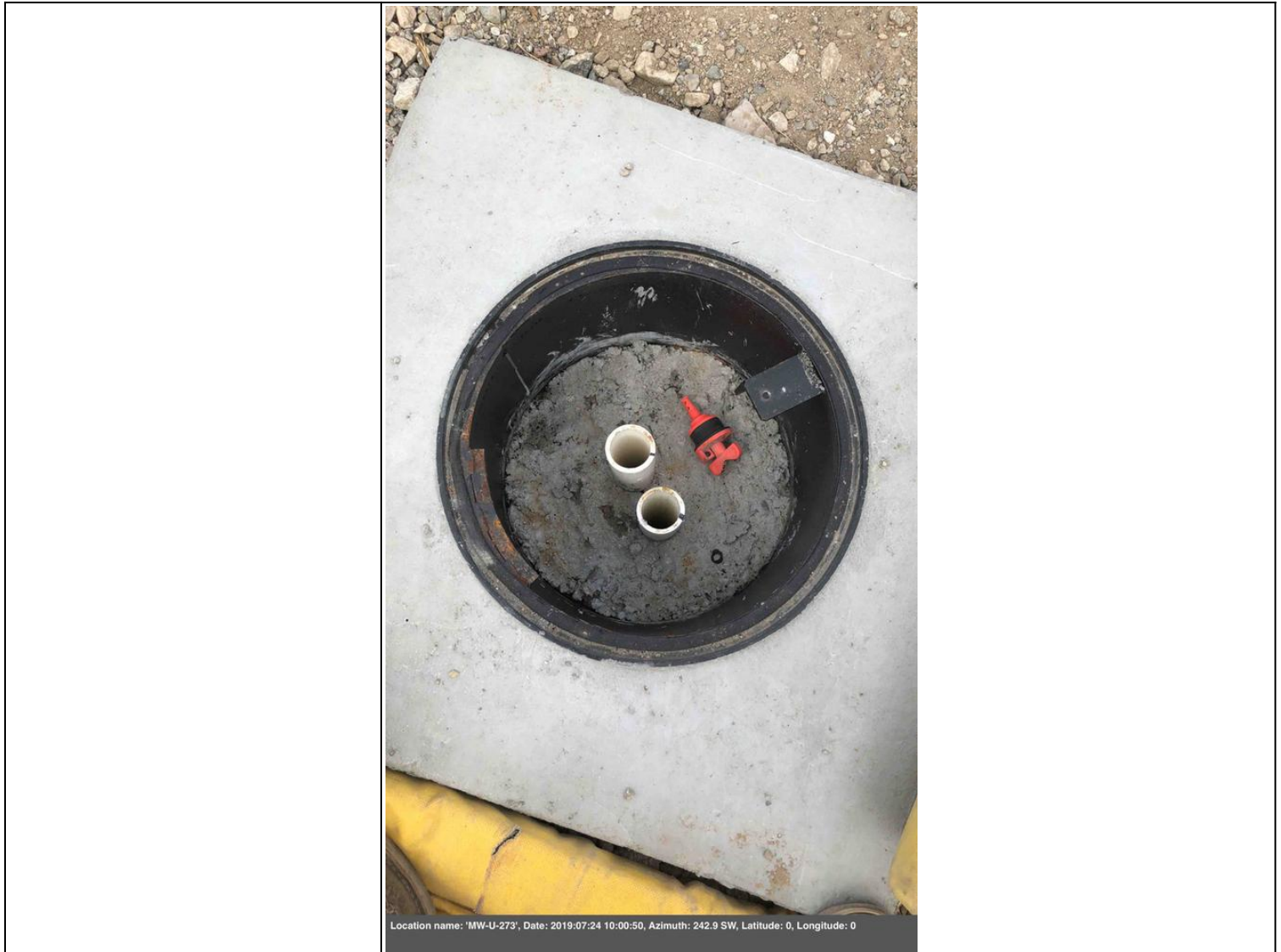
Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Photo Taken?	X			

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-84-057

Date	07/22/2019	Sampler	Kevin Thompson
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	None
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	07/22/2019	EB Sample ID	
Sample Time	14:25	EB Time	
Sample ID	MW-M-57-Q319	MS/MSD Sample ID	
Single Filter Turbidity	3	MS/MSD Sample Time	
Without Filter Turbidity	33	Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	07/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:04	500	2000	30.2	7.45	2131	57.4	3.71	59	44.38	1.09	1.39
14:08	500	4000	30.2	7.45	2140	61.5	3.59	39	44.38	1.07	1.38
14:12	500	6000	30.2	7.45	2132	66.8	3.54	36	44.38	1.07	1.38
14:16	500	8000	30.2	7.45	2130	70.3	3.51	34	44.38	1.07	1.38
14:20	500	10000	30.2	7.45	2129	72.6	3.49	33	44.38	1.07	1.38
14:24	500	12000	30.2	7.45	2127	73.1	3.48	33	44.38	1.07	1.38

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Pondered Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-84-095

Date	07/22/2019	Sampler	
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	44.40
Water Quality Meter	YSI	Gallons in Well	8.58
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	97.02
Casing Diameter (in)	2	Odor	None
Water Column in Well	52.62	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	07/22/2019	EB Sample ID	Eb-77-3q19
Sample Time	15:15	EB Time	16:00
Sample ID	MW-M-95-Q319	MS/MSD Sample ID	
Single Filter Turbidity	3	MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	07/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:49	500	2000	30.4	7.50	6151	-141.0	0.26	297	44.43	3.32	4.00
14:53	500	4000	30.4	7.54	6149	-136.6	0.28	82	44.43	3.32	4.00
14:57	500	6000	30.4	7.53	6152	-131.8	0.27	31	44.43	3.32	4.00
15:01	500	8000	30.4	7.53	6149	-128.7	0.27	30	44.43		
15:05	500	10000	30.4	7.53	6148	-124.9	0.26	30	44.43	3.32	4.00
15:09	500	12000	30.4	7.53	6147	-122.4	0.25	30	44.43	3.32	4.00

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-84-132

Date	<u>07/22/2019</u>	Sampler	<u>Jordan teramae</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u></u>
Purge Volume Units	<u>ml</u>	Depth to Water (ft bmp)	<u>44.61</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>14.66</u>
Sampling Type	<u>Low Flow – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>134.50</u>
Casing Material	<u>PVC</u>	Odor	<u>none</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u></u>
Water Column in Well	<u>89.89</u>	Total Volume to Remove	<u></u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u>EB-771-Q319</u>
Sample Date	<u>07/22/2019</u>	EB Time	<u>16:00</u>
Sample Time	<u>15:05</u>	MS/MSD Sample ID	<u></u>
Sample ID	<u>MW-M-132-0719</u>	MS/MSD Sample Time	<u></u>
Single Filter Turbidity	<u>1</u>	Double Filter Turbidity	<u></u>
		Post Sampling Turbidity	<u></u>
		Purge Date	<u>07/22/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:44	500	2000	31.7	7.18	9595	-97	1.11	210	44.90	5.34	6.54
14:48	500	4000	31.6	7.17	9796	-105	0.87	68	44.90	5.449	6.70
14:52	500	6000	31.4	7.18	9790	-110	0.68	32	44.90	5.40	6.61
14:56	500	8000	31.7	7.19	9788	-119	0.51	24	44.90	5.445	6.62
15:00	500	10000	31.6	7.22	9780	-120	0.44	23	44.90	5.47	6.62
15:04	500	12000	31.6	7.23	9777	-121	0.42	23	44.90	5.52	6.65

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-84-193

Date	07/22/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	44.55
Water Quality Meter	YSI	Gallons in Well	24.57
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	195.16
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	150.61	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	07/22/2019	EB Time	
Sample Time	14:17	MS/MSD Sample ID	
Sample ID	MW-M-193-0719	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	07/22/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:56	500	2000	30.6	6.91	13070	-73	0.98	18	44.72	7.49	8.94
14:00	500	4000	31.0	7.09	13543	-72	0.97	14	44.72	7.77	9.26
14:04	500	6000	31.1	7.15	14056	-75	1.05	10	44.72	8.10	9.66
14:08	500	8000	31.1	7.26	14280	-67	1.04	12	44.72	8.21	9.71
14:12	500	10000	31.2	7.30	14332	-65	1.09	12	44.72	8.25	9.77
14:16	500	12000	31.3	7.33	14420	-66	1.15	122	44.72	8.30	9.71

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?	X			

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

MW-87-192

Date	07/23/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	90.27
Water Quality Meter	YSI	Gallons in Well	16.85
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	193.60
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	103.33	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	
Sample Date	07/23/2019	EB Time	
Sample Time	13:07	MS/MSD Sample ID	
Sample ID	MW-R-192-0719	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	4
		Post Sampling Turbidity	
		Purge Date	07/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:46	500	2000	30.4	7.17	9040	-32	0.22	25	90.50	5.09	6.26
12:50	500	4000	30.7	7.29	9116	-45	0.26	22	90.50	5.12	6.29
12:54	500	6000	30.8	7.33	9210	-56	0.29	22	90.50	5.15	6.30
12:58	500	8000	30.8	7.34	9119	-68	0.31	20	90.50	5.16	6.31
13:02	500	10000	30.8	7.38	9255	-73	0.38	20	90.50	5.18	6.33
13:06	500	12000	30.9	7.41	9266	-79	0.34	19	90.50	5.17	6.35

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings



Site: PGE Topock
Topock, CA

MW-87-275

Date	07/23/2019	Sampler	KT
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	90.15
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	
Sample Date	07/23/2019	EB Sample ID	EB-772-3Q19
Sample Time	13:02	EB Time	14:45
Sample ID	MW-R-275-0719	MS/MSD Sample ID	
Without Filter	7	MS/MSD Sample Time	
Turbidity		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	07/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:40	500	2000	31.9	7.59	12197	-110.6	0.32	18	90.18	6.90	7.92
12:44	500	4000	32.0	7.60	12200	-113.7	0.29	11	90.20	6.91	7.93
12:48	500	6000	32.1	7.59	12204	-113.3	0.29	8	90.18	6.91	7.93
12:52	500	8000	32.1	7.61	12206	-114.0	0.28	7	90.20	6.92	7.93
12:56	500	10000	32.1	7.60	12206	-113.9	0.28	7	90.20	6.92	7.93
13:00	500	12000	32.1	7.61	12209	-113.7	0.26	7	90.20	6.92	7.93

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?			X	
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
 Topock, CA

MW-87-109

Date	07/23/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	ml	Depth to Water (ft bmp)	90.00
Water Quality Meter	YSI	Gallons in Well	3.45
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	111.18
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	21.18	Total Volume to Remove	
Did Well Dewater?	No	EB Sample ID	EB-773-0719
Sample Date	07/23/2019	EB Time	14:45
Sample Time	13:49	MS/MSD Sample ID	
Sample ID	MW-R-109-0719	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	6
		Post Sampling Turbidity	
		Purge Date	07/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:32	500	2000	31.6	7.22	2044	50	1.18	44	90.18	1.96	1.38
13:36	500	4000	31.9	7.17	2089	44	1.09	40	90.18	1.99	1.42
13:40	500	6000	31.9	7.11	2099	41	1.01	37	90.18	2.02	1.44
13:44	500	8000	32.0	7.16	2105	38	1.05	35	90.18	1.99	1.59
13:48	500	10000	32.2	7.09	2114	33	0.97	35	90.18	2.05	1.53

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		
Action Completed?		X		

Site: PGE Topock
Topock, CA

Photos and Drawings



Site: PGE Topock
Topock, CA

PT9M

Date	07/24/2019	Sampler	KT
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	3
Purge Volume Units	gal	Depth to Water (ft bmp)	99.59
Water Quality Meter	YSI	Gallons in Well	14.06
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	185.82
Casing Diameter (in)	2	Odor	none
Water Column in Well	86.23	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	42.18
Sample Date	07/24/2019	EB Sample ID	
Sample Time	12:45	EB Time	
Sample ID	PT9M-0719	MS/MSD Sample ID	
Single Filter Turbidity	2	MS/MSD Sample Time	
Without Filter	11	Double Filter Turbidity	
Turbidity		Post Sampling Turbidity	
		Purge Date	07/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:23	2	10	31.4	6.82	10402	97.5	0.75	44	99.62	5.79	6.73
12:28	2	20	31.3	6.79	10399	93.8	0.54	26	99.63	5.80	6.75
12:33	2	30	31.4	6.75	10386	84.7	0.44	12	99.62	5.79	6.74
12:40	2	40	31.4	6.75	10385	80.3	0.40	11	99.63	5.81	6.75
12:45	2	45	31.4	6.76	10385	78.8	0.39	11	99.63	5.79	6.74

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?			X	
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Photos and Drawings

Site: PGE Topock
Topock, CA

PT8D

Date	07/24/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	3
Purge Volume Units	gal	Depth to Water (ft bmp)	105.71
Water Quality Meter	YSI	Gallons in Well	16.13
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	204.58
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	98.87	Total Volume to Remove	48.39
Did Well Dewater?	No	EB Sample ID	
Sample Date	07/24/2019	EB Time	
Sample Time	08:59	MS/MSD Sample ID	
Sample ID	PT8D-Q319	MS/MSD Sample Time	
Single Filter Turbidity	5	Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	07/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cum'l Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:43	3	12	31.6	6.81	16829	126	0.55	72	106.22	9.80	11.45
08:47	3	24	31.9	6.84	16844	133	0.49	40	106.22	9.83	11.49
08:50	3	33	32.2	6.85	16890	137	0.47	33	106.22	9.89	11.41
08:54	3	45	32.5	6.90	16899	139	0.43	30	106.22	9.94	11.53
08:58	3	57	32.5	6.90	16903	144	0.39	30	106.22	9.94	11.52

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		
Action Completed?		X		

Site: PGE Topock
Topock, CA

Photos and Drawings

Site: PGE Topock
 Topock, CA

PT9S

Date	07/24/2019	Sampler	
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	3
Purge Volume Units	gal	Depth to Water (ft bmp)	102.68
Water Quality Meter	YSI	Gallons in Well	8.21
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	153.00
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	50.32	Total Volume to Remove	24.63
Did Well Dewater?	No	EB Sample ID	EB-774-Q319
Sample Date	07/24/2019	EB Time	14:00
Sample Time	13:30	MS/MSD Sample ID	
Sample ID	PT9S-0719	MS/MSD Sample Time	
Single Filter Turbidity	1	Double Filter Turbidity	
Without Filter Turbidity	4	Post Sampling Turbidity	
		Purge Date	07/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
13:15	2	6	30.0	7.19	3904	8.4	0.42	14	102.73	2.00	2.50
13:18	2	12	30.3	7.23	3922	10.2	0.36	5	102.73	2.00	2.50
13:21	2	18	30.4	7.24	3938	12.1	0.29	4	102.73	2.00	2.50
13:24	2	24	30.4	7.24	3946	13.5	0.29	4	12.73	2.00	2.50
13:27	2	30	30.4	7.24	3945	13.8	0.28	4	102.73	2.00	2.50

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?			X	
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		

Photos and Drawings

Site: PGE Topock
 Topock, CA

PT9D

Date	07/24/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	3
Purge Volume Units	gal	Depth to Water (ft bmp)	102.31
Sampling Type	Volume Purge – Grundfos RF2	Gallons in Well	17.62
Casing Material	PVC	Measured Well Depth (ft bmp)	210.31
Casing Diameter (in)	2	Odor	none
Water Column in Well	108.00	Pump Intake Depth (ft bmp)	
Did Well Dewater?	No	Total Volume to Remove	52.86
Sample Date	07/24/2019	EB Sample ID	
Sample Time	12:39	EB Time	
Sample ID	PT9D-Q319	MS/MSD Sample ID	
Single Filter Turbidity	5	MS/MSD Sample Time	
		Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	07/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
12:23	3	9	31.8	7.14	18035	160	1.28	22	102.70	10.53	12.26
12:26	3	18	32.3	7.25	18117	155	1.45	19	102.70	10.59	12.34
12:29	3	27	32.6	7.30	18203	166	1.49	17	102.70	10.55	12.35
12:32	3	36	32.8	7.31	18333	170	1.72	17	102.70	10.59	12.34
12:35	3	45	33.1	7.36	18322	174	1.80	16	102.70	10.64	12.43
12:38	3	54	32.9	7.34	18345	175	1.82	16	102.70	10.60	12.42

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

PT8S

Date	07/24/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Low Flow	Casing Volume to Remove	3
Purge Volume Units	gal	Depth to Water (ft bmp)	105.60
Water Quality Meter	YSI	Gallons in Well	7.33
Sampling Type	Volume Purge – Grundfos RF2	Measured Well Depth (ft bmp)	150.55
Casing Material	PVC	Odor	none
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
Water Column in Well	44.95	Total Volume to Remove	21.99
Did Well Dewater?	No	EB Sample ID	EB-775-Q319
Sample Date	07/24/2019	EB Time	15:00
Sample Time	14:16	MS/MSD Sample ID	
Sample ID	PT8S-Q319	MS/MSD Sample Time	
Single Filter Turbidity	4	Double Filter Turbidity	1
		Post Sampling Turbidity	
		Purge Date	07/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
14:05	2	4	32.6	7.18	4476	-148	0.10	38	105.90	2.34	3.00
14:07	2	8	32.4	7.20	4402	-166	0.12	29	105.90	2.27	2.93
14:09	2	12	32.4	7.20	4424	-180	0.14	22	105.90	2.27	2.96
14:11	2	16	32.5	7.20	4289	-195	0.15	19	105.90	2.25	2.90
14:13	2	20	32.5	7.22	4238	-204	0.14	19	105.90	2.28	2.94
14:15	2	24	32.7	7.23	4227	-208	0.16	18	105.90	2.20	2.90

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		

Site: PGE Topock
Topock, CA

Item	Yes	No	NA	Notes
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

Pt8m

Date	<u>07/24/2019</u>	Sampler	<u>KT</u>
Weather Conditions	<u>Sunny</u>	Color	<u>Clear</u>
Purge Method	<u>Low Flow</u>	Casing Volume to Remove	<u>3</u>
Purge Volume Units	<u>gal</u>	Depth to Water (ft bmp)	<u>105.61</u>
Water Quality Meter	<u>YSI</u>	Gallons in Well	<u>12.58</u>
Sampling Type	<u>Volume Purge – Grundfos RF2</u>	Measured Well Depth (ft bmp)	<u>182.75</u>
Casing Material	<u>PVC</u>	Odor	<u>none</u>
Casing Diameter (in)	<u>2</u>	Pump Intake Depth (ft bmp)	<u> </u>
Water Column in Well	<u>77.14</u>	Total Volume to Remove	<u>37.74</u>
Did Well Dewater?	<u>No</u>	EB Sample ID	<u> </u>
Sample Date	<u>07/24/2019</u>	EB Time	<u> </u>
Sample Time	<u>08:48</u>	MS/MSD Sample ID	<u> </u>
Sample ID	<u>PT8M-0719</u>	MS/MSD Sample Time	<u> </u>
Single Filter Turbidity	<u>4</u>	Double Filter Turbidity	<u> </u>
Without Filter Turbidity	<u>49</u>	Post Sampling Turbidity	<u> </u>
		Purge Date	<u>07/24/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
08:37	3	12	30.7	6.78	9119	-101.3	0.52	78	105.65	5.05	5.92
08:41	3	24	30.8	6.77	9126	-99.7	0.49	50	105.65	5.05	5.92
08:45	3	36	30.8	6.77	9115	-100.2	0.50	49	105.65	5.05	5.93
08:47	3	42	30.7	6.76	9128	-99.3	0.49	49	105.65	5.05	5.92

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Pondered Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?			X	
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			

Photos and Drawings

Site: PGE Topock
 Topock, CA

MW-R-275-0719

Date	07/23/2019	Sampler	KT
Weather Conditions	Sunny	Color	
Purge Method	Low Flow	Casing Volume to Remove	
Purge Volume Units	MI	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Low Flow – Grundfos RF2	Measured Well Depth (ft bmp)	
Casing Material	PVC	Odor	
Casing Diameter (in)	2	Pump Intake Depth (ft bmp)	
		Total Volume to Remove	
		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	07/23/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
15:05											

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Ponded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?			X	
Concrete Pad Intact?			X	
Erosion Around Wellhead?			X	
Steel Casing Intact?		X		
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		

Photos and Drawings

Site: PGE Topock
Topock, CA

C-R27-D

Date	<u>07/22/2019</u>	Sampler	<u></u>
		Color	<u></u>
		Casing Volume to Remove	<u></u>
		Depth to Water (ft bmp)	<u></u>
		Gallons in Well	<u></u>
		Measured Well Depth (ft bmp)	<u></u>
		Odor	<u></u>
		Pump Intake Depth (ft bmp)	<u></u>
		Total Volume to Remove	<u></u>
		EB Sample ID	<u></u>
		EB Time	<u></u>
		MS/MSD Sample ID	<u></u>
		MS/MSD Sample Time	<u></u>
		Double Filter Turbidity	<u></u>
		Post Sampling Turbidity	<u></u>
		Purge Date	<u>07/22/2019</u>

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				

Photos and Drawings

Site: PGE Topock
 Topock, CA

PE-01

Date	07/24/2019	Sampler	Jordan teramae
Weather Conditions	Sunny	Color	Clear
Purge Method	Extraction Port	Casing Volume to Remove	
Purge Volume Units	Na	Depth to Water (ft bmp)	
Water Quality Meter	YSI	Gallons in Well	
Sampling Type	Extraction port	Measured Well Depth (ft bmp)	
Did Well Dewater?	No	Odor	none
Sample Date	07/24/2019	Pump Intake Depth (ft bmp)	
Sample Time	07:30	Total Volume to Remove	
Sample ID	PE-01-0719	EB Sample ID	
Single Filter Turbidity	1	EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	07/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:30			34.8	7.16	3695	128	2.90	2		1.91	2.50

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?	X			
Standing or Ponded Water?		X		
Lock in Place?	X			
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?	X			
Traffic Poles Intact?	X			
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?	X			
PVC Cap Present?	X			
Standing Water in Annulus?		X		
Well Casing Intact?	X			
Photo Taken?		X		
Action Completed?		X		

Photos and Drawings

Site: PGE Topock
 Topock, CA

TW-03D

Date	07/24/2019	Sampler	KT
Weather Conditions	Sunny	Color	Clear
Sampling Type	Extraction port	Casing Volume to Remove	
Did Well Dewater?	No	Depth to Water (ft bmp)	
Sample Date	07/24/2019	Gallons in Well	
Sample Time	07:15	Measured Well Depth (ft bmp)	
Sample ID	TW-03D-0719	Odor	none
Single Filter Turbidity	1	Pump Intake Depth (ft bmp)	
Without Filter	3	Total Volume to Remove	
Turbidity		EB Sample ID	
		EB Time	
		MS/MSD Sample ID	
		MS/MSD Sample Time	
		Double Filter Turbidity	
		Post Sampling Turbidity	
		Purge Date	07/24/2019

Field Parameters

Time	Flow Rate (ml/min or gal/ min)	Cuml Vol Purged	Temp (C)	pH	Conductivit (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Salinity (ppt)	TDS (g/L)
07:15			27.5	7.70	7972	70.4	2.26	3		4.40	5.18

Well Integrity Checklist

Item	Yes	No	NA	Notes
Date				
Time				
Survey Mark Present?		X		
Standing or Pounded Water?		X		
Lock in Place?		X		
Evidence of well subsidence?		X		
Well Labeled on Casing or Pad?		X		
Traffic Poles Intact?		X		
Concrete Pad Intact?	X			
Erosion Around Wellhead?		X		
Steel Casing Intact?			X	
PVC Cap Present?			X	
Standing Water in Annulus?			X	
Well Casing Intact?			X	
Photo Taken?			X	

Photos and Drawings