

GW – 028

2015 AGWMR

PART 3 OF 25

03 / 2016

Monitoring Well Purging and Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
										DRO	HCL	8015M
										GRO	HCL	8015M
										VOC	HCL	8260
						Total Metals (As,Ba,Cr,Fe,Pb,Mn,Se) and/or Cations (Ca,K,Na)					HNO3	6010/6020
								Anions (Chloride,Fluoride,Sulfate)			Neat	300
										Nitrate-Nitrite	H2SO4	per ARCADIS
										TDS	Neat	2540C
										Total Metals (Hg,Ni,Va)	HNO3	6010/6020 and/or 7470
										Cyanide	NaOH	SM4500
										If <0.03 feet of PSH present, remove PSH and sample groundwater		

Monitoring Well Purging and Sampling Record

Navajo Refining Company

Artesia Refinery

Artesia, New Mexico

Well Inspection Information

Well: MW-55

Event: Fall 2015

Area of Concern: NCL

Hydrologic Monitoring

for ARCADIS

Houston, Texas

(2-in; stickup)

Initials: CJH

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake (Ft-TOC)	Well Inspection					Comments
							Cap	Casing	Well Secured	Label	Other	
10-19-15	1555	NA	9.36	0.0	26.58	21.7	yes	yes	yes	yes		Weather: Cloudy, 70's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Water Color / Clarity	
10-19-15	1600	9.39	0.5	7.12	22.1	3240	3.4	-106.9	5.1	Colorless, clear	Low-flow groundwater sample:
	1602	9.39	1.0	7.05	22.5	3350	2.8	-89.1	4.8		A) peristaltic pump w/ ded tubing
	1605	9.39	1.5	7.00	22.2	3360	2.6	-81.8	4.6		B) ded bladder pump
	1607	9.39	2.0	6.98	22.0	3370	2.5	-77.3	4.4		C) non-ded bladder pump; or
	1610	9.39	2.5	6.96	21.8	3370	2.5	-74.1	4.1		Standard groundwater sample:
	1612	9.39	3.0	6.97	21.7	3380	2.4	-72.6	3.8		D) bailer due to limited column; or
	1615	9.39	3.5	6.98	21.6	3380	2.4	-70.8	3.6		E) recovery well cycling sample
	1617	9.39	4.0	6.99	21.5	3380	2.4	-69.7	3.1		F) irrigation well grab sample

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
10-19-15	1620	MW-55	9.39	6.99	21.5	3380	2.4	-69.7	3.1	DRO	HCL	8015M
										GRO	HCL	8015M
										VOC	HCL	8260
						Total Metals (As,Ba,Cr,Fe,Pb,Mn,Se) and/or Cations (Ca,K,Na)				HNO3		6010/6020
						Anions (Chloride,Fluoride,Sulfate)				Neat		300
										Nitrate-Nitrite	H2SO4	per ARCADIS
										TDS	Neat	2540C
						Total Metals (Hg,Ni,Va)				HNO3		6010/6020 and/or 7470 ✓
										Cyanide	NaOH	SM4500 ✓

If <0.03 feet of PSH present, remove PSH and sample groundwater

[illegible]

Initials: CJH

[illegible]

If <0.03 feet of PSH present, remove PSH and sample groundwater

Monitoring Well Purging and Sampling Record

Navajo Refining Company

Artesia Refinery

Artesia, New Mexico

Well Inspection Information

Well: MW-54B

Event: Fall 2015

Area of Concern: NCL

(Gauge Only)

(2-in, stickup)

Hydrologic Monitoring

for ARCADIS

Houston, Texas

Initials: RJH

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake (Ft-TOC)	Well Inspection					Comments
							Cap	Casing	Well Secured	Label	Other	
10-19-15	945	NA	9.77	0.0	46.80	41.8	yes	yes	*yes	yes		Weather:

Well Purging Record

*Lock has been replaced since last event.

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Water Color / Clarity	
			0.5								Low-flow groundwater sample:
			1.0								(A) peristaltic pump w/ ded tubing
			1.5								B) ded bladder pump
			2.0								C) non-ded bladder pump; or
			2.5								Standard groundwater sample:
			3.0								D) bailer due to limited column; or
			3.5								E) recovery well cycling sample
			4.0								F) irrigation well grab sample

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
												Lab: ESC Lab Sciences, Mt. Juliet, TN
										DRO	HCL	8015M
										GRO	HCL	8015M
										VOC	HCL	8260
										Total Metals (As,Ba,Cr,Fe,Pb,Mn,Se) and/or Cations (Ca,K,Na)		HNO3 6010/6020
										Anions (Chloride,Fluoride,Sulfate)		Neat 300
										Nitrate-Nitrite	H2SO4	per ARCADIS
										TDS	Neat	2540C
										Total Metals (Hg,Ni,Va)		HNO3 6010/6020 and/or 7470
										Cyanide	NaOH	SM4500

If <0.03 feet of PSH present, remove PSH and sample groundwater

Monitoring Well Purging and Sampling Record

Navajo Refining Company
Artesia Refinery
Artesia, New Mexico
Well Inspection Information

Well: NCL-49
Event: Fall 2015
Area of Concern: NCL

*New prot. casing installed since last event. Needs lock, well not secure.
As shown in pictures, the prot. casing lid is not secured (held solid) to the body of the prot. casing.
*With the current installation of the prot. casing, you would need two locks to secure the lid.
(2-in ; stickup)

+ DUP-NCL-01
(for same analyses)

Hydrologic Monitoring
for ARCADIS
Houston, Texas

Initials: CJH

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake (Ft-TOC)	Well Inspection					Comments
							Cap	Casing	Well Secured	Label	Other	
10-19-15	800	NA	13.79	0.0	32.18	27.2	yes	yes	*Tissue	yes		Partly Cloudy, 50's

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Water Color / Clarity	Comments
10-19-15	805	13.82	0.5	7.71	18.8	2840	2.8	57.4	6.3	Clear	Low-flow groundwater sample:
	807	13.82	1.0	7.60	19.2	2870	2.5	54.4	6.0		(A) peristaltic pump w/ ded tubing
	810	13.82	1.5	7.51	19.4	2910	2.4	54.3	5.4		B) ded bladder pump
	812	13.82	2.0	7.45	19.5	2940	2.3	54.6	5.1		C) non-ded bladder pump; or
	815	13.82	2.5	7.42	19.6	2950	2.3	55.0	4.7		Standard groundwater sample:
	817	13.82	3.0	7.41	19.6	2950	2.2	55.2	4.9		D) bailer due to limited column; or
	820	13.82	3.5	7.40	19.6	2960	2.2	55.4	5.0		E) recovery well cycling sample
	822	13.82	4.0	7.39	19.6	2960	2.2	55.7	4.8		F) irrigation well grab sample

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
10-19-15	825	NCL-49	13.82	7.39	19.6	2960	2.2	55.7	4.8	DRO	HCL	8015M
										GRO	HCL	8015M
										VOC	HCL	8260
										Total Metals (As,Ba,Cr,Fe,Pb,Mn,Se) and/or Cations (Ca,K,Na)		HNO3 6010/6020
										Anions (Chloride,Fluoride,Sulfate)		Neat 300
										Nitrate-Nitrite	H2SO4	per ARCADIS
										TDS	Neat	2540C
										Total Metals (Hg,Ni,Va)		HNO3 6010/6020 and/or 7470
										Cyanide	NaOH	SM4500
✓	900	DUP-NCL-01	13.82	7.39	19.6	2960	2.2	55.7	4.8	Same as above	Same	Same

If <0.03 feet of PSH present, remove PSH and sample groundwater

20 ft S. of 70 mile marker off 285 N. bound

Monitoring Well Purging and Sampling Record

Navajo Refining Company

Artesia Refinery

Artesia, New Mexico

Well Inspection Information

Well: MW-53

Event: Fall 2015

Area of Concern: NCL

(Gauge only)

(2-in; at-grade)

Hydrologic Monitoring

for ARCADIS

Houston, Texas

Initials: CJH

Date	Time	Depth to LNAPL (Ft-TOC)	Depth to Water (Ft-TOC)	LNAPL Thickness (Ft)	Well Total Depth (Ft-TOC)	Sample Intake (Ft-TOC)	Well Inspection					Comments
							Cap	Casing	Well Secured	Label	Other	
10-19-15	750	NA	8.70	0.0	23.60	19.6	yes	yes	yes	yes		Weather: clear, 60s

Well Purging Record

Date	Time	Depth to Water (Ft-TOC)	Cum. Vol. Purged (L)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Water Color / Clarity	Comments
			0.5								Low-flow groundwater sample:
			1.0								A) peristaltic pump w/ ded tubing
			1.5								B) ded bladder pump
			2.0								C) non-ded bladder pump; or
			2.5								Standard groundwater sample:
			3.0								D) bailer due to limited column; or
			3.5								E) recovery well cycling sample
			4.0								F) irrigation well grab sample

Well Sampling Record

Date	Time	Sample I.D.	Depth to Water (Ft-TOC)	pH (std units)	T (C)	SC (umho/cm)	Dissolved Oxygen (mg/L)	Oxidation-Reduction-Potential (mV)	Turbidity (NTU)	Parameter	Preserv	Comments
												Lab: ESC Lab Sciences, Mt. Juliet, TN
										DRO	HCL	8015M
										~~GRO~~	~~HCL~~	~~8015M~~
										VOC	HCL	8260
										Total Metals (As,Ba,Cr,Fe,Pb,Mn,Se) and/or Cations (Ca,K,Na)		HNO3 6010/6020
										Anions (Chloride,Fluoride,Sulfate)		Neat 300
										Nitrate-Nitrite	H2SO4	per ARCADIS
										TDS	Neat	2540C
										~~Total Metals (Hg,Ni,Va)~~	~~HNO3~~	~~6010/6020 and/or 7470~~
										~~Cyanide~~	~~NaOH~~	~~SM4500~~

If <0.03 feet of PSH present, remove PSH and sample groundwater

Instrument Calibration Log

Navajo Refining Company
Artesia Refinery
Artesia, New Mexico

Hydrologic Monitoring
for ARCADIS
Houston, Texas

[illegible]

A.3 Well Logs



Date Start/Finish: 8/10/2015 - 8/11/2015 Drilling Company: National EWP Driller's Name: Matt Cain Drilling Method: Hollow Stem Sampling Method: Split Spoon Rig Type: CME 85	Northing: 672876.52 Easting: 523041.05 Casing Elevation: 3363.24 Borehole Depth: 25'bgs Surface Elevation: 3363.15 Descriptions By:	Well/Boring ID: MW-138 Client: Navajo Refining Company Location: Navajo Refinery Artesia, New Mexico

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								Flush mount completion
			HA					Hydrovac	
5	-5	1	SS	5	68 72.9			CLAY (0,0,0,100), brown, dry, low plasticity, trace caliche nodules, no staining, no odor SAND (0,100,0,0), brown, fine grained, well sorted, dry, loose, no staining SILT (0,0,100,0), white, dry, consolidated, odor present	2" OD PVC Casing PVC Riser (0'-10' bgs) Bentonite Seal (2'-8' bgs)
10	-10	2	SS	5	231 258			CLAYLEY SILT (0,0,60,40), dry, grey, caliche nodules, subrounded, no plasticity, staining and odor present SILTY CLAY (20,0,30,50), with angular gravel, poorly sorted, wet, light grey, soft, high plasticity, staining present	
15	-15	3	SS	5	330			CLAY (0,0,0,100), grey, wet, high plasticity, medium stiffness, staining present light brown, no staining	20/40 Silica Sand Pack (8'-25' bgs) 2" OD 0.010" Slot Screen (10'-25' bgs)
20	-20	4	SS	5	242 158			CLAY (0,0,0,100), light grey to white, dry, stiff, no plasticity, slight staining	
25	-25								

	Remarks: bgs = below ground surface; amsl = above mean sea level; HA = Hand Auger; ppm = parts per million; NA = not applicable/available; SS = split spoon, ags = above ground surface Lithology is described as percentage of (Gravel, Sand, Silt, Clay)

APPENDIX B

Groundwater Laboratory Reports and Tabulated Data 2013-2015
Tables



Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
Crossgradient	KWB-13	Apr-13				< 0.052
Crossgradient	KWB-13	Apr-14				< 0.020
Crossgradient	KWB-13	Apr-15				0.0630 J
Crossgradient	MW-17	Apr-14				0.038 J
Crossgradient	NP-5	Apr-13				< 0.053
Crossgradient	NP-5	Apr-15				0.0387 J
Crossgradient	RA-3156	Apr-13				
Crossgradient	RA-3156	Nov-13				
Crossgradient	RA-3156	Apr-14				
Crossgradient	MW-136	Oct-15		< 0.0314		0.0721 J
EP	MW-1R	Apr-13	FD			< 0.052
EP	MW-1R	Apr-13				< 0.052
EP	MW-1R	Apr-14				< 0.020
EP	MW-1R	Apr-15				0.12
EP	MW-2A	Mar-13		< 0.0500		0.15
EP	MW-2A	Nov-13		< 0.0500		< 0.051
EP	MW-2A	Apr-14		0.129		< 0.020
EP	MW-2A	Nov-14		< 0.031		0.25
EP	MW-2A	Apr-15		< 0.031		0.3
EP	MW-2A	Oct-15		0.0363 J		0.26
EP	MW-3	Mar-13		0.479		4.5
EP	MW-3	Nov-13		0.229		2.3
EP	MW-3	Apr-14		0.0493 J		1
EP	MW-3	Nov-14		0.54		9.1
EP	MW-3	Nov-14	FD	0.52		9.2
EP	MW-3	Apr-15	FD	0.151 J		8.6
EP	MW-3	Apr-15		0.134		8.5
EP	MW-3	Oct-15	FD	0.839		10.2
EP	MW-3	Oct-15		3.59		11.2
EP	MW-4A	Apr-13		0.514		3.2
EP	MW-4A	Nov-13		0.346		1.8
EP	MW-4A	Apr-14		0.342 H		3.4
EP	MW-4A	Nov-14		0.35		3.8
EP	MW-4A	Apr-15		0.13		5.6
EP	MW-4A	Oct-15		3.44		9.81
EP	MW-4B	Apr-13		0.102		0.36
EP	MW-4B	Apr-15		0.12		1.3
EP	MW-5A	Apr-13		5.3		5.8
EP	MW-5A	Nov-13		3.59		5.3
EP	MW-5A	Apr-14		4.48 H		6.1
EP	MW-5A	Nov-14		0.9		2
EP	MW-5A	Apr-15		1.19		4.3
EP	MW-5A	Oct-15		1.72		2.31
EP	MW-5B	Apr-13		1.78		7.1
EP	MW-5B	Apr-15		1.14		11

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
EP	MW-5C	Apr-13		0.0652	0.22	
EP	MW-5C	Apr-15		< 0.0310	0.58	
EP	MW-6A	Mar-13		0.19	3	
EP	MW-6A	Apr-14		0.238	1.5	
EP	MW-6A	Apr-15		< 0.031	4.5	
EP	MW-6B	Mar-13	FD	< 0.0500	< 0.054	
EP	MW-6B	Mar-13		< 0.0500	< 0.053	
EP	MW-6B	Apr-15		< 0.031	0.39	
EP	MW-7A	Apr-13		0.468	1.1	
EP	MW-7A	Nov-13		0.576	0.3	
EP	MW-7A	Apr-14		0.463 H	0.93	
EP	MW-7A	Nov-14	FD	0.37	1.1	
EP	MW-7A	Nov-14		0.36	1.1	
EP	MW-7A	Apr-15	FD	0.19 J	1.2	
EP	MW-7A	Apr-15		0.201	1.2	
EP	MW-7A	Oct-15	FD	0.417	1.13	
EP	MW-7A	Oct-15		0.347	1.06	
EP	MW-7B	Apr-13		< 0.0500	< 0.053	
EP	MW-7B	Apr-15		< 0.0310	0.12	
EP	MW-10	Apr-13		1.21	1.9	
EP	MW-10	Nov-13		1.07	0.97	
EP	MW-10	Apr-14		1.08	2	
EP	MW-10	Nov-14		0.91	2.2	
EP	MW-10	Apr-15		0.41 J	2.6	
EP	MW-10	Oct-15		0.73	1.79	
EP	MW-11A	Mar-13		< 0.0500	< 0.052	
EP	MW-11A	Apr-14		< 0.0100	< 0.021	
EP	MW-11A	Nov-14				
EP	MW-11A	Apr-15		< 0.031	0.056 J	
EP	MW-11B	Mar-13		< 0.0500	< 0.052	
EP	MW-11B	Apr-15		< 0.031	< 0.025	
EP	MW-12	Apr-14			< 0.020	
EP	MW-13	Apr-14			< 0.020	
EP	MW-15	Mar-13		< 0.0500	0.2	
EP	MW-15	Apr-14		0.149	0.57	
EP	MW-15	Apr-15		< 0.16	1	
EP	MW-18A	Apr-13			0.21	
EP	MW-18A	Nov-13	FD		< 0.052	
EP	MW-18A	Nov-13			< 0.051	
EP	MW-18A	Apr-14			< 0.020	
EP	MW-18A	Nov-14			0.074 J	
EP	MW-18A	Apr-15			0.0770 J	
EP	MW-18A	Oct-15			0.215	
EP	MW-18B	Apr-13		0.0995	< 0.052	
EP	MW-18B	Apr-15		< 0.0310	0.28	

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
EP	MW-22A	Apr-13		5.5	6.1	
EP	MW-22A	Nov-13		4.44	4	
EP	MW-22A	Apr-14		3.46	5.8	
EP	MW-22A	Nov-14	FD	4.3	5.3	
EP	MW-22A	Nov-14		3.3	5.6	
EP	MW-22A	Apr-15	FD	3.8	6.4	
EP	MW-22A	Apr-15		2.57	5.8	
EP	MW-22A	Oct-15	FD	3.31	4.46	
EP	MW-22A	Oct-15		3.63	4.56	
EP	MW-22B	Apr-13		1.99	3	
EP	MW-22B	Apr-15		2.34	5.6	
EP	MW-70	Apr-13		1.61	0.71	
EP	MW-70	Nov-13		1.43	0.22	
EP	MW-70	Apr-14		1.42	0.53	
EP	MW-70	Nov-14		1.2	0.72	
EP	MW-70	Apr-15		1.27 J	0.79	
EP	MW-70	Oct-15		1.37	0.599	
EP	MW-72	Mar-13		0.139	0.18	
EP	MW-72	Nov-13		0.0932	< 0.051	
EP	MW-72	Apr-14		0.092	0.76	
EP	MW-72	Apr-15		< 0.0310	1.3	
EP	MW-73	Mar-13		1.12	1.3	
EP	MW-73	Oct-13		1.22	3.1	
EP	MW-73	Apr-14		0.985	4.8	
EP	MW-73	Apr-15		0.378	4	
EP	MW-74	Mar-13		1.52	7.2	
EP	MW-74	Oct-13		0.459	32	
EP	MW-74	Apr-14		1.09	28	
EP	MW-74	Nov-14		0.68	30	
EP	MW-74	Apr-15		0.0910 J	38	
EP	MW-74	Oct-15		3.23	18.9	
EP	MW-75	Mar-13		2.05	5.5	
EP	MW-75	Oct-13		2.05	4.9	
EP	MW-75	Apr-14		1.66	9	
EP	MW-75	Nov-14		2.5	13	
EP	MW-75	Apr-15		2.31	22	
EP	MW-75	Oct-15		10.9	19.6	
EP	MW-76	Mar-13		1.23	3.4	
EP	MW-76	Oct-13		0.865	6.2	
EP	MW-76	Apr-14		0.856	4.6	
EP	MW-76	Nov-14		1.1	23	
EP	MW-76	Apr-15		0.356 J	21	
EP	MW-76	Oct-15		0.773	25.2	
EP	MW-77	Mar-13		1.38	11	
EP	MW-77	Oct-13	FD	1.21	17	

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
EP	MW-77	Oct-13		1.17	17	
EP	MW-77	Apr-14		1.13	39	
EP	MW-77	Nov-14		1.3	91	
EP	MW-77	Apr-15		0.893	140	
EP	MW-77	Oct-15	1.98	2.68	173	
EP	MW-78	Mar-13		0.373	6.4	
EP	MW-78	Apr-14		0.333 J	29	
EP	MW-78	Apr-15		0.279	67	
EP	MW-79	Mar-13		0.063	0.23	
EP	MW-79	Oct-13		0.0616	0.18	
EP	MW-79	Apr-14		0.0756	1.3	
EP	MW-79	Nov-14		0.055 J	0.59	
EP	MW-79	Apr-15		< 0.0310	0.56	
EP	MW-79	Oct-15		0.0383 J	0.575	
EP	MW-80	Mar-13		< 0.0500	0.054	
EP	MW-80	Apr-14		0.0489 J	0.2	
EP	MW-80	Apr-15		< 0.0310	0.75	
EP	MW-81	Mar-13	FD	< 0.0500	0.15	
EP	MW-81	Mar-13		< 0.0500	0.14	
EP	MW-81	Apr-14		0.0318 J	3.6	
EP	MW-81	Apr-15		< 0.0310	8	
EP	MW-82	Mar-13		1.3	2.7	
EP	MW-82	Apr-14	FD	0.649	4.2	
EP	MW-82	Apr-14		0.611	4.2	
EP	MW-82	Apr-15		0.361	14	
EP	MW-83	Mar-13		1.32	5.4	
EP	MW-83	Oct-13		0.701	25	
EP	MW-83	Apr-14		0.489 J	20	
EP	MW-83	Nov-14		0.43	22	
EP	MW-83	Apr-15		0.278	31	
EP	MW-83	Oct-15		6.26	40.3	
EP	MW-84	Mar-13		0.91	8.8	
EP	MW-84	Oct-13		0.783	26	
EP	MW-84	Apr-14		0.607	27	
EP	MW-84	Nov-14		0.61	75	
EP	MW-84	Apr-15		0.613	62	
EP	MW-84	Oct-15		1.96	82.1	
EP	MW-87	Apr-13		< 0.0500	0.25	
EP	MW-87	Nov-13		0.056	< 0.051	
EP	MW-87	Apr-14		< 0.0100	0.23	
EP	MW-87	Nov-14		< 0.031	0.12	
EP	MW-87	Apr-15		< 0.0310	0.39	
EP	MW-87	Oct-15		0.0451 J	0.251	
EP	MW-88	Apr-13		0.0648	0.37	
EP	MW-88	Nov-13		0.0653	0.1	

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
EP	MW-88	Apr-14		0.0497 J		0.37
EP	MW-88	Nov-14		0.048 J		0.57
EP	MW-88	Apr-15		< 0.0310		0.61
EP	MW-88	Oct-15		< 0.0314		0.455
EP	MW-120	Oct-13		0.0586		1.1
EP	MW-120	Apr-14		0.0734		0.23
EP	MW-120	Nov-14		0.057 J		2.4
EP	MW-120	Apr-15		< 0.031		3.1
EP	MW-120	Oct-15		0.181		1.3
EP	MW-121	Oct-13		< 0.0500		0.25
EP	MW-121	Apr-14		< 0.0100		0.092
EP	MW-121	Nov-14		< 0.031		0.51
EP	MW-121	Apr-15		< 0.031		0.56
EP	MW-121	Oct-15		< 0.0314		0.46
EP	MW-122	Oct-13		< 0.0500		0.16
EP	MW-122	Apr-14		0.0289 J		< 0.021
EP	MW-122	Nov-14		< 0.031		5.5
EP	MW-122	Apr-15		< 0.031		4.8
EP	MW-122	Oct-15		0.0340 J		6.06
EP	MW-123	Nov-13	FD	2		1.8
EP	MW-123	Nov-13		1.92		1.6
EP	MW-123	Apr-14		< 0.0100		2.8
EP	MW-123	Nov-14		1.6		2.7
EP	MW-123	Apr-15		1.9		3.6
EP	MW-123	Oct-15	1.45	1.24		2.13
EP	MW-124	Nov-13		< 0.0500		< 0.051
EP	MW-124	Apr-14		< 0.0100		< 0.021
EP	MW-124	Nov-14		< 0.031		< 0.022
EP	MW-124	Apr-15		< 0.0310 J		0.0550 J
EP	MW-124	Oct-15		< 0.0314		0.0298 J
EP	OCD-1R	Nov-13		< 0.0500		< 0.052
EP	OCD-1R	Apr-14		< 0.0100		< 0.021
EP	OCD-1R	Nov-14		< 0.031		0.23
EP	OCD-1R	Apr-15		< 0.031		0.24
EP	OCD-2A	Mar-13		< 0.0500		< 0.052
EP	OCD-2A	Nov-13		< 0.0500		< 0.052
EP	OCD-2A	Apr-14		< 0.0100		< 0.020
EP	OCD-2A	Nov-14		< 0.031		0.093 J
EP	OCD-2A	Apr-15		< 0.031		0.1
EP	OCD-2A	Oct-15		< 0.0314		0.0455 J
EP	OCD-3	Mar-13		< 0.0500		< 0.051
EP	OCD-3	Nov-13		< 0.0500		< 0.052
EP	OCD-3	Apr-14		< 0.0100		< 0.021
EP	OCD-3	Nov-14		< 0.031		0.07 J
EP	OCD-3	Apr-15		< 0.031		0.048 J

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
EP	OCD-3	Oct-15			< 0.0314	0.0251 J
EP	OCD-4	Mar-13			< 0.0500	< 0.052
EP	OCD-4	Nov-13			< 0.0500	< 0.052
EP	OCD-4	Apr-14			< 0.0100	< 0.021
EP	OCD-4	Nov-14			< 0.031	0.065 J
EP	OCD-4	Apr-15			< 0.031	0.046 J
EP	OCD-4	Oct-15			< 0.0314	< 0.0247
EP	OCD-5	Mar-13			0.0703	< 0.053
EP	OCD-5	Nov-13			0.204	0.084
EP	OCD-5	Apr-14	FD		0.14	< 0.021
EP	OCD-5	Apr-14			0.127	< 0.021
EP	OCD-5	Nov-14			0.26	0.54
EP	OCD-5	Apr-15			< 0.031	0.22
EP	OCD-5	Oct-15			0.0402 J	0.0951 J
EP	OCD-6	Mar-13			0.436	1.9
EP	OCD-6	Nov-13			0.249	0.45
EP	OCD-6	Apr-14			0.297	0.82
EP	OCD-6	Nov-14			< 0.031	0.54
EP	OCD-6	Apr-15			0.0819 J	1
EP	OCD-6	Oct-15			1.88	1.09
EP	OCD-7AR	Mar-13			1.63	5
EP	OCD-7AR	Nov-13			1.21	4.1
EP	OCD-7AR	Apr-14	FD		0.883	4.1
EP	OCD-7AR	Apr-14			0.889	4
EP	OCD-7AR	Nov-14			0.76	3.5
EP	OCD-7AR	Apr-15			0.71	4.3
EP	OCD-7AR	Oct-15			1.2	4.12
EP	OCD-7B	Mar-13			< 0.0500	< 0.052
EP	OCD-7B	Apr-15			< 0.0310	0.12
EP	OCD-8A	Apr-13	FD		1.14	3.1
EP	OCD-8A	Apr-13			1.16	3.8
EP	OCD-8A	Nov-13			0.436	0.58
EP	OCD-8A	Apr-14	FD		0.764	2.8
EP	OCD-8A	Apr-14			0.728	2.9
EP	OCD-8A	Nov-14			0.66	1.8
EP	OCD-8A	Apr-15			0.491	2.6
EP	OCD-8A	Oct-15			0.648	2.74
EP	OCD-8B	Apr-13			0.298	0.89
EP	OCD-8B	Apr-15			< 0.0310	0.84
Field E of Refinery	KWB-1A	Apr-13				< 0.053
Field E of Refinery	KWB-1A	Oct-13			< 0.0500	< 0.052
Field E of Refinery	KWB-1A	Apr-14				< 0.021
Field E of Refinery	KWB-1A	Nov-14				0.15 J
Field E of Refinery	KWB-1A	Apr-15				0.0932 J
Field E of Refinery	KWB-1A	Oct-15				0.114

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
Field E of Refinery	KWB-1C	Apr-13				< 0.044
Field E of Refinery	KWB-1C	Apr-15				0.113
Field E of Refinery	KWB-7	Apr-13		< 0.0500		0.62
Field E of Refinery	KWB-7	Nov-14				1
Field E of Refinery	KWB-7	Apr-15				1.43
Field E of Refinery	KWB-7	Oct-15				0.721
Field E of Refinery	KWB-10R	Nov-14				12
Field E of Refinery	KWB-10R	Apr-15				9.16
Field E of Refinery	KWB-10R	Oct-15				4.65
Field E of Refinery	KWB-11A	Apr-13		< 0.0500		< 0.051
Field E of Refinery	KWB-11A	Nov-14	FD	0.29		0.86
Field E of Refinery	KWB-11A	Nov-14		< 0.031		0.71
Field E of Refinery	KWB-11A	Apr-15		0.339		1.87
Field E of Refinery	KWB-11A	Oct-15		0.217		0.646
Field E of Refinery	KWB-11B	Apr-13		< 0.0500		< 0.052
Field E of Refinery	KWB-11B	Apr-14		2.74		3.2
Field E of Refinery	KWB-11B	Nov-14		< 0.031		< 0.022
Field E of Refinery	KWB-11B	Apr-15		< 0.0310		0.0365 J
Field E of Refinery	KWB-11B	Oct-15		< 0.0314		< 0.0247
Field E of Refinery	KWB-12A	Oct-13		< 0.0500		< 0.052
Field E of Refinery	KWB-12A	Nov-14		< 0.031		< 0.022
Field E of Refinery	KWB-12A	Nov-14	FD	< 0.031		0.074 J
Field E of Refinery	KWB-12A	Apr-15	FD	< 0.0310		0.305
Field E of Refinery	KWB-12A	Apr-15		< 0.0310		0.0310 J
Field E of Refinery	KWB-12A	Oct-15		< 0.0314		< 0.0247
Field E of Refinery	KWB-12B	Apr-13	FD	< 0.0500		< 0.052
Field E of Refinery	KWB-12B	Apr-13		< 0.0500		< 0.052
Field E of Refinery	KWB-12B	Oct-13		< 0.0500		< 0.052
Field E of Refinery	KWB-12B	Apr-14	FD	< 0.0100		< 0.021
Field E of Refinery	KWB-12B	Apr-14		< 0.0100		< 0.021
Field E of Refinery	KWB-12B	Nov-14		< 0.031		< 0.022
Field E of Refinery	KWB-12B	Apr-15		< 0.0310		0.0740 J
Field E of Refinery	KWB-12B	Oct-15	FD	< 0.0314		0.0372 J
Field E of Refinery	KWB-12B	Oct-15		< 0.0314		< 0.0247
Field E of Refinery	KWB-P4	Apr-13				< 0.052
Field E of Refinery	KWB-P4	Apr-15				0.0820 J
Field E of Refinery	MW-57	Apr-13		< 0.0500		0.32
Field E of Refinery	MW-57	Oct-13		0.357		0.67
Field E of Refinery	MW-57	Apr-14		0.35		0.78
Field E of Refinery	MW-57	Nov-14		0.047 J		0.26 J
Field E of Refinery	MW-57	Apr-15		< 0.0310		0.2
Field E of Refinery	MW-57	Oct-15		< 0.0314		0.242
Field E of Refinery	MW-58	Oct-13		6.91		1.7
Field E of Refinery	MW-58	Nov-14				7.8
Field E of Refinery	MW-58	Apr-15				9

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
Field E of Refinery	MW-58	Oct-15				5.11
Field E of Refinery	MW-111	Apr-13		2.49		1.7
Field E of Refinery	MW-111	Oct-13		2.26		1.4
Field E of Refinery	MW-111	Apr-14		2.36		1.3
Field E of Refinery	MW-111	Nov-14		1.7		2
Field E of Refinery	MW-111	Apr-15		1.37		1.9
Field E of Refinery	MW-111	Oct-15		0.674		2.1
Field E of Refinery	MW-112	Nov-14		28		2.2
Field E of Refinery	MW-113	Apr-13		< 0.0500		0.2
Field E of Refinery	MW-113	Oct-13		3.05		< 0.051
Field E of Refinery	MW-113	Apr-14		17.3		0.23
Field E of Refinery	MW-113	Nov-14	FD	2.7		0.82
Field E of Refinery	MW-113	Nov-14		2.4		0.64
Field E of Refinery	MW-113	Apr-15	FD	< 0.0310		0.241
Field E of Refinery	MW-113	Apr-15		< 0.0310		0.33
Field E of Refinery	MW-113	Oct-15	FD	< 0.0314		0.0917 J
Field E of Refinery	MW-113	Oct-15		< 0.0314		0.115
Field E of Refinery	MW-125	Apr-14		0.0383 J		< 0.021
Field E of Refinery	MW-125	Nov-14		< 0.031		0.047 J
Field E of Refinery	MW-125	Apr-15		< 0.0310 UJ		< 0.0250 UB
Field E of Refinery	MW-125	Oct-15		< 0.0314		0.0523 J
Field E of Refinery	MW-126A	Apr-14		0.142		0.71
Field E of Refinery	MW-126A	Nov-14		0.41		0.88
Field E of Refinery	MW-126A	Apr-15		< 0.0310		0.757
Field E of Refinery	MW-126A	Oct-15		0.64		0.569
Field E of Refinery	MW-126B	Apr-14		0.0791		0.34
Field E of Refinery	MW-126B	Nov-14		< 0.031		0.28
Field E of Refinery	MW-126B	Apr-15		< 0.0310		0.392
Field E of Refinery	MW-126B	Oct-15		< 0.0314		0.14
Field E of Refinery	MW-127	Apr-14		37.7		3.5
Field E of Refinery	MW-127	Nov-14		6.1		1.3
Field E of Refinery	MW-127	Apr-15		9.73		1.68
Field E of Refinery	MW-127	Oct-15		6.54		0.585
Field E of Refinery	MW-128	Apr-14		3.19		2.1
Field E of Refinery	MW-128	Nov-14		1.2		2.4
Field E of Refinery	MW-128	Apr-15		1.23 J		3
Field E of Refinery	MW-128	Oct-15		0.644		1.78
Field E of Refinery	MW-129	Nov-14		4.6		2.7
Field E of Refinery	MW-129	Apr-15		3.29		2.45
Field E of Refinery	MW-129	Oct-15		4.11 J		1.31
Field E of Refinery	MW-130	Apr-14		< 0.0100		0.33
Field E of Refinery	MW-130	Nov-14		< 0.031		0.7
Field E of Refinery	MW-130	Apr-15		< 0.0310 UJ		0.96
Field E of Refinery	MW-130	Oct-15		< 0.0314		0.508
Field E of Refinery	MW-131	Apr-14		26.2		3.4

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
Field E of Refinery	MW-131	Nov-14		9.1	3.7	
Field E of Refinery	MW-131	Apr-15		7.68	2.8	
Field E of Refinery	MW-131	Oct-15		6.76	4	
Field E of Refinery	MW-133	Nov-14		9.4	2.8	
Field E of Refinery	MW-133	Apr-15		11.3	3.1	
Field E of Refinery	MW-134	Apr-14		< 0.0100	< 0.021	
Field E of Refinery	MW-134	Nov-14		< 0.031	0.064 J	
Field E of Refinery	MW-134	Apr-15	FD	< 0.0310	0.0886 J	
Field E of Refinery	MW-134	Apr-15		< 0.0310	0.1	
Field E of Refinery	MW-134	Oct-15	FD	< 0.0314	0.0457 J	
Field E of Refinery	MW-134	Oct-15		< 0.0314	0.0503 J	
Field E of Refinery	MW-135	Apr-14		< 0.0100	< 0.021	
Field E of Refinery	MW-135	Nov-14		< 0.031	0.31	
Field E of Refinery	MW-135	Apr-15		< 0.0310	0.0823 J	
Field E of Refinery	MW-135	Oct-15		< 0.0314	0.0571 J	
Field E of Refinery	RA-4196	Apr-13	FD			
Field E of Refinery	RA-4196	Apr-13				
Field E of Refinery	RA-4196	Nov-13	FD			
Field E of Refinery	RA-4196	Nov-13				
Field E of Refinery	RA-4196	Apr-14				
Field E of Refinery	RA-4196	Apr-15				
Field E of Refinery	RA-4196	Oct-15				
Field E of Refinery	RA-4798	Apr-13				
Field E of Refinery	RA-4798	Nov-13				
Field E of Refinery	RA-4798	Apr-14	FD			
Field E of Refinery	RA-4798	Apr-14				
Field E of Refinery	RA-4798	Nov-14				
Field E of Refinery	RA-4798	Apr-15				
Field E of Refinery	RA-4798	Oct-15				
Field E of Refinery	RW-18	Apr-13				
Field E of Refinery	RW-18	Apr-14				
Field E of Refinery	RW-18	Apr-15				
Field E of Refinery	RW-20	Apr-15			2.1	
Field E of Refinery	RW-22	Apr-15			5.4	
N Refinery	MW-23	Apr-13		30.4	17	
N Refinery	MW-23	Oct-13		38.3	20	
N Refinery	MW-23	Apr-14		32.1	6	
N Refinery	MW-23	Nov-14		39	6	
N Refinery	MW-23	Apr-15		31.1	6.79	
N Refinery	MW-23	Oct-15		34	41.8	
N Refinery	MW-29	Apr-13		< 0.0500	0.3	
N Refinery	MW-29	Oct-13		0.113	1.3	
N Refinery	MW-29	Apr-14		< 0.0100 B	0.51	
N Refinery	MW-29	Nov-14		< 0.031	1.2	
N Refinery	MW-29	Apr-15		< 0.0310	1.2	

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
N Refinery	MW-29	Oct-15		0.0738 J	0.658	
N Refinery	MW-39	Oct-13		2.37	4.6	
N Refinery	MW-39	Apr-15		0.147	5.2	
N Refinery	MW-39	Oct-15		0.0759 J	3.83	
N Refinery	MW-40	Apr-13		0.919	1.7	
N Refinery	MW-40	Apr-14		1.01	0.88	
N Refinery	MW-40	Apr-15		0.735	4.5	
N Refinery	MW-41	Apr-13		0.167	0.74	
N Refinery	MW-41	Oct-13		0.0833	1.3	
N Refinery	MW-41	Apr-14		0.233	0.3	
N Refinery	MW-41	Apr-15		0.103	1.6	
N Refinery	MW-42	Apr-13		2.89	3.5	
N Refinery	MW-42	Oct-13		3.17	4.8	
N Refinery	MW-42	Apr-14		2.9	1.4	
N Refinery	MW-42	Apr-15		1.37	7	
N Refinery	MW-43	Apr-13		1.98	5.2	
N Refinery	MW-43	Oct-13	FD	6.94	8.3	
N Refinery	MW-43	Oct-13		6.73	8	
N Refinery	MW-43	Apr-14		2.89	1.2	
N Refinery	MW-43	Nov-14		4.8	7.4	
N Refinery	MW-43	Apr-15		2.65	8.04	
N Refinery	MW-43	Oct-15		30.5	9.95	
N Refinery	MW-59	Apr-13		0.13	< 0.052	
N Refinery	MW-59	Apr-14		0.247	0.068	
N Refinery	MW-59	Apr-15		< 0.0310 UJ	0.86	
N Refinery	MW-60	Apr-13	FD	0.936	0.39	
N Refinery	MW-60	Apr-13		0.907	0.42	
N Refinery	MW-60	Oct-13	FD	0.753	0.32	
N Refinery	MW-60	Oct-13		0.776	0.34	
N Refinery	MW-60	Apr-14		0.658	0.11	
N Refinery	MW-60	Nov-14		0.54	0.63	
N Refinery	MW-60	Apr-15	FD	0.228	1	
N Refinery	MW-60	Apr-15		0.238	1.1	
N Refinery	MW-60	Oct-15	FD	0.249	0.627	
N Refinery	MW-60	Oct-15		0.241	0.803	
N Refinery	MW-61	Apr-13		8.43	2.5	
N Refinery	MW-61	Oct-13		1.95	3.3	
N Refinery	MW-61	Apr-14		10.9 J	3.4	
N Refinery	MW-61	Nov-14		11	6.4	
N Refinery	MW-61	Apr-15		6.77	9.4	
N Refinery	MW-61	Oct-15		5.13	3.32	
N Refinery	MW-62	Apr-13		2.92	6.3	
N Refinery	MW-62	Oct-13		10.7	7.3	
N Refinery	MW-62	Apr-14		7.37	2	
N Refinery	MW-62	Nov-14		42	29	

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
N Refinery	MW-62	Apr-15		21.1	36.9	
N Refinery	MW-62	Oct-15		18.5	7.62	
N Refinery	MW-67	Oct-13		9.46	5.5	
N Refinery	MW-67	Nov-14		0.81	4.2	
N Refinery	MW-67	Apr-15		0.784	8.4	
N Refinery	MW-67	Oct-15		2.16	5.18	
N Refinery	MW-90	Apr-13		0.221	3.9	
N Refinery	MW-90	Oct-13		0.157	6.2	
N Refinery	MW-90	Apr-14		0.317	1.4	
N Refinery	MW-90	Nov-14		0.21	2.3	
N Refinery	MW-90	Apr-15		0.242	7.68	
N Refinery	MW-90	Oct-15		0.166	0.992	
N Refinery	MW-91	Oct-13	FD	8.09	7.6	
N Refinery	MW-91	Oct-13		7.89	6.9	
N Refinery	MW-91	Apr-14		11.9	2.9	
N Refinery	MW-91	Nov-14		7.9	11	
N Refinery	MW-91	Apr-15		14.7	15.9	
N Refinery	MW-91	Oct-15		12.2	20.3	
N Refinery	MW-93	Apr-13		8.99	6.2	
N Refinery	MW-93	Oct-13		9.74	10	
N Refinery	MW-93	Apr-14		9.9	14	
N Refinery	MW-93	Nov-14		6.5	11	
N Refinery	MW-93	Apr-15		3.67	15.3	
N Refinery	MW-93	Oct-15		5.14	16.5	
N Refinery	MW-94	Nov-14		5.5	9.4	
N Refinery	MW-94	Oct-15		6.12	25.6	
N Refinery	MW-95	Apr-13		0.0526	3.4	
N Refinery	MW-95	Apr-14		0.0926	1.1	
N Refinery	MW-95	Apr-15		< 0.0310	7.58	
N Refinery	MW-96	Apr-13		26.6	6.4	
N Refinery	MW-96	Oct-13		25.5	5.4	
N Refinery	MW-96	Apr-14		25.8	2.2	
N Refinery	MW-96	Nov-14		26	10	
N Refinery	MW-96	Apr-15		45.1	12	
N Refinery	MW-96	Oct-15		24.3	9.23	
N Refinery	MW-98	Apr-13		26.2	6.2	
N Refinery	MW-98	Oct-13		29.2	3.1	
N Refinery	MW-98	Apr-14	FD	32.5	2.7	
N Refinery	MW-98	Apr-14		32.1	2.2	
N Refinery	MW-98	Nov-14		26	5.4	
N Refinery	MW-98	Apr-15		19.3	7.06	
N Refinery	MW-98	Oct-15		18.6	6.38	
N Refinery	MW-137	Oct-15		30	20.1	
N Refinery	MW-138	Oct-15		5.08	6.73	
N Refinery	RW-1	Apr-15		2.95 J	12	

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
N Refinery	RW-2	Apr-15		18.3	19.7	
N Refinery	RW-7	Apr-15		1.05	9.7	
N Refinery	RW-8	Apr-15			7.3	
N Refinery	RW-9	Apr-13		4.14	2.3	
N Refinery	RW-9	Apr-14		3.26	0.48	
N Refinery	RW-9	Apr-15		2.55	3.2	
N Refinery	RW-10	Apr-13		< 0.0500	0.65	
N Refinery	RW-10	Apr-14		< 0.0100	0.15	
N Refinery	RW-10	Apr-15		< 0.0310	4.8	
N Refinery	RW-16	Apr-13			0.58	
N Refinery	RW-16	Apr-14	FD		0.23	
N Refinery	RW-16	Apr-14			0.11	
N Refinery	RW-16	Apr-15			1.9	
N Refinery	RW-17	Apr-13		< 0.0500	0.29	
N Refinery	RW-17	Apr-14		< 0.0100	0.11	
N Refinery	RW-17	Apr-15		< 0.0310	1.2	
N RO Reject Field	MW-117*	Feb-13		< 0.05	< 0.052	
N RO Reject Field	MW-117*	Nov-13		< 0.05	< 0.051	
N RO Reject Field	MW-117	Apr-14		< 0.0100	< 0.022	
N RO Reject Field	MW-117	Nov-14	FD	< 0.031	0.12 J	
N RO Reject Field	MW-117	Nov-14		< 0.031	0.029 J	
N RO Reject Field	MW-117	Apr-15		< 0.0310	0.0323 J	
N RO Reject Field	MW-117	Oct-15		< 0.0314	< 0.0247	
N RO Reject Field	MW-118*	Feb-13		0.0436 J	< 0.052	
N RO Reject Field	MW-118*	Nov-13		< 0.05	< 0.052	
N RO Reject Field	MW-118	Apr-14		< 0.0100	< 0.021	
N RO Reject Field	MW-118	Nov-14		< 0.031	0.032 J	
N RO Reject Field	MW-118	Apr-15		< 0.0310	0.0307 J	
N RO Reject Field	MW-118	Oct-15		< 0.0314	< 0.0247	
N RO Reject Field	MW-119*	Feb-13		0.0371 J	< 0.051	
N RO Reject Field	MW-119*	Nov-13		< 0.05	< 0.053	
N RO Reject Field	MW-119	Apr-14	FD	< 0.0100	< 0.021	
N RO Reject Field	MW-119	Apr-14		< 0.0100	< 0.020	
N RO Reject Field	MW-119	Nov-14		< 0.031	0.053 J	
N RO Reject Field	MW-119	Apr-15		< 0.0310	0.0353 J	
N RO Reject Field	MW-119	Oct-15		< 0.0314	< 0.0247	
NCL	MW-18	Apr-13	FD		0.34	
NCL	MW-18	Apr-13			0.33	
NCL	MW-18	Oct-13			0.58	
NCL	MW-18	Apr-14			0.28	
NCL	MW-18	Apr-15			2.41	
NCL	MW-45	Apr-13			0.44	
NCL	MW-45	Oct-13			0.55	
NCL	MW-45	Apr-14			0.27	
NCL	MW-45	Nov-14			0.86	

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
NCL	MW-45	Apr-15				1.1
NCL	MW-45	Oct-15				0.874
NCL	MW-53	Apr-13				< 0.053
NCL	MW-53	Apr-14				< 0.021
NCL	MW-53	Apr-15				0.296
NCL	MW-54A	Apr-13				0.92
NCL	MW-54A	Oct-13				1.4
NCL	MW-54A	Apr-14				0.57
NCL	MW-54A	Nov-14				2.6
NCL	MW-54A	Apr-15				2.93
NCL	MW-54A	Oct-15				3.29
NCL	MW-54B	Apr-13		< 0.0500		0.63
NCL	MW-54B	Apr-15		< 0.0310		2.47
NCL	MW-55	Apr-13		< 0.0500		< 0.051
NCL	MW-55	Oct-13		< 0.0500		< 0.052
NCL	MW-55	Apr-14	FD	< 0.0100		< 0.021
NCL	MW-55	Apr-14		< 0.0100		< 0.020
NCL	MW-55	Nov-14		< 0.031		0.12
NCL	MW-55	Apr-15		< 0.0310		0.227
NCL	MW-55	Oct-15		< 0.0314		0.3
NCL	MW-56	Apr-13				0.21
NCL	MW-56	Oct-13				0.078
NCL	MW-56	Apr-14				0.29
NCL	MW-56	Nov-14				0.8
NCL	MW-56	Apr-15				1.62
NCL	MW-56	Oct-15				0.68
NCL	MW-108	Apr-13				4.2
NCL	MW-108	Oct-13				3.6
NCL	MW-108	Apr-14				3
NCL	MW-108	Nov-14				7.7
NCL	MW-108	Apr-15				9.03
NCL	MW-108	Oct-15				7.89
NCL	NCL-31	Apr-13				1.1
NCL	NCL-31	Oct-13				1.3
NCL	NCL-31	Apr-14				0.65
NCL		Nov-14				2
NCL	NCL-31	Apr-15				2.38
NCL	NCL-31	Oct-15				2.1
NCL	NCL-32	Nov-14				2.3
NCL	NCL-32	Apr-15				2.8
NCL	NCL-32	Oct-15				7.5
NCL	NCL-33	Apr-13				2.1
NCL	NCL-33	Oct-13				2.4
NCL	NCL-33	Apr-14				1.2
NCL	NCL-33	Nov-14				3.7

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
NCL	NCL-33	Apr-15				4.6
NCL	NCL-33	Oct-15				5.3
NCL	NCL-34A	Oct-13				5.7
NCL	NCL-34A	Nov-14				5.3
NCL	NCL-34A	Apr-15				10
NCL	NCL-34A	Oct-15				5.11
NCL	NCL-44	Apr-13				2.5
NCL	NCL-44	Oct-13				3
NCL	NCL-44	Apr-14				1.5
NCL	NCL-44	Nov-14				3.9
NCL	NCL-44	Apr-15				5.5
NCL	NCL-44	Oct-15				6.17
NCL	NCL-49	Apr-13				< 0.052
NCL	NCL-49	Oct-13				< 0.051
NCL	NCL-49	Apr-14				< 0.020
NCL	NCL-49	Nov-14				0.042 J
NCL	NCL-49	Nov-14	FD			0.028 J
NCL	NCL-49	Apr-15	FD			0.0832 J
NCL	NCL-49	Apr-15				0.0967 J
NCL	NCL-49	Oct-15	FD			0.0960 J
NCL	NCL-49	Oct-15				0.0770 J
S Refinery	KWB-2R	Nov-14				5.5
S Refinery	KWB-2R	Apr-15				5.2
S Refinery	KWB-2R	Oct-15				3.95
S Refinery	KWB-5	Oct-13		12.6		1.3
S Refinery	KWB-5	Nov-14				1.8
S Refinery	KWB-5	Apr-15				2.3
S Refinery	KWB-5	Oct-15				1.39
S Refinery	KWB-6	Nov-14				1.8
S Refinery	KWB-6	Apr-15				4.5
S Refinery	KWB-6	Oct-15				1.41
S Refinery	MW-28	Apr-13		6.08		2.7
S Refinery	MW-28	Oct-13		6.19		3.1
S Refinery	MW-28	Apr-14		6.32		3
S Refinery	MW-28	Nov-14		16		3.7
S Refinery	MW-28	Apr-15		7.85 J		13
S Refinery	MW-28	Oct-15		9.88		16.2
S Refinery	MW-48	Nov-14		4.5 J		4
S Refinery	MW-48	Apr-15		3.65 J		3.9
S Refinery	MW-48	Oct-15		2.99		2.97
S Refinery	MW-50	Apr-13				0.16
S Refinery	MW-50	Oct-13				< 0.052
S Refinery	MW-50	Apr-14				0.12
S Refinery	MW-50	Nov-14				0.36 J
S Refinery	MW-50	Apr-15				0.902

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
S Refinery	MW-50	Oct-15				0.642
S Refinery	MW-52	Apr-13		< 0.0500		0.24
S Refinery	MW-52	Oct-13	FD	< 0.0500		< 0.052
S Refinery	MW-52	Oct-13		< 0.0500		0.14
S Refinery	MW-52	Apr-14	FD	0.0263 J		0.33
S Refinery	MW-52	Apr-14		0.0223 J		0.17
S Refinery	MW-52	Nov-14		0.032 J		0.28 J
S Refinery	MW-52	Apr-15		< 0.0310 UJ		0.37
S Refinery	MW-52	Oct-15		< 0.0314		0.158
S Refinery	MW-65	Nov-14		27		15
S Refinery	MW-65	Apr-15		33.1		12.4
S Refinery	MW-66	Apr-13		7.57		2.4
S Refinery	MW-66	Oct-13	FD	10.9		3.2 J
S Refinery	MW-66	Oct-13		10.7		1.4 J
S Refinery	MW-66	Apr-14		6.64		2.1
S Refinery	MW-66	Nov-14		23		3.3
S Refinery	MW-66	Apr-15		8.18		4.51
S Refinery	MW-66	Oct-15		8.74		1.4
S Refinery	MW-99	Nov-14		14		2.5
S Refinery	MW-99	Apr-15		6.76		1.94
S Refinery	MW-99	Oct-15		19.4		1.87
S Refinery	MW-101	Apr-13		6.76		3.5
S Refinery	MW-101	Oct-13		1.05		3.7
S Refinery	MW-101	Apr-14		4.56		4.3
S Refinery	MW-101	Nov-14		1.4		5.3
S Refinery	MW-101	Apr-15		0.18		6
S Refinery	MW-101	Oct-15		0.0803 J		5.08
S Refinery	MW-102	Nov-14		36		9.5
S Refinery	MW-102	Apr-15		24.5		9.96
S Refinery	MW-102	Oct-15		31.4		11.4
S Refinery	MW-103	Apr-13		3.31		5.4
S Refinery	MW-103	Apr-14		1.43 J		5.9
S Refinery	MW-103	Apr-15		4.15		8.66
S Refinery	MW-104	Apr-13		1.14		0.99
S Refinery	MW-104	Oct-13		0.993		0.6
S Refinery	MW-104	Apr-14	FD	1.42		0.69
S Refinery	MW-104	Apr-14		1.42		0.72
S Refinery	MW-104	Nov-14	FD	1.4		0.62
S Refinery	MW-104	Nov-14		1.3 J		0.7
S Refinery	MW-104	Apr-15	FD	0.878		0.79
S Refinery	MW-104	Apr-15		0.783		0.813
S Refinery	MW-104	Oct-15	FD	1.18		3
S Refinery	MW-104	Oct-15		1.05		1.06
S Refinery	MW-105	Nov-14		14		7.8
S Refinery	MW-105	Apr-15		6.5		3.74

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
S Refinery	MW-105	Oct-15		4.37	2.31	
S Refinery	MW-106	Apr-13		26.1	6.1	
S Refinery	MW-106	Oct-13		27.8	3.7	
S Refinery	MW-106	Apr-14		27.9	2.1	
S Refinery	MW-106	Apr-15		1.52	3.4	
S Refinery	MW-106	Oct-15		23.8	19.6	
S Refinery	MW-107	Apr-13		21.3	5.9	
S Refinery	MW-107	Oct-13		21.4	6.2	
S Refinery	MW-107	Apr-14		7.32	4.9	
S Refinery	MW-107	Nov-14		17	4.9	
S Refinery	MW-107	Apr-15		9.85	7.2	
S Refinery	MW-107	Oct-15		14.9 J	4.72	
S Refinery	MW-109	Apr-13		2.12	1.7	
S Refinery	MW-109	Oct-13		1.01	0.93	
S Refinery	MW-109	Apr-14		2.02	2.7	
S Refinery	MW-109	Nov-14		1	3.7	
S Refinery	MW-109	Apr-15		2.36	8.1	
S Refinery	MW-109	Oct-15		1.46	0.842	
S Refinery	MW-110	Apr-13		0.892	0.73	
S Refinery	MW-110	Oct-13		0.329	0.25	
S Refinery	MW-110	Apr-14		2.05	1.2	
S Refinery	MW-110	Nov-14		0.47	0.82	
S Refinery	MW-110	Apr-15		1.12	2.2	
S Refinery	MW-110	Oct-15		1.48	< 0.0247	
S Refinery	RA-313	Apr-13				
S Refinery	RA-313	Apr-14				
S Refinery	RA-313	Apr-15				
S Refinery	RW-4	Apr-15			3.72	
S Refinery	RW-5R	Apr-15			6.42	
S Refinery	RW-6	Apr-15			11.4	
S RO Reject Field	MW-114	Feb-13		< 0.05	< 0.052	
S RO Reject Field	MW-114*	Nov-13		< 0.05	< 0.053	
S RO Reject Field	MW-114	Apr-14		< 0.0100	< 0.020	
S RO Reject Field	MW-114	Nov-14		< 0.031	0.032 J	
S RO Reject Field	MW-114	Apr-15		< 0.0310 UJ	< 0.0250 UB	
S RO Reject Field	MW-114	Oct-15		< 0.0314	< 0.0247	
S RO Reject Field	MW-115*	Feb-13		< 0.05	< 0.051	
S RO Reject Field	MW-115*	Nov-13		< 0.05	< 0.051	
S RO Reject Field	MW-115	Apr-14		< 0.0100	< 0.021	
S RO Reject Field	MW-115	Nov-14		< 0.031	0.11	
S RO Reject Field	MW-115	Apr-15		< 0.0310 UJ	< 0.0250 UB	
S RO Reject Field	MW-115	Oct-15		0.0324 J	0.103	
S RO Reject Field	MW-116*	Feb-13		< 0.05	< 0.051	
S RO Reject Field	MW-116*	Nov-13		< 0.05	< 0.054	
S RO Reject Field	MW-116*	Nov-13	FD	< 0.05	< 0.053	

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
S RO Reject Field	MW-116	Apr-14		< 0.0100	< 0.021	
S RO Reject Field	MW-116	Nov-14		< 0.031	0.026 J	
S RO Reject Field	MW-116	Apr-15		< 0.0310 UJ	< 0.0250 UB	
S RO Reject Field	MW-116	Oct-15		< 0.0314	0.0607 J	
TEL	MW-49	Apr-13	FD	1.9	5.1	
TEL	MW-49	Apr-13		1.9	5	
TEL	MW-49	Oct-13		2.79	2.6	
TEL	MW-49	Apr-14		1.99	5.6	
TEL	MW-49	Nov-14		1	7	
TEL	MW-49	Apr-15		0.654	8.6	
TEL	MW-49	Oct-15	1.05	1.58	7.66	
TEL	TEL-1	Apr-13		0.218	5.1	
TEL	TEL-1	Oct-13		0.276	3.9	
TEL	TEL-1	Apr-14	FD	0.35	7.7	
TEL	TEL-1	Apr-14		0.384 J	8.7	
TEL	TEL-1	Nov-14		0.2	6	
TEL	TEL-1	Apr-15		0.181	9.8	
TEL	TEL-1	Oct-15		0.148	7.46	
TEL	TEL-2	Apr-13		6.51	12	
TEL	TEL-2	Oct-13		6.19	7.5	
TEL	TEL-2	Apr-14		6.08 J	17	
TEL	TEL-2	Nov-14		1.7 J	18	
TEL	TEL-2	Apr-15		5.12	20	
TEL	TEL-2	Oct-15		2.86	18.7 J	
TEL	TEL-3	Apr-13		0.715	4	
TEL	TEL-3	Oct-13		0.798	1.9	
TEL	TEL-3	Apr-14		0.971 J	8.3	
TEL	TEL-3	Nov-14		0.45	6.3	
TEL	TEL-3	Apr-15		0.666	9.4	
TEL	TEL-3	Oct-15		0.633	5.86	
TEL	TEL-4	Apr-13		2.61	4.7	
TEL	TEL-4	Oct-13		3.02	2.6	
TEL	TEL-4	Apr-14		3.11 J	8.6	
TEL	TEL-4	Nov-14	FD	2.8	5.7	
TEL	TEL-4	Nov-14		3.3	7.4	
TEL	TEL-4	Apr-15	FD	2.26	8.5	
TEL	TEL-4	Apr-15		2.09	8.4	
TEL	TEL-4	Oct-15	FD	2.7	5.73	
TEL	TEL-4	Oct-15		2.77	4.98	
TMD	MW-8	Apr-13		< 0.0500	< 0.053	
TMD	MW-8	Oct-13		< 0.0500	< 0.052	
TMD	MW-8	Apr-14		< 0.0100	< 0.021	
TMD	MW-8	Apr-15		< 0.0310	0.38	
TMD	MW-16	Apr-13			< 0.052	
TMD	MW-16	Apr-14			0.058	

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
TMD	MW-16	Apr-15				0.34
TMD	MW-20	Apr-13				< 0.053
TMD	MW-20	Apr-14	FD			< 0.020
TMD	MW-20	Apr-14				< 0.020
TMD	MW-20	Apr-15				0.15
TMD	MW-21	Apr-13		< 0.0500		< 0.052
TMD	MW-21	Oct-13	FD	< 0.0500		< 0.053
TMD	MW-21	Oct-13		< 0.0500		< 0.051
TMD	MW-21	Apr-14		< 0.0100		< 0.020
TMD	MW-21	Nov-14		< 0.031		0.092 J
TMD	MW-21	Apr-15		< 0.0310		0.18
TMD	MW-21	Oct-15		< 0.0314		0.194
TMD	MW-25	Apr-13				< 0.052
TMD	MW-25	Apr-14				< 0.020
TMD	MW-25	Apr-15				0.69
TMD	MW-26	Apr-13				< 0.053
TMD	MW-26	Apr-14				< 0.020
TMD	MW-26	Apr-15				0.0530 J
TMD	MW-27	Apr-13				< 0.052
TMD	MW-27	Apr-14				< 0.021
TMD	MW-27	Apr-15				0.11
TMD	MW-46R	Apr-13				< 0.052
TMD	MW-46R	Oct-13				< 0.052
TMD	MW-46R	Apr-14				< 0.021
TMD	MW-46R	Nov-14				0.042 J
TMD	MW-46R	Apr-15				0.0540 J
TMD	MW-68	Apr-13				< 0.052
TMD	MW-68	Apr-14				< 0.020
TMD	MW-68	Apr-15				0.13
TMD	MW-71	Apr-13	FD			< 0.052
TMD	MW-71	Apr-13				< 0.051
TMD	MW-71	Oct-13				0.096
TMD	MW-71	Apr-14				< 0.021
TMD	MW-71	Apr-15				0.0930 J
TMD	MW-89	Apr-13				0.058
TMD	MW-89	Apr-14				0.21
TMD	MW-89	Apr-15				2.4
TMD	NP-1	Apr-13		0.158		< 0.053
TMD	NP-1	Oct-13				
TMD	NP-1	Apr-14				
TMD	NP-1	Nov-14				
TMD	NP-1	Apr-15				
TMD	NP-1	Oct-15				
TMD	NP-2	Apr-13		< 0.0500		< 0.052
TMD	NP-6	Apr-13				

Table B.1 - Groundwater Analytical Results 2013-2015 - TPH (GRO and DRO)

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	GRO	DRO
				Units:	mg/L	mg/L
				CGWSL:	---	0.2
				CGWSL Source:		NMED TPH
Area	Location	Date	Dup			
TMD	NP-6	Apr-15				
Upgradient	UG-1	Apr-13		< 0.0500	< 0.053	
Upgradient	UG-1	Apr-14		< 0.0100	< 0.021	
Upgradient	UG-1	Apr-15		< 0.0310	< 0.0250 UB	
Upgradient	UG-2	Apr-13	FD	< 0.0500	< 0.053	
Upgradient	UG-2	Apr-13		< 0.0500	< 0.052	
Upgradient	UG-2	Apr-14		< 0.0100	< 0.020	
Upgradient	UG-2	Apr-15		< 0.0310	< 0.0250 UB	
Upgradient	UG-3R	Apr-13		< 0.0500	< 0.053	
Upgradient	UG-3R	Apr-14	FD	< 0.0100	< 0.020	
Upgradient	UG-3R	Apr-14		< 0.0100	< 0.020	
Upgradient	UG-3R	Apr-15		< 0.0310	< 0.0250 UB	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
Crossgradient	KWB-13	Apr-13		< 0.0100	0.0232	< 0.00500	0.932	< 0.00500			0.0208	< 0.000200	< 0.0100	0.0165	0.0206
Crossgradient	KWB-13	Apr-14		0.00259 J	0.0145	0.00121 J	< 0.0500	< 0.000700			< 0.00250	< 0.0000400	< 0.00100	0.0126	0.0172
Crossgradient	KWB-13	Apr-15		0.0118	0.122	0.0182	12.3	0.0190			0.399	< 0.0000490	0.0144	0.0110	0.0426
Crossgradient	MW-17	Apr-14		< 0.00200	0.0152	< 0.00200	< 0.100	0.00724 J			< 0.00500			0.0104	
Crossgradient	NP-5	Apr-13		< 0.0100	< 0.0100	< 0.0100	< 0.400	< 0.0100	562		< 0.0100			0.0135	
Crossgradient	NP-5	Apr-15		0.00288	0.0159	0.00109 J	0.437	0.000415 J			0.00318 J			0.0125	
Crossgradient	RA-3156	Apr-13							164						
Crossgradient	RA-3156	Nov-13							170						
Crossgradient	RA-3156	Apr-14											< 0.000500		
Crossgradient	MW-136	Oct-15		0.00381	0.103	0.00365	1.18	0.00218			0.204	< 0.0000490	0.00425	0.00463	0.0212
EP	MW-1R	Apr-13	FD	< 0.0250	< 0.0250	< 0.0250	1.64	< 0.0250			1.59			< 0.0250	
EP	MW-1R	Apr-13		< 0.0250	< 0.0250	< 0.0250	1.77	< 0.0250			1.64			< 0.0250	
EP	MW-1R	Apr-14		0.00335 J	0.0214	< 0.00200	2.39	< 0.00140			1.38			< 0.00200	
EP	MW-1R	Apr-15		0.0037 J	0.024 J	< 0.0027	3.5	< 0.0012			2.1 J			< 0.0019	
EP	MW-2A	Mar-13		0.0505	0.0246	< 0.00500	6.75	< 0.00500	162		2.7			< 0.00500	
EP	MW-2A	Nov-13		0.0205	0.0225	< 0.00500	0.437	< 0.00500	475		0.92			0.00569	
EP	MW-2A	Apr-14		0.0194 J	0.0222 J	< 0.00500	0.737 J	< 0.00350			1.21			< 0.00500	
EP	MW-2A	Nov-14		0.048	0.026	0.0078	3.1	< 0.0012			1.5			0.0051 J	
EP	MW-2A	Apr-15		0.015 J	0.025 J	< 0.0054	0.57 J	< 0.0024			2			< 0.0038	
EP	MW-2A	Oct-15		0.00962	0.0241	< 0.00108	0.588	< 0.000480			2.88			0.00153 J	
EP	MW-3	Mar-13		0.0324	0.0148	< 0.00500	0.706	< 0.00500	147		1.35			0.00733	
EP	MW-3	Nov-13		0.0357	0.0209	< 0.00500	0.333	< 0.00500	334		0.556			0.0472	
EP	MW-3	Apr-14		0.0298	0.0185	< 0.00200	< 0.100	< 0.00140			0.254			0.0458	
EP	MW-3	Nov-14		0.035	0.022 J	0.0081	0.57	< 0.0012			2.2			0.019	
EP	MW-3	Nov-14	FD	0.029	0.022 J	0.006	0.34 J	< 0.0012			2.5			0.023	
EP	MW-3	Apr-15	FD	0.0346	0.0215	0.00198 J	0.0806 J	0.000346 J			1.85			0.112	
EP	MW-3	Apr-15		0.0288	0.0186 J	< 0.00270	< 0.0750	< 0.00120			1.55			0.108	
EP	MW-3	Oct-15	FD	0.0281	0.0158	0.00107 J	0.559	0.000371 J			1.33			0.00804	
EP	MW-3	Oct-15		0.0248	0.0157	< 0.000540	0.366	0.000298 J			1.29			0.00892	
EP	MW-4A	Apr-13		0.0636	< 0.0250	< 0.0250	1.57	< 0.0250			1.88			< 0.0250	
EP	MW-4A	Nov-13		0.0724	0.0161	< 0.0100	0.672	< 0.0100			2.36			< 0.0100	
EP	MW-4A	Apr-14		0.147	0.0121	< 0.00200	2.31	< 0.00140			2.24			< 0.00200	
EP	MW-4A	Nov-14		0.057	0.014 J	< 0.0027	0.82	< 0.0012			2.7			< 0.0019	
EP	MW-4A	Apr-15		0.108 J	0.0139 J	0.00570 J	3.15	< 0.00120			2.96			< 0.00190	
EP	MW-4A	Oct-15		0.112	0.014	0.00126 J	2.09	< 0.000240			1.75			0.000588 J	
EP	MW-4B	Apr-13		0.0371	< 0.0250	< 0.0250	< 1.00	< 0.0250			1.3			< 0.0250	
EP	MW-4B	Apr-15		0.1	0.035	< 0.0011	3.6	0.0019 J			8.7			< 0.00076	
EP	MW-5A	Apr-13		0.201	< 0.0250	< 0.0250	11	< 0.0250			1.1			< 0.0250	
EP	MW-5A	Nov-13		0.097	< 0.0250	< 0.0250	5.79	< 0.0250			1.78			< 0.0250	
EP	MW-5A	Apr-14		0.106	0.0142 J	< 0.00500	7.1	< 0.00350			1.74			< 0.00500	
EP	MW-5A	Nov-14		0.064	0.014 J	< 0.0027	4.4	< 0.0012			2			0.0040 J	
EP	MW-5A	Apr-15		0.0938	0.0128 J	< 0.00540	5.62	< 0.00240			1.84			< 0.00380	
EP	MW-5A	Oct-15		0.0705	0.0143	0.000685 J	5.34	< 0.000240			1.82			0.000954 J	
EP	MW-5B	Apr-13		0.122	< 0.0250	< 0.0250	< 1.00	< 0.0250			2.44			< 0.0250	
EP	MW-5B	Apr-15		0.201	0.0112 J	0.00277 J	6.11	< 0.00120			3.87			0.00197 J	
EP	MW-5C	Apr-13		0.0139	0.0166	< 0.0100	1.04	< 0.0100			0.943			< 0.0100	
EP	MW-5C	Apr-15		0.0145	0.0200 J	< 0.00270	1.15	< 0.00120			0.975			< 0.00190	
EP	MW-6A	Mar-13		0.00788	0.0143	< 0.00500	0.66	< 0.00500	105		0.277			< 0.00500	
EP	MW-6A	Apr-14		0.0113	0.0287	0.00234 J	< 0.100	< 0.00140			1.37			0.0192	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
EP	MW-6A	Apr-15			0.013	0.031	< 0.0027	0.15 J	< 0.0012		1.4			0.031	
EP	MW-6B	Mar-13	FD		0.0537	0.0163	< 0.00500	1.69	< 0.00500	148	2.43			< 0.00500	
EP	MW-6B	Mar-13			0.0493	0.0139	< 0.00500	1.54	< 0.00500	158	2.39			< 0.00500	
EP	MW-6B	Apr-15			0.033	0.016	< 0.0011	1.4	< 0.00048		3.4			< 0.00076	
EP	MW-7A	Apr-13			0.0272	< 0.0250	< 0.0250	6.05	< 0.0250		0.422			< 0.0250	
EP	MW-7A	Nov-13			0.0242	0.0181	< 0.0100	1.53	< 0.0100		0.465			< 0.0100	
EP	MW-7A	Apr-14			0.0256	0.0152	< 0.00200	2.99	< 0.00140		0.509			< 0.00200	
EP	MW-7A	Nov-14	FD		0.02	0.017 J	< 0.0027	1.5	< 0.0012		1.6			< 0.0019	
EP	MW-7A	Nov-14			0.021	0.018 J	0.0027 J	1.3	< 0.0012		1.5			< 0.0019	
EP	MW-7A	Apr-15	FD		0.0194	0.0156	0.00131 J	0.996	0.000288 J		1.06			0.000570 J	
EP	MW-7A	Apr-15			0.019	0.0149	0.000895 J	0.984	< 0.000240		1.11			0.000620 J	
EP	MW-7A	Oct-15	FD		0.0253	0.0159	0.00114 J	2.86	0.000524 J		0.629			0.000647 J	
EP	MW-7A	Oct-15			0.0255	0.0155	0.00116 J	2.86	0.000494 J		0.632			0.000638 J	
EP	MW-7B	Apr-13			< 0.0250	< 0.0250	< 0.0250	< 1.00	< 0.0250		0.397			< 0.0250	
EP	MW-7B	Apr-15			0.00588	0.0111	0.000702 J	0.188	< 0.000240		0.58			< 0.000380	
EP	MW-10	Apr-13			< 0.0250	< 0.0250	< 0.0250	< 1.00	< 0.0250		2.33			< 0.0250	
EP	MW-10	Nov-13			0.0219	0.0176	< 0.00500	< 0.200	< 0.00500		2.3			< 0.00500	
EP	MW-10	Apr-14			0.0211	0.0134	< 0.00200	< 0.100	< 0.00140		2.7			< 0.00200	
EP	MW-10	Nov-14			0.019	0.021	0.00092 JB	0.14	0.00098 J		2.4			0.0015 J	
EP	MW-10	Apr-15			0.02	0.0128 J	< 0.00270	< 0.0750	< 0.00120		2.43			< 0.00190	
EP	MW-10	Oct-15			0.0173	0.0124	< 0.000540	0.0570 J	< 0.000240		2.55			< 0.000380	
EP	MW-11A	Mar-13			< 0.0250	0.0294	< 0.0250	14.7	< 0.0250	485	1.67			< 0.0250	
EP	MW-11A	Apr-14			< 0.0100	0.0321	< 0.0100	2.5	< 0.00700		1.56			< 0.0100	
EP	MW-11A	Nov-14													
EP	MW-11A	Apr-15			< 0.0050	0.041 J	< 0.011	< 0.3	< 0.0048		0.91			< 0.0076	
EP	MW-11B	Mar-13			< 0.0250	< 0.0250	< 0.0250	3.25	< 0.0250	279	0.316			< 0.0250	
EP	MW-11B	Apr-15			0.0045 J	0.019 J	< 0.0054	4.4	< 0.0024		0.43			< 0.0038	
EP	MW-12	Apr-14			< 0.00500	0.0194	< 0.00500	0.441 J	< 0.00140		0.2			0.0172 J	
EP	MW-13	Apr-14			0.00205 J	0.031	< 0.00200	< 0.100	< 0.00140		0.192			< 0.00200	
EP	MW-15	Mar-13			0.0337	0.0218	< 0.0100	< 0.400	< 0.0100	224	1.77			< 0.0100	
EP	MW-15	Apr-14			0.0605	0.0217	0.00381 J	< 0.100	< 0.00140		0.363			0.00535 J	
EP	MW-15	Apr-15			0.028	0.024 J	< 0.0027	< 0.075	< 0.0012		0.86			0.02	
EP	MW-18A	Apr-13			< 0.0250	< 0.0250	< 0.0250	10.7	< 0.0250		3.02	< 0.000200	< 0.0250	< 0.0250	< 0.0250
EP	MW-18A	Nov-13	FD		0.00545	0.0168	< 0.00500	0.377	< 0.00500	1770	0.597	< 0.000200	< 0.00500	0.0725	0.00556
EP	MW-18A	Nov-13			0.00537	0.0173	< 0.00500	0.361	< 0.00500	1740	0.58	< 0.000200	< 0.00500	0.0758	0.00506
EP	MW-18A	Apr-14			< 0.0100	0.0135	< 0.0100	< 0.500	< 0.00700		0.189	< 0.0000400	< 0.0100	< 0.0100	< 0.00900
EP	MW-18A	Nov-14			0.0034	0.016	0.00080 JB	1.1	0.00030 J		0.076	< 0.000049	0.0065 B	0.0069	0.0047 J
EP	MW-18A	Apr-15			0.0041	0.0129	0.000794 J	0.379	< 0.00480		0.0221	< 0.0000490	0.00225	0.0503	0.00652
EP	MW-18A	Oct-15			0.00485	0.0173	0.00184 J	0.572	0.000262 J		0.363	< 0.0000490	0.0033	0.00108 J	0.00360 J
EP	MW-18B	Apr-13			< 0.0100	0.0126	< 0.0100	< 0.400	< 0.0100		0.572			< 0.0100	
EP	MW-18B	Apr-15			0.012	0.0125	0.000942 J	0.139	0.000814 J		0.789			< 0.000380	
EP	MW-22A	Apr-13			0.0471	< 0.0250	< 0.0250	3.81	< 0.0250		5.72			< 0.0250	
EP	MW-22A	Nov-13			0.061	0.0216	< 0.00500	3.13	< 0.0100		4.39			< 0.00500	
EP	MW-22A	Apr-14			0.0568	0.0153	< 0.00200	2.19	< 0.00140		3.61			< 0.00200	
EP	MW-22A	Nov-14	FD		0.064	0.018 J	0.0030 J	8.1	< 0.0012		6.3			< 0.0019	
EP	MW-22A	Nov-14			0.06	0.019	0.00081 JB	6.9	< 0.00024		6			0.0016 J	
EP	MW-22A	Apr-15	FD		0.036	0.015 J	< 0.0027	2.9	< 0.0012		4.4			< 0.0019	
EP	MW-22A	Apr-15			0.0545	0.0179 J	< 0.00270	2.34	< 0.00120		5.18			< 0.00190	
EP	MW-22A	Oct-15	FD		0.0479	0.0165	< 0.000540	4.54	< 0.000240		5.81			0.000979 J	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
EP	MW-22A	Oct-15			0.0482	0.0166	< 0.000540	4.62	< 0.000240		5.86			0.000966 J	
EP	MW-22B	Apr-13			0.0343	< 0.0250	< 0.0250	1.78	< 0.0250		3.37			< 0.0250	
EP	MW-22B	Apr-15			0.0389	0.0160 J	< 0.00270	2.32	0.00134 J		4.32			< 0.00190	
EP	MW-70	Apr-13			< 0.0250	< 0.0250	< 0.0250	2.49	< 0.0250		0.461			< 0.0250	
EP	MW-70	Nov-13			0.0218	0.021	< 0.00500	2.02	< 0.00500	186	0.552			< 0.00500	
EP	MW-70	Apr-14			0.0286	0.0157	< 0.00200	3.36	< 0.00140		0.262			< 0.00200	
EP	MW-70	Nov-14			0.021	0.02	0.00055 J	2.5	< 0.00024		0.73			0.00044 J	
EP	MW-70	Apr-15			0.0252	0.0151	0.000653 J	3.29	< 0.000240		0.222			< 0.000380	
EP	MW-70	Oct-15			0.0163	0.0166	< 0.000540	2.99	< 0.000240		0.227			< 0.000380	
EP	MW-72	Mar-13			0.0625	< 0.0250	< 0.0250	23.4	< 0.0250	364	5.67			< 0.0250	
EP	MW-72	Nov-13			0.0929	0.0186	< 0.0100	20.9	< 0.00500		5.26			< 0.0100	
EP	MW-72	Apr-14			0.048	0.0154	< 0.00100	7.13	< 0.000700		5.69			< 0.00100	
EP	MW-72	Apr-15			0.149	0.0321	< 0.00270	32.3	< 0.00120		3.05			0.0155	
EP	MW-73	Mar-13			0.109	< 0.0250	< 0.0250	8.38	< 0.0250	213	2.97			< 0.0250	
EP	MW-73	Oct-13			0.108	0.012	< 0.00500	9.29	< 0.00500	241	3.09			< 0.00500	
EP	MW-73	Apr-14			0.0982	0.0132 J	< 0.00500	5.71	< 0.00350		2.77			< 0.00500	
EP	MW-73	Apr-15			0.0757	0.00999 J	< 0.00270	2.4	< 0.00120		2.61			0.00233 J	
EP	MW-74	Mar-13			0.118	< 0.0250	< 0.0250	1.64	< 0.0250	167	2.78			< 0.0250	
EP	MW-74	Oct-13			0.0625	0.015	< 0.00500	0.948	< 0.00500	183	0.915			0.285	
EP	MW-74	Apr-14			0.0599	0.0137 J	< 0.00500	< 0.250	< 0.00350		1.18			0.193	
EP	MW-74	Nov-14			0.062	0.014	0.00074 JB	0.11	< 0.00024		0.88			0.25	
EP	MW-74	Apr-15			0.0549	0.00894 J	< 0.00270	0.175 J	< 0.00120		0.406			0.48	
EP	MW-74	Oct-15			0.0733	0.0127	< 0.00108	< 0.0300	< 0.000480		1.17			0.0608	
EP	MW-75	Mar-13			0.219	< 0.0250	< 0.0250	1.97	< 0.0100	109	0.852			< 0.0250	
EP	MW-75	Oct-13			0.368	0.0161	< 0.00500	3.59	< 0.00500	110	0.95			< 0.00500	
EP	MW-75	Apr-14			0.299	0.0166	0.00221 J	4.01	< 0.00140		1.1			0.00288 J	
EP	MW-75	Nov-14			0.35	0.016	0.0019	4.2	0.00029 J		0.96			0.0025	
EP	MW-75	Apr-15			0.4	0.0183 J	0.00396 J	10.7	< 0.00120		0.901			0.00311 J	
EP	MW-75	Oct-15			0.328	0.0149	0.00155 J	3.75	< 0.000240		0.821			0.00248	
EP	MW-76	Mar-13			0.0607	< 0.0250	< 0.0250	2.88	< 0.0100	161	0.666			< 0.0250	
EP	MW-76	Oct-13			0.118	0.0185	< 0.00500	5.81	< 0.00500	176	1.72			< 0.00500	
EP	MW-76	Apr-14			0.0712	0.0151	0.00181 J	4	< 0.000700		1.06			0.00301 J	
EP	MW-76	Nov-14			0.1	0.018	0.0027	5.1	0.00046 J		1.8			0.0049	
EP	MW-76	Apr-15			0.0777	0.0127 J	< 0.00270	4.04	< 0.00120		1.1			0.00258 J	
EP	MW-76	Oct-15			0.0582	0.0143	0.00126 J	3.75	0.000242 J		0.753			0.0025	
EP	MW-77	Mar-13			0.0611	< 0.0250	< 0.0250	3.88	< 0.0100	266	0.82	< 0.000200	< 0.0250	< 0.0250	< 0.0250
EP	MW-77	Oct-13	FD		0.0719	0.0133	0.00591	6	< 0.00500		0.908	< 0.000200	0.0136	0.0103	0.0075
EP	MW-77	Oct-13			0.0693	0.013	0.00636	6.01	< 0.00500	346	1.08	< 0.000200	0.015	0.00923	0.00746
EP	MW-77	Apr-14			0.0765	0.0138	0.00884 J	9.8	< 0.000700		1.06			0.0113	
EP	MW-77	Nov-14			0.054	0.013 J	0.0097	9.8	0.0013 J		0.77			0.021	
EP	MW-77	Apr-15			0.0928	0.0158 J	0.0144	14.9	< 0.00120		0.666			0.0135	
EP	MW-77	Oct-15	1.98		0.05	0.0132 J	0.00980 J	8.54	< 0.00120		0.703			0.0119	
EP	MW-78	Mar-13			< 0.0250	0.0284	0.0843	< 1.00	< 0.00500	411	0.491			< 0.0250	
EP	MW-78	Apr-14			0.0217	0.0388	0.0476	7.58	0.00107 J		1.46			0.0105	
EP	MW-78	Apr-15			0.0211	0.0318	0.133	12.3	< 0.00120		1.29			0.0156	
EP	MW-79	Mar-13			< 0.0250	< 0.0250	< 0.0250	< 1.00	< 0.0100	188	4.18			< 0.0250	
EP	MW-79	Oct-13			0.0114	0.0213	< 0.0100	< 0.400	< 0.0100	180	3.42			< 0.0100	
EP	MW-79	Apr-14			0.0188	0.0138	< 0.00200	0.108 J	< 0.00140		1.34			0.00675 J	
EP	MW-79	Nov-14			0.0073	0.02	0.00065 JB	0.23	< 0.00024		4			0.0017 J	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
EP	MW-79	Apr-15			0.00807 J	0.0154 J	< 0.00270	0.276 J	< 0.00120		1.46			< 0.00190	
EP	MW-79	Oct-15			0.0126	0.0165	< 0.00108	3.03	< 0.000480		3.76			0.00144 J	
EP	MW-80	Mar-13			< 0.0250	< 0.0250	< 0.0250	1.31	< 0.0100	152	0.583			< 0.0250	
EP	MW-80	Apr-14			0.0143	0.016	< 0.00200	2.1	< 0.00140		0.703			< 0.00200	
EP	MW-80	Apr-15			0.0187	0.0151 J	< 0.00270	1.73	< 0.00120		0.555			< 0.00190	
EP	MW-81	Mar-13	FD		< 0.0250	< 0.0250	< 0.0250	< 1.00	< 0.0100	165	2.08			< 0.0250	
EP	MW-81	Mar-13			< 0.0250	< 0.0250	< 0.0250	< 1.00	< 0.0100	164	2.14			< 0.0250	
EP	MW-81	Apr-14			0.0188	0.0162	< 0.00200	< 0.100	< 0.00140		0.137			0.00757 J	
EP	MW-81	Apr-15			0.022	0.0131 J	< 0.00270	0.183 J	< 0.00120		0.132			0.0235	
EP	MW-82	Mar-13			0.105	< 0.0250	< 0.0250	1.8	< 0.0250	78.3	1.55			< 0.0250	
EP	MW-82	Apr-14	FD		0.126	0.021	< 0.00200	2.73	< 0.00140		1.36			< 0.00200	
EP	MW-82	Apr-14			0.133	0.021	< 0.00200	3.06	0.000773 J		1.33			< 0.00200	
EP	MW-82	Apr-15			0.0929	0.0302	0.00570 J	1.68	< 0.00120		1.38			0.00302 J	
EP	MW-83	Mar-13			0.0441	< 0.0250	< 0.0250	1.53	< 0.0100	320	0.495			< 0.0250	
EP	MW-83	Oct-13			0.0407	0.0311	< 0.00500	17	< 0.0100	724	1.79			0.0097	
EP	MW-83	Apr-14			0.0388	0.0197	0.00430 J	4.65	0.000914 J		0.986			0.00977	
EP	MW-83	Nov-14			0.03	0.046	0.0089	12	0.00037 J		0.7			0.0075	
EP	MW-83	Apr-15			0.0304	0.0116 J	0.0115	8.98	< 0.00120		0.863			0.00376 J	
EP	MW-83	Oct-15			0.0215	0.0403	0.00791	1.87	0.000860 J		0.17			0.00806	
EP	MW-84	Mar-13			0.095	< 0.0250	< 0.0250	1.23	< 0.0250	482	2.61			< 0.0250	
EP	MW-84	Oct-13			0.108	0.0211	0.0117	5.97	< 0.0100	754	3.9			0.0139	
EP	MW-84	Apr-14			0.114	0.0144	0.00416 J	3.21	< 0.000700		3.58			0.00577 J	
EP	MW-84	Nov-14			0.083	0.029	0.019 B	1.6	< 0.00024		3.6			0.014	
EP	MW-84	Apr-15			0.116	0.0135 J	0.00500 J	2.54	< 0.00120		2.83			0.00452 J	
EP	MW-84	Oct-15			0.0827	0.0249 J	0.022	0.397 J	< 0.00240		2.74			0.0308	
EP	MW-87	Apr-13			< 0.0250	< 0.0250	< 0.0250	< 1.00	< 0.0250		0.0396			< 0.0250	
EP	MW-87	Nov-13			< 0.0250	< 0.0250	< 0.0250	< 1.00	< 0.0250		2.95			< 0.0250	
EP	MW-87	Apr-14			0.00862 J	0.0168	0.00290 J	0.789	< 0.00140		0.103			< 0.00200	
EP	MW-87	Nov-14			0.0024	0.027	0.00082 JB	0.2	< 0.00024		1.5			0.0014 J	
EP	MW-87	Apr-15			0.00635	0.0184	0.000789 J	0.194	< 0.000240		0.102			0.00115 J	
EP	MW-87	Oct-15			0.00702	0.0322	< 0.000540	11.8	< 0.000240		6.04			0.00131 J	
EP	MW-88	Apr-13			< 0.0250	< 0.0250	< 0.0250	< 1.00	< 0.0250		0.767			< 0.0250	
EP	MW-88	Nov-13			0.0136	0.0163	< 0.00500	< 0.200	< 0.0100		2.53			< 0.00500	
EP	MW-88	Apr-14			0.0106	0.0115	< 0.00200	< 0.100	< 0.00140		0.796			< 0.00200	
EP	MW-88	Nov-14			0.012	0.021	< 0.00054	1.4	< 0.00024		1.6			0.0015 J	
EP	MW-88	Apr-15			0.0231	0.0132 J	< 0.00270	2.11	< 0.00120		1.42			< 0.00190	
EP	MW-88	Oct-15			0.00917	0.0108	< 0.000540	0.0268 J	< 0.000240		0.772			< 0.000380	
EP	MW-120	Oct-13			0.0214	0.0225	< 0.00500	2.9	< 0.00500	304	1.18			0.0371	
EP	MW-120	Apr-14			0.0307	0.0335	0.00217 J	8.09	0.00213 J		1.19			< 0.00200	
EP	MW-120	Nov-14			0.026	0.018	0.001	12	0.00064 J		1.5			0.038	
EP	MW-120	Apr-15			0.0097 J	0.011 J	< 0.0027	2.6	< 0.0012		1.3			0.034	
EP	MW-120	Oct-15			0.0101	0.0149	< 0.000540	4.74	< 0.000240		1.79			0.00113 J	
EP	MW-121	Oct-13			0.0401	0.0172	< 0.00500	0.913	< 0.00500	263	4.49			0.0102	
EP	MW-121	Apr-14			0.0465	0.016	< 0.00100	0.963	< 0.000700		4.22			0.00446 J	
EP	MW-121	Nov-14			0.071	0.019	0.0014	2	0.00070 J		3.8			0.012	
EP	MW-121	Apr-15			0.037	0.014	< 0.0011	0.7	< 0.00048		3.8			0.0079	
EP	MW-121	Oct-15			0.0413	0.0138	< 0.000540	0.287	< 0.000240		2.7			0.0109	
EP	MW-122	Oct-13			0.00871	0.0317	< 0.00500	4.63	< 0.00500	168	1.43			< 0.00500	
EP	MW-122	Apr-14			0.00917 J	0.0406	< 0.00200	5.37	0.00144 J		2.09			< 0.00200	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
EP	MW-122	Nov-14			0.018	0.034	0.0015	2.6	0.00036 J		1.1			0.04	
EP	MW-122	Apr-15			0.012 J	0.027 J	< 0.0054	0.6 J	< 0.0024		1.9			0.0099 J	
EP	MW-122	Oct-15			0.00629	0.0251	< 0.00108	1.59	< 0.000480		1.27			0.00120 J	
EP	MW-123	Nov-13	FD		0.0258	0.0368	< 0.0100	0.676	< 0.00500		3.02			< 0.0100	
EP	MW-123	Nov-13			0.0303	0.0563	< 0.00500	1.06	< 0.00500		2.92			< 0.00500	
EP	MW-123	Apr-14			0.0226	0.0175	< 0.00200	0.102 J	< 0.00140		2.66			< 0.00200	
EP	MW-123	Nov-14			0.023	0.027	0.00093 JB	0.3	0.00075 J		2.7			0.0013 J	
EP	MW-123	Apr-15			0.026	0.02 J	< 0.0027	< 0.075	< 0.0012		2.6			< 0.0019	
EP	MW-123	Oct-15	1.45		0.025	0.0226	< 0.000540	0.0657 J	0.000254 J		2.72			< 0.000380	
EP	MW-124	Nov-13			< 0.0100	0.0527	< 0.0100	1.41	< 0.0100		0.592			< 0.0100	
EP	MW-124	Apr-14			0.00952 J	0.0216	< 0.00200	2.48	< 0.00140		0.479			< 0.00200	
EP	MW-124	Nov-14			0.0052	0.027	0.00086 JB	2.7	0.00051 J		1.1			0.00093 J	
EP	MW-124	Apr-15			0.00276	0.0192	0.00126 J	1.22	0.000379 J		0.816			< 0.000380	
EP	MW-124	Oct-15			0.00443	0.0247	< 0.00108	2.93	< 0.000480		0.562			< 0.000760	
EP	OCD-1R	Nov-13			0.0116	0.02	< 0.00500	0.31	< 0.00500	542	0.505			0.0378	
EP	OCD-1R	Apr-14			0.00833 J	0.0144 J	0.00407 J	0.65	< 0.00140		1.52			0.00892 J	
EP	OCD-1R	Nov-14			0.0071	0.02	0.00081 JB	0.34	< 0.00024		0.41			0.019	
EP	OCD-1R	Apr-15			0.0066 J	0.018 J	< 0.0054	0.24 J	< 0.0024		0.77			0.022	
EP	OCD-2A	Mar-13			< 0.0100	0.029	< 0.0100	6.45	< 0.0100	229	1.66			< 0.0100	
EP	OCD-2A	Nov-13			< 0.00500	0.0199	< 0.00500	< 0.200	< 0.00500	370	0.539			0.0169	
EP	OCD-2A	Apr-14			0.00332 J	0.0185	< 0.00200	0.425	< 0.00140		0.563			0.00245 J	
EP	OCD-2A	Nov-14			0.0021	0.023	0.00089 JB	0.71	< 0.00024		0.59			0.0075	
EP	OCD-2A	Apr-15			0.0020 J	0.019 J	< 0.0027	0.96	< 0.0012		0.31			< 0.0019	
EP	OCD-2A	Oct-15			0.00361 J	0.0234	0.00385 J	2.64	< 0.000480		1.34			< 0.000760	
EP	OCD-3	Mar-13			< 0.00500	0.0226	< 0.00500	1.37	< 0.00500	124	0.404			< 0.00500	
EP	OCD-3	Nov-13			< 0.00500	0.0217	< 0.00500	0.361	< 0.00500	203	0.0464			0.00574	
EP	OCD-3	Apr-14			0.00631 J	0.0198	< 0.00200	1.69	< 0.00140		0.134			0.00206 J	
EP	OCD-3	Nov-14			0.0055 J	0.019 J	< 0.0027	2.2 V	< 0.0012		0.16 J			0.0040 J	
EP	OCD-3	Apr-15			0.0042 J	0.02 J	< 0.0027	1.7	< 0.0012		0.16			< 0.0019	
EP	OCD-3	Oct-15			0.00184 J	0.0224	< 0.000540	0.352	< 0.000240		0.412			0.00113 J	
EP	OCD-4	Mar-13			< 0.0250	< 0.0250	< 0.0250	5.2	< 0.0250	320	0.294			< 0.0250	
EP	OCD-4	Nov-13			< 0.00500	0.0259	< 0.00500	3.46	< 0.00500	343	0.323			< 0.00500	
EP	OCD-4	Apr-14			< 0.00500	0.0213	< 0.00500	3.13	< 0.00140		0.276			< 0.00500	
EP	OCD-4	Nov-14			0.0036 J	0.025	< 0.0027	3.8	< 0.0012		0.31			< 0.0019	
EP	OCD-4	Apr-15			0.0035 J	0.026 J	< 0.0054	4	< 0.0024		0.31			< 0.0038	
EP	OCD-4	Oct-15			0.00701	0.0226	< 0.000540	6.61	< 0.000240		0.233			< 0.000380	
EP	OCD-5	Mar-13			< 0.0250	< 0.0250	< 0.0250	5.18	< 0.0250	280	0.339			< 0.0250	
EP	OCD-5	Nov-13			0.00598	0.0256	< 0.00500	2.43	< 0.00500	267	0.389			< 0.00500	
EP	OCD-5	Apr-14	FD		0.00491 J	0.0211	< 0.00200	1.28	< 0.00140		0.364			< 0.00200	
EP	OCD-5	Apr-14			0.00738 J	0.0206	< 0.00200	2.47	< 0.00140		0.411			< 0.00200	
EP	OCD-5	Nov-14			0.0099 J	0.028	< 0.0027	4.8	< 0.0012		0.36			< 0.0019	
EP	OCD-5	Apr-15			0.0080 J	0.028 J	< 0.0054	5.3	< 0.0024		0.33			< 0.0038	
EP	OCD-5	Oct-15			0.0166	0.0272	0.00108 J	11.3	< 0.000480		0.306			< 0.000760	
EP	OCD-6	Mar-13			0.0358	< 0.0250	< 0.0250	12.5	< 0.0250	267	2.1			< 0.0250	
EP	OCD-6	Nov-13			0.0212	0.0205	< 0.00500	0.201	< 0.00500	295	1.05			< 0.00500	
EP	OCD-6	Apr-14			0.0160 J	0.0191 J	< 0.00500	2.56	< 0.00350		2.15			< 0.00500	
EP	OCD-6	Nov-14			0.014	0.024 J	0.0027 J	7.6	< 0.0012		1.2			< 0.0019	
EP	OCD-6	Apr-15			0.0141	0.0240 J	< 0.00270	3.91	< 0.00120		2.07			< 0.00190	
EP	OCD-6	Oct-15			0.0235	0.0254	< 0.00108	9.38	< 0.000480		2.32			0.00110 J	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
EP	OCD-7AR	Mar-13			0.257	< 0.0250	< 0.0250	11.9	< 0.0250	224	3.48			< 0.0250	
EP	OCD-7AR	Nov-13			0.214	0.0171	< 0.00500	9.11	< 0.00500	228	3.49			0.00541	
EP	OCD-7AR	Apr-14	FD		0.165	0.0152	< 0.00200	8.08	< 0.00140		2.92			0.00356 J	
EP	OCD-7AR	Apr-14			0.158	0.0147	< 0.00200	7.59	< 0.00140		2.87			0.00425 J	
EP	OCD-7AR	Nov-14			0.11	0.015 J	< 0.0027	4.3	< 0.0012		2.4			0.0020 J	
EP	OCD-7AR	Apr-15			0.084	0.011 J	< 0.0027	1.6	< 0.0012		2.6			< 0.0019	
EP	OCD-7AR	Oct-15			0.201	0.0162	< 0.00108	9.36	< 0.00048		2.88			0.0023 J	
EP	OCD-7B	Mar-13			< 0.00500	0.016	< 0.00500	< 0.200	< 0.00500	133	0.0246			< 0.00500	
EP	OCD-7B	Apr-15			0.00294 J	0.0196 J	< 0.00270	3.52	< 0.00120		0.71			< 0.00190	
EP	OCD-8A	Apr-13	FD		0.13	< 0.0250	< 0.0250	9.16	< 0.0250		3.56	< 0.000200	< 0.0250	< 0.0250	< 0.0250
EP	OCD-8A	Apr-13			0.126	< 0.0250	< 0.0250	9.75	< 0.0250		3.78	< 0.000200	< 0.0250	< 0.0250	< 0.0250
EP	OCD-8A	Nov-13			0.0815	0.041	< 0.0100	10.3	< 0.0100		3	< 0.000200	0.0172	< 0.0100	< 0.0100
EP	OCD-8A	Apr-14	FD		0.0683	0.0218	< 0.00200	7.73	< 0.00140		3.12	< 0.0000400	0.0279	< 0.00200	0.00219 J
EP	OCD-8A	Apr-14			0.0676	0.023	< 0.00200	7.72	< 0.00140		3.14	< 0.0000400	0.0279	< 0.00200	0.00223 J
EP	OCD-8A	Nov-14			0.05	0.08	0.0072	13	< 0.0012		4.7	< 0.000049	0.062	< 0.0019	0.0065 J
EP	OCD-8A	Apr-15			0.0541	0.0336	0.000836 J	12.3	< 0.000240		6.38	< 0.0000490	0.0598	0.000802 J	0.00100 J
EP	OCD-8A	Oct-15			0.0622	0.0287	0.000787 J	9.7	0.000380 J		4.11	< 0.000049 J	0.0471	0.000836 J	0.00231 J
EP	OCD-8B	Apr-13			< 0.0250	< 0.0250	< 0.0250	< 1.00	< 0.0250		0.417			< 0.0250	
EP	OCD-8B	Apr-15			0.0126	0.0141	0.000872 J	0.239	0.000392 J		5.98			0.000525 J	
Field E of Refinery	KWB-1A	Apr-13			< 0.0100	< 0.0100	< 0.0100	< 0.400	< 0.0100	425	0.332	< 0.000200	< 0.0100	< 0.0100	0.0207
Field E of Refinery	KWB-1A	Oct-13			< 0.00500	0.0113	< 0.00500	< 0.200	< 0.00500		0.404	< 0.000200	0.00833	< 0.00500	0.0199
Field E of Refinery	KWB-1A	Apr-14			0.00441 J	0.01	< 0.00100	0.0770 J	< 0.000700		0.371	< 0.0000400	0.00833	< 0.00100	0.0223
Field E of Refinery	KWB-1A	Nov-14			0.0035	0.0087	0.00069 JB	< 0.05	0.00029 JB		0.42	< 0.000049	0.0082	0.00076 J	0.037
Field E of Refinery	KWB-1A	Apr-15			0.00362	0.00932	0.000649 J	0.108	0.000599 J		0.543	< 0.0000490	0.00866	0.00247	0.0236
Field E of Refinery	KWB-1A	Oct-15			0.00416	0.00949	< 0.000540	0.0387 J	0.000260 J		0.439	< 0.0000490	0.00846	0.000753 J	0.0209
Field E of Refinery	KWB-1C	Apr-13			< 0.0100	0.0146	< 0.0100	< 0.400	< 0.0100	370	< 0.0100			< 0.0100	
Field E of Refinery	KWB-1C	Apr-15			0.00338	0.00918	< 0.000540	0.0537 J	0.000320 J		0.462			0.000549 J	
Field E of Refinery	KWB-7	Apr-13			< 0.00500	0.0646	< 0.00500	1.09	< 0.00500		1.78	< 0.000200	0.0237	< 0.00500	0.0139
Field E of Refinery	KWB-7	Nov-14			0.02	0.079	0.00082 JB	0.81	0.0015 JB		4.9	< 0.000049	0.037	0.00064 J	0.0012 J
Field E of Refinery	KWB-7	Apr-15			0.02	0.0645	0.000832 J	1.44	0.000625 J		5.65	< 0.0000490	0.00901	< 0.000380	0.00133 J
Field E of Refinery	KWB-7	Oct-15			0.00939	0.0647	< 0.000540	1.04	< 0.000240		4.09	< 0.0000490	0.00442	< 0.000380	0.00182 J
Field E of Refinery	KWB-10R	Nov-14			0.036	3.4	0.001	8.2	0.0042		0.19			0.00052 J	
Field E of Refinery	KWB-10R	Apr-15			0.0259	3.5	< 0.000540	7.48	0.00172 J		0.149			< 0.000380	
Field E of Refinery	KWB-10R	Oct-15			0.0217	3.72	< 0.000540	5.84	0.00109 J		0.157			< 0.000380	
Field E of Refinery	KWB-11A	Apr-13			< 0.00500	0.0213	< 0.00500	< 0.200	< 0.00500		0.0369	< 0.000200	< 0.00500	0.00826	0.0131
Field E of Refinery	KWB-11A	Nov-14	FD		0.002	0.028	< 0.00054	< 0.05	0.0055		0.16	< 0.000049	0.0042	0.0082	0.012
Field E of Refinery	KWB-11A	Nov-14			0.002	0.028	0.00076 JB	< 0.05	0.0061 B		0.16	< 0.000049	0.0039	0.0079	0.013
Field E of Refinery	KWB-11A	Apr-15			0.00251 J	0.0240 J	< 0.00270	< 0.0750	0.00825 J		0.294	< 0.0000490	0.00675 J	0.00262 J	0.0122 J
Field E of Refinery	KWB-11A	Oct-15			0.00266	0.0267	< 0.000540	< 0.0150	0.00515		0.191	< 0.0000490	0.00461	0.00776	0.0112
Field E of Refinery	KWB-11B	Apr-13			< 0.00500	0.0169	< 0.00500	< 0.200	< 0.00500		< 0.00500	< 0.000200	< 0.00500	0.0114	0.0087
Field E of Refinery	KWB-11B	Apr-14			0.00157 J	0.0117	< 0.00100	< 0.0500	0.000903 J		< 0.00250	< 0.0000400	< 0.00100	0.00848	0.00741
Field E of Refinery	KWB-11B	Nov-14			0.0011 J	0.013	< 0.0027	< 0.05	0.00090 JB		0.0030 J	< 0.000049	< 0.00035	0.0073	0.0081
Field E of Refinery	KWB-11B	Apr-15			0.00147 J	0.0127	0.00116 J	< 0.0150	< 0.000240		0.00271 J	< 0.0000490	< 0.000350	0.00783	0.00806
Field E of Refinery	KWB-11B	Oct-15			0.00185 J	0.0134	0.000703 J	< 0.0150	< 0.000240		0.000257 J	< 0.0000490	< 0.000350	0.00769	0.00812
Field E of Refinery	KWB-12A	Oct-13			< 0.00500	0.0174	< 0.00500	< 0.200	< 0.00500	238	< 0.00500	< 0.000200	< 0.00500	0.0057	0.0132
Field E of Refinery	KWB-12A	Nov-14			0.0014 J	0.017	0.00086 JB	< 0.05	< 0.00024		0.0011 J	< 0.000049	0.00074 J	0.0052	0.013
Field E of Refinery	KWB-12A	Nov-14	FD		0.0016 J	0.01	0.00060 J	< 0.05	< 0.00024		0.0016 J	< 0.000049	0.00065 J	0.0046	0.012
Field E of Refinery	KWB-12A	Apr-15	FD		0.00145 J	0.0138	< 0.000540	< 0.0150	< 0.000240		0.000251 J	< 0.0000490	0.000503 J	0.00375	0.01
Field E of Refinery	KWB-12A	Apr-15			0.00160 J	0.0168	0.00164 J	0.269	0.000780 J		0.00353 J	< 0.0000490	0.000930 J	0.00435	0.0108

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
Field E of Refinery	KWB-12A	Oct-15		0.00242	0.017	0.000659 J	0.0285 J	< 0.000240			0.000862 J	< 0.0000490	0.000959 J	0.00368	0.0139
Field E of Refinery	KWB-12B	Apr-13	FD	< 0.00500	0.0108	< 0.00500	< 0.200	< 0.0100			< 0.00500	< 0.000200	< 0.00500	< 0.00500	0.0124
Field E of Refinery	KWB-12B	Apr-13		< 0.00500	0.0105	< 0.00500	< 0.200	< 0.00500			< 0.00500	< 0.000200	< 0.00500	< 0.00500	0.0121
Field E of Refinery	KWB-12B	Oct-13		< 0.00500	0.0097	< 0.00500	< 0.200	< 0.00500	237		< 0.00500	< 0.000200	< 0.00500	< 0.00500	0.0129
Field E of Refinery	KWB-12B	Apr-14	FD	0.00240 J	0.0108	< 0.00100	< 0.0500	< 0.000700			< 0.00250	< 0.0000400	< 0.00100	0.00363 J	0.0136
Field E of Refinery	KWB-12B	Apr-14		0.00286 J	0.00926	< 0.00100	< 0.0500	< 0.000700			< 0.00250	< 0.0000400	< 0.00100	0.00318 J	0.013
Field E of Refinery	KWB-12B	Nov-14		0.0015 J	0.013	0.00086 JB	< 0.05	< 0.00024			0.0027 J	< 0.000049	0.00071 J	0.0042	0.013
Field E of Refinery	KWB-12B	Apr-15		0.00151 J	0.00823	0.000588 J	< 0.0150	< 0.000240			0.000826 J	< 0.0000490	0.000469 J	0.00348	0.0108
Field E of Refinery	KWB-12B	Oct-15	FD	0.00237	0.0118	0.000599 J	0.0312 J	< 0.000240			< 0.000250 UB	< 0.0000490	0.000565 J	0.00361	0.0129
Field E of Refinery	KWB-12B	Oct-15		0.00182 J	0.0118	< 0.000540	0.0175 J	< 0.000240			0.00117 J	< 0.0000490	0.00120 J	0.0037	0.0129
Field E of Refinery	KWB-P4	Apr-13													
Field E of Refinery	KWB-P4	Apr-15													
Field E of Refinery	MW-57	Apr-13		0.0142	0.0264	0.00881	0.873	< 0.00500			0.516			< 0.00500	
Field E of Refinery	MW-57	Oct-13		0.0438	0.0669	< 0.00500	2.8	< 0.00500	122		2.03			< 0.00500	
Field E of Refinery	MW-57	Apr-14		0.0889	2.17	0.0456	38.8	0.0269			2.73			0.00342 J	
Field E of Refinery	MW-57	Nov-14		0.0055	0.052	0.0015	1	0.0019 J			1.3			0.0088	
Field E of Refinery	MW-57	Apr-15		0.00495	0.0267	0.00104 J	0.658	0.000946 J			0.192			0.03	
Field E of Refinery	MW-57	Oct-15		0.0066	0.0339	< 0.000540	0.301	0.000729 J			0.852			0.0159	
Field E of Refinery	MW-58	Oct-13		0.0511	0.681	< 0.00500	1.81	< 0.00500			0.881	< 0.000200	< 0.00500	< 0.00500	< 0.00500
Field E of Refinery	MW-58	Nov-14		0.0078	0.67	0.00083 J	0.66	0.0058			0.094	< 0.000049	0.0015 J	0.00040 J	0.0043 J
Field E of Refinery	MW-58	Apr-15		0.0121	0.819	< 0.000540	1.76	0.00339			0.0946	< 0.0000490	0.00140 J	< 0.000380	0.00229 J
Field E of Refinery	MW-58	Oct-15		0.0081	1.03	< 0.000540	1.29	0.00190 J			0.117	< 0.0000490	0.00108 J	< 0.000380	< 0.000180 UB
Field E of Refinery	MW-111	Apr-13		0.0136	0.166	< 0.00500	6.18	< 0.00500			1.86	< 0.000200	0.00701	< 0.00500	< 0.00500
Field E of Refinery	MW-111	Oct-13		0.0114	0.211	< 0.00500	7.88	< 0.00500	167		1.72			< 0.00500	
Field E of Refinery	MW-111	Apr-14		0.0114	0.254	0.00252 J	7.64	0.000856 J			1.57			< 0.00100	
Field E of Refinery	MW-111	Nov-14		0.014	0.22	0.0024	8	0.0013 J			1.6			0.00046 J	
Field E of Refinery	MW-111	Apr-15		0.0201	0.147	0.00167 J	5.03	0.00141 J			1.72			< 0.000380	
Field E of Refinery	MW-111	Oct-15		0.0144	0.127	0.00239	7.14	0.00205			1.52			< 0.000380	
Field E of Refinery	MW-112	Nov-14		0.005	7.6	0.0021	5.8	0.0013 J			0.31			0.0018 J	
Field E of Refinery	MW-113	Apr-13		< 0.00500	0.0405	< 0.00500	0.375	< 0.00500			0.389	< 0.000200	< 0.00500	< 0.00500	0.0116
Field E of Refinery	MW-113	Oct-13		< 0.00500	0.0259	< 0.00500	0.261	< 0.00500	161		0.404			< 0.00500	
Field E of Refinery	MW-113	Apr-14		0.00326 J	0.0882	0.00423 J	1.87	0.00211 J			0.408			< 0.00200	
Field E of Refinery	MW-113	Nov-14	FD	0.0093	0.048	< 0.00054	0.7	< 0.00024			1.9			0.00070 J	
Field E of Refinery	MW-113	Nov-14		0.0088	0.047	0.00059 J	0.68	0.00025 J			1.9			0.00044 J	
Field E of Refinery	MW-113	Apr-15	FD	0.00418	0.0518	0.00221	1.01	0.000872 J			0.857			< 0.000380	
Field E of Refinery	MW-113	Apr-15		0.00294	0.033	0.00171 J	0.559	0.000733 J			0.918			0.0025	
Field E of Refinery	MW-113	Oct-15	FD	0.00379	0.0233	< 0.000540	0.203	< 0.000240			0.767			< 0.000380	
Field E of Refinery	MW-113	Oct-15		0.00366	0.0242	< 0.000540	0.196	< 0.000240			0.765			< 0.000380	
Field E of Refinery	MW-125	Apr-14		0.00471 J	0.011	< 0.00100	0.0544 J	< 0.000700			0.47			< 0.00100 B	
Field E of Refinery	MW-125	Nov-14		0.0036	0.0092	0.00056 J	< 0.05	< 0.00024			0.42			0.0033	
Field E of Refinery	MW-125	Apr-15		0.00369	0.00961	< 0.000540	< 0.0150	< 0.000240			0.405			0.00581 J	
Field E of Refinery	MW-125	Oct-15		0.0044	0.00911	< 0.000540	0.0196 J	< 0.000240			0.371			0.00409	
Field E of Refinery	MW-126A	Apr-14		0.00322 J	0.0163	0.00131 J	0.463	0.00132 J			0.194			0.00175 J	
Field E of Refinery	MW-126A	Nov-14		0.0021	0.028	0.0017	1.7	0.0010 J			0.79			0.00053 J	
Field E of Refinery	MW-126A	Apr-15		0.0027	0.0185	0.00164 J	1.02	0.000293 J			0.824			< 0.000380	
Field E of Refinery	MW-126A	Oct-15		0.00195 J	0.0146	< 0.000540	0.786	< 0.000240			0.642			< 0.000380	
Field E of Refinery	MW-126B	Apr-14		0.00299 J	0.0182	< 0.00100	1.32	< 0.000700			0.918			< 0.00100	
Field E of Refinery	MW-126B	Nov-14		0.0039	0.017	0.0013	0.39	0.00064 J			0.098			0.0026	
Field E of Refinery	MW-126B	Apr-15		0.00377 J	0.0110 J	< 0.00270	< 0.0750	< 0.00120			0.0892			0.00215 J	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
Field E of Refinery	MW-126B	Oct-15			0.00442	0.0116	0.000580 J	0.154	0.000342 J		0.0609			0.00206	
Field E of Refinery	MW-127	Apr-14			0.00433 J	0.785	0.00192 J	1.66	0.000968 J		0.156			< 0.00100	
Field E of Refinery	MW-127	Nov-14			0.0064	1.2	0.0035	3.9	0.002		0.14			0.0012 J	
Field E of Refinery	MW-127	Apr-15			0.00626	0.534	0.00241	1.64	0.00138 J		0.109			< 0.000380	
Field E of Refinery	MW-127	Oct-15			0.00499	0.116	< 0.000540	0.323	< 0.000240		0.0943			< 0.000380	
Field E of Refinery	MW-128	Apr-14			0.0549	0.0867	0.00181 J	3.53	0.00132 J		2.33			< 0.00100	
Field E of Refinery	MW-128	Nov-14			0.062	0.094	0.0051	5	0.013		2.6			0.0012 J	
Field E of Refinery	MW-128	Apr-15			0.052	0.0783	0.000905 J	2.94	0.00246		2.42			< 0.000380 UBJ	
Field E of Refinery	MW-128	Oct-15			0.0552	0.0772	< 0.000540	2.65	< 0.000240		2.31			< 0.000380	
Field E of Refinery	MW-129	Nov-14			0.027	0.66	0.0045	7.8	0.0044		1.2			0.0032	
Field E of Refinery	MW-129	Apr-15			0.0338	0.498	0.00227	6.42	0.00277		1.21			< 0.000380	
Field E of Refinery	MW-129	Oct-15			0.0271	0.546	< 0.000540	5.07	0.000292 J		1.09			< 0.000380	
Field E of Refinery	MW-130	Apr-14			0.00474 J	0.037	0.00626	2.84	0.00398 J		0.202			0.00569	
Field E of Refinery	MW-130	Nov-14			0.0046	0.026	0.0025	1.2	0.0012 J		0.12			0.0037	
Field E of Refinery	MW-130	Apr-15			0.00718	0.677	0.00205	0.143 J	0.00929		0.242			< 0.00190 UB	
Field E of Refinery	MW-130	Oct-15			0.00477	0.0195	0.000567 J	0.162	0.000362 J		0.0921			0.00224	
Field E of Refinery	MW-131	Apr-14			0.0196	2.37	0.00159 J	2.25	0.00106 J		0.378			< 0.00100	
Field E of Refinery	MW-131	Nov-14			0.023	2.6	0.0028	3.8	0.0014 J		0.36			0.00050 J	
Field E of Refinery	MW-131	Apr-15			0.022	2.67	0.000747 J	2.34	0.000919 J		0.316			< 0.000380	
Field E of Refinery	MW-131	Oct-15			0.0261	2.88	0.00371	4.71	0.00294		0.337			< 0.000380	
Field E of Refinery	MW-133	Nov-14			0.019	0.13	0.00060 J	3.5	0.00080 J		0.38			< 0.00038	
Field E of Refinery	MW-133	Apr-15			0.00897	0.157	< 0.000540	5.53	0.00145 J		0.312			0.00124 J	
Field E of Refinery	MW-134	Apr-14			0.00701 J	0.0168	< 0.00200	0.581	< 0.00140		0.031			0.00570 J	
Field E of Refinery	MW-134	Nov-14			0.0059	0.015	0.0024	0.36	0.00024 J		0.031			0.012	
Field E of Refinery	MW-134	Apr-15	FD		0.00575	0.0107	0.00148 J	0.131	< 0.000240		0.00795			0.0129	
Field E of Refinery	MW-134	Apr-15			0.00881 J	0.0143 J	0.00285 J	0.234 J	< 0.00120		0.00773 J			0.0197	
Field E of Refinery	MW-134	Oct-15	FD		0.0063	0.00964	0.000709 J	< 0.0150	< 0.000240		0.00594			0.00807	
Field E of Refinery	MW-134	Oct-15			0.00621	0.0101	0.000869 J	< 0.0150	< 0.000240		0.0065			0.00756	
Field E of Refinery	MW-135	Apr-14			0.00454 J	0.0856	0.00467 J	1.68	0.00227 J		0.0799			0.0344	
Field E of Refinery	MW-135	Nov-14			0.0088	0.41	0.018	9.6	0.01		0.42			0.038	
Field E of Refinery	MW-135	Apr-15			0.00871 J	0.413	0.0168	5.33	0.0119		0.5			0.0337	
Field E of Refinery	MW-135	Oct-15			0.00442	0.058	0.00319	1.52	0.00144 J		0.0438			0.0399	
Field E of Refinery	RA-4196	Apr-13	FD							131					
Field E of Refinery	RA-4196	Apr-13								128					
Field E of Refinery	RA-4196	Nov-13	FD							127					
Field E of Refinery	RA-4196	Nov-13								128					
Field E of Refinery	RA-4196	Apr-14											< 0.000500		
Field E of Refinery	RA-4196	Apr-15													
Field E of Refinery	RA-4196	Oct-15													
Field E of Refinery	RA-4798	Apr-13								145					
Field E of Refinery	RA-4798	Nov-13								114					
Field E of Refinery	RA-4798	Apr-14	FD										0.00136 J		
Field E of Refinery	RA-4798	Apr-14											0.000731 J		
Field E of Refinery	RA-4798	Nov-14													
Field E of Refinery	RA-4798	Apr-15													
Field E of Refinery	RA-4798	Oct-15													
Field E of Refinery	RW-18	Apr-13			< 0.0100	0.015	< 0.00500	0.496	< 0.00500	509	< 0.00500			0.0124	
Field E of Refinery	RW-18	Apr-14			0.00496 J	0.0137	< 0.00200	0.295 J	< 0.00140		0.00572 J			0.011	
Field E of Refinery	RW-18	Apr-15			0.00379	0.0105	0.000703 J	< 0.0150	< 0.000240		< 0.000250			0.00988	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
Field E of Refinery	RW-20	Apr-15			0.00375 J	0.527	< 0.00270	1.75	0.00354 J		0.872			< 0.00190	
Field E of Refinery	RW-22	Apr-15			0.00248	0.816	0.0032	0.14	0.00397		0.845			0.00234	
N Refinery	MW-23	Apr-13			0.00869	9.65	< 0.00500	< 0.200	< 0.00500		0.0959			< 0.00500	
N Refinery	MW-23	Oct-13			0.0103	8.01	< 0.00500	< 0.200	< 0.00500	138	0.104			< 0.00500	
N Refinery	MW-23	Apr-14			0.00898	9.23	< 0.00100	< 0.0500	0.00224 J		0.0877			0.00280 J	
N Refinery	MW-23	Nov-14			0.022	0.1	0.0014 B	0.059 J	0.00075 J		0.21			0.0020 J	
N Refinery	MW-23	Apr-15			0.0164	0.319	< 0.00270	0.56	0.00336 J		0.212			0.125	
N Refinery	MW-23	Oct-15			0.0104	11	0.00113 J	0.0742 J	0.00578		0.089			0.00109 J	
N Refinery	MW-29	Apr-13			0.014	0.0164	< 0.0100	< 0.400	< 0.0100	430	0.527			< 0.0100	
N Refinery	MW-29	Oct-13			< 0.00500	0.0166	< 0.00500	< 0.200	< 0.00500	230	0.311			< 0.00500	
N Refinery	MW-29	Apr-14			0.00836	< 0.000900 B	< 0.00100	0.228	< 0.000700 B		0.558 J			0.00119 J	
N Refinery	MW-29	Nov-14			0.00093 J	0.02	0.00062 JB	< 0.05	0.00037 J		0.47			0.00063 J	
N Refinery	MW-29	Apr-15			0.000896 J	0.017	< 0.000540	0.0678 J	< 0.000240		0.382			< 0.000380	
N Refinery	MW-29	Oct-15			0.00100 J	0.0161	< 0.000540	< 0.0150	< 0.00120		0.369			0.00165 J	
N Refinery	MW-39	Oct-13			0.0147	0.022	< 0.00500	< 0.200	< 0.00500	91.8	0.0383			< 0.00500	
N Refinery	MW-39	Apr-15			0.00256 J	0.0228 J	< 0.00270	< 0.0750	< 0.00120		0.208			< 0.00190	
N Refinery	MW-39	Oct-15			0.00156 J	0.0222	< 0.000540	0.0199 J	< 0.00240		0.186			0.00266	
N Refinery	MW-40	Apr-13			< 0.0100	0.0284	< 0.0100	< 0.400	< 0.00500	195	0.0479			< 0.0100	
N Refinery	MW-40	Apr-14			0.00157 J	0.0278	< 0.00100	< 0.0500	< 0.000700		0.0451			0.00202 J	
N Refinery	MW-40	Apr-15			0.00122 J	0.0336	< 0.00270	0.345 J	0.00213 J		0.0398			< 0.00190	
N Refinery	MW-41	Apr-13			0.00746	0.0165	< 0.00500	< 0.200	< 0.00500	221	0.791			< 0.00500	
N Refinery	MW-41	Oct-13			0.00849	0.016	< 0.00500	< 0.200	< 0.00500	212	0.832			< 0.00500	
N Refinery	MW-41	Apr-14			0.00475 J	0.014	< 0.00100	0.0729 J	< 0.000700		0.854			0.00163 J	
N Refinery	MW-41	Apr-15			0.00591 J	0.0203 J	< 0.00270	0.136 J	< 0.00120		1.01			< 0.00190	
N Refinery	MW-42	Apr-13			0.0144	0.0285	< 0.0100	0.475	< 0.00500	308	0.224			< 0.0100	
N Refinery	MW-42	Oct-13			0.00973	0.0252	< 0.00500	0.213	< 0.00500	286	0.152			< 0.00500	
N Refinery	MW-42	Apr-14			0.012	0.0284	< 0.00100	0.527	0.000766 J		0.189			0.00168 J	
N Refinery	MW-42	Apr-15			0.00935 J	0.0242 J	< 0.00270	0.136 J	< 0.00120		0.171			0.00393 J	
N Refinery	MW-43	Apr-13			0.0102	0.102	< 0.00500	< 0.200	< 0.00500		0.439	< 0.000200	< 0.00500	< 0.00500	< 0.00500
N Refinery	MW-43	Oct-13	FD		0.0106	0.48	< 0.00500	< 0.200	< 0.00500	129	0.279	< 0.000200	0.00529	< 0.00500	< 0.00500
N Refinery	MW-43	Oct-13			0.0107	0.467	< 0.00500	< 0.200	< 0.00500	116	0.274	< 0.000200	< 0.00500	< 0.00500	< 0.00500
N Refinery	MW-43	Apr-14			0.0106	0.103	< 0.00100	< 0.0500	< 0.000700		0.47		0.00617	0.00128 J	< 0.000900
N Refinery	MW-43	Nov-14			0.009	0.42	0.0013	< 0.05	0.0018 J		0.37	< 0.000049	0.0059	0.022 O1J6	0.00062 J
N Refinery	MW-43	Apr-15			0.0134	0.239	< 0.00270	< 0.0750	< 0.00120		0.402	< 0.0000490	0.00482 J	0.0518	< 0.000900
N Refinery	MW-43	Oct-15			0.018	0.108	0.00111 J	0.0583 J	0.000577 J		0.157	< 0.0000490	0.00465	0.000853 J	0.00386 J
N Refinery	MW-59	Apr-13			0.0274	0.0168	< 0.00500	< 0.200	< 0.0100	220	0.506			< 0.00500	
N Refinery	MW-59	Apr-14			0.0324	0.0144	< 0.00100	0.164 J	< 0.000700		0.464			0.00432 J	
N Refinery	MW-59	Apr-15			0.0172	0.0163	< 0.000540	0.163	0.000394 J		0.465			0.00573 J	
N Refinery	MW-60	Apr-13	FD		0.0133	0.0228	< 0.0100	< 0.400	< 0.0100	333	0.37	< 0.000200	< 0.0100	< 0.0100	< 0.0100
N Refinery	MW-60	Apr-13			0.0124	0.0234	< 0.0100	< 0.400	< 0.00500	321	0.354	< 0.000200	< 0.0100	< 0.0100	< 0.0100
N Refinery	MW-60	Oct-13	FD		0.00996	0.0222	< 0.00500	0.366	< 0.00500		0.398	< 0.000200	< 0.00500	< 0.00500	< 0.00500
N Refinery	MW-60	Oct-13			0.0103	0.0207	< 0.00500	0.36	< 0.00500		0.402	< 0.000200	< 0.00500	< 0.00500	< 0.00500
N Refinery	MW-60	Apr-14			0.00662	0.0191	< 0.00100	0.0539 J	< 0.000700		0.348		< 0.00100	< 0.00100	< 0.000900
N Refinery	MW-60	Nov-14			0.0026	0.017	0.00065 J	0.065 J	0.00046 J		0.38	< 0.000049	0.0016 J	0.014	0.00029 J
N Refinery	MW-60	Apr-15	FD		0.00850 J	0.0177	< 0.000540	0.0960 J	< 0.000240		0.335		< 0.000350 UB	< 0.000380 UB	
N Refinery	MW-60	Apr-15			0.00464 J	0.0177 J	< 0.000540	0.0725 J	0.000305 J		0.34	< 0.0000490	< 0.000350 UB	< 0.00190 UJ	0.000695 J
N Refinery	MW-60	Oct-15	FD		0.0088	0.0179	< 0.000540	0.291	0.000328 J		0.342	< 0.0000490	0.000516 J	< 0.000380	0.00115 J
N Refinery	MW-60	Oct-15			0.00884	0.0167	< 0.000540	0.286	0.000907 J		0.332	< 0.000049 J	0.000645 J	0.014	0.00128 J
N Refinery	MW-61	Apr-13			< 0.00500	0.0255	< 0.00500	< 0.200	< 0.00500	167	0.0199			< 0.00500	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
N Refinery	MW-61	Oct-13		< 0.00500	0.0375	< 0.00500	< 0.200	< 0.00500	172	0.0224			< 0.00500		
N Refinery	MW-61	Apr-14		0.00127 J	0.0305	< 0.00100	0.0734 J	< 0.000700 B		0.0226			< 0.00100		
N Refinery	MW-61	Nov-14		0.002	0.053	0.00081 J	< 0.05	0.0012 J		0.0044 J			0.0087		
N Refinery	MW-61	Apr-15		0.00463 J	0.0499 J	< 0.00270	< 0.15	< 0.00240		0.00444 J			0.168		
N Refinery	MW-61	Oct-15		0.00107 J	0.0246	0.00119 J	0.0828 J	0.00122 J		0.0416			0.00688		
N Refinery	MW-62	Apr-13		< 0.00500	0.653	< 0.00500	< 0.200	< 0.00500	116	0.00805			< 0.00500		
N Refinery	MW-62	Oct-13		< 0.00500	0.141	< 0.00500	< 0.200	< 0.00500	113	< 0.00500			< 0.00500		
N Refinery	MW-62	Apr-14		0.00288 J	0.0679	< 0.00100	0.0711 J	< 0.000700		0.00786			0.00279 J		
N Refinery	MW-62	Nov-14		0.01	9.3	0.0021	0.26	0.0098		0.1			0.0019 J		
N Refinery	MW-62	Apr-15		0.0136	9.3	0.00149 J	0.0542 J	0.00419		0.0677			0.0187		
N Refinery	MW-62	Oct-15		0.00293	0.0235	< 0.000540	0.0154 J	0.000278 J		0.00266 J			0.00587		
N Refinery	MW-67	Oct-13		< 0.00500	0.544	< 0.00500	< 0.200	< 0.00500	106	0.0771	< 0.000200	< 0.00500	< 0.00500	< 0.00500	
N Refinery	MW-67	Nov-14		0.0018 J	0.12	0.00074 J	< 0.05	0.00094 J		0.13	< 0.000049	0.0033	0.014	0.00036 J	
N Refinery	MW-67	Apr-15		0.00371	0.14	< 0.000540	0.0384 J	0.00113 J		0.08	< 0.0000490	0.00198 J	0.000386 J	0.00108 J	
N Refinery	MW-67	Oct-15		0.0063	0.129	0.000623 J	< 0.0150	0.00100 J		0.0785	< 0.0000490	0.000885 J	0.000445 J	0.00164 J	
N Refinery	MW-90	Apr-13		< 0.00500	0.0188	< 0.00500	< 0.200	< 0.00500	232	0.0647			< 0.00500		
N Refinery	MW-90	Oct-13		0.00701	0.0248	< 0.00500	0.72	< 0.00500	311	0.337			< 0.00500		
N Refinery	MW-90	Apr-14		0.00439 J	0.0183	< 0.00100	0.0589 J	0.000780 J		0.0745			< 0.00100		
N Refinery	MW-90	Nov-14		0.011	0.014	0.00067 J	0.41	< 0.00024		0.052			0.021		
N Refinery	MW-90	Apr-15		0.00709	0.0233	< 0.000540	0.473	0.000242 J		0.345			0.00172 J		
N Refinery	MW-90	Oct-15		0.00883	0.0126	< 0.000540	1.56	< 0.000240		0.0504			0.0334		
N Refinery	MW-91	Oct-13	FD	< 0.00500	0.11	< 0.00500	< 0.200	< 0.00500	130	< 0.00500			< 0.00500		
N Refinery	MW-91	Oct-13		< 0.00500	0.11	< 0.00500	< 0.200	< 0.00500	134	< 0.00500			< 0.00500		
N Refinery	MW-91	Apr-14		0.00394 J	0.13	< 0.00100	0.117 J	0.00191 J		0.00450 J			< 0.00100		
N Refinery	MW-91	Nov-14		0.0047	0.094	0.00099 J	< 0.05	0.0013 J		0.026			0.0098		
N Refinery	MW-91	Apr-15		0.00509	0.094	< 0.000540	0.0957 J	0.00236		0.00502			0.0138		
N Refinery	MW-91	Oct-15		0.00552	0.0824	< 0.000540	0.0165 J	0.0027		0.00246 J			0.0248		
N Refinery	MW-93	Apr-13		0.00737	0.0602	< 0.00500	< 0.200	< 0.00500	97.9	0.0192			< 0.00500		
N Refinery	MW-93	Oct-13		0.00708	0.0835	< 0.00500	0.475	< 0.00500	89.7	0.183			0.00632		
N Refinery	MW-93	Apr-14		0.00671	0.0823	0.00329 J	0.163 J	0.00288 J		0.0471			0.00282 J		
N Refinery	MW-93	Nov-14		0.003	0.052	0.0065	3.2	0.0054		1.3			0.013		
N Refinery	MW-93	Apr-15		0.00687 J	0.0346	0.00442 J	1.83	0.00126 J		0.227			0.0646		
N Refinery	MW-93	Oct-15		0.00502	0.0486	0.00365	1.29	0.00327		0.12			0.0709		
N Refinery	MW-94	Nov-14		0.017	0.78	0.0014	0.081 J	< 0.00024		0.0065			0.0012 J		
N Refinery	MW-94	Oct-15		0.0215	1.57	0.00144 J	< 0.0150	< 0.000240		0.00194 J			0.000935 J		
N Refinery	MW-95	Apr-13		< 0.00500	0.13	< 0.00500	1.02	< 0.00500	113	0.0567			< 0.00500		
N Refinery	MW-95	Apr-14		< 0.00100	0.126	< 0.00100	0.0549 J	< 0.000700		0.0419			< 0.00100		
N Refinery	MW-95	Apr-15		0.00133 J	0.0762	< 0.000540	0.0357 J	0.000477 J		0.0247			0.000381 J		
N Refinery	MW-96	Apr-13		< 0.00500	0.147	< 0.00500	0.261	< 0.00500	118	< 0.00500			< 0.00500		
N Refinery	MW-96	Oct-13		0.00531	0.105	< 0.00500	< 0.200	< 0.00500	153	0.0075			< 0.00500		
N Refinery	MW-96	Apr-14		0.00469 J	0.109	< 0.00100	< 0.0500	< 0.000700		0.00250 J			< 0.00100		
N Refinery	MW-96	Nov-14		0.0049	0.073	0.0021	0.37	0.00089 J		0.11			0.0019 J		
N Refinery	MW-96	Apr-15		0.00421	0.126	0.000816 J	0.0338 J	0.000576 J		0.00352 J			0.000731 J		
N Refinery	MW-96	Oct-15		0.00397	0.158	0.000655 J	0.132	0.000953 J		0.00236 J			0.000640 J		
N Refinery	MW-98	Apr-13		< 0.00500	0.016	< 0.00500	< 0.200	0.0106	314	0.0287			< 0.00500		
N Refinery	MW-98	Oct-13		< 0.00500	0.0179	< 0.00500	< 0.200	0.01	290	0.0339			< 0.00500		
N Refinery	MW-98	Apr-14	FD	0.00177 J	0.0145	< 0.00100	< 0.0500	0.00934		0.0267			0.00464 J		
N Refinery	MW-98	Apr-14		0.00167 J	0.0156	< 0.00100	< 0.0500	0.00919		0.0259			0.00335 J		
N Refinery	MW-98	Nov-14		0.00068 J	0.017	0.0011	0.064 J	0.0079		0.027			0.02		

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
N Refinery	MW-98	Apr-15		< 0.00250	0.0177 J	< 0.00270	< 0.0750	0.00894 J			0.0192 J			0.108	
N Refinery	MW-98	Oct-15		0.00109 J	0.0149	0.000932 J	0.0339 J	0.00659			0.0213			0.00514	
N Refinery	MW-137	Oct-15		0.0525	0.127	0.00326	1.63	0.00596			0.12	< 0.0000490	0.00874	0.00218	0.00904
N Refinery	MW-138	Oct-15		0.00728	0.131	0.00218	2.54	0.00195 J			0.249	< 0.0000490	0.00420	0.000743 J	0.00705
N Refinery	RW-1	Apr-15		0.00607	0.0305	0.0029	0.216	0.000495 J			0.126			0.00302 J	
N Refinery	RW-2	Apr-15		0.0264	0.0245 J	0.00553 J	0.381 J	0.00233 J			0.313			0.0705	
N Refinery	RW-7	Apr-15		0.00239 J	0.508	< 0.00270	0.0976 J	< 0.00120			0.028			< 0.00190	
N Refinery	RW-8	Apr-15		0.00556 J	0.0889	< 0.00270	0.427 J	< 0.00120			0.0556			0.00200 J	
N Refinery	RW-9	Apr-13		< 0.0100	0.0703	< 0.0100	< 0.400	< 0.00500	198		0.288			< 0.0100	
N Refinery	RW-9	Apr-14		0.00434 J	0.047	< 0.00100	0.942	< 0.000700			0.417			0.00250 J	
N Refinery	RW-9	Apr-15		0.00392	0.0397	0.00102 J	0.257	0.000449 J			0.46			0.0144	
N Refinery	RW-10	Apr-13		< 0.00500	0.0215	< 0.00500	1.79	< 0.00500	218		0.224			< 0.00500	
N Refinery	RW-10	Apr-14		0.00174 J	0.0185	< 0.00100	5.22	< 0.000700			0.217			0.00143 J	
N Refinery	RW-10	Apr-15		0.00171 J	0.0258	0.000561 J	0.454	< 0.000240			0.237			0.00517	
N Refinery	RW-16	Apr-13		0.0167	0.0163	< 0.00500	< 0.200	< 0.00500	376		0.485			< 0.00500	
N Refinery	RW-16	Apr-14	FD	0.0132	0.0147	< 0.00100	0.184 J	< 0.000700			0.596			0.00278 J	
N Refinery	RW-16	Apr-14		0.0127	0.0141	< 0.00100	0.174 J	0.000789 J			0.576			0.00272 J	
N Refinery	RW-16	Apr-15		0.0171	0.0138 J	< 0.00270	< 0.0750	< 0.00120			0.421			< 0.00190	
N Refinery	RW-17	Apr-13		0.0107	0.0244	< 0.00500	0.462	0.00563	519		0.704			< 0.00500	
N Refinery	RW-17	Apr-14		0.00888	0.0228	< 0.00100	0.471	0.019			0.675			0.00156 J	
N Refinery	RW-17	Apr-15		0.0111	0.0274	< 0.00270	0.0850 J	0.00425 J			0.121			0.0361	
N RO Reject Field	MW-117*	Feb-13		0.00498 J	0.0235	< 0.005	< 0.2	< 0.005			0.108	< 0.0002	0.00413 J	0.00427 J	
N RO Reject Field	MW-117*	Nov-13		0.00347 J	0.0108	< 0.005	0.110 J	0.00125 J			0.00982	< 0.0002	0.00305 J	0.00380 J	
N RO Reject Field	MW-117	Apr-14		0.00366 J	0.017	0.00210 J	0.78	0.00109 J			0.033			< 0.00100 B	
N RO Reject Field	MW-117	Nov-14	FD	0.0024	0.016	0.0024	0.71	0.00086 J			0.014			0.0079	
N RO Reject Field	MW-117	Nov-14		0.0025	0.02	0.0031	0.95	0.00072 J			0.014			0.0077	
N RO Reject Field	MW-117	Apr-15		0.00249 J	0.0162 J	< 0.00270	0.492 J	< 0.00120			0.00809 J			0.0168	
N RO Reject Field	MW-117	Oct-15		0.00351	0.0214	0.00364	1.42	0.00113 J			0.0149			0.00486	
N RO Reject Field	MW-118*	Feb-13		0.011	0.0145	< 0.005	< 0.2	< 0.005			0.0232	0.000042 J	0.00173 J	0.00861	
N RO Reject Field	MW-118*	Nov-13		0.0125	0.00964	0.00105 J	0.179 J	0.00107 J			0.00526	< 0.0002	0.00214 J	0.00327 J	
N RO Reject Field	MW-118	Apr-14		0.0109	0.0147	0.00312 J	0.952	0.00266 J			0.0526			< 0.00100	
N RO Reject Field	MW-118	Nov-14		0.012	0.033	0.0032	1.1	0.0010 J			0.02			0.0065	
N RO Reject Field	MW-118	Apr-15		0.00977 J	0.0180 J	< 0.00270	0.253 J	0.00175 J			0.00454 J			0.00863 J	
N RO Reject Field	MW-118	Oct-15		0.0117	0.0131	0.00137 J	0.155	0.000329 J			0.00223 J			0.00509	
N RO Reject Field	MW-119*	Feb-13		0.00294 J	0.00981	< 0.005	< 0.2	< 0.005			0.0424	< 0.0002	0.00174 J	0.00246 J	
N RO Reject Field	MW-119*	Nov-13		0.00438 J	0.00973	0.00116 J	0.185 J	< 0.005			0.00459 J		0.00222 J	0.00144 J	
N RO Reject Field	MW-119	Apr-14	FD	0.00446 J	0.0126	0.00114 J	0.341	< 0.000700			0.0136			< 0.00100 B	
N RO Reject Field	MW-119	Apr-14		0.00470 J	0.0126	0.00119 J	0.35	< 0.000700			0.0148			< 0.00100 B	
N RO Reject Field	MW-119	Nov-14		0.0062	0.06	0.0042	2.3	0.0016 J			0.062			0.0013 J	
N RO Reject Field	MW-119	Apr-15		0.00398 J	0.0156 J	< 0.00270	0.309 J	< 0.00120			0.0151 J			< 0.00190	
N RO Reject Field	MW-119	Oct-15		0.00417	0.0105	0.000744 J	0.0886 J	< 0.000240			0.00485 J			0.00189 J	
NCL	MW-18	Apr-13	FD	0.00506	0.0183	< 0.00500	< 0.200	< 0.00500	261	< 0.00500	< 0.000200	< 0.00500	0.0126	0.0166	
NCL	MW-18	Apr-13		< 0.00500	0.0189	< 0.00500	< 0.200	< 0.00500	264	0.00548	< 0.000200	< 0.00500	0.012	0.0164	
NCL	MW-18	Oct-13		< 0.00500	0.025	< 0.00500	< 0.200	< 0.00500	207	0.017	< 0.000200	< 0.00500	0.00853	0.02	
NCL	MW-18	Apr-14		0.00313 J	0.0168	< 0.00100	0.146 J	< 0.000700			0.0203	< 0.0000400	0.00151 J	0.0112	0.0172
NCL	MW-18	Apr-15		0.00321	0.0167	0.00108 J	< 0.0150	< 0.000240			0.00671	< 0.0000490	0.00120 J	0.00947	0.0147
NCL	MW-45	Apr-13		< 0.00500	0.0168	< 0.00500	0.839	0.0061	264	0.52	< 0.000200	0.0085	< 0.00500	< 0.00500	
NCL	MW-45	Oct-13		< 0.00500	0.0175	< 0.00500	0.861	0.00623	299	0.574	< 0.000200	0.00827	< 0.00500	< 0.00500	
NCL	MW-45	Apr-14		0.00268 J	0.0159	< 0.00100	0.786	0.00443 J			0.535	< 0.0000400	0.00736	0.00191 J	0.00217 J

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
NCL	MW-45	Nov-14		0.0028	0.018	< 0.00054 B	0.82	< 0.00024 B			0.6	< 0.000049	0.0083	0.00071 J	0.00030 J
NCL	MW-45	Apr-15		0.00395	0.0185	< 0.000540	1.66	0.00527			0.534	< 0.0000490	0.00666	< 0.000380	0.000411 J
NCL	MW-45	Oct-15		0.00373	0.0216	0.000591 J	0.6	0.00667			0.551	< 0.0000490	0.00472	< 0.000380	0.00118 J
NCL	MW-53	Apr-13		< 0.00500	0.0267	< 0.00500	< 0.200	< 0.0100			1			< 0.00500	
NCL	MW-53	Apr-14		0.00217 J	0.0232	< 0.00100	< 0.0500	< 0.000700			0.778			0.00141 J	
NCL	MW-53	Apr-15		0.00179 J	0.0256	< 0.000540	0.0338 J	0.000252 J			1.2			0.00566	
NCL	MW-54A	Apr-13		< 0.00500	0.0197	< 0.00500	< 0.200	< 0.00500	107		0.458			< 0.00500	
NCL	MW-54A	Oct-13		< 0.00500	0.0192	< 0.00500	< 0.200	< 0.00500	104		0.516			< 0.00500	
NCL	MW-54A	Apr-14		0.00532	0.0181	< 0.00100	0.0714 J	0.000847 J			0.495			0.00134 J	
NCL	MW-54A	Nov-14		0.0045	0.019	< 0.00054 B	0.079 J	< 0.00024 B			0.45			< 0.00038	
NCL	MW-54A	Apr-15		0.00312	0.0173	< 0.000540	0.0537 J	< 0.000240			0.45			0.000509 J	
NCL	MW-54A	Oct-15		0.00312	0.0192	0.000898 J	< 0.0150	0.00110 J			0.488			0.00126 J	
NCL	MW-54B	Apr-13		< 0.00500	0.0183	< 0.00500	< 0.200	< 0.00500	119		0.145			< 0.00500	
NCL	MW-54B	Apr-15		0.0022	0.0165	< 0.000540	0.0520 J	< 0.000240			0.165			0.000400 J	
NCL	MW-55	Apr-13		0.00653	0.00954	< 0.00500	< 0.200	< 0.00500			0.0304	< 0.000200	< 0.00500	0.0252	0.0175
NCL	MW-55	Oct-13		< 0.00500	0.0114	< 0.00500	< 0.200	< 0.00500			0.0817	< 0.000200	< 0.00500	0.016	0.017
NCL	MW-55	Apr-14	FD	0.00484 J	0.00952	< 0.00100	< 0.0500	< 0.000700			0.185	< 0.0000400	0.00409 J	0.0238	0.0177
NCL	MW-55	Apr-14		0.00506	0.0106	< 0.00100	0.0618 J	< 0.000700			0.195	< 0.0000400	0.00498 J	0.0245	0.0176
NCL	MW-55	Nov-14		0.0045	0.013	< 0.00054 B	0.056 J	< 0.00024 B			0.093	< 0.000049	0.0025	0.013	0.017
NCL	MW-55	Apr-15		0.00457	0.011	0.00108 J	0.0483 J	< 0.000240			0.139	< 0.0000490	0.00268	0.019	0.0147
NCL	MW-55	Oct-15		0.00582	0.0128	0.00104 J	< 0.0150	< 0.000240			0.0468	< 0.0000490	0.00168 J	0.00934	0.0189
NCL	MW-56	Apr-13		0.00715	0.0128	< 0.00500	< 0.200	< 0.00500	270		0.333			0.005	
NCL	MW-56	Oct-13		0.00668	0.0135	< 0.00500	< 0.200	< 0.00500	227		0.33			< 0.00500	
NCL	MW-56	Apr-14		0.00689	0.0137	< 0.00100	< 0.0500	0.000927 J			0.36			0.00495 J	
NCL	MW-56	Nov-14		0.0067	0.014	< 0.00054 B	0.061 J	< 0.00024 B			0.35			0.0031	
NCL	MW-56	Apr-15		0.00727	0.0143	< 0.000540	0.0230 J	0.000739 J			0.293			0.00372	
NCL	MW-56	Oct-15		0.00731	0.0166	< 0.000540	< 0.0150	0.000392 J			0.321			0.00491	
NCL	MW-108	Apr-13		< 0.00500	0.0425	< 0.00500	0.261	< 0.00500	156		0.0195			< 0.00500	
NCL	MW-108	Oct-13		0.00869	0.0792	0.00547	< 0.200	< 0.00500	316		0.0551			< 0.00500	
NCL	MW-108	Apr-14		0.00320 J	0.046	0.00333 J	0.31	0.00196 J			0.0338			0.00115 J	
NCL	MW-108	Nov-14		0.0061	0.049	< 0.00054 B	< 0.05	< 0.00024 B			0.045			0.0012 J	
NCL	MW-108	Apr-15		0.00462	0.0387	0.00259	0.0411 J	0.00155 J			0.0256			< 0.000380	
NCL	MW-108	Oct-15		0.00399	0.0482	0.00226	0.0288 J	0.00157 J			0.0239			0.00234	
NCL	NCL-31	Apr-13		0.0112	0.0246	< 0.00500	0.939	< 0.00500	166		1.78			< 0.00500	
NCL	NCL-31	Oct-13		0.0103	0.0254	< 0.00500	0.866	< 0.00500	183		1.76			< 0.00500	
NCL	NCL-31	Apr-14		0.011	0.0229	< 0.00100	1.02	0.00104 J			1.83			0.00110 J	
NCL		Nov-14		0.026	0.021	< 0.00054 B	0.95	< 0.00024 B			2			0.00059 J	
NCL	NCL-31	Apr-15		0.00847	0.0224	0.000989 J	0.834	0.000803 J			1.7			< 0.000380	
NCL	NCL-31	Oct-15		0.00655	0.0334	0.00175 J	1.49	0.00140 J			2.28			< 0.000380	
NCL	NCL-32	Nov-14		0.013	0.2	0.0084	1.4	< 0.00024 B			0.47			0.00044 J	
NCL	NCL-32	Apr-15		0.00446 J	0.0556	0.00960 J	1.39	0.0167			0.968			< 0.00190	
NCL	NCL-32	Oct-15		0.00653	0.129	0.028	4.57	0.0289			1.34			0.000884 J	
NCL	NCL-33	Apr-13		< 0.00500	0.0282	< 0.00500	2.92	< 0.00500	102		0.0814			< 0.00500	
NCL	NCL-33	Oct-13		< 0.00500	0.0302	< 0.00500	2.98	< 0.00500	87.4		0.0872			< 0.00500	
NCL	NCL-33	Apr-14		0.00230 J	0.0246	< 0.00100	2.98	< 0.000700			0.0896			0.00142 J	
NCL	NCL-33	Nov-14		0.0019 J	0.032	< 0.00054 B	3.6	< 0.00024 B			0.11			0.00067 J	
NCL	NCL-33	Apr-15		0.00407 J	0.0247 J	< 0.00270	2.26	0.00569 J			0.108			< 0.00190	
NCL	NCL-33	Oct-15		0.00385	0.0274	< 0.000540	2.49	0.000259 J			0.117			0.000519 J	
NCL	NCL-34A	Oct-13		< 0.00500	1.05	< 0.00500	< 0.200	< 0.00500	76.5		0.0582			< 0.00500	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
NCL	NCL-34A	Nov-14			0.00042 J	0.26	0.00078 J	< 0.05	0.00066 J		0.053			< 0.00038	
NCL	NCL-34A	Apr-15			< 0.00120	0.547	< 0.00270	< 0.0750	0.00183 J		0.0369			< 0.00190	
NCL	NCL-34A	Oct-15			0.00218 J	0.382	< 0.00270	< 0.0750	0.00136 J		0.042			0.00641 J	
NCL	NCL-44	Apr-13			0.0405	0.036	0.00527	1.77	< 0.00500	122	0.694			< 0.00500	
NCL	NCL-44	Oct-13			0.0393	0.0302	< 0.00500	1.3	< 0.00500	112	0.658			< 0.00500	
NCL	NCL-44	Apr-14			0.0383	0.0276	< 0.00100	1.25	< 0.000700		0.656			0.00122 J	
NCL	NCL-44	Nov-14			0.042	0.031	< 0.00054 B	1.2	0.00064 J		0.68			0.00065 J	
NCL	NCL-44	Apr-15			0.0617	0.0311	< 0.00270	1.47	0.00123 J		0.703			< 0.00190	
NCL	NCL-44	Oct-15			0.07	0.0306	0.00105 J	2.09	0.000414 J		0.723			< 0.000380	
NCL	NCL-49	Apr-13			< 0.00500	0.0116	< 0.00500	< 0.200	< 0.00500		< 0.00500			< 0.00500	
NCL	NCL-49	Oct-13			< 0.00500	0.012	< 0.00500	< 0.200	< 0.00500	213	0.00745			< 0.00500	
NCL	NCL-49	Apr-14			0.00187 J	0.0115	< 0.00100	< 0.0500	< 0.000700		< 0.00250			0.00451 J	
NCL	NCL-49	Nov-14			0.0014 J	0.012	< 0.00054 B	< 0.05	< 0.00024 B		0.0011 J			0.0032	
NCL	NCL-49	Nov-14	FD		0.0016 J	0.011	< 0.00054 B	< 0.05	< 0.00024 B		0.0015 J			0.0026	
NCL	NCL-49	Apr-15	FD		0.00145 J	0.0106	< 0.000540	< 0.0150	< 0.000240		0.00146 J			0.00281	
NCL	NCL-49	Apr-15			0.00151 J	0.0109	< 0.000540	0.0232 J	0.000252 J		0.00215 J			0.00279	
NCL	NCL-49	Oct-15	FD		0.00208	0.0116	< 0.000540	< 0.0150	< 0.000240		0.000279 J			0.00365	
NCL	NCL-49	Oct-15			0.00218	0.0118	< 0.000540	< 0.0150	< 0.000240		0.000528 J			0.00363	
S Refinery	KWB-2R	Nov-14			0.0053	0.089	0.00060 J	0.57	0.0039		0.31			0.00048 J	
S Refinery	KWB-2R	Apr-15			0.00281	0.274	0.000702 J	0.329	0.00468		0.356			< 0.000380	
S Refinery	KWB-2R	Oct-15			0.0039	0.259	0.000641 J	0.0295 J	0.00195 J		0.0529			< 0.000380	
S Refinery	KWB-5	Oct-13			0.0238	3.73	< 0.00500	4.79	< 0.00500	144	2.17			< 0.00500	
S Refinery	KWB-5	Nov-14			0.024	3.7	0.00059 J	5.4	0.00042 J		2.3			0.00082 J	
S Refinery	KWB-5	Apr-15			0.0225	3.42	< 0.000540	3.39	0.000632 J		1.57			< 0.000380	
S Refinery	KWB-5	Oct-15			0.0209	3.65	< 0.000540	3.22	0.000340 J		1.59			< 0.000380	
S Refinery	KWB-6	Nov-14			0.0095	0.16	0.00073 J	0.77	0.0010 J		2.2			0.0013 J	
S Refinery	KWB-6	Apr-15			0.00621	0.294	< 0.000540	0.87	0.00182 J		2.16			< 0.000380	
S Refinery	KWB-6	Oct-15			0.0124	0.136	< 0.000540	0.558	0.00137 J		2.04	< 0.0000490	0.00186 J	< 0.000380	0.00239 J
S Refinery	MW-28	Apr-13			< 0.00500	0.0492	< 0.00500	< 0.200	< 0.00500		0.0354	< 0.000200	0.00718	< 0.00500	< 0.00500
S Refinery	MW-28	Oct-13			< 0.00500	0.0663	< 0.00500	< 0.200	< 0.00500		0.0408	< 0.000200	0.00764	< 0.00500	< 0.00500
S Refinery	MW-28	Apr-14			0.00429 J	0.142	< 0.00100	< 0.0500	< 0.000700 B		0.0397	< 0.0000400	0.00817	< 0.00100	< 0.000900 B
S Refinery	MW-28	Nov-14			0.0067	0.1	0.0017 B	0.073 J	0.0045		0.1	< 0.000049	0.0056	0.0020 J	0.0099
S Refinery	MW-28	Apr-15			0.00912 J	0.0772	0.000931 J	0.0712 J	0.011		0.0685	< 0.0000490	0.00489	0.0204 J	0.00634
S Refinery	MW-28	Oct-15			0.00936	0.0484	0.000931 J	0.0744 J	0.0136		0.0261	< 0.0000490	0.0036	0.0205	0.00557
S Refinery	MW-48	Nov-14			0.033	0.35	0.0031	1.4	0.012		2			0.0014 J	
S Refinery	MW-48	Apr-15			0.004	0.0204 J	< 0.000540	0.562	0.000320 J		0.0948 J			< 0.000380 UB	
S Refinery	MW-48	Oct-15			0.0108	0.367	0.000690 J	0.131	0.00215		1.24			0.00487	
S Refinery	MW-50	Apr-13			< 0.00500	0.0198	< 0.00500	< 0.200	< 0.00500		1.31			< 0.00500	
S Refinery	MW-50	Oct-13			< 0.00500	0.024	< 0.00500	0.43	< 0.00500	182	1.47			< 0.00500	
S Refinery	MW-50	Apr-14			< 0.00100	0.0199	< 0.00100	0.123 J	0.00124 J		1.32			< 0.00100	
S Refinery	MW-50	Nov-14			0.0042	0.024	0.00060 J	3.7	0.0010 J		1.5			0.00040 J	
S Refinery	MW-50	Apr-15			0.00138 J	0.0226	< 0.000540	0.471	0.00102 J		1.53			< 0.000380	
S Refinery	MW-50	Oct-15			0.00166 J	0.0219	< 0.000540	0.0271 J	0.000889 J		1.37			0.000495 J	
S Refinery	MW-52	Apr-13			< 0.0100	0.00906	< 0.00500	< 0.200	< 0.00500		0.0726	< 0.000200	< 0.0100	< 0.00500	0.0251
S Refinery	MW-52	Oct-13	FD		< 0.00500	0.0114	< 0.00500	< 0.200	< 0.00500	155	0.0344	< 0.000200	< 0.00500	< 0.00500	0.0258
S Refinery	MW-52	Oct-13			< 0.00500	0.0114	< 0.00500	< 0.200	< 0.00500	161	0.0296	< 0.000200	< 0.00500	< 0.00500	0.0267
S Refinery	MW-52	Apr-14	FD		0.00349 J	0.00988	0.00143 J	0.0709 J	< 0.000700		0.0324	< 0.0000400	0.00206 J	0.00124 J	0.0238
S Refinery	MW-52	Apr-14			0.00373 J	0.00923	< 0.00100	< 0.0500	< 0.000700		0.036	< 0.0000400	0.00268 J	0.00103 J	0.0236
S Refinery	MW-52	Nov-14			0.0033	0.0097	0.00057 J	< 0.05	0.00076 J		0.06	< 0.000049	0.0067	0.002	0.025

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals

2015 Annual Groundwater Report

Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
S Refinery	MW-52	Apr-15			0.00318	0.0098	< 0.000540	0.0256 J	< 0.000240		0.0478	< 0.0000490	0.00625	< 0.000380 UB	0.0253
S Refinery	MW-52	Oct-15			0.00429	0.0129	0.000582 J	0.0180 J	< 0.000240		0.0446	< 0.0000490	0.00684	0.00187 J	0.0262
S Refinery	MW-65	Nov-14			0.058	0.37	0.00074 J	8.6	0.0019 J		2.2			0.00042 J	
S Refinery	MW-65	Apr-15			0.0186	3.08	< 0.000540	2.88	0.00153 J		0.79			< 0.000380	
S Refinery	MW-66	Apr-13			< 0.00500	1.93	< 0.00500	0.54	< 0.00500		0.283	< 0.000200	0.00959	< 0.00500	< 0.00500
S Refinery	MW-66	Oct-13	FD		< 0.00500	1.89	< 0.00500	0.56	< 0.00500		0.303	< 0.000200	0.0091	< 0.00500	< 0.00500
S Refinery	MW-66	Oct-13			< 0.00500	1.99	< 0.00500	0.601	< 0.00500		0.306	< 0.000200	0.00981	< 0.00500	< 0.00500
S Refinery	MW-66	Apr-14			0.00300 J	1.9	< 0.00100	0.397 J	< 0.000700		0.335	< 0.0000400	0.00857	< 0.00100	< 0.000900
S Refinery	MW-66	Nov-14			0.0029	2.2	0.00076 J	1.4	0.0026		0.28	< 0.000049	0.0068	0.0015 J	0.00084 J
S Refinery	MW-66	Apr-15			0.00298	2.35	< 0.000540	0.635	0.000902 J		0.189	< 0.0000490	0.00613	< 0.000380	0.000941 J
S Refinery	MW-66	Oct-15			0.0037	2	< 0.000540	0.792	0.000430 J		0.22	< 0.0000490	0.00743	< 0.000380	0.00175 J
S Refinery	MW-99	Nov-14			0.012	0.43	0.0019	1.2	0.0038		0.29			< 0.00038	
S Refinery	MW-99	Apr-15			0.00289	0.159	0.000639 J	0.457	0.00571		0.0802			0.000808 J	
S Refinery	MW-99	Oct-15			0.00812	0.279	0.000832 J	0.382	0.00153 J		0.191			< 0.000380	
S Refinery	MW-101	Apr-13			0.00878	0.111	< 0.00500	0.294	< 0.00500	90.3	0.835			< 0.00500	
S Refinery	MW-101	Oct-13			0.0689	0.0563	< 0.00500	2.75	< 0.00500	95.3	1.23			< 0.00500	
S Refinery	MW-101	Apr-14			0.0320 J	< 0.000900 B	< 0.00100	1.42 J	< 0.000700		1.12			< 0.00100	
S Refinery	MW-101	Nov-14			0.049	0.089	0.00061 J	1.8	0.00065 J		0.98			0.0012 J	
S Refinery	MW-101	Apr-15			0.0939	0.0501	0.000581 J	3.58	< 0.000240		1.08			< 0.000380	
S Refinery	MW-101	Oct-15			0.056	0.0382	< 0.000540	2.59	< 0.00240		1.13			0.00344 J	
S Refinery	MW-102	Nov-14			0.012	0.25	0.0016	0.1 J	0.0026		0.049			0.0013 J	
S Refinery	MW-102	Apr-15			0.01	6.21	< 0.000540	0.138	0.00344		0.0431			< 0.000380	
S Refinery	MW-102	Oct-15			0.0123	0.423	0.00106 J	0.0723 J	0.00263		0.0273			0.000393 J	
S Refinery	MW-103	Apr-13			< 0.00500	0.823	< 0.00500	< 0.200	< 0.0100	11.9	< 0.00500			< 0.00500	
S Refinery	MW-103	Apr-14			0.00270 J	1.47	< 0.00100 B	< 0.0500	< 0.000700 B		0.00278 J			< 0.00100	
S Refinery	MW-103	Apr-15			0.00617 J	9.36	< 0.0110	< 0.3	< 0.00480		0.0125 J			0.0607 J	
S Refinery	MW-104	Apr-13			< 0.00500	0.019	< 0.00500	< 0.200	< 0.00500	74.3	0.0255			< 0.00500	
S Refinery	MW-104	Oct-13			< 0.00500	0.0245	< 0.00500	< 0.200	< 0.00500	73.1	0.0274			< 0.00500	
S Refinery	MW-104	Apr-14	FD		< 0.00100	0.0188	< 0.00100	< 0.0500	< 0.000700		0.0216			< 0.00100 B	
S Refinery	MW-104	Apr-14			< 0.00100	< 0.000900 B	< 0.00100	< 0.0500	< 0.000700		0.038			< 0.00100	
S Refinery	MW-104	Nov-14	FD		0.0017 J	0.029	0.00075 J	< 0.05	< 0.00024		0.032			0.00095 J	
S Refinery	MW-104	Nov-14			0.0018 J	0.03	< 0.00054	< 0.05	< 0.00024		0.031			< 0.00038	
S Refinery	MW-104	Apr-15	FD		0.000400 J	0.0196	< 0.000540	0.0490 J	< 0.000240		0.0217			< 0.000380	
S Refinery	MW-104	Apr-15			0.000408 J	0.0195	< 0.000540	0.0945 J	0.000364 J		0.0228			< 0.000380	
S Refinery	MW-104	Oct-15	FD		0.00149 J	0.0218	< 0.000540	< 0.0150	< 0.000240		0.0142			< 0.000380	
S Refinery	MW-104	Oct-15			0.00150 J	0.0229	0.000591 J	0.0385 J	< 0.000240		0.0148			< 0.000380	
S Refinery	MW-105	Nov-14			0.011	0.12	0.0027	0.87	0.0025		0.27			0.012	
S Refinery	MW-105	Apr-15			0.00662	0.108	0.00184 J	2.55	0.00279		0.105			< 0.000380	
S Refinery	MW-105	Oct-15			0.00849	0.214	0.00221	1.07	0.00562		0.0917			0.0108 J	
S Refinery	MW-106	Apr-13			0.00686	0.0293	< 0.00500	0.416	0.014	229	0.0174			< 0.00500	
S Refinery	MW-106	Oct-13			0.0083	0.029	< 0.00500	< 0.200	0.00728	244	0.0144			< 0.00500	
S Refinery	MW-106	Apr-14			0.00755	0.03	0.00115 J	0.101 J	0.00337 J		0.0124			0.00320 J	
S Refinery	MW-106	Apr-15			0.00491	0.089	0.00283	1.16	0.0296		0.147			0.00957	
S Refinery	MW-106	Oct-15			0.00726	0.0451	0.00385	0.65	0.00907		0.0119			0.00522	
S Refinery	MW-107	Apr-13			0.00702	2.33	< 0.00500	9.24	< 0.00500	163	0.277			< 0.00500	
S Refinery	MW-107	Oct-13			0.0124	3.6	< 0.00500	11.9	< 0.00500	162	0.265			< 0.00500	
S Refinery	MW-107	Apr-14			0.00688	2.74	< 0.00100	10.1	< 0.000700		0.27			< 0.00100	
S Refinery	MW-107	Nov-14			0.015	0.52	0.00097 J	3.8	0.00049 J		0.39			< 0.00038	
S Refinery	MW-107	Apr-15			0.0107	1.75	< 0.000540	0.787	0.000331 J		0.158			< 0.000380 UBJ	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
S Refinery	MW-107	Oct-15		0.00883	1.55	0.000625 J	0.368	0.000259 J			0.178			< 0.000380	
S Refinery	MW-109	Apr-13		0.028	0.867	< 0.00500	1.3	< 0.00500			0.421			< 0.00500	
S Refinery	MW-109	Oct-13		0.0221	0.232	< 0.00500	0.573	< 0.00500	105		0.337			< 0.00500	
S Refinery	MW-109	Apr-14		0.0223	0.562	0.00194 J	1.64	< 0.000700			0.345			< 0.00100	
S Refinery	MW-109	Nov-14		0.0077	0.094	0.00076 J	0.46	< 0.00024			0.18			< 0.00038	
S Refinery	MW-109	Apr-15		0.00554	0.101	< 0.000540	0.154	< 0.000240			0.14 J			< 0.000380 UB	
S Refinery	MW-109	Oct-15		0.00134 J	0.112	0.000783 J	0.102	0.000334 J			0.127			0.00328	
S Refinery	MW-110	Apr-13		0.0386	0.067	< 0.00500	1.56	< 0.00500			2.34			< 0.00500	
S Refinery	MW-110	Oct-13		0.0367	0.0643	< 0.00500	1.26	< 0.00500	84.4		2.25			< 0.00500	
S Refinery	MW-110	Apr-14		0.0281	0.0599	< 0.00100	1.32	< 0.000700			1.44			< 0.00100	
S Refinery	MW-110	Nov-14		0.051	0.048	0.00074 J	1.2	< 0.00024			1.8			0.00038 J	
S Refinery	MW-110	Apr-15		0.00924	0.0617	0.000649 J	0.379	0.000690 J			0.612			< 0.000380 UB	
S Refinery	MW-110	Oct-15		0.013	0.0765	0.000557 J	0.321	0.000523 J			0.882			< 0.000380	
S Refinery	RA-313	Apr-13							47.5						
S Refinery	RA-313	Apr-14													
S Refinery	RA-313	Apr-15													
S Refinery	RW-4	Apr-15		0.00183 J	0.0521	< 0.000540	0.0744 J	0.000665 J			0.104			< 0.000380	
S Refinery	RW-5R	Apr-15		0.00136 J	0.0259	< 0.000540	0.0952 J	0.000336 J			0.0177			< 0.000380	
S Refinery	RW-6	Apr-15		0.0332	1.66	< 0.000540	13.8	0.000574 J			0.28			< 0.000380	
S RO Reject	MW-114	Feb-13		0.00561	0.0204	< 0.005	< 0.2	< 0.005			1.51	< 0.0002	0.00651	0.0222 J	
S RO Reject	MW-114*	Nov-13		0.00539	0.0112	0.00119 J	0.167 J	< 0.005			0.035		0.00369 J	0.00451 J	
S RO Reject	MW-114	Apr-14		0.00292 J	0.0153	< 0.00100	0.0777 J	< 0.000700			1.2			< 0.00100 B	
S RO Reject	MW-114	Nov-14		0.0031	0.026	0.0023	0.81	0.00055 J			1.2			0.0018 J	
S RO Reject	MW-114	Apr-15		0.00279	0.0165	0.000896 J	0.361	0.000317 J			0.927			< 0.000380 UB	
S RO Reject	MW-114	Oct-15		0.00355	0.0134	< 0.000540	0.0486 J	< 0.000240			0.905			0.000757 J	
S RO Reject Field	MW-115*	Feb-13		0.00499 J	0.0309	< 0.005	< 0.2	< 0.005			0.255	< 0.0002	0.00483 J	0.0081	
S RO Reject	MW-115*	Nov-13		0.00616	0.011	< 0.005	< 0.2	< 0.005			0.0249		0.00206 J	0.00506	
S RO Reject	MW-115	Apr-14		0.00444 J	0.0102	< 0.00100	0.0685 J	< 0.000700			0.0262			< 0.00100 B	
S RO Reject	MW-115	Nov-14		0.0034	0.015	0.00086 J	0.13	0.00024 J			0.03			0.0028	
S RO Reject	MW-115	Apr-15		0.00697 J	0.0118	< 0.000540	0.0684 J	< 0.000240			0.12			< 0.000380 UB	
S RO Reject	MW-115	Oct-15		0.00761	0.0119	0.000763 J	0.0367 J	< 0.000240			0.124			0.000590 J	
S RO Reject	MW-116*	Feb-13		0.00797 J	0.0161	< 0.005	< 0.2	< 0.005			0.0437	0.000131 J	0.0012 J	0.00203 J	
S RO Reject	MW-116*	Nov-13		0.00525	0.00989	< 0.005	< 0.2	< 0.005			0.0092		0.00245 J	0.00611	
S RO Reject	MW-116*	Nov-13	FD	0.00526	0.011	< 0.005	0.132 J	< 0.005			0.00576		0.00144 J	0.00582	
S RO Reject	MW-116	Apr-14		0.00442 J	0.0102	< 0.00100	0.108 J	< 0.000700			0.00627			< 0.00100 B	
S RO Reject	MW-116	Nov-14		0.0038	0.0098	0.0010 J	0.11	< 0.00024			0.0042 J			0.0055	
S RO Reject	MW-116	Apr-15		0.00521	0.00931	< 0.000540	< 0.0150	< 0.000240			0.00454 J			< 0.000380 UB	
S RO Reject	MW-116	Oct-15		0.00825	0.0434	0.00542	2.45	0.00183 J			0.0815			0.000668 J	
TEL	MW-49	Apr-13	FD	0.00556	0.0404	< 0.00500	< 0.200	< 0.00500	173		0.289	< 0.000200	0.00841	< 0.00500	< 0.00500
TEL	MW-49	Apr-13		0.00553	0.039	< 0.00500	< 0.200	< 0.00500	176		0.29	< 0.000200	0.00825	< 0.00500	< 0.00500
TEL	MW-49	Oct-13		< 0.00500	0.0511	< 0.00500	< 0.200	< 0.00500			0.245	< 0.000200	0.00904	< 0.00500	< 0.00500
TEL	MW-49	Apr-14		0.00457 J	0.0409	< 0.00100	< 0.0500	< 0.000700			0.302	< 0.0000400	0.00856	0.00113 J	< 0.000900 B
TEL	MW-49	Nov-14		0.0055	0.1	0.0082	3.4	0.012			0.33	< 0.000049	0.02	0.0019 J	0.011
TEL	MW-49	Apr-15		0.00433	0.0514	0.00147 J	0.53	0.00133 J			0.269	< 0.0000490	0.00842	< 0.000380	0.00195 J
TEL	MW-49	Oct-15	1.05	< 0.000250 UB	0.0429	< 0.000540	0.0195 J	0.000453 J			0.209	< 0.0000490	0.0074	0.0117	0.00145 J
TEL	TEL-1	Apr-13		< 0.00500	0.0125	< 0.00500	< 0.200	< 0.00500	160		0.153			< 0.00500	
TEL	TEL-1	Oct-13		< 0.00500	0.013	< 0.00500	< 0.200	< 0.00500	139		0.114			< 0.00500	
TEL	TEL-1	Apr-14	FD	0.00372 J	0.0108 J	< 0.00100	< 0.0500	< 0.000700			0.0751 J			< 0.00100 B	
TEL	TEL-1	Apr-14		0.00402 J	0.0117	< 0.00100	< 0.0500	0.00109 J			0.0827			< 0.00100 B	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
TEL	TEL-1	Nov-14		0.0026	0.011	0.00090 J	< 0.05	< 0.00024			0.14			< 0.00038	
TEL	TEL-1	Apr-15		0.00537	0.0119	0.00501	0.0741 J	< 0.000240			0.0523			< 0.000380	
TEL	TEL-1	Oct-15		< 0.000250 UB	< 0.000360 UB	0.00318	0.0506 J	< 0.000240			0.103			0.00798 J	
TEL	TEL-2	Apr-13		0.0119	0.0652	< 0.00500	< 0.200	< 0.00500	200		0.0149			< 0.00500	
TEL	TEL-2	Oct-13		0.0109	0.0608	< 0.00500	< 0.200	< 0.00500	189		0.0189			< 0.00500	
TEL	TEL-2	Apr-14		0.0115	0.0729	0.00127 J	< 0.0500	0.00248 J			0.00988			0.00593	
TEL	TEL-2	Nov-14		0.012	0.11	0.0017	< 0.05	0.0024			0.013			0.0011 J	
TEL	TEL-2	Apr-15		0.0132	0.185	0.00134 J	0.0326 J	0.00276			0.0101			0.000383 J	
TEL	TEL-2	Oct-15		0.0118	0.153	0.00178 J	0.0291 J	0.00242			0.00753			0.00679	
TEL	TEL-3	Apr-13		< 0.00500	0.0135	< 0.00500	< 0.200	< 0.00500	123		0.0123			< 0.00500	
TEL	TEL-3	Oct-13		< 0.00500	0.0161	< 0.00500	< 0.200	< 0.00500	105		0.0197			< 0.00500	
TEL	TEL-3	Apr-14		0.00330 J	0.0147	0.00723	0.0610 J	< 0.000700			0.0122			< 0.00100 B	
TEL	TEL-3	Nov-14		0.0013 J	0.012	0.0053	0.076 J	< 0.00024			0.015			< 0.00038	
TEL	TEL-3	Apr-15		0.00354	0.0145	0.00466	0.0738 J	0.000599 J			0.00827			< 0.000380	
TEL	TEL-3	Oct-15		< 0.000250 UB	< 0.000360 UB	0.00613	0.0417 J	0.000435 J			0.0139			0.00966	
TEL	TEL-4	Apr-13		0.0085	0.0299	0.146	1.22	< 0.00500	250		0.587			< 0.00500	
TEL	TEL-4	Oct-13		0.0129	0.0475	0.0588	0.243	< 0.00500	437		0.763			< 0.00500	
TEL	TEL-4	Apr-14		0.0128	0.0376	0.223	0.0921 J	< 0.000700 B			0.408			0.00103 J	
TEL	TEL-4	Nov-14	FD	0.01	0.042	0.51	0.13	< 0.00024 B			0.28			< 0.00038	
TEL	TEL-4	Nov-14		0.01	0.043	0.38	0.093 J	< 0.00024 B			0.29			< 0.00038	
TEL	TEL-4	Apr-15	FD	0.00598	0.0233	0.599	2.41	0.00262			0.86			0.000420 J	
TEL	TEL-4	Apr-15		0.00613	0.0244	0.419	1.57	0.00227			0.872			< 0.000380	
TEL	TEL-4	Oct-15	FD	0.00929	0.0326	0.281	0.107	0.00206			0.412			0.0135	
TEL	TEL-4	Oct-15		0.0106	0.0338	0.315	0.107	0.00255			0.406			0.0201	
TMD	MW-8	Apr-13		0.0105	0.0123	0.262	0.838	< 0.0100	394		0.567			0.0233	
TMD	MW-8	Oct-13		0.00929	0.0123	0.0986	0.307	< 0.00500	396		0.584			0.0158	
TMD	MW-8	Apr-14		0.00884 J	0.0114	0.0212	< 0.100	< 0.00140			0.557			0.0237	
TMD	MW-8	Apr-15		0.0108	0.0107	0.234	0.779	0.000470 J			0.507			0.0188	
TMD	MW-16	Apr-13		< 0.0100	0.0162	< 0.0100	< 0.400	< 0.0100	203		0.052			< 0.0100	
TMD	MW-16	Apr-14		0.00470 J	0.0151	< 0.00200	< 0.100	< 0.00140			0.244			0.00322 J	
TMD	MW-16	Apr-15		0.00500 J	0.0174 J	< 0.00270	< 0.0750	< 0.00120			0.0950 J			0.00213 J	
TMD	MW-20	Apr-13		< 0.0100	0.0101	< 0.0100	< 0.400	< 0.0100	449		0.251			0.016	
TMD	MW-20	Apr-14	FD	0.00865 J	0.0103	< 0.00200	< 0.100	< 0.00140			0.08			0.017	
TMD	MW-20	Apr-14		0.00750 J	0.00905 J	< 0.00200	< 0.100	< 0.00140			0.0906			0.0179	
TMD	MW-20	Apr-15		0.00621	0.0104	< 0.000540	0.0746 J	< 0.000240			0.00743			0.0289	
TMD	MW-21	Apr-13		< 0.0100	< 0.0100	< 0.0100	< 0.400	< 0.0100	429		0.345			0.0305	
TMD	MW-21	Oct-13	FD	0.00554	0.0079	< 0.00500	< 0.200	< 0.00500	469		0.629			0.0192	
TMD	MW-21	Oct-13		0.0053	0.00844	< 0.00500	< 0.200	< 0.00500	436		0.614			0.0195	
TMD	MW-21	Apr-14		0.00724 J	0.00373 J	< 0.00200	< 0.100	< 0.00140			0.432			0.0259	
TMD	MW-21	Nov-14		0.0054	0.008	0.00078 J	< 0.05	< 0.00024			0.82			0.018	
TMD	MW-21	Apr-15		0.00656 J	0.0100 J	< 0.00270	< 0.0750	< 0.00120			0.323 J			0.0258	
TMD	MW-21	Oct-15		0.00635	0.00939	< 0.000540	< 0.0150	< 0.000240			0.658			0.029	
TMD	MW-25	Apr-13		< 0.0100	0.0121	< 0.0100	< 0.400	< 0.0100			0.129			< 0.0100	
TMD	MW-25	Apr-14		0.00502 J	0.0265	< 0.00500	< 0.250	< 0.00350			1.09			< 0.00500	
TMD	MW-25	Apr-15		0.00984 J	0.0187 J	< 0.00270	< 0.0750	< 0.00120			0.582 J			0.0204	
TMD	MW-26	Apr-13		< 0.0100	< 0.0100	< 0.0100	< 0.400	< 0.0100	346		0.212			< 0.0100	
TMD	MW-26	Apr-14		0.00413 J	0.00878 J	< 0.00200	< 0.100	< 0.00140			0.731			0.0241	
TMD	MW-26	Apr-15		0.00351	0.00944	< 0.000540	0.0811 J	< 0.000240			0.613			0.0197	
TMD	MW-27	Apr-13		< 0.00500	0.0145	< 0.00500	< 0.200	< 0.00500			0.0102			0.0199	

Table B.2 - Groundwater Analytical Results 2013-2015 - Total Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

				Analyte:	Arsenic	Barium	Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Selenium	Vanadium
				Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				CGWSL:	0.01	1	0.05	1	0.015	---	0.2	0.002	0.2	0.05	0.0631
				CGWSL Source:	USEPA MCL	WQCC HH	WQCC HH	WQCC Dom	USEPA MCL		WQCC Dom	USEPA MCL	WQCC Irr	USEPA MCL	NMED TW
Area	Location	Date	Dup												
TMD	MW-27	Apr-14		0.00249 J	0.0166	< 0.00100	< 0.0500	< 0.000700			0.00554			0.0192	
TMD	MW-27	Apr-15		0.00239	0.0235	< 0.000540	< 0.0150	< 0.000240			0.0318			0.018	
TMD	MW-46R	Apr-13		< 0.00500	0.0121	< 0.00500	< 0.200	< 0.00500	284		0.0423			0.00735	
TMD	MW-46R	Oct-13		< 0.00500	0.0148	< 0.00500	< 0.200	< 0.00500	322		0.0809			< 0.00500	
TMD	MW-46R	Apr-14		0.00338 J	0.0259	0.00222 J	0.621	< 0.000700			0.0998			< 0.00100 B	
TMD	MW-46R	Nov-14		0.0042	0.024	0.0028	1.1	0.00083 J			0.14			0.0034	
TMD	MW-46R	Apr-15		0.00307	0.0188	0.00106 J	0.297	0.000608 J			0.116			0.00116 J	
TMD	MW-68	Apr-13		< 0.00500	0.0147	< 0.00500	0.279	< 0.00500	202		< 0.00500			0.0314	
TMD	MW-68	Apr-14		0.00325 J	0.0142	< 0.00200	< 0.100	< 0.00140			< 0.00500			0.0248	
TMD	MW-68	Apr-15		0.00292	0.0159	< 0.000540	0.0594 J	0.000524 J			0.00131 J			0.0123	
TMD	MW-71	Apr-13	FD	< 0.0100	< 0.0100	< 0.0100	< 0.400	< 0.0100	471		< 0.0100	< 0.000200	< 0.0100	0.0396	0.0254
TMD	MW-71	Apr-13		< 0.0100	< 0.0100	< 0.0100	< 0.400	< 0.0100	452		< 0.0100	< 0.000200	< 0.0100	0.0398	0.0245
TMD	MW-71	Oct-13		0.00536	0.00969	< 0.00500	< 0.200	< 0.00500	463		< 0.00500	< 0.000200	< 0.00500	0.0417	0.0251
TMD	MW-71	Apr-14		0.00458 J	0.0086	< 0.00100	< 0.0500	< 0.000700			< 0.00250	< 0.0000400	0.00123 J	0.0452	0.0252
TMD	MW-71	Apr-15		0.00411	0.00897	0.000581 J	0.0373 J	< 0.000240			0.000898 J	< 0.0000490	0.00134 J	0.0349	0.0229
TMD	MW-89	Apr-13		0.0132	0.0134	< 0.00500	< 0.200	< 0.00500	125		0.67			< 0.00500	
TMD	MW-89	Apr-14		0.0128	0.014	< 0.00100	0.195 J	< 0.000700			0.537			0.0188	
TMD	MW-89	Apr-15		0.00900 J	0.0144 J	< 0.00270	0.12 J	< 0.00120			0.0710 J			0.0275	
TMD	NP-1	Apr-13								394					
TMD	NP-1	Oct-13													
TMD	NP-1	Apr-14													
TMD	NP-1	Nov-14													
TMD	NP-1	Apr-15													
TMD	NP-1	Oct-15													
TMD	NP-2	Apr-13								413					
TMD	NP-6	Apr-13													
TMD	NP-6	Apr-15													
Upgradient	UG-1	Apr-13		< 0.00500	0.0137	< 0.00500	< 0.200	< 0.00500			< 0.00500	< 0.000200	< 0.00500	< 0.00500	0.0111
Upgradient	UG-1	Apr-14		0.00158 J	0.0128	0.00159 J	0.0832 J	< 0.000700			0.00575	< 0.0000400	0.00121 J	0.00728	0.0135
Upgradient	UG-1	Apr-15		0.00113 J	0.0137	0.00242	0.0262 J	< 0.000240			0.000764 J	< 0.0000490	< 0.000350 UB	0.0103	0.0105
Upgradient	UG-2	Apr-13	FD	< 0.00500	0.0182	< 0.00500	< 0.200	< 0.00500			0.0711	< 0.000200	0.0121	0.00581	0.0166
Upgradient	UG-2	Apr-13		< 0.00500	0.0172	< 0.00500	< 0.200	< 0.00500			0.0801	< 0.000200	0.0125	< 0.00500	0.0148
Upgradient	UG-2	Apr-14		0.00385 J	0.0167	< 0.00100	0.673	< 0.000700			0.488	< 0.0000400	0.0256	0.00209 J	0.0082
Upgradient	UG-2	Apr-15		0.00205	0.0153	< 0.000540	< 0.0150	< 0.000240			0.011	< 0.0000490	0.00527	< 0.000380 UB	0.0115
Upgradient	UG-3R	Apr-13		< 0.00500	0.0149	< 0.00500	< 0.200	< 0.00500			< 0.00500	< 0.000200	< 0.00500	< 0.00500	0.00815
Upgradient	UG-3R	Apr-14	FD	0.00167 J	0.0163	< 0.00100	< 0.0500	< 0.000700			< 0.00250	< 0.0000400	< 0.00100	0.0064	0.0101
Upgradient	UG-3R	Apr-14		0.00184 J	0.017	< 0.00100	< 0.0500	< 0.000700			< 0.00250	< 0.0000400	< 0.00100	0.00534	0.0109
Upgradient	UG-3R	Apr-15		0.00258	0.0595	0.00368	2.05	0.000626 J			0.0725	< 0.0000490	< 0.000350 UB	< 0.000380 UB	0.0135

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
Crossgradient	KWB-13	Apr-13		< 0.00500 U	0.0161		< 0.00500 U		< 0.200 U	< 0.00500 U	< 0.00500 U	< 0.000200 U	< 0.00500 U	0.0145		0.0206	
Crossgradient	KWB-13	Apr-14		0.00276 J	0.0156		0.00107 J		< 0.0780 U	< 0.000700 U	< 0.00250 U	< 0.0000420 U	< 0.00100 U	0.0136		0.0188	
Crossgradient	KWB-13	Apr-15		0.00376	0.0439		0.00125 J		0.337	0.00143 J	0.0462		0.00136 J	0.0117		0.0173	
Crossgradient	MW-17	Apr-14		0.00217 J	0.0139		0.00184 J		< 0.0780 U	< 0.000700 U	< 0.00250 U			0.00918			
Crossgradient	NP-5	Apr-13		< 0.0100 U	< 0.0100 U		< 0.0100 U		< 0.400 U	< 0.0100 U	< 0.0100 U			0.0148			
Crossgradient	NP-5	Apr-15		0.00306	0.00760		< 0.000540		< 0.0150	< 0.000240	0.000511 J			0.0128			
EP	MW-10	Apr-13		< 0.0250 U	< 0.0250 U		< 0.0250 U		< 1.00 U	< 0.0250 U	2.27			< 0.0250 U			
EP	MW-10	Apr-14		0.0195	0.0114		< 0.00200 U		< 0.156 U	< 0.00140 U	2.75			< 0.00200 U			
EP	MW-10	Apr-15		0.0191	0.0130 J		< 0.00270		< 0.0750	< 0.00120	2.53			< 0.00190			
EP	MW-11A	Mar-13		< 0.0250 U	0.0251		< 0.0250 U		3.95	< 0.0250 U	1.83			< 0.0250 U			
EP	MW-11A	Apr-14		< 0.00500 U	0.0370		< 0.00500 U		0.924 J	< 0.00350 U	1.84			< 0.00500 U			
EP	MW-11A	Apr-15		< 0.00250	0.0338 J		< 0.00540		< 0.15	< 0.00240	0.846			< 0.00380			
EP	MW-11B	Mar-13		< 0.0250 U	< 0.0250 U		< 0.0250 U		3.62	< 0.0250 U	0.365			< 0.0250 U			
EP	MW-11B	Apr-15		0.00458 J	0.0187 J		< 0.00270		3.59	< 0.00120	0.376			< 0.00190			
EP	MW-12	Apr-14		< 0.00200 U	0.0204		< 0.00200 U		< 0.156 U	< 0.00140 U	0.183			0.0208			
EP	MW-120	Apr-14		0.0152	0.00984 J		< 0.00200 U		3.76	0.00156 J	1.27			< 0.00200 U			
EP	MW-120	Apr-15		0.00704	0.0113		< 0.000540		1.35	< 0.000240	1.28			0.0324			
EP	MW-121	Apr-14		0.0339	0.0170		< 0.00200 U		0.415	0.00150 J	4.37			0.00511 J			
EP	MW-121	Apr-15		0.0337	0.0138		< 0.000540		0.567	< 0.000240	3.86			0.00764			
EP	MW-122	Apr-14		0.00897 J	0.0337		< 0.00200 U		4.81	0.00167 J	2.00			< 0.00200 U			
EP	MW-122	Apr-15		0.0108	0.0250		< 0.000540		0.224	< 0.000240	1.85			0.00914			
EP	MW-123	Apr-14		0.0276	0.0207		< 0.00200 U		< 0.156 U	< 0.00140 U	2.94			< 0.00200 U			
EP	MW-123	Apr-15		0.0274	0.0210 J		< 0.00270		< 0.0750	< 0.00120	2.67			< 0.00190			
EP	MW-124	Apr-14		0.00439 J	0.0241		< 0.00200 U		0.613	< 0.00140 U	0.518			< 0.00200 U			
EP	MW-124	Apr-15		0.00199 J	0.0170		< 0.000540		0.961	< 0.000240	0.703			< 0.000380			
EP	MW-13	Apr-14		< 0.00200 U	0.0334		< 0.00200 U		< 0.156 U	< 0.00140 U	0.173			< 0.00200 U			
EP	MW-15	Mar-13		0.0242	0.0157		< 0.0100 U		< 0.400 U	< 0.0100 U	1.60			< 0.0100 U			
EP	MW-15	Apr-14		0.0589	0.0186		0.0144		< 0.156 U	< 0.00140 U	0.332			0.00547 J			
EP	MW-15	Apr-15		0.0268	0.0219 J		< 0.00270		0.0762 J	< 0.00120	0.814			0.0211			
EP	MW-18A	Apr-13		< 0.0250 U	< 0.0250 U		< 0.0250 U		9.20	< 0.0250 U	2.58	< 0.000200 U	< 0.0250 U	< 0.0250 U		< 0.0250 U	
EP	MW-18A	Apr-14		< 0.0100 U	0.0166 J		< 0.0100 U		< 0.780 U	< 0.00700 U	0.176	< 0.0000420 U	< 0.0100 U	0.0323 J		< 0.00900 U	
EP	MW-18A	Apr-15		0.00341	0.0116		< 0.000540		< 0.0150	< 0.000240	0.00939		0.00194 J	0.0464		0.00420 J	
EP	MW-18B	Apr-13		0.00781	0.0119		< 0.00500 U		< 0.200 U	< 0.00500 U	0.657			< 0.00500 U			
EP	MW-18B	Apr-15		0.0104	0.0116		< 0.000540		0.0398 J	< 0.000240	0.723			< 0.000380			
EP	MW-1R	Apr-13	FD	< 0.00500 U	0.0195		< 0.00500 U		1.53	< 0.00500 U	1.37			< 0.00500 U			
EP	MW-1R	Apr-13		< 0.00500 U	0.0200		< 0.00500 U		1.55	< 0.00500 U	1.38			< 0.00500 U			
EP	MW-1R	Apr-14		< 0.00200 U	0.0194		< 0.00200 U		1.31	< 0.00140 U	1.22			< 0.00200 U			
EP	MW-1R	Apr-15		0.00264 J	0.0229 J		< 0.00270		2.58	< 0.00120	2.14			< 0.00190			
EP	MW-22A	Apr-13		0.0397	< 0.0250 U		< 0.0250 U		2.55	< 0.0250 U	5.34			< 0.0250 U			
EP	MW-22A	Apr-14		0.0418	0.0154		< 0.00200 U		0.271 J	< 0.00140 U	3.58			0.00322 J			
EP	MW-22A	Apr-15	FD	0.0369	0.0171		< 0.000540		0.901	< 0.000240	5.08			0.00105 J			
EP	MW-22A	Apr-15		0.0376	0.0162 J		< 0.00270		0.537	< 0.00120	5.37			< 0.00190			
EP	MW-22B	Apr-13		0.0288	< 0.0250 U		< 0.0250 U		1.98	< 0.0250 U	3.41			< 0.0250 U			
EP	MW-22B	Apr-15		0.0383	0.0154 J		< 0.00270		2.2	< 0.00120	4.64			< 0.00190			
EP	MW-2A	Mar-13		0.0437	0.0236		< 0.0100 U		5.95	< 0.0100 U	2.87			< 0.0100 U			
EP	MW-2A	Apr-14		0.0148 J	0.0210 J		< 0.00500 U		< 0.390 U	0.00423 J	1.27			0.00624 J			

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
EP	MW-2A	Apr-15		0.0116	0.0216		< 0.000540		0.201	< 0.000240	1.83			0.00186 J			
EP	MW-3	Mar-13		0.0257	0.0155		< 0.00500 U		0.465	< 0.00500 U	1.48			0.00615			
EP	MW-3	Apr-14		0.0285	0.0178		< 0.00200 U		< 0.156 U	< 0.00140 U	0.325			0.0429			
EP	MW-3	Apr-15	FD	0.0253	0.0171		< 0.000540		< 0.0150	< 0.000240	1.3			0.0955			
EP	MW-3	Apr-15		0.0269	0.0180		< 0.000540		< 0.0150	< 0.000240	1.37			0.0950			
EP	MW-4A	Apr-13		0.0618	0.0123		< 0.00500 U		1.46	< 0.00500 U	1.59			< 0.00500 U			
EP	MW-4A	Apr-14		0.0786	0.0121		< 0.00200 U		0.614	< 0.00140 U	2.36			< 0.00200 U			
EP	MW-4A	Apr-15		0.104	0.0113		0.000987 J		1.89	< 0.000240	2.73			0.000614 J			
EP	MW-4B	Apr-13		0.0428	0.00976		< 0.00500 U		1.18	< 0.00500 U	1.52			< 0.00500 U			
EP	MW-4B	Apr-15		0.0930	0.0202		< 0.000540		2.05	< 0.000240	8.49 J			0.000414 J			
EP	MW-5A	Apr-13		0.140	< 0.0250 U		< 0.0250 U		8.10	< 0.0250 U	1.03			< 0.0250 U			
EP	MW-5A	Apr-14		0.0796	0.0106 J		< 0.00500 U		5.40	< 0.00350 U	1.62			< 0.00500 U			
EP	MW-5A	Apr-15		0.0848	0.0107		0.000957 J		4.5	< 0.000240	1.58			0.000860 J			
EP	MW-5B	Apr-13		0.109	< 0.0100 U		< 0.0100 U		0.618	< 0.0100 U	2.17			< 0.0100 U			
EP	MW-5B	Apr-15		0.198	0.0104		0.000978 J		4.71	< 0.000240	3.49			0.00197 J			
EP	MW-5C	Apr-13		0.0137	0.0140		< 0.00500 U		1.08	< 0.00500 U	0.900			< 0.00500 U			
EP	MW-5C	Apr-15		0.0124	0.0172		0.00115 J		0.77	0.000449 J	0.687			< 0.000380			
EP	MW-6A	Mar-13		0.00642	0.0136		< 0.00500 U		0.571	< 0.00500 U	0.297			< 0.00500 U			
EP	MW-6A	Apr-14		0.0102	0.0252		< 0.00200 U		< 0.156 U	< 0.00140 U	1.20			0.0157			
EP	MW-6A	Apr-15		0.0114	0.0331		< 0.000540		0.0527 J	0.000400 J	1.4			0.0318			
EP	MW-6B	Mar-13	FD	0.0336	0.0173		< 0.00500 U		1.23	< 0.00500 U	3.03			< 0.00500 U			
EP	MW-6B	Mar-13		0.0320	0.0145		< 0.00500 U		1.24	< 0.00500 U	2.84			< 0.00500 U			
EP	MW-6B	Apr-15		0.0319	0.0186		< 0.000540		1.21	< 0.000240	3.52			< 0.000380			
EP	MW-70	Apr-13		0.0192	0.0153		< 0.00500 U		1.87	< 0.00500 U	0.402			< 0.00500 U			
EP	MW-70	Apr-14		0.0240	0.0154		< 0.00100 U		0.922	< 0.000700 U	0.302			< 0.00100 U			
EP	MW-70	Apr-15		0.0196	0.0139		< 0.000540		1.57	< 0.000240	0.213			< 0.000380			
EP	MW-72	Mar-13		0.0550	0.0142		< 0.00500 U		21.8	< 0.00500 U	5.31			< 0.00500 U			
EP	MW-72	Apr-14		0.0258	0.0146 J		< 0.00500 U		3.89	< 0.00350 U	5.16			< 0.00500 U			
EP	MW-72	Apr-15		0.0306	0.0226		0.000575 J		1.19	< 0.000240	2.89			0.0117			
EP	MW-73	Mar-13		0.108	0.0104		< 0.00500 U		6.66	< 0.00500 U	2.91			< 0.00500 U			
EP	MW-73	Apr-14		0.0986	0.0102 J		< 0.00500 U		4.67	< 0.00350 U	2.62			< 0.00500 U			
EP	MW-73	Apr-15		0.0640	0.0109		0.000772 J		0.0580 J	< 0.000240	2.36			0.00193 J			
EP	MW-74	Mar-13		0.111	0.0128		< 0.00500 U		1.48	< 0.00500 U	2.64			0.00876			
EP	MW-74	Apr-14		0.0606	0.0121 J		< 0.00500 U		< 0.390 U	< 0.00350 U	1.07			0.162			
EP	MW-74	Apr-15		0.0515	0.0103		< 0.000540		0.0650 J	< 0.000240	0.392			0.48			
EP	MW-75	Mar-13		0.191	0.0130		< 0.00500 U		1.43	< 0.00500 U	0.902			< 0.00500 U			
EP	MW-75	Apr-14		0.152	0.0155		< 0.00200 U		0.719	< 0.00140 U	1.03			0.00292 J			
EP	MW-75	Apr-15		0.355	0.0186		0.00300		9.82	< 0.000240	0.861			0.00261			
EP	MW-76	Mar-13		0.0559	0.0123		< 0.00500 U		2.60	< 0.00500 U	0.619			< 0.00500 U			
EP	MW-76	Apr-14		0.0521	0.0128		0.00128 J		2.95	< 0.000700 U	1.00			0.00139 J			
EP	MW-76	Apr-15		0.0628	0.0120		0.00133 J		3.53	< 0.000240	0.977			0.00214			
EP	MW-77	Mar-13		0.0641	0.0117		0.00570		3.48	< 0.00500 U	0.824	< 0.000200 U	0.0129	0.00744		0.00656	
EP	MW-77	Apr-14		0.0670	0.0110		0.00747 J		7.09	0.00176 J	0.909			0.0123			
EP	MW-77	Apr-15		0.0921	0.0144 J		0.0116		13.6	< 0.00120	0.644			0.0127			
EP	MW-78	Mar-13		0.0126	0.0295		0.0815		0.798	< 0.00500 U	0.489			0.00963			
EP	MW-78	Apr-14		0.0145	0.0278		0.0363		4.70	< 0.000700 U	1.60			0.00708			

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
EP	MW-78	Apr-15		0.0117	0.0320		0.0342		10.7	< 0.00120	1.26			0.0122			
EP	MW-79	Mar-13		0.00818	0.0147		< 0.00500 U		0.587	< 0.00500 U	3.78			< 0.00500 U			
EP	MW-79	Apr-14		0.0183	0.0134		< 0.00200 U		< 0.156 U	< 0.00140 U	1.30			0.00861 J			
EP	MW-79	Apr-15		0.00630	0.0161		< 0.000540		< 0.0150	< 0.000240	1.34			0.00120 J			
EP	MW-7A	Apr-13		0.0264	< 0.0250 U		< 0.0250 U		5.61	< 0.0250 U	0.392			< 0.0250 U			
EP	MW-7A	Apr-14		0.0239	0.0167		< 0.00200 U		2.34	< 0.00140 U	0.541			< 0.00200 U			
EP	MW-7A	Apr-15	FD	0.0141	0.0149		0.000544 J		< 0.0150	< 0.000240	0.997			0.000601 J			
EP	MW-7A	Apr-15		0.0172	0.0148		0.000890 J		0.676	< 0.000240	0.994			0.000532 J			
EP	MW-7B	Apr-13		< 0.0100 U	0.0114		< 0.0100 U		< 0.400 U	< 0.0100 U	0.358			< 0.0100 U			
EP	MW-7B	Apr-15		0.00529	0.0110		< 0.000540		0.0879 J	< 0.000240	0.541 J			< 0.000380			
EP	MW-80	Mar-13		0.00510	0.0136		< 0.00500 U		0.544	< 0.00500 U	0.642			< 0.00500 U			
EP	MW-80	Apr-14		0.00720 J	0.0155		< 0.00200 U		< 0.156 U	0.00170 J	0.403			0.00238 J			
EP	MW-80	Apr-15		0.0109	0.0153		< 0.000540		0.0598 J	< 0.000240	0.381			0.000949 J			
EP	MW-81	Mar-13	FD	0.00523	0.0151		< 0.00500 U		< 0.200 U	< 0.00500 U	2.17			< 0.00500 U			
EP	MW-81	Mar-13		0.00503	0.0154		< 0.00500 U		< 0.200 U	< 0.00500 U	2.12			< 0.00500 U			
EP	MW-81	Apr-14		0.0188	0.0151		< 0.00200 U		< 0.156 U	0.00152 J	0.124			0.00945 J			
EP	MW-81	Apr-15		0.0188	0.0144		0.000736 J		0.0190 J	< 0.000240	0.0128			0.0229			
EP	MW-82	Mar-13		0.0837	0.0175		< 0.00500 U		0.626	< 0.00500 U	1.47			< 0.00500 U			
EP	MW-82	Apr-14	FD	0.0710	0.0183		< 0.00200 U		0.543	< 0.00140 U	1.39			< 0.00200 U			
EP	MW-82	Apr-14		0.0684	0.0181		< 0.00200 U		0.493	< 0.00140 U	1.35			< 0.00200 U			
EP	MW-82	Apr-15		0.0761	0.0303		0.00320		0.765	< 0.000240	1.25			0.00265			
EP	MW-83	Mar-13		0.0398	0.0175		< 0.00500 U		1.07	< 0.00500 U	0.473			0.00511			
EP	MW-83	Apr-14		0.0292	0.0171		0.00271 J		2.60	< 0.000700 U	0.977			0.00741			
EP	MW-83	Apr-15		0.0253	0.0129		0.00766		6.99	< 0.000240	0.741			0.00376			
EP	MW-84	Mar-13		0.0828	0.0133		< 0.00500 U		0.515	< 0.00500 U	2.55			0.00513			
EP	MW-84	Apr-14		0.0779	0.0127		0.00293 J		0.324 J	< 0.00140 U	3.28			0.00690 J			
EP	MW-84	Apr-15		0.0885	0.0139		0.00335		0.265	< 0.000240	2.9			0.00500			
EP	MW-87	Apr-13		< 0.0250 U	< 0.0250 U		< 0.0250 U		< 1.00 U	< 0.0250 U	0.0302			< 0.0250 U			
EP	MW-87	Apr-14		0.00660 J	0.0160 J		< 0.00500 U		< 0.390 U	< 0.00350 U	0.0205 J			< 0.00500 U			
EP	MW-87	Apr-15		0.00565	0.0186		0.000544 J		< 0.0150	0.000455 J	0.0419			0.00110 J			
EP	MW-88	Apr-13		< 0.0250 U	< 0.0250 U		< 0.0250 U		< 1.00 U	< 0.0250 U	0.690			< 0.0250 U			
EP	MW-88	Apr-14		0.0106	0.0130		< 0.00200 U		< 0.156 U	< 0.00140 U	0.914			< 0.00200 U			
EP	MW-88	Apr-15		0.0106	0.0139 J		< 0.00270		0.0753 J	< 0.00120	1.31			< 0.00190			
EP	OCD-1R	Apr-14		0.00705 J	0.0156		< 0.00200 U		< 0.156 U	< 0.00140 U	1.31			0.00716 J			
EP	OCD-1R	Apr-15		0.00669 J	0.0184 J		< 0.00270		< 0.0750	< 0.00120	0.69			0.0204			
EP	OCD-2A	Mar-13		< 0.00500 U	0.00556		< 0.00500 U		1.22	< 0.00500 U	0.357			< 0.00500 U			
EP	OCD-2A	Apr-14		< 0.00200 U	0.0203		< 0.00200 U		< 0.156 U	< 0.00140 U	0.440			< 0.00200 U			
EP	OCD-2A	Apr-15		0.00138 J	0.0188 J		< 0.00270		< 0.0750	< 0.00120	0.296			< 0.00190			
EP	OCD-3	Mar-13		< 0.00500 U	< 0.00500 U		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0894			< 0.00500 U			
EP	OCD-3	Apr-14		< 0.00200 U	0.0187		< 0.00200 U		< 0.156 U	< 0.00140 U	0.0572			< 0.00200 U			
EP	OCD-3	Apr-15		< 0.00120	0.0180 J		< 0.00270		0.341 J	< 0.00120	0.105			< 0.00190			
EP	OCD-4	Mar-13		< 0.0250 U	< 0.0250 U		< 0.0250 U		4.32	< 0.0250 U	0.275			< 0.0250 U			
EP	OCD-4	Apr-14		< 0.00500 U	0.0212 J		< 0.00500 U		3.10	< 0.00350 U	0.287			< 0.00500 U			
EP	OCD-4	Apr-15		0.00246 J	0.0228 J		< 0.00270		1.89	< 0.00120	0.29			< 0.00190			
EP	OCD-5	Mar-13		< 0.0250 U	< 0.0250 U		< 0.0250 U		2.24	< 0.0250 U	0.295			< 0.0250 U			
EP	OCD-5	Apr-14	FD	< 0.00500 U	0.0241 J		< 0.00500 U		1.62	< 0.00350 U	0.386			< 0.00500 U			

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
EP	OCD-5	Apr-14		0.00550 J	0.0243 J		< 0.00500 U		1.61	< 0.00350 U	0.375			< 0.00500 U			
EP	OCD-5	Apr-15		0.00721 J	0.0265		< 0.00270		3.41	< 0.00120	0.312			< 0.00190			
EP	OCD-6	Mar-13		0.0374	< 0.0250 U		< 0.0250 U		12.4	< 0.0250 U	2.33			< 0.0250 U			
EP	OCD-6	Apr-14		0.0161 J	0.0194 J		< 0.00500 U		1.75	< 0.00350 U	2.20			< 0.00500 U			
EP	OCD-6	Apr-15		0.0124	0.0209		0.000915 J		2.91	0.000267 J	1.98			0.000955 J			
EP	OCD-7AR	Mar-13		0.242	< 0.0250 U		< 0.0250 U		11.1	< 0.0250 U	3.65			< 0.0250 U			
EP	OCD-7AR	Apr-14	FD	0.131	0.0125		< 0.00200 U		1.57	< 0.00140 U	2.62			0.00271 J			
EP	OCD-7AR	Apr-14		0.130	0.0119		0.00204 J		1.73	< 0.00140 U	2.77			0.00234 J			
EP	OCD-7AR	Apr-15		0.0732	0.0122		< 0.000540		0.237	0.000300 J	2.7			0.00179 J			
EP	OCD-7B	Mar-13		< 0.00500 U	0.0155		< 0.00500 U		< 0.200 U	< 0.00500 U	< 0.00500 U			< 0.00500 U			
EP	OCD-7B	Apr-15		0.00304	0.0178		0.000838 J		2.72	< 0.000240	0.626			< 0.000380			
EP	OCD-8A	Apr-13	FD	0.116	< 0.0250 U		< 0.0250 U		8.48	< 0.0250 U	3.36	< 0.000200 U	< 0.0250 U	< 0.0250 U		< 0.0250 U	
EP	OCD-8A	Apr-13		0.107	< 0.0250 U		< 0.0250 U		8.51	< 0.0250 U	3.18	< 0.000200 U	< 0.0250 U	< 0.0250 U		< 0.0250 U	
EP	OCD-8A	Apr-14	FD	0.0735	0.0235		< 0.00200 U		8.13	< 0.00140 U	3.38	0.00170	0.0295	< 0.00200 U		0.00193 J	
EP	OCD-8A	Apr-14		0.0791	0.0240		< 0.00200 U		8.18	< 0.00140 U	3.45	0.0000800 J	0.0285	< 0.00200 U		0.00185 J	
EP	OCD-8A	Apr-15		0.0543	0.0315		0.000744 J		11	< 0.000240	6.4		0.0562	0.000889 J		0.000737 J	
EP	OCD-8B	Apr-13		< 0.0250 U	< 0.0250 U		< 0.0250 U		< 1.00 U	< 0.0250 U	0.617			< 0.0250 U			
EP	OCD-8B	Apr-15		0.0113	0.0120		0.000653 J		0.2	< 0.000240	5.18			0.000497 J			
Field E of Refine	KWB-10R	Apr-15		0.0247	3.15		< 0.000540		7.25	0.00142 J	0.151			0.000839 J			
Field E of Refine	KWB-11A	Apr-13		< 0.00500 U	0.0209		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0115	< 0.000200 U	< 0.00500 U	0.00781		0.0126	
Field E of Refine	KWB-11A	Apr-15		0.00241	0.0217		< 0.000540		< 0.0150	0.00817	0.265		0.00442	0.00260		0.0123	
Field E of Refine	KWB-11B	Apr-13		< 0.00500 U	0.0149		< 0.00500 U		< 0.200 U	< 0.00500 U	< 0.00500 U	< 0.000200 U	< 0.00500 U	0.0106		0.00824	
Field E of Refine	KWB-11B	Apr-14		0.00165 J	0.0142		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U	< 0.0000420 U	< 0.00100 U	0.00946		0.00790	
Field E of Refine	KWB-11B	Apr-15		0.00139 J	0.0135		0.000786 J		< 0.0150	< 0.000240	0.000825 J		0.000504 J	0.00972		0.00811	
Field E of Refine	KWB-12A	Apr-15	FD	0.00150 J	0.0128		< 0.000540		< 0.0150	< 0.000240	0.000359 J		0.000473 J	0.00374		0.00955	
Field E of Refine	KWB-12A	Apr-15		0.00167 J	0.0160		< 0.000540		0.0156 J	< 0.000240	< 0.000250		0.000471 J	0.00445		0.0112	
Field E of Refine	KWB-12B	Apr-13	FD	< 0.0100 U	< 0.0100 U		< 0.0100 U		< 0.400 U	< 0.0100 U	< 0.0100 U	< 0.000200 U	< 0.0100 U	< 0.0100 U		0.0130	
Field E of Refine	KWB-12B	Apr-13		< 0.0100 U	< 0.0100 U		< 0.0100 U		< 0.400 U	< 0.0100 U	< 0.0100 U	< 0.000200 U	< 0.0100 U	< 0.0100 U		0.0132	
Field E of Refine	KWB-12B	Apr-14	FD	0.00222 J	0.0101		< 0.00200 U		< 0.156 U	< 0.00140 U	< 0.00500 U	< 0.0000420 U	< 0.00200 U	0.00341 J		0.0134	
Field E of Refine	KWB-12B	Apr-14		0.00336 J	0.00906		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U	< 0.0000420 U	< 0.00100 U	0.00460 J		0.0133	
Field E of Refine	KWB-12B	Apr-15		0.00169 J	0.00905		< 0.000540		< 0.0150	< 0.000240	0.000656 J		0.000442 J	0.00404		0.0112	
Field E of Refine	KWB-1A	Apr-13		< 0.0100 U	< 0.0100 U		< 0.0100 U		< 0.400 U	< 0.0100 U	0.349	< 0.000200 U	< 0.0100 U	< 0.0100 U		0.0193	
Field E of Refine	KWB-1A	Apr-14		0.00420 J	0.00811 J		< 0.00200 U		< 0.156 U	< 0.00140 U	0.406		0.00847 J	< 0.00200 U		0.0197	
Field E of Refine	KWB-1A	Apr-15		0.00328	0.00840		< 0.000540		< 0.0150	< 0.000240	0.371		0.00773	0.00336		0.0226	
Field E of Refine	KWB-1C	Apr-13		< 0.0100 U	0.0131		< 0.0100 U		< 0.400 U	< 0.0100 U	< 0.0100 U			< 0.0100 U			
Field E of Refine	KWB-1C	Apr-15		0.00297	0.00870		< 0.000540		< 0.0150	0.000528 J	0.451			0.00155 J			
Field E of Refine	KWB-7	Apr-13		< 0.00500 U	0.0429		< 0.00500 U		< 0.200 U	< 0.00500 U	1.72	< 0.000200 U	0.0201	< 0.00500 U		0.0116	
Field E of Refine	KWB-7	Apr-15		0.0191	0.0628		< 0.000540		1.51	< 0.000240	5.86		0.00784	0.000486 J		0.00111 J	
Field E of Refine	MW-111	Apr-13		0.0132	0.179		< 0.00500 U		5.56	< 0.00500 U	1.86	< 0.000200 U	0.00559	< 0.00500 U		< 0.00500 U	
Field E of Refine	MW-111	Apr-14		0.0126	0.222		< 0.00100 U		6.74	< 0.000700 U	1.68			0.00119 J			
Field E of Refine	MW-111	Apr-15		0.0123	0.239		< 0.000540		5.92	< 0.000240	1.6			< 0.000380			
Field E of Refine	MW-113	Apr-13		< 0.00500 U	0.0170		< 0.00500 U		< 0.200 U	< 0.00500 U	0.383	< 0.000200 U	< 0.00500 U	< 0.00500 U		0.0103	
Field E of Refine	MW-113	Apr-14		0.00267 J	0.0180		< 0.00100 U		0.0871 J	< 0.000700 U	0.387			< 0.00100 U			
Field E of Refine	MW-113	Apr-15	FD	0.00413	0.0254		< 0.000540		0.35	< 0.000240	0.946			0.000388 J			
Field E of Refine	MW-113	Apr-15		0.00445	0.0248		< 0.000540		0.341	< 0.000240	0.917			0.00328			
Field E of Refine	MW-125	Apr-14		0.00406 J	0.00914		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.395			0.00773			

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
Field E of Refine	MW-125	Apr-15		0.00367	0.00842 J		< 0.000540		< 0.0150	< 0.000240	0.385			0.00797 J			
Field E of Refine	MW-126A	Apr-14		0.00366 J	0.0136		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.174			0.00270 J			
Field E of Refine	MW-126A	Apr-15		0.00257	0.0159		0.000604 J		1.17	< 0.000240	0.829			< 0.000380			
Field E of Refine	MW-126B	Apr-14		0.00344 J	0.0168		0.00379 J		1.17	< 0.000700 U	0.930			0.00115 J			
Field E of Refine	MW-126B	Apr-15		0.00384	0.0102		0.000682 J		0.0320 J	< 0.000240	0.0807			0.00222			
Field E of Refine	MW-127	Apr-14		0.00400 J	0.191		< 0.00100 U		0.685	< 0.000700 U	0.155			0.00106 J			
Field E of Refine	MW-127	Apr-15		0.00374	0.204		0.000841 J		0.486	0.000441 J	0.0919			< 0.000380			
Field E of Refine	MW-128	Apr-14		0.0563	0.0808		< 0.00100 U		2.92	< 0.000700 U	2.29			< 0.00100 U			
Field E of Refine	MW-128	Apr-15		0.0450	0.0674 J		< 0.000540		2.23	< 0.000240	2.2			0.00455 J			
Field E of Refine	MW-129	Apr-15		0.0279	0.536		< 0.000540		4.93	< 0.000240	1.11			< 0.000380			
Field E of Refine	MW-131	Apr-14		0.0205	2.21		< 0.00100 U		1.56	< 0.000700 U	0.384			0.00118 J			
Field E of Refine	MW-131	Apr-15		0.0219	2.82		< 0.000540		1.84	0.000414 J	0.323			< 0.000380			
Field E of Refine	MW-133	Apr-15		0.0102	0.138		< 0.000540		2.59	0.000513 J	0.29			0.00325			
Field E of Refine	MW-134	Apr-14		0.00761 J	0.00947 J		< 0.00200 U		< 0.156 U	< 0.00140 U	0.0169			0.00508 J			
Field E of Refine	MW-134	Apr-15	FD	0.00571	0.00941		0.00147 J		0.182	< 0.000240	0.00509			0.0134			
Field E of Refine	MW-134	Apr-15		0.00634 J	0.0115 J		< 0.00270		< 0.0750	< 0.00120	0.00504 J			0.0180			
Field E of Refine	MW-135	Apr-14		0.00316 J	0.0122		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0111			0.0349			
Field E of Refine	MW-135	Apr-15		0.00291	0.0106		0.000881 J		< 0.0150	< 0.000240	0.00329 J			0.0345			
Field E of Refine	MW-57	Apr-13		0.0135	0.0245		< 0.00500 U		0.841	< 0.00500 U	0.534			< 0.00500 U			
Field E of Refine	MW-57	Apr-14		0.0560	0.0650		< 0.00100 U		2.67	0.000734 J	1.98			< 0.00100 U			
Field E of Refine	MW-57	Apr-15		0.00508	0.0171		< 0.000540		0.385	< 0.000240	0.188			0.0331			
Field E of Refine	MW-58	Apr-15		0.0116	0.89		< 0.000540		1.33	0.00259	0.0974		0.000747 J	0.000588 J		0.00237 J	
Field E of Refine	RW-18	Apr-13		< 0.0250 U	< 0.0250 U		< 0.0250 U		< 1.00 U	< 0.0250 U	< 0.0250 U			< 0.0250 U			
Field E of Refine	RW-18	Apr-14		0.00353 J	0.0108		< 0.00200 U		< 0.156 U	< 0.00140 U	< 0.00500 U			0.00964 J			
Field E of Refine	RW-20	Apr-15		0.00171 J	0.464		< 0.000540		0.27	< 0.000240	0.717			0.00488			
Field E of Refine	RW-22	Apr-15		< 0.00250	0.802		< 0.00540		0.394 J	0.00305 J	0.886			0.0326			
N Refinery	MW-23	Apr-13		0.00890	8.59		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0924			< 0.00500 U			
N Refinery	MW-23	Apr-14		0.0101	9.40		< 0.00100 U		< 0.0780 U	0.0107	0.0910			< 0.00100 U			
N Refinery	MW-23	Apr-15		0.0206	0.215		0.000653 J		0.156	0.000295 J	0.203			0.000997 J			
N Refinery	MW-29	Apr-13		0.0130	0.0165		< 0.00500 U		< 0.200 U	< 0.00500 U	0.525			< 0.00500 U			
N Refinery	MW-29	Apr-14		0.00753	0.0141		< 0.00100 U		0.241	< 0.000700 U	0.624 J			< 0.00100 U			
N Refinery	MW-29	Apr-15		0.000886 J	0.0185		< 0.000540		< 0.0150	< 0.000240	0.378			0.00432			
N Refinery	MW-39	Apr-15		0.00174 J	0.0226		< 0.000540		< 0.0150	0.000389 J	0.191			0.00533			
N Refinery	MW-40	Apr-13		< 0.00500 U	0.0262		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0482			< 0.00500 U			
N Refinery	MW-40	Apr-14		0.00257 J	0.0271		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0424			0.00270 J			
N Refinery	MW-40	Apr-15		0.000999 J	0.0270		< 0.000540		0.2	< 0.000240	0.0375			0.000388 J			
N Refinery	MW-41	Apr-13		0.00690	0.0145		< 0.00500 U		< 0.200 U	< 0.00500 U	0.777			< 0.00500 U			
N Refinery	MW-41	Apr-14		0.00640	0.0141		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.847			0.00316 J			
N Refinery	MW-41	Apr-15		0.00448	0.0152		< 0.000540		0.0163 J	< 0.000240	0.791			< 0.000380			
N Refinery	MW-42	Apr-13		0.0112	0.0231		< 0.00500 U		0.416	< 0.00500 U	0.201			< 0.00500 U			
N Refinery	MW-42	Apr-14		0.0135	0.0270		< 0.00100 U		0.332	< 0.000700 U	0.189			0.00429 J			
N Refinery	MW-42	Apr-15		0.00740	0.0230		0.000790 J		0.142	0.000322 J	0.152			0.000534 J			
N Refinery	MW-43	Apr-13		0.0100	0.0722		< 0.00500 U		< 0.200 U	< 0.00500 U	0.432	< 0.000200 U	< 0.00500 U	< 0.00500 U		< 0.00500 U	
N Refinery	MW-43	Apr-14		0.0102	0.0931		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.439		0.00357 J	< 0.00100 U		0.00397 J	
N Refinery	MW-43	Apr-15		0.0114	0.25		< 0.000540		< 0.0150	< 0.000240	0.374		0.00384	0.000428 J		0.000695 J	
N Refinery	MW-59	Apr-13		0.0318	0.0161		< 0.00500 U		< 0.200 U	< 0.0100 U	0.484			< 0.00500 U			

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
N Refinery	MW-59	Apr-14		0.0324	0.0145		< 0.00100 U		0.152 J	< 0.000700 U	0.480			0.00267 J			
N Refinery	MW-59	Apr-15		0.0177	0.0137 J		< 0.000540		0.126	< 0.00120	0.427			0.00859 J			
N Refinery	MW-60	Apr-13	FD	0.0128	0.0229		< 0.0100 U		< 0.400 U	< 0.0100 U	0.326	< 0.000200 U	< 0.0100 U	< 0.0100 U		< 0.0100 U	
N Refinery	MW-60	Apr-13		0.0131	0.0219		< 0.0100 U		< 0.400 U	< 0.0100 U	0.340	< 0.000200 U	< 0.0100 U	< 0.0100 U		< 0.0100 U	
N Refinery	MW-60	Apr-14		0.00796	0.0200		< 0.00100 U		0.136 J	< 0.000700 U	0.334		< 0.00100 U	0.00214 J		< 0.000900 U	
N Refinery	MW-60	Apr-15	FD	0.00160 J	0.0177		< 0.000540		0.127	0.000283 J	0.349		0.000977 J	R			
N Refinery	MW-60	Apr-15		0.0171 J	0.0260 J		< 0.000540		0.116 J	0.000316 J	0.321		0.000587 J	0.0470 J		0.000471 J	
N Refinery	MW-61	Apr-13		< 0.00500 U	0.0267		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0213			< 0.00500 U			
N Refinery	MW-61	Apr-14		0.00159 J	0.0310		< 0.00100 U		< 0.0780 U	0.00173 J	0.0235			< 0.00100 U			
N Refinery	MW-61	Apr-15		0.00381	0.0442		< 0.000540		< 0.0150	< 0.000240	0.00470 J			0.000496 J			
N Refinery	MW-62	Apr-13		< 0.00500 U	0.704		< 0.00500 U		< 0.200 U	< 0.00500 U	0.00658			< 0.00500 U			
N Refinery	MW-62	Apr-14		0.00406 J	0.0689		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.00390 J			0.00135 J			
N Refinery	MW-62	Apr-15		0.0110	9.93		0.000662 J		< 0.0150	0.000487 J	0.0688			0.000755 J			
N Refinery	MW-67	Apr-15		0.00402	0.129		< 0.000540		0.0443 J	0.000620 J	0.0816		0.00369	< 0.000380		0.000753 J	
N Refinery	MW-90	Apr-13		< 0.00500 U	0.0174		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0673			< 0.00500 U			
N Refinery	MW-90	Apr-14		0.00379 J	0.0166		< 0.00100 U		< 0.0780 U	0.000729 J	0.0754			< 0.00100 U			
N Refinery	MW-90	Apr-15		0.00775	0.0207		0.000646 J		0.187	< 0.000240	0.338			0.00101 J			
N Refinery	MW-91	Apr-14		0.00323 J	0.115		< 0.00100 U		< 0.0780 U	0.00144 J	< 0.00250 U			< 0.00100 U			
N Refinery	MW-91	Apr-15		0.00974	0.0899		< 0.000540		0.0216 J	0.00281	0.00489 J			< 0.000380			
N Refinery	MW-93	Apr-13		0.00801	0.0634		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0187			< 0.00500 U			
N Refinery	MW-93	Apr-14		0.00718	0.0850		0.00207 J		< 0.0780 U	0.00113 J	0.0408			0.00186 J			
N Refinery	MW-93	Apr-15		0.0124	0.0327		0.00341		0.0375 J	0.000293 J	0.215			0.00468			
N Refinery	MW-95	Apr-13		< 0.00500 U	0.124		< 0.00500 U		0.560	< 0.00500 U	0.0657			< 0.00500 U			
N Refinery	MW-95	Apr-14		< 0.00100 U	0.118		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0413			< 0.00100 U			
N Refinery	MW-95	Apr-15		0.00134 J	0.0681		< 0.000540		0.0255 J	< 0.000240	0.0368			< 0.000380			
N Refinery	MW-96	Apr-13		< 0.00500 U	0.152		< 0.00500 U		< 0.200 U	< 0.00500 U	< 0.00500 U			< 0.00500 U			
N Refinery	MW-96	Apr-14		0.00477 J	0.114		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U			< 0.00100 U			
N Refinery	MW-96	Apr-15		0.00499	0.113		0.000705 J		0.0345 J	< 0.000240	0.00338 J			0.000787 J			
N Refinery	MW-98	Apr-13		< 0.00500 U	0.0152		< 0.00500 U		< 0.200 U	0.0102	0.0293			< 0.00500 U			
N Refinery	MW-98	Apr-14	FD	0.00239 J	0.0160		0.00142 J		< 0.0780 U	0.00986	0.0274			0.00200 J			
N Refinery	MW-98	Apr-14		0.00226 J	0.0145		< 0.00100 U		< 0.0780 U	0.00912	0.0273			0.00155 J			
N Refinery	MW-98	Apr-15		0.00139 J	0.0151		< 0.000540		< 0.0150	0.00908	0.0259			0.000446 J			
N Refinery	RW-1	Apr-15		0.00426	0.0301		0.00131 J		0.0744 J	0.000323 J	0.118			0.00136 J			
N Refinery	RW-10	Apr-13		< 0.00500 U	0.0185		< 0.00500 U		< 0.200 U	< 0.00500 U	0.223			< 0.00500 U			
N Refinery	RW-10	Apr-14		0.00273 J	0.0186		< 0.00100 U		0.132 J	< 0.000700 U	0.212			0.00268 J			
N Refinery	RW-10	Apr-15		0.00177 J	0.0275		< 0.000540		0.0573 J	< 0.000240	0.25			0.00598			
N Refinery	RW-16	Apr-13		0.0158	0.0167		< 0.00500 U		< 0.200 U	< 0.00500 U	0.498			< 0.00500 U			
N Refinery	RW-16	Apr-14	FD	0.0127	0.0141		< 0.00100 U		0.139 J	< 0.000700 U	0.611			0.00300 J			
N Refinery	RW-16	Apr-14		0.0126	0.0139		< 0.00100 U		0.125 J	< 0.000700 U	0.601			0.00304 J			
N Refinery	RW-16	Apr-15		0.0133	0.0143		0.00101 J		0.0234 J	0.000255 J	0.4			0.00931			
N Refinery	RW-17	Apr-13		0.00825	0.0256		< 0.00500 U		0.325	< 0.00500 U	0.710			< 0.00500 U			
N Refinery	RW-17	Apr-14		0.0104	0.0219		< 0.00200 U		0.540	0.00417 J	0.743			< 0.00200 U			
N Refinery	RW-17	Apr-15		0.00838	0.0211		0.000835 J		< 0.0150	0.00228	0.0992			0.0393			
N Refinery	RW-2	Apr-15		0.0194	0.0174		0.00494		0.0471 J	0.000546 J	0.285			0.00133 J			
N Refinery	RW-7	Apr-15		0.00249	0.404		0.000879 J		< 0.0150	0.000482 J	0.0266			0.0165			
N Refinery	RW-8	Apr-15		0.00521	0.0797		< 0.000540		0.163	0.000591 J	0.0744			< 0.000380			

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
N Refinery	RW-9	Apr-13		< 0.00500 U	0.0629		< 0.00500 U		< 0.200 U	< 0.00500 U	0.286			< 0.00500 U			
N Refinery	RW-9	Apr-14		0.00610	0.0494		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.404			0.00393 J			
N Refinery	RW-9	Apr-15		0.00358	0.0468		< 0.000540		0.179	0.000454 J	0.501			0.000418 J			
NCL	MW-108	Apr-13		< 0.00500 U	0.0403		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0169			< 0.00500 U			
NCL	MW-108	Apr-14		0.00326 J	0.0457		0.00207 J		< 0.0780 U	0.000952 J	0.0290			< 0.00100 U			
NCL	MW-108	Apr-15		0.00343	0.0299		0.00223		< 0.0150	0.00105 J	0.0224			0.0184			
NCL	MW-18	Apr-13	FD	< 0.00500 U	0.0185		< 0.00500 U		< 0.200 U	< 0.00500 U	< 0.00500 U	< 0.000200 U	< 0.00500 U	0.00965		0.0157	
NCL	MW-18	Apr-13		< 0.00500 U	0.0184		< 0.00500 U		< 0.200 U	< 0.00500 U	0.00555	< 0.000200 U	< 0.00500 U	0.00971		0.0156	
NCL	MW-18	Apr-14		0.00488 J	0.0183		0.00170 J		< 0.0780 U	0.000942 J	0.0110	< 0.0000420 U	0.00102 J	0.0136		0.0161	
NCL	MW-18	Apr-15		0.00350	0.0171		0.00131 J		0.0182 J	< 0.000240	0.00643		0.00135 J	0.0129		0.0157	
NCL	MW-45	Apr-13		< 0.00500 U	0.0179		< 0.00500 U		0.760	< 0.00500 U	0.538	< 0.000200 U	0.00743	< 0.00500 U		< 0.00500 U	
NCL	MW-45	Apr-14		0.00354 J	0.0163		< 0.00100 U		0.690	< 0.000700 U	0.535	< 0.0000420 U	0.00756	0.00198 J		< 0.000900 U	
NCL	MW-45	Apr-15		0.00359	0.0174		< 0.000540		0.79	< 0.000240	0.526		0.00635	0.000904 J		0.000284 J	
NCL	MW-53	Apr-13		< 0.00500 U	0.0238		< 0.00500 U		< 0.200 U	< 0.00500 U	0.826			< 0.00500 U			
NCL	MW-53	Apr-14		0.00316 J	0.0213		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.532			0.00135 J			
NCL	MW-53	Apr-15		0.00167 J	0.0212		< 0.000540		< 0.0150	< 0.000240	0.797			0.00627			
NCL	MW-54A	Apr-13		< 0.00500 U	0.0183		< 0.00500 U		< 0.200 U	< 0.00500 U	0.498			< 0.00500 U			
NCL	MW-54A	Apr-14		0.00620	0.0182		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.491			0.00228 J			
NCL	MW-54A	Apr-15		0.00289	0.0178		< 0.000540		< 0.0150	< 0.000240	0.461			0.00290			
NCL	MW-54B	Apr-13		< 0.00500 U	0.0157		< 0.00500 U		< 0.200 U	< 0.00500 U	0.138			< 0.00500 U			
NCL	MW-54B	Apr-15		0.00205	0.0150		< 0.000540		0.0456 J	< 0.000240	0.164			0.00289			
NCL	MW-55	Apr-13		< 0.00500 U	0.00863		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0285	< 0.000200 U	< 0.00500 U	0.0195		0.0165	
NCL	MW-55	Apr-14	FD	0.00659	0.00871		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0596	< 0.0000420 U	0.00345 J	0.0272		0.0156	
NCL	MW-55	Apr-14		0.00641	0.00965		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0595	< 0.0000420 U	0.00400 J	0.0253		0.0156	
NCL	MW-55	Apr-15		0.00452	0.00832		0.00119 J		< 0.0150	< 0.000240	0.0421		0.00209	0.0230		0.0141	
NCL	MW-56	Apr-13		0.00602	0.0134		< 0.00500 U		< 0.200 U	< 0.00500 U	0.344			< 0.00500 U			
NCL	MW-56	Apr-14		0.00883	0.0136		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.336			0.00579			
NCL	MW-56	Apr-15		0.00709	0.0136		< 0.000540		< 0.0150	0.000483 J	0.286			0.00334			
NCL	NCL-31	Apr-13		0.0122	0.0212		< 0.00500 U		0.892	< 0.00500 U	1.87			< 0.00500 U			
NCL	NCL-31	Apr-14		0.0112	0.0194		< 0.00100 U		0.940	< 0.000700 U	1.59			< 0.00100 U			
NCL	NCL-31	Apr-15		0.00908	0.0141		< 0.000540		0.731	0.000439 J	1.59			0.00311			
NCL	NCL-32	Apr-15		0.00262	0.0355		0.00120 J		0.42	0.000769 J	0.878			< 0.000380			
NCL	NCL-33	Apr-13		< 0.00500 U	0.0269		< 0.00500 U		2.48	< 0.00500 U	0.0848			< 0.00500 U			
NCL	NCL-33	Apr-14		0.00264 J	0.0247		< 0.00100 U		2.68	< 0.000700 U	0.0855			0.00104 J			
NCL	NCL-33	Apr-15		0.00311	0.0223		< 0.000540		1.49	< 0.000240	0.104			0.000538 J			
NCL	NCL-34A	Apr-15		0.000947 J	0.492		< 0.000540		< 0.0150	< 0.000240	0.0338			< 0.000380			
NCL	NCL-44	Apr-13		0.0354	0.0279		< 0.00500 U		1.30	< 0.00500 U	0.753			< 0.00500 U			
NCL	NCL-44	Apr-14		0.0372	0.0289		< 0.00100 U		1.21	< 0.000700 U	0.661			< 0.00100 U			
NCL	NCL-44	Apr-15		0.0536	0.0256		< 0.000540		1.37	< 0.000240	0.663			< 0.000380			
NCL	NCL-49	Apr-13		< 0.00500 U	0.0111		< 0.00500 U		< 0.200 U	< 0.00500 U	< 0.00500 U			0.00506			
NCL	NCL-49	Apr-14		0.00338 J	0.0112		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U			0.00503			
NCL	NCL-49	Apr-15	FD	0.00152 J	0.0102		< 0.000540		< 0.0150	< 0.000240	< 0.000250			0.00364			
NCL	NCL-49	Apr-15		0.00145 J	0.0104		< 0.000540		0.0227 J	< 0.000240	0.000312 J			0.00471			
North RO Field	MW-117	Feb-13		0.00498 J	0.0235	< 0.00080 U	< 0.0012 U	0.0141	< 0.078 U	< 0.00070 U	0.108	< 0.000042 U	0.00413 J	0.00427 J	< 0.00080 U		0.0123
North RO Field	MW-117	May-13		0.00367 J	0.0113	< 0.00080 U	< 0.0010 U	< 0.0010 U	< 0.078 U	< 0.00070 U	0.00978 J	< 0.000042 U	< 0.0010 U	0.00585 J	< 0.00080 U		< 0.0025 U
North RO Field	MW-117	Sep-13		0.00559	0.0108	< 0.000800 U	< 0.00100 U	< 0.00100 U	< 0.0780 U	< 0.000700 U	0.00502	< 0.0000420 U	0.00189 J	0.00316 J	< 0.000800 U		0.00266 J

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
North RO Field	MW-117	Nov-13		0.00347 J	0.0108	< 0.000800 U	< 0.00100 U	0.00345 J	0.110 J	0.00125 J	0.00982	< 0.0000420 U	0.00305 J	0.00380 J	< 0.000800 U		0.0343
North RO Field	MW-117	Apr-14		0.00328 J	< 0.000900 UB		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0204			0.00425 J			
North RO Field	MW-117	Apr-15		0.00241	0.00887		0.000697 J		0.0963 J	< 0.000240	0.00160 J			0.0166			
North RO Field	MW-118	Feb-13		0.0110	0.0145	< 0.00080 U	< 0.0012 U	0.00156 J	< 0.078 U	< 0.00070 U	0.0232	0.0000420 J	0.00173 J	0.00861	< 0.00080 U		< 0.0025 U
North RO Field	MW-118	May-13		0.0146	0.00919	< 0.00080 U	< 0.0010 U	0.00156 J	< 0.078 U	< 0.00070 U	< 0.0025 U	< 0.000042 U	0.00184 J	0.0127	< 0.00080 U		< 0.0025 U
North RO Field	MW-118	Sep-13		0.0156	0.00990	< 0.000800 U	< 0.00100 U	< 0.00100 U	< 0.0780 U	< 0.000700 U	< 0.00250 U	< 0.0000420 U	0.00131 J	0.0129	< 0.000800 U		< 0.00250 U
North RO Field	MW-118	Nov-13		0.0125	0.00964	< 0.000800 U	0.00105 J	0.00338 J	0.179 J	0.00107 J	0.00526	< 0.0000420 U	0.00214 J	0.00327 J	< 0.000800 U		0.0407
North RO Field	MW-118	Apr-14		0.00974	< 0.000900 UB		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0121			0.00108 J			
North RO Field	MW-118	Apr-15		0.00984	0.00952		0.00131 J		0.0698 J	< 0.000240	0.00169 J			0.00799			
North RO Field	MW-119	Feb-13		0.00294 J	0.00981	< 0.00080 U	< 0.0012 U	0.00309 J	< 0.078 U	< 0.00070 U	0.0424	< 0.000042 U	0.00174 J	0.00246 J	< 0.00080 U		< 0.0025 U
North RO Field	MW-119	May-13		0.00537	0.00625	< 0.00080 U	< 0.0010 U	0.00137 J	< 0.078 U	< 0.00070 U	< 0.0025 U	< 0.000042 U	0.00163 J	0.00506	< 0.00080 U		< 0.0025 U
North RO Field	MW-119	Sep-13		0.00595	0.00864	< 0.000800 U	< 0.00100 U	< 0.00100 U	< 0.0780 U	< 0.000700 U	< 0.00250 U	< 0.0000420 U	0.00140 J	0.00660	< 0.000800 U		< 0.00250 U
North RO Field	MW-119	Nov-13		0.00438 J	0.00973	< 0.000800 U	0.00116 J	0.00311 J	0.185 J	< 0.000700 U	0.00459 J		0.00222 J	0.00144 J	< 0.000800 U		0.0241
North RO Field	MW-119	Apr-14	FD	0.00461 J	< 0.000900 UB		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U			0.00402 J			
North RO Field	MW-119	Apr-14		0.00468 J	< 0.000900 UB		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U			0.00393 J			
North RO Field	MW-119	Apr-15		0.00374	0.00758		0.000834 J		0.262	< 0.000240	0.00863			< 0.000380			
S Refinery	KWB-2R	Apr-15		0.00249	0.273		< 0.000540		0.216	0.000989 J	0.419			0.000612 J			
S Refinery	KWB-5	Apr-15		0.0227	3.64		< 0.000540		3.64	0.000353 J	1.74			< 0.000380			
S Refinery	KWB-6	Apr-15		0.00581	0.293		< 0.000540		0.629	0.00116 J	2.18			< 0.000380			
S Refinery	MW-101	Apr-13		0.0113	0.104		< 0.00500 U		0.500	< 0.00500 U	0.928			< 0.00500 U			
S Refinery	MW-101	Apr-14		0.0378 J	0.0718		0.00404 J		1.64 J	< 0.000700 U	1.16			< 0.00100 U			
S Refinery	MW-101	Apr-15		0.0767	0.0565		< 0.000540		2.2	< 0.000240	1.13			0.000395 J			
S Refinery	MW-102	Apr-15		0.0102	6.52		< 0.000540		0.0780 J	0.00273	0.0433			0.00310			
S Refinery	MW-103	Apr-13		< 0.00500 U	0.821		< 0.00500 U		< 0.200 U	< 0.00500 U	< 0.00500 U			< 0.00500 U			
S Refinery	MW-103	Apr-14		< 0.00100 U	0.988		< 0.00100 U		< 0.0780 U	0.00106 J	< 0.00250 U			< 0.00100 U			
S Refinery	MW-103	Apr-15		0.00491	8.03		< 0.000540		< 0.0150	0.000809 J	0.00848			0.000642 J			
S Refinery	MW-104	Apr-13		< 0.00500 U	0.0194		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0247			< 0.00500 U			
S Refinery	MW-104	Apr-14	FD	< 0.00100 U	0.0190		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0215			< 0.00100 U			
S Refinery	MW-104	Apr-14		< 0.00100 U	0.0195		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0236			< 0.00100 U			
S Refinery	MW-104	Apr-15	FD	0.000422 J	0.0182		< 0.000540		< 0.0150	< 0.000240	0.0213			< 0.000380			
S Refinery	MW-104	Apr-15		0.000481 J	0.0212		< 0.000540		0.0279 J	< 0.000240	0.0222			0.000603 J			
S Refinery	MW-105	Apr-15		0.00829	0.114		0.000786 J		2.07	0.000320 J	0.111			0.00103 J			
S Refinery	MW-106	Apr-13		0.00677	0.0276		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0134			< 0.00500 U			
S Refinery	MW-106	Apr-14		0.00920	0.0328		0.00126 J		< 0.0780 U	0.00309 J	0.0125			0.00137 J			
S Refinery	MW-106	Apr-15		0.00361	0.0936		< 0.000540		0.172	0.00129 J	0.146			0.00795			
S Refinery	MW-107	Apr-13		0.00762	2.24		< 0.00500 U		9.40	< 0.00500 U	0.292			< 0.00500 U			
S Refinery	MW-107	Apr-14		0.00681	2.58		< 0.00100 U		10.8	< 0.000700 U	0.289			< 0.00100 U			
S Refinery	MW-107	Apr-15		0.0100	1.53 J		0.000581 J		0.59	< 0.00120	0.15			0.00457 J			
S Refinery	MW-109	Apr-13		0.0269	0.576		< 0.00500 U		0.784	< 0.00500 U	0.402			< 0.00500 U			
S Refinery	MW-109	Apr-14		0.0226	0.396		< 0.00100 U		0.603	< 0.000700 U	0.332			0.00138 J			
S Refinery	MW-109	Apr-15		0.00369	0.0313		< 0.000540		0.155	< 0.000240	0.162 J			0.00235 J			
S Refinery	MW-110	Apr-13		0.0355	0.0643		< 0.00500 U		1.30	< 0.00500 U	2.39			< 0.00500 U			
S Refinery	MW-110	Apr-14		0.0307	0.0633		< 0.00100 U		1.08	< 0.000700 U	1.60			0.00133 J			
S Refinery	MW-110	Apr-15		0.00892	0.0573		< 0.000540		0.117	< 0.000240	0.667			R			
S Refinery	MW-130	Apr-14		0.00434 J	0.0238		< 0.00100 U		0.0912 J	< 0.000700 U	0.130			0.00713			
S Refinery	MW-130	Apr-15		0.00464	0.0233		0.00155 J		0.446 J	0.00165 J	0.119			0.00337 J			

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
S Refinery	MW-28	Apr-13		< 0.00500 U	0.0467		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0328	< 0.000200 U	0.00631	< 0.00500 U		< 0.00500 U	
S Refinery	MW-28	Apr-14		0.00396 J	0.131		< 0.00100 U		< 0.0780 U	0.00126 J	0.0374	< 0.0000420 UJ	0.00839	< 0.00100 U		< 0.000900 U	
S Refinery	MW-28	Apr-15		0.0130 J	0.0644 J		0.000923 J		0.0283 J	0.0120	0.0647		0.00417	0.0699 J		0.00527	
S Refinery	MW-48	Apr-15		0.00412	0.58 J		0.000777 J		0.255	0.00139 J	0.242 J			0.00302 J			
S Refinery	MW-50	Apr-13		0.00526	0.0194		< 0.00500 U		< 0.200 U	< 0.00500 U	1.21			< 0.00500 U			
S Refinery	MW-50	Apr-14		< 0.00100 U	0.0202		< 0.00100 U		< 0.0780 U	0.000770 J	1.38			< 0.00100 U			
S Refinery	MW-50	Apr-15		0.00146 J	0.0223		< 0.000540		0.0396 J	0.000670 J	1.62			< 0.000380			
S Refinery	MW-52	Apr-13		< 0.00500 U	0.00941		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0729	< 0.000200 U	< 0.00500 U	< 0.00500 U		0.0237	
S Refinery	MW-52	Apr-14	FD	0.00352 J	0.00895		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0339	< 0.0000420 U	0.00416 J	0.00225 J		0.0250	
S Refinery	MW-52	Apr-14		0.00375 J	0.00869		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0328	< 0.0000420 U	0.00448 J	0.00265 J		0.0256	
S Refinery	MW-52	Apr-15		0.00397	0.00909		< 0.000540		< 0.0150	< 0.000240	0.0341		0.00635	0.00124 J		0.0268	
S Refinery	MW-65	Apr-15		0.0202	3.38		< 0.000540		2.64	0.000681 J	0.814			0.000425 J			
S Refinery	MW-66	Apr-13		< 0.00500 U	1.72		< 0.00500 U		0.452	< 0.00500 U	0.286	< 0.000200 U	0.00912	< 0.00500 U		< 0.00500 U	
S Refinery	MW-66	Apr-14		0.00139 J	1.47		< 0.00100 U		0.480 J	< 0.000700 U	0.294	< 0.0000420 UJ	0.00861	< 0.00100 U		< 0.000900 U	
S Refinery	MW-66	Apr-15		0.00297	2.17		< 0.000540		0.549	< 0.000240	0.201		0.00565	< 0.000380		0.000494 J	
S Refinery	MW-99	Apr-15		0.00305	0.155		< 0.000540		0.317	0.00200 J	0.0828			0.000714 J			
S Refinery	RW-4	Apr-15		0.00189 J	0.0573		< 0.000540		0.0571 J	< 0.000240	0.11			0.000503 J			
S Refinery	RW-5R	Apr-15		0.00136 J	0.0275		< 0.000540		0.0247 J	< 0.000240	0.0167			< 0.000380			
S Refinery	RW-6	Apr-15		0.0354	0.857		0.000677 J		17.5	0.00129 J	0.284			< 0.000380			
South RO Field	MW-114	Feb-13		0.00561	0.0204	< 0.00080 U	< 0.0012 U	< 0.0015 U	< 0.078 U	< 0.00070 U	1.51	< 0.000042 U	0.00651	0.00222 J	< 0.00080 U		0.00343 J
South RO Field	MW-114	May-13		0.00437 J	0.0129	< 0.00080 U	< 0.0010 U	< 0.0010 U	< 0.078 U	< 0.00070 U	0.844	< 0.000042 U	0.00410 J	0.00636	< 0.00080 U		< 0.0025 U
South RO Field	MW-114	Sep-13		0.00502	0.0170	< 0.000800 U	< 0.00100 U	0.00197 J	< 0.0780 U	< 0.000700 U	1.42	< 0.0000420 U	0.00558	0.00245 J	< 0.000800 U		< 0.00250 U
South RO Field	MW-114	Nov-13		0.00539	0.0112	< 0.000800 U	0.00119 J	< 0.00100 U	0.167 J	< 0.000700 U	0.0350		0.00369 J	0.00451 J	< 0.000800 U		0.0806
South RO Field	MW-114	Apr-14		0.00297 J	0.0136		< 0.00100 U		< 0.0780 U	< 0.000700 U	1.13			< 0.00100 U			
South RO Field	MW-114	Apr-15		0.00273	0.0127 J		< 0.000540		< 0.0150	< 0.000240	0.894			0.00180 J			
South RO Field	MW-115	Feb-13		0.00499 J	0.0309	< 0.00080 U	< 0.0012 U	0.00704	< 0.078 U	< 0.00070 U	0.255	< 0.000042 U	0.00483 J	0.00810	< 0.00080 U		0.00973
South RO Field	MW-115	May-13	FD	0.00427 J	0.0110	< 0.00080 U	< 0.0010 U	0.00151 J	< 0.078 U	< 0.00070 U	0.0230	< 0.000042 U	0.00225 J	0.00734	< 0.00080 U		< 0.0025 U
South RO Field	MW-115	May-13		0.00478 J	0.0107	< 0.00080 U	< 0.0010 U	< 0.0010 U	< 0.078 U	< 0.00070 U	0.0267	< 0.000042 U	< 0.0010 U	0.00654 J	< 0.00080 U		0.00821 J
South RO Field	MW-115	Sep-13		0.00467 J	0.0106	< 0.000800 U	< 0.00100 U	< 0.00100 U	< 0.0780 U	< 0.000700 U	0.0362	< 0.0000420 U	0.00208 J	0.00568	< 0.000800 U		< 0.00250 U
South RO Field	MW-115	Nov-13		0.00616	0.0110	< 0.000800 U	< 0.00100 U	< 0.00100 U	< 0.0780 U	< 0.000700 U	0.0249		0.00206 J	0.00506	< 0.000800 U		0.0257
South RO Field	MW-115	Apr-14		0.00368 J	0.00870		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0216			0.00166 J			
South RO Field	MW-115	Apr-15		0.00797 J	0.00965 J		0.000735 J		0.0283 J	< 0.000240	0.102			0.00313			
South RO Field	MW-116	Feb-13		0.00274 J	0.0161	< 0.00080 U	< 0.0012 U	< 0.0015 U	< 0.078 U	< 0.00070 U	0.0437	0.000131 J	0.00120 J	0.00203 J	< 0.00080 U		< 0.0025 UB
South RO Field	MW-116	May-13		0.00502	0.0111	< 0.00080 U	0.00119 J	0.00176 J	0.201	< 0.00070 U	0.0342	0.0000460 J	0.00204 J	0.00733	< 0.00080 U		< 0.0025 U
South RO Field	MW-116	Sep-13	FD	0.00467 J	0.00946	< 0.000800 U	< 0.00100 U	< 0.00100 U	< 0.0780 U	< 0.000700 U	0.00366 J	0.0000600 J	0.00112 J	0.00558	< 0.000800 U		< 0.00250 U
South RO Field	MW-116	Sep-13		0.00535	0.00928	< 0.000800 U	< 0.00100 U	< 0.00100 U	< 0.0780 U	< 0.000700 U	0.00478 J	0.0000610 J	0.00115 J	0.00493 J	< 0.000800 U		< 0.00250 U
South RO Field	MW-116	Nov-13	FD	0.00526	0.0110	< 0.000800 U	< 0.00100 U	< 0.00100 U	0.132 J	< 0.000700 U	0.00576		0.00144 J	0.00582	< 0.000800 U		0.0218
South RO Field	MW-116	Nov-13		0.00525	0.00989	< 0.000800 U	< 0.00100 U	< 0.00100 U	< 0.0780 U	< 0.000700 U	0.00920		0.00245 J	0.00611	< 0.000800 U		0.0311
South RO Field	MW-116	Apr-14		0.00348 J	0.00950		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U			0.00563			
South RO Field	MW-116	Apr-15		0.00507	0.00904 J		0.000586 J		< 0.0150	< 0.000240	0.00316 J			0.00417 J			
SWMU22	MW-136	Apr-15		0.00283	0.0107	< 0.000160	< 0.000540	0.00156 J	0.0239 J	< 0.000240	0.00574		0.00110 J	0.00362	< 0.000310	0.0158	< 0.00260 UJ
TEL	MW-49	Apr-13	FD	0.00734	0.0398		< 0.00500 U		< 0.200 U	< 0.00500 U	0.301	< 0.000200 U	0.00930	< 0.00500 U		< 0.00500 U	
TEL	MW-49	Apr-13		0.00700	0.0402		< 0.00500 U		< 0.200 U	< 0.00500 U	0.294	< 0.000200 U	0.00912	< 0.00500 U		< 0.00500 U	
TEL	MW-49	Apr-14		0.00460 J	0.0376		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.333	< 0.0000420 U	0.00825	< 0.00100 U		< 0.000900 U	
TEL	MW-49	Apr-15		0.00329	0.0394		< 0.000540		0.0291 J	0.000467 J	0.24		0.00656	0.00302 J		0.000493 J	
TEL	TEL-1	Apr-13		0.00553	0.0120		< 0.00500 U		< 0.200 U	< 0.00500 U	0.147			< 0.00500 U			

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
TEL	TEL-1	Apr-14	FD	0.00428 J	0.0131 J		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0909 J			0.00110 J			
TEL	TEL-1	Apr-14		0.00400 J	0.0127		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0837			< 0.00100 U			
TEL	TEL-1	Apr-15		0.00480	0.0113		0.00301		0.0488 J	< 0.00120	0.0520			0.00161 J			
TEL	TEL-2	Apr-13		0.0130	0.0510		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0157			< 0.00500 U			
TEL	TEL-2	Apr-14		0.0119	0.0745		< 0.00100 U		< 0.0780 U	0.00246 J	0.0107			< 0.00100 U			
TEL	TEL-2	Apr-15		0.0173	0.0887		0.00111 J		0.0269 J	0.00254	0.00915			0.0136			
TEL	TEL-3	Apr-13		< 0.00500 U	0.0140		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0121			< 0.00500 U			
TEL	TEL-3	Apr-14		0.00303 J	0.0129		0.00193 J		< 0.0780 U	< 0.000700 U	0.0105			< 0.00100 U			
TEL	TEL-3	Apr-15		0.00639	0.0123		0.00235		0.0316 J	0.000406 J	0.00717			0.0219			
TEL	TEL-4	Apr-13		0.00967	0.0299		0.00864		< 0.200 U	< 0.00500 U	0.577			< 0.00500 U			
TEL	TEL-4	Apr-14		0.0125	0.0349		0.00884		< 0.0780 U	0.00196 J	0.444			< 0.00100 U			
TEL	TEL-4	Apr-15	FD	0.00568	0.0220		0.0298		0.149	0.00143 J	0.835			< 0.000380			
TEL	TEL-4	Apr-15		0.00563	0.0208		0.0139		0.0279 J	0.00114 J	0.792			0.000882 J			
TMD	MW-16	Apr-13		< 0.0100 U	0.0167		< 0.0100 U		< 0.400 U	< 0.0100 U	0.0509			< 0.0100 U			
TMD	MW-16	Apr-14		0.00546	0.0144		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.125			< 0.00100 U			
TMD	MW-16	Apr-15		0.00465 J	0.0151 J		< 0.00270		< 0.0750	< 0.00120	0.0513			0.00213 J			
TMD	MW-20	Apr-13		< 0.0100 U	< 0.0100 U		< 0.0100 U		< 0.400 U	< 0.0100 U	0.0569			0.0153			
TMD	MW-20	Apr-14	FD	0.00848	0.0103		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0647			0.0220			
TMD	MW-20	Apr-14		0.00931	0.00977		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.0645			0.0205			
TMD	MW-20	Apr-15		0.00586	0.00926		< 0.000540		0.0359 J	< 0.000240	0.00169 J			0.0254			
TMD	MW-21	Apr-13		< 0.0100 U	< 0.0100 U		< 0.0100 U		< 0.400 U	< 0.0100 U	0.272			0.0319			
TMD	MW-21	Apr-14		0.00845	0.00996		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.422			0.0368			
TMD	MW-21	Apr-15		0.00681 J	0.00852 J		< 0.00270		< 0.0750	< 0.00120	0.252			0.0269			
TMD	MW-25	Apr-13		< 0.00500 U	0.0106		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0832			< 0.00500 U			
TMD	MW-25	Apr-14		0.00575 J	0.0277		< 0.00200 U		< 0.156 U	< 0.00140 U	0.121			0.00885 J			
TMD	MW-25	Apr-15		0.0104	0.0196 J		< 0.00270		< 0.0750	< 0.00120	0.218			0.0204			
TMD	MW-26	Apr-13		< 0.0100 U	< 0.0100 U		< 0.0100 U		< 0.400 U	< 0.0100 U	0.0589			< 0.0100 U			
TMD	MW-26	Apr-14		0.00617 J	0.00866 J		< 0.00200 U		< 0.156 U	< 0.00140 U	0.520			0.0309			
TMD	MW-26	Apr-15		0.00338	0.00842		< 0.000540		< 0.0150	< 0.000240	0.47			0.0184			
TMD	MW-27	Apr-13		< 0.00500 U	0.0168		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0118			0.0262			
TMD	MW-27	Apr-14		0.00355 J	0.0150		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.00617			0.0193			
TMD	MW-27	Apr-15		0.00259	0.0218		< 0.000540		< 0.0150	< 0.000240	0.0290			0.0173			
TMD	MW-46R	Apr-13		< 0.00500 U	0.0121		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0424			0.00600			
TMD	MW-46R	Apr-14		0.00348 J	0.0120		< 0.00100 U		0.0908 J	< 0.000700 U	0.0925			0.00666			
TMD	MW-46R	Apr-15		0.00293	0.0127		< 0.000540		0.0873 J	< 0.000240	0.102			0.00102 J			
TMD	MW-68	Apr-13		< 0.00500 U	0.0138		< 0.00500 U		< 0.200 U	< 0.00500 U	< 0.00500 U			0.0316			
TMD	MW-68	Apr-14		0.00413 J	0.0135		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U			0.0302			
TMD	MW-68	Apr-15		0.00272	0.0154		< 0.000540		0.0904 J	< 0.000240	0.00126 J			0.0115			
TMD	MW-71	Apr-13	FD	< 0.0100 U	0.0107		< 0.0100 U		< 0.400 U	< 0.0100 U	< 0.0100 U	< 0.000200 U	< 0.0100 U	0.0421		0.0240	
TMD	MW-71	Apr-13		< 0.0100 U	0.0107		< 0.0100 U		< 0.400 U	< 0.0100 U	< 0.0100 U	< 0.000200 U	< 0.0100 U	0.0405		0.0245	
TMD	MW-71	Apr-14		0.00573	0.0102		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U	< 0.0000420 U	0.00155 J	0.0499		0.0255	
TMD	MW-71	Apr-15		0.00387	0.00817		< 0.000540		< 0.0150	< 0.000240	0.000487 J		0.00116 J	0.0336		0.0215	
TMD	MW-8	Apr-13		< 0.0100 U	0.0114		< 0.0100 U		< 0.400 U	< 0.0100 U	0.584			0.0213			
TMD	MW-8	Apr-14		0.00898	0.0116		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.587			0.0295			
TMD	MW-8	Apr-15		0.00679	0.0100		0.000644 J		< 0.0150	< 0.000240	0.464			0.0174			
TMD	MW-89	Apr-13		0.0127	0.0122		< 0.00500 U		< 0.200 U	< 0.00500 U	0.707			< 0.00500 U			

Table B.3 - Groundwater Analytical Results 2013-2015 - Dissolved Metals
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte: Units: CGWSL: CGWSL Source:				Arsenic mg/l 0.01 USEPA MCL	Barium mg/l 1 NMED GW HH	Cadmium mg/l 0.005 USEPA MCL	Chromium mg/l 0.05 NMED GW HH	Copper mg/l 1 NMED GW Dom	Iron mg/l 1 NMED GW Dom	Lead mg/l 0.015 USEPA MCL	Manganese mg/l 0.2 NMED GW Dom	Mercury mg/l 0.002 NMED GW HH	Nickel mg/l 0.2 NMED GW Irr	Selenium mg/l 0.05 NMED GW HH	Silver mg/l 0.05 NMED GW HH	Vanadium mg/l 0.0631 NMED TW	Zinc mg/l 10 NMED GW Dom
Area	Location	Date	Dup														
TMD	MW-89	Apr-14		0.00959	0.0135		< 0.00100 U		< 0.0780 U	< 0.000700 U	0.528			0.0182			
TMD	MW-89	Apr-15		0.00928 J	0.0167 J		< 0.00270		< 0.0750	< 0.00120	0.0732			0.0291			
Upgradient	UG-1	Apr-13		< 0.00500 U	0.0121		< 0.00500 U		< 0.200 U	< 0.00500 U	< 0.00500 U	< 0.000200 U	< 0.00500 U	< 0.00500 U		0.0108	
Upgradient	UG-1	Apr-14		0.00288 J	0.0120		0.00187 J		< 0.0780 U	< 0.000700 U	< 0.00250 U	< 0.0000420 U	< 0.00100 U	0.00635		0.0107	
Upgradient	UG-1	Apr-15		0.00124 J	0.0133		0.000833 J		< 0.0150	< 0.000240	0.000689 J		0.00139 J	0.0101 J		0.0109	
Upgradient	UG-2	Apr-13	FD	< 0.00500 U	0.0153		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0514	< 0.000200 U	0.00997	< 0.00500 U		0.0173	
Upgradient	UG-2	Apr-13		< 0.00500 U	0.0153		< 0.00500 U		< 0.200 U	< 0.00500 U	0.0521	< 0.000200 U	0.0102	< 0.00500 U		0.0181	
Upgradient	UG-2	Apr-14		0.00625	0.0147		< 0.00100 U		0.334	< 0.000700 U	0.346	< 0.0000420 U	0.0537	0.00369 J		0.0142	
Upgradient	UG-2	Apr-15		0.00205	0.0150		< 0.000540		< 0.0150	< 0.000240	0.00934		0.00543	0.00373 J		0.0116	
Upgradient	UG-3R	Apr-13		< 0.00500 U	0.0143		< 0.00500 U		< 0.200 U	< 0.00500 U	< 0.00500 U	< 0.000200 U	< 0.00500 U	< 0.00500 U		0.00822	
Upgradient	UG-3R	Apr-14	FD	0.00310 J	0.0172		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U	< 0.0000420 U	< 0.00100 U	0.00460 J		0.00834	
Upgradient	UG-3R	Apr-14		0.00253 J	0.0175		< 0.00100 U		< 0.0780 U	< 0.000700 U	< 0.00250 U	< 0.0000420 U	< 0.00100 U	0.00422 J		0.00799	
Upgradient	UG-3R	Apr-15		0.00157 J	0.0193		< 0.000540		0.0534 J	< 0.000240	0.00492 J		0.00114 J	0.00375 J		0.00934	

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

Page 1 of 68

Navajo Refinery, Artesia, New Mexico

Analy te: Units: CGWSL: CGWSL Source:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
EP	MW-6A	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-6B	Mar-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-6B	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-6B	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-7A	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-7A	Nov-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-7A	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-7A	Nov-14	FD	< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-7A	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-7A	Apr-15	FD	< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-7A	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-7A	Oct-15	FD	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-7A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-7B	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-7B	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-10	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-10	Nov-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-10	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-10	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-10	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-10	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-11A	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-11A	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-11A	Nov-14											
EP	MW-11A	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-11B	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-11B	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-12	Apr-14											
EP	MW-13	Apr-14											
EP	MW-15	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-15	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-15	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-18A	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-18A	Nov-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-18A	Nov-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-18A	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-18A	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-18A	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-18A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-18B	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-18B	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-22A	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-22A	Nov-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-22A	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-22A	Nov-14	FD	< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-22A	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-22A	Apr-15	FD	< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-22A	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-22A	Oct-15	FD	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
EP	MW-22A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-22B	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-22B	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-70	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-70	Nov -13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-70	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-70	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-70	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-70	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-72	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-72	Nov -13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-72	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-72	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-73	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-73	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0053	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-73	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0021 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-73	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.00171	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-74	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-74	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-74	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0019 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-74	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.0012	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-74	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000710 J	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-74	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.00252	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-75	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-75	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-75	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-75	Nov -14		< 0.0016	< 0.00065	< 0.0019	< 0.0013	< 0.0020	< 0.0019	< 0.0019	< 0.0018	< 0.0015	< 0.0019
EP	MW-75	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	< 0.00370	< 0.00380	< 0.00360	< 0.00310	< 0.00390
EP	MW-75	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.000479 J	< 0.000381	< 0.000361	< 0.000306	0.000950 J
EP	MW-76	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-76	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-76	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-76	Nov -14		< 0.0016	< 0.00065	< 0.0019	< 0.0013	< 0.0020	0.0026 J	< 0.0019	< 0.0018	< 0.0015	< 0.0019
EP	MW-76	Apr-15		< 0.000319	0.000308 J	0.000384 J	< 0.000260	< 0.000400	0.000699 J	< 0.000380	< 0.000360	< 0.000310	0.000697 J
EP	MW-76	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.000531 J	< 0.000381	< 0.000361	< 0.000306	0.000499 J
EP	MW-77	Mar-13		< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
EP	MW-77	Oct-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-77	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-77	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0019 J	< 0.00040	< 0.00050	< 0.00070	0.0019 J
EP	MW-77	Nov -14		< 0.0016	< 0.00065	< 0.0019	< 0.0013	< 0.0020	0.0053	< 0.0019	< 0.0018	< 0.0015	0.0044 J
EP	MW-77	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.00333	< 0.000380	< 0.000360	< 0.000310	0.00239
EP	MW-77	Oct-15	1.98	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.00348	< 0.000381	< 0.000361	< 0.000306	0.00223
EP	MW-78	Mar-13		< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
EP	MW-78	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-78	Apr-15		< 0.000319	0.000305 J	< 0.000380	< 0.000260	< 0.000400	0.00132	< 0.000380	< 0.000360	< 0.000310	0.000829 J
EP	MW-79	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-79	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-79	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-79	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039

Navajo Refinery, Artesia, New Mexico

Analy te: Units: CGWSL: CGWSL Source:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethy lbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethyl lbenzene
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
EP	MW-79	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-79	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-80	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-80	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-80	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-81	Mar-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-81	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-81	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-81	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-82	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-82	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-82	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-82	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-83	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-83	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-83	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-83	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-83	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-83	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-84	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-84	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-84	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-84	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-84	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-84	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-87	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-87	Nov-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-87	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-87	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-87	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-87	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-88	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-88	Nov-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-88	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-88	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-88	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	MW-88	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-120	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-120	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-120	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-120	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-120	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-121	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-121	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	MW-121	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-121	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	MW-121	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	MW-122	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	MW-122	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060

Navajo Refinery, Artesia, New Mexico

				Analy te:	1, 1, 1-Trichloroethane	1, 1, 2, 2-Tetrachloroethane	1, 1, 2-Trichloroethane	1, 1-Dichloroethane	1, 1-Dichloroethene	1, 2, 4-Trimethyl benzene	1, 2-Dibromoethane	1, 2-Dichloroethane	1, 2-Dichloropropane	1, 3, 5-Trimethyl benzene
				Units:	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
				CGWSL:	0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
				CGWSL Source:	WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup											
EP	MW-122	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	MW-122	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	MW-122	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387	
EP	MW-123	Nov -13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	MW-123	Nov -13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	MW-123	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060	
EP	MW-123	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	MW-123	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	MW-123	Oct-15	1.45	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387	
EP	MW-124	Nov -13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	MW-124	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060	
EP	MW-124	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	MW-124	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390	
EP	MW-124	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387	
EP	OCD-1R	Nov -13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-1R	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060	
EP	OCD-1R	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-1R	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-2A	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-2A	Nov -13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-2A	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060	
EP	OCD-2A	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-2A	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-2A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387	
EP	OCD-3	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-3	Nov -13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-3	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060	
EP	OCD-3	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-3	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-3	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387	
EP	OCD-4	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-4	Nov -13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-4	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060	
EP	OCD-4	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-4	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-4	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387	
EP	OCD-5	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-5	Nov -13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-5	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060	
EP	OCD-5	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060	
EP	OCD-5	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-5	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-5	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387	
EP	OCD-6	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-6	Nov -13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
EP	OCD-6	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060	
EP	OCD-6	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039	
EP	OCD-6	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390	
EP	OCD-6	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387	

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
EP	OCD-7AR	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	OCD-7AR	Nov-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	OCD-7AR	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0016 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	OCD-7AR	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0017 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	OCD-7AR	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.00054 J	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	OCD-7AR	Apr-15		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.00076 J	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	OCD-7AR	Oct-15		< 0.000319	< 0.00013	< 0.000383	< 0.000259	< 0.000398	0.00129	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	OCD-7B	Mar-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	OCD-7B	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	OCD-8A	Apr-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	OCD-8A	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	OCD-8A	Nov-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	OCD-8A	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	OCD-8A	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0010 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
EP	OCD-8A	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
EP	OCD-8A	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000370 J	< 0.000380	< 0.000360	< 0.000310	< 0.000390
EP	OCD-8A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.000454 J	< 0.000381	< 0.000361	< 0.000306	< 0.000387
EP	OCD-8B	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
EP	OCD-8B	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	KWB-1A	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-1A	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-1A	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	KWB-1A	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	KWB-1A	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	KWB-1A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	KWB-1C	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-1C	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	KWB-7	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-7	Nov-14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	0.21	< 0.0038	< 0.0036	< 0.0031	0.0085 J
Field E of Refinery	KWB-7	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.0766	< 0.000380	< 0.000360	< 0.000310	0.000982 J
Field E of Refinery	KWB-7	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.00557	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	KWB-10R	Nov-14		< 0.0080	< 0.0032	< 0.0096	< 0.0065	< 0.01	0.41	< 0.0095	< 0.0090	< 0.0076	0.11
Field E of Refinery	KWB-10R	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.457	< 0.00380	< 0.00360	< 0.00310	0.136
Field E of Refinery	KWB-10R	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.358	< 0.000381	< 0.000361	< 0.000306	0.1
Field E of Refinery	KWB-11A	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-11A	Nov-14	FD	< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.047	< 0.00038	< 0.00036	< 0.00031	0.0011
Field E of Refinery	KWB-11A	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.052	< 0.00038	< 0.00036	< 0.00031	0.0013
Field E of Refinery	KWB-11A	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.0658	< 0.000380	< 0.000360	< 0.000310	0.00168
Field E of Refinery	KWB-11A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.0528	< 0.000381	< 0.000361	< 0.000306	0.00117
Field E of Refinery	KWB-11B	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-11B	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.23	< 0.00040	< 0.00050	< 0.00070	0.0046 J
Field E of Refinery	KWB-11B	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	KWB-11B	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	KWB-11B	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.000489 J	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	KWB-12A	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-12A	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	KWB-12A	Nov-14	FD	< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	KWB-12A	Apr-15	FD	< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	KWB-12A	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000452 J	< 0.000380	< 0.000360	< 0.000310	< 0.000390

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
Field E of Refinery	KWB-12A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	KWB-12B	Apr-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-12B	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-12B	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-12B	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	KWB-12B	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	KWB-12B	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	KWB-12B	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	KWB-12B	Oct-15	FD	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.000895 J	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	KWB-12B	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	KWB-P4	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	KWB-P4	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	MW-57	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	MW-57	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	MW-57	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	MW-57	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	MW-57	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.00163	< 0.000380	< 0.000360	< 0.000310	0.000463 J
Field E of Refinery	MW-57	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	MW-58	Oct-13		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.093	< 0.050	< 0.050	< 0.050	< 0.050
Field E of Refinery	MW-58	Nov -14		< 0.0080	< 0.0032	< 0.0096	< 0.0065	< 0.01	0.86	< 0.0095	< 0.0090	< 0.0076	0.098
Field E of Refinery	MW-58	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	1.04	< 0.00380	< 0.00360	< 0.00310	0.195
Field E of Refinery	MW-58	Oct-15		< 0.0319	< 0.0130	< 0.0383	< 0.0259	< 0.0398	0.893	< 0.0381	< 0.0361	< 0.0306	0.0651 J
Field E of Refinery	MW-111	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	MW-111	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0053	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	MW-111	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0021 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	MW-111	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.0074	< 0.00038	< 0.00036	< 0.00031	0.0017
Field E of Refinery	MW-111	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.00256	< 0.000380	0.000724 J	< 0.000310	0.000567 J
Field E of Refinery	MW-111	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.00122	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	MW-112	Nov -14		< 0.0080	< 0.0032	< 0.0096	< 0.0065	< 0.01	0.35	< 0.0095	< 0.0090	< 0.0076	0.09
Field E of Refinery	MW-113	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	MW-113	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0097	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	MW-113	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.058	< 0.00040	< 0.00050	< 0.00070	0.026
Field E of Refinery	MW-113	Nov -14	FD	< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	0.039	< 0.0038	< 0.0036	< 0.0031	0.0069 J
Field E of Refinery	MW-113	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.041	< 0.00038	0.00052 J	< 0.00031	0.0071
Field E of Refinery	MW-113	Apr-15	FD	< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000538 J	< 0.000380	0.000383 J	< 0.000310	< 0.000390
Field E of Refinery	MW-113	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	0.000497 J	< 0.000310	< 0.000390
Field E of Refinery	MW-113	Oct-15	FD	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	MW-113	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	0.000455 J	< 0.000306	< 0.000387
Field E of Refinery	MW-125	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	MW-125	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	MW-125	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	MW-125	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	MW-126A	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0030 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	MW-126A	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	MW-126A	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000397 J	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	MW-126A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.00251	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	MW-126B	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	MW-126B	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	MW-126B	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000409 J	< 0.000380	< 0.000360	< 0.000310	< 0.000390

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
Field E of Refinery	MW-126B	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	MW-127	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.29	< 0.00040	< 0.00050	< 0.00070	0.063
Field E of Refinery	MW-127	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.078	< 0.00038	< 0.00036	< 0.00031	0.0061
Field E of Refinery	MW-127	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.126	< 0.000380	0.000418 J	< 0.000310	0.00854
Field E of Refinery	MW-127	Oct-15		< 0.00638	< 0.00260	< 0.00766	< 0.00518	< 0.00796	0.098	< 0.00762	< 0.00722	< 0.00612	< 0.00774
Field E of Refinery	MW-128	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0095	< 0.00040	< 0.00050	< 0.00070	0.0045 J
Field E of Refinery	MW-128	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.0028	< 0.00038	< 0.00036	< 0.00031	0.00048 J
Field E of Refinery	MW-128	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.00374	< 0.000380	< 0.000360	< 0.000310	0.000551 J
Field E of Refinery	MW-128	Oct-15		< 0.00638	< 0.00260	< 0.00766	< 0.00518	< 0.00796	< 0.00746	< 0.00762	< 0.00722	< 0.00612	< 0.00774
Field E of Refinery	MW-129	Nov-14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	0.014	< 0.0038	< 0.0036	< 0.0031	0.0043 J
Field E of Refinery	MW-129	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.00286	< 0.000380	< 0.000360	< 0.000310	0.000679 J
Field E of Refinery	MW-129	Oct-15		< 0.0319	< 0.0130	< 0.0383	< 0.0259	< 0.0398	< 0.0373	< 0.0381	< 0.0361	< 0.0306	< 0.0387
Field E of Refinery	MW-130	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	MW-130	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	MW-130	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	MW-130	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	MW-131	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.23	< 0.00040	< 0.00050	< 0.00070	0.066
Field E of Refinery	MW-131	Nov-14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	0.058	< 0.0038	< 0.0036	< 0.0031	0.016
Field E of Refinery	MW-131	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.0486	< 0.000380	< 0.000360	< 0.000310	0.0119
Field E of Refinery	MW-131	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.0231	< 0.000381	< 0.000361	< 0.000306	0.00694
Field E of Refinery	MW-133	Nov-14		< 0.032	< 0.013	< 0.038	< 0.026	< 0.04	0.28	< 0.038	< 0.036	< 0.031	0.053 J
Field E of Refinery	MW-133	Apr-15		< 0.0319	< 0.0130	< 0.0380	< 0.0260	< 0.0400	0.138	< 0.0380	< 0.0360	< 0.0310	< 0.0390
Field E of Refinery	MW-134	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	MW-134	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	MW-134	Apr-15	FD	< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	MW-134	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	MW-134	Oct-15	FD	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	MW-134	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	MW-135	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	MW-135	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
Field E of Refinery	MW-135	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000793 J	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	MW-135	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	RA-4196	Apr-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	RA-4196	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	RA-4196	Nov-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	RA-4196	Nov-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	RA-4196	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	RA-4196	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Field E of Refinery	RA-4196	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
Field E of Refinery	RA-4798	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	RA-4798	Nov-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	RA-4798	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	RA-4798	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	RA-4798	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	0.0015	< 0.00031	< 0.00039
Field E of Refinery	RA-4798	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	0.00311	< 0.000310	< 0.000390
Field E of Refinery	RA-4798	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	0.00154	< 0.000306	< 0.000387
Field E of Refinery	RW-18	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Field E of Refinery	RW-18	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Field E of Refinery	RW-18	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
Field E of Refinery	RW-20	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.539	< 0.00380	< 0.00360	< 0.00310	0.113
Field E of Refinery	RW-22	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.575	< 0.00380	< 0.00360	< 0.00310	0.0853
N Refinery	MW-23	Apr-13		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
N Refinery	MW-23	Oct-13		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
N Refinery	MW-23	Apr-14		< 0.010	< 0.010	< 0.010	< 0.0080	< 0.010	0.020 J	< 0.0080	< 0.010	< 0.014	< 0.012
N Refinery	MW-23	Nov -14		< 0.016	< 0.0065	< 0.019	< 0.013	< 0.02	0.37	< 0.019	< 0.018	< 0.015	0.069
N Refinery	MW-23	Apr-15		< 0.00798	< 0.00320	< 0.00960	< 0.00650	< 0.0100	0.473	< 0.00950 J	< 0.00900 J	< 0.00760	0.0997
N Refinery	MW-23	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	0.00126	0.000677 J	< 0.000381	< 0.000361	0.00206	< 0.000387
N Refinery	MW-29	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-29	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-29	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	MW-29	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
N Refinery	MW-29	Apr-15		< 0.000319	< 0.000130	0.000819 J	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	MW-29	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
N Refinery	MW-39	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.064	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-39	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	MW-39	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.000527 J	< 0.000381	< 0.000361	< 0.000306	< 0.000387
N Refinery	MW-40	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-40	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	MW-40	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000498 J	< 0.000380	< 0.000360	0.000769 J	< 0.000390
N Refinery	MW-41	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-41	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-41	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	MW-41	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	MW-42	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.094	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-42	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.11	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-42	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.063	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	MW-42	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.0247	< 0.00380	< 0.00360	< 0.00310	< 0.00390
N Refinery	MW-43	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.012	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-43	Oct-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.11	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-43	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.11	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-43	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.029	< 0.00040	< 0.00050	0.0032 J	0.0015 J
N Refinery	MW-43	Nov -14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	0.027	< 0.0038	< 0.0036	< 0.0031	< 0.0039
N Refinery	MW-43	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.0576	< 0.00380 J	< 0.00360 J	0.00376 J	0.00448 J
N Refinery	MW-43	Oct-15		< 0.00319	< 0.00130	< 0.00383	< 0.00259	< 0.00398	0.477	< 0.00381	< 0.00361	0.00782 J	0.101
N Refinery	MW-59	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-59	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	MW-59	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	MW-60	Apr-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-60	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-60	Oct-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-60	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-60	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0029 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	MW-60	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
N Refinery	MW-60	Apr-15	FD	< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000430 J	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	MW-60	Apr-15		< 0.000319	0.000307 J	< 0.000380	< 0.000260	< 0.000400	0.000879 J	< 0.000380	0.000376 J	< 0.000310	< 0.000390
N Refinery	MW-60	Oct-15	FD	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
N Refinery	MW-60	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
N Refinery	MW-61	Apr-13		< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	0.19	< 0.025	< 0.025	< 0.025	< 0.025

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
N Refinery	MW-61	Oct-13		< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	0.2	< 0.025	< 0.025	< 0.025	0.098
N Refinery	MW-61	Apr-14		< 0.0025	< 0.0025	< 0.0025	< 0.0020	< 0.0025	0.2	< 0.0020	< 0.0025	< 0.0035	0.0058 J
N Refinery	MW-61	Nov -14		< 0.016	< 0.0065	< 0.019	< 0.013	< 0.02	0.43	< 0.019	< 0.018	< 0.015	0.1
N Refinery	MW-61	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.531	< 0.00380 J	< 0.00360 J	< 0.00310	0.13
N Refinery	MW-61	Oct-15		< 0.00319	< 0.00130	< 0.00383	< 0.00259	< 0.00398	0.233	< 0.00381	< 0.00361	< 0.00306	< 0.00387
N Refinery	MW-62	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.088	< 0.0050	< 0.0050	< 0.0050	0.012
N Refinery	MW-62	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.48	< 0.0050	< 0.0050	< 0.0050	0.11
N Refinery	MW-62	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.27 E	< 0.00040	< 0.00050	< 0.00070	0.06
N Refinery	MW-62	Nov -14		< 0.016	< 0.0065	< 0.019	< 0.013	< 0.02	< 0.019	< 0.019	< 0.018	< 0.015	< 0.019
N Refinery	MW-62	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	< 0.00370	< 0.00380 J	< 0.00360 J	< 0.00310	< 0.00390
N Refinery	MW-62	Oct-15		< 0.00638	< 0.00260	< 0.00766	< 0.00518	< 0.00796	0.662	< 0.00762	< 0.00722	< 0.00612	0.158
N Refinery	MW-67	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.029	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-67	Nov -14		< 0.0016	< 0.00065	< 0.0019	< 0.0013	< 0.0020	0.0050 J	< 0.0019	< 0.0018	< 0.0015	< 0.0019
N Refinery	MW-67	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.00108	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	MW-67	Oct-15		< 0.00638	< 0.00260	< 0.00766	< 0.00518	< 0.00796	< 0.00746	< 0.00762	< 0.00722	< 0.00612	< 0.00774
N Refinery	MW-90	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-90	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-90	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	MW-90	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
N Refinery	MW-90	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	MW-90	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
N Refinery	MW-91	Oct-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.27	< 0.0050	< 0.0050	< 0.0050	0.072
N Refinery	MW-91	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.26	< 0.0050	< 0.0050	< 0.0050	0.072
N Refinery	MW-91	Apr-14		< 0.0025	< 0.0025	< 0.0025	< 0.0020	< 0.0025	0.22	< 0.0020	< 0.0025	< 0.0035	0.064
N Refinery	MW-91	Nov -14		< 0.08	< 0.032	< 0.096	< 0.065	< 0.1	0.18 J	< 0.095	< 0.09	< 0.076	< 0.097
N Refinery	MW-91	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.184	< 0.00380	< 0.00360	< 0.00310	0.0476
N Refinery	MW-91	Oct-15		< 0.00798	< 0.00325	< 0.00958	< 0.00648	< 0.00995	0.226	< 0.00952	< 0.00902	< 0.00765	0.0626
N Refinery	MW-93	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.28	< 0.0050	< 0.0050	< 0.0050	0.059
N Refinery	MW-93	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.3	< 0.0050	< 0.0050	< 0.0050	0.067
N Refinery	MW-93	Apr-14		< 0.0025	< 0.0025	< 0.0025	< 0.0020	< 0.0025	0.37	< 0.0020	< 0.0025	< 0.0035	0.076
N Refinery	MW-93	Nov -14		< 0.016	< 0.0065	< 0.019	< 0.013	< 0.02	0.24	< 0.019	< 0.018	< 0.015	0.046 J
N Refinery	MW-93	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.206	< 0.00380 J	< 0.00360 J	< 0.00310	0.0368
N Refinery	MW-93	Oct-15		< 0.00319	< 0.00130	< 0.00383	< 0.00259	< 0.00398	0.241	< 0.00381	< 0.00361	< 0.00306	0.0414
N Refinery	MW-94	Nov -14		< 0.0064	< 0.0026	< 0.0077	< 0.0052	< 0.0080	0.54	< 0.0076	< 0.0072	< 0.0061	0.12
N Refinery	MW-94	Oct-15		< 0.00319	< 0.00130	< 0.00383	< 0.00259	< 0.00398	0.432	< 0.00381	< 0.00361	< 0.00306	0.0857
N Refinery	MW-95	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	MW-95	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	MW-95	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	MW-96	Apr-13		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
N Refinery	MW-96	Oct-13		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
N Refinery	MW-96	Apr-14		< 0.012	< 0.012	< 0.012	< 0.010	< 0.012	0.019 J	< 0.010	< 0.012	< 0.018	< 0.015
N Refinery	MW-96	Nov -14		< 0.0080	< 0.0032	< 0.0096	< 0.0065	< 0.01	< 0.0093	< 0.0095	< 0.0090	< 0.0076	< 0.0097
N Refinery	MW-96	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000553 J	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	MW-96	Oct-15		< 0.16	< 0.0650	< 0.192	< 0.13	< 0.199	< 0.186	< 0.19	< 0.18	< 0.153	< 0.194
N Refinery	MW-98	Apr-13		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.41	< 0.050	< 0.050	< 0.050	0.095
N Refinery	MW-98	Oct-13		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.42	< 0.050	< 0.050	< 0.050	0.096
N Refinery	MW-98	Apr-14	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	0.46	< 0.0040	< 0.0050	< 0.0070	0.1
N Refinery	MW-98	Apr-14		< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	0.44	< 0.0040	< 0.0050	< 0.0070	0.1
N Refinery	MW-98	Nov -14		< 0.08	< 0.032	< 0.096	< 0.065	< 0.1	0.34	< 0.095	< 0.09	< 0.076	< 0.097

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
N Refinery	MW-98	Apr-15		< 0.00798	< 0.00320	< 0.00960	< 0.00650	< 0.0100	0.36	< 0.00950 J	< 0.00900 J	< 0.00760	0.087
N Refinery	MW-98	Oct-15		< 0.00798	< 0.00325	< 0.00958	< 0.00648	< 0.00995	0.38	< 0.00952	< 0.00902	< 0.00765	0.0836
N Refinery	MW-137	Oct-15		< 0.0319	< 0.0130	< 0.0383	< 0.0259	< 0.0398	0.437	< 0.0381	< 0.0361	< 0.0306	0.102
N Refinery	MW-138	Oct-15		< 0.00638	< 0.00260	< 0.00766	< 0.00518	< 0.00796	0.0792	< 0.00762	< 0.00722	< 0.00612	0.0189 J
N Refinery	RW-1	Apr-15		< 0.0160	< 0.00650	< 0.0190	< 0.0130	< 0.0200	< 0.0190	< 0.0190	< 0.0180	< 0.0150	< 0.0190
N Refinery	RW-2	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.33	< 0.00380 J	< 0.00360 J	< 0.00310	0.0772
N Refinery	RW-7	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.0818	< 0.000380	< 0.000360	< 0.000310	0.000663 J
N Refinery	RW-8	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.00710 J	< 0.00380	< 0.00360	< 0.00310	< 0.00390
N Refinery	RW-9	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.007	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	RW-9	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0065	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	RW-9	Apr-15		< 0.0160	< 0.00650	< 0.0190	< 0.0130	< 0.0200	< 0.0190	< 0.0190	< 0.0180	< 0.0150	< 0.0190
N Refinery	RW-10	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	RW-10	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	RW-10	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	RW-16	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	RW-16	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	RW-16	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	RW-16	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N Refinery	RW-17	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
N Refinery	RW-17	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N Refinery	RW-17	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N RO Reject Field	MW-117*	Feb-13											
N RO Reject Field	MW-117*	Nov-13											
N RO Reject Field	MW-117	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N RO Reject Field	MW-117	Nov-14	FD	< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
N RO Reject Field	MW-117	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
N RO Reject Field	MW-117	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.00285	< 0.000380	< 0.000360	< 0.000310	0.000897 J
N RO Reject Field	MW-117	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
N RO Reject Field	MW-118*	Feb-13											
N RO Reject Field	MW-118*	Nov-13											
N RO Reject Field	MW-118	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N RO Reject Field	MW-118	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
N RO Reject Field	MW-118	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.000863 J	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N RO Reject Field	MW-118	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
N RO Reject Field	MW-119*	Feb-13											
N RO Reject Field	MW-119*	Nov-13											
N RO Reject Field	MW-119	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N RO Reject Field	MW-119	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
N RO Reject Field	MW-119	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
N RO Reject Field	MW-119	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
N RO Reject Field	MW-119	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
NCL	MW-18	Apr-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-18	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-18	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-18	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
NCL	MW-18	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	MW-45	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-45	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-45	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060

Navajo Refinery, Artesia, New Mexico

Analyte: Units: CGWSL: CGWSL Source:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
NCL	MW-45	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
NCL	MW-45	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	MW-45	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
NCL	MW-53	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-53	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
NCL	MW-53	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	MW-54A	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-54A	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-54A	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
NCL	MW-54A	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
NCL	MW-54A	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	MW-54A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
NCL	MW-54B	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-54B	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	MW-55	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-55	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-55	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
NCL	MW-55	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
NCL	MW-55	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
NCL	MW-55	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	MW-55	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
NCL	MW-56	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-56	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-56	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
NCL	MW-56	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
NCL	MW-56	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	MW-56	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
NCL	MW-108	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.03	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-108	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.024	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	MW-108	Apr-14		< 0.00050	< 0.00050	0.00063 J	< 0.00040	< 0.00050	0.031	< 0.00040	0.0098	< 0.00070	0.0034 J
NCL	MW-108	Nov-14		< 0.0016	< 0.00065	< 0.0019	< 0.0013	< 0.0020	0.039	< 0.0019	< 0.0018	< 0.0015	0.0046 J
NCL	MW-108	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.0465	< 0.00380	< 0.00360	< 0.00310	0.00603 J
NCL	MW-108	Oct-15		< 0.00319	< 0.00130	< 0.00383	< 0.00259	< 0.00398	0.0616	< 0.00381	< 0.00361	< 0.00306	0.00805 J
NCL	NCL-31	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	NCL-31	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	NCL-31	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
NCL		Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
NCL	NCL-31	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	NCL-31	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
NCL	NCL-32	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
NCL	NCL-32	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	NCL-32	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
NCL	NCL-33	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	NCL-33	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	NCL-33	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
NCL	NCL-33	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
NCL	NCL-33	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	NCL-33	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398 J	< 0.000373	< 0.000381 J	< 0.000361	< 0.000306	< 0.000387
NCL	NCL-34A	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.18	< 0.0050	< 0.0050	< 0.0050	0.012

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
NCL	NCL-34A	Nov -14		< 0.0016	< 0.00065	< 0.0019	< 0.0013	< 0.0020	0.11	< 0.0019	< 0.0018	< 0.0015	< 0.0019
NCL	NCL-34A	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.0979	< 0.000380	< 0.000360	< 0.000310	0.00122
NCL	NCL-34A	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.0589	< 0.000381	< 0.000361	< 0.000306	0.000423 J
NCL	NCL-44	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	NCL-44	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	NCL-44	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00070	< 0.00060
NCL	NCL-44	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
NCL	NCL-44	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	NCL-44	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
NCL	NCL-49	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	NCL-49	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
NCL	NCL-49	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00070	< 0.00060
NCL	NCL-49	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
NCL	NCL-49	Nov -14	FD	< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
NCL	NCL-49	Apr-15	FD	< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	NCL-49	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
NCL	NCL-49	Oct-15	FD	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
NCL	NCL-49	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
S Refinery	KWB-2R	Nov -14		< 0.0080	< 0.0032	< 0.0096	< 0.0065	< 0.01	0.79	< 0.0095	< 0.0090	< 0.0076	0.039
S Refinery	KWB-2R	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.307	< 0.00380	< 0.00360	< 0.00310	< 0.00390
S Refinery	KWB-2R	Oct-15		< 0.0319	< 0.0130	< 0.0383	< 0.0259	< 0.0398	0.317	< 0.0381	< 0.0361	< 0.0306	< 0.0387
S Refinery	KWB-5	Oct-13		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
S Refinery	KWB-5	Nov -14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	< 0.0037	< 0.0038	< 0.0036	< 0.0031	< 0.0039
S Refinery	KWB-5	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.0158	< 0.000380	< 0.000360	< 0.000310	0.00419
S Refinery	KWB-5	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.00334	< 0.000381	< 0.000361	< 0.000306	0.00179
S Refinery	KWB-6	Nov -14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	0.26	< 0.0038	< 0.0036	< 0.0031	0.047
S Refinery	KWB-6	Apr-15		< 0.00798	< 0.00320	< 0.00960	< 0.00650	< 0.0100	0.68	< 0.00950	0.0119 J	< 0.00760	0.124
S Refinery	KWB-6	Oct-15		< 0.16	< 0.0650	< 0.192	< 0.13	< 0.199	0.325 J	< 0.19	< 0.18	< 0.153	< 0.194
S Refinery	MW-28	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-28	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-28	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.00069 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
S Refinery	MW-28	Nov -14		< 0.0080	< 0.0032	< 0.0096	< 0.0065	< 0.01	0.12	< 0.0095	< 0.0090	< 0.0076	0.011 J
S Refinery	MW-28	Apr-15		< 0.0319	< 0.0130	< 0.0380	< 0.0260	< 0.0400	0.0950 J	< 0.0380	< 0.0360	< 0.0310	< 0.0390
S Refinery	MW-28	Oct-15		< 0.0319	< 0.0130	< 0.0383	< 0.0259	< 0.0398	0.151	< 0.0381	< 0.0361	< 0.0306	< 0.0387
S Refinery	MW-48	Nov -14		< 0.0080	< 0.0032	< 0.0096	< 0.0065	< 0.01	0.2	< 0.0095	< 0.0090	< 0.0076	< 0.0097
S Refinery	MW-48	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.14	< 0.00380	< 0.00360	< 0.00310	0.00962 J
S Refinery	MW-48	Oct-15		< 0.00160	< 0.000650	< 0.00192	< 0.00130	< 0.00199	0.211	< 0.00190	< 0.00180	< 0.00153	0.00235 J
S Refinery	MW-50	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-50	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-50	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00070	< 0.00060
S Refinery	MW-50	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
S Refinery	MW-50	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
S Refinery	MW-50	Oct-15		< 0.000319 J	< 0.000130 J	< 0.000383 J	< 0.000259	< 0.000398	< 0.000373 J	< 0.000381 J	< 0.000361	< 0.000306 J	< 0.000387 J
S Refinery	MW-52	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-52	Oct-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-52	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-52	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00070	< 0.00060
S Refinery	MW-52	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00070	< 0.00060
S Refinery	MW-52	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
S Refinery	MW-52	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
S Refinery	MW-52	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
S Refinery	MW-65	Nov -14		< 0.016	< 0.0065	< 0.019	< 0.013	< 0.02	0.06	< 0.019	< 0.018	< 0.015	0.022 J
S Refinery	MW-65	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.0514	< 0.00380	< 0.00360	< 0.00310	0.0228
S Refinery	MW-66	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-66	Oct-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-66	Oct-13		< 0.0050 J	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050 J
S Refinery	MW-66	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
S Refinery	MW-66	Nov -14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	0.012	< 0.0038	< 0.0036	< 0.0031	< 0.0039
S Refinery	MW-66	Apr-15		< 0.0160	< 0.00650	< 0.0190	< 0.0130	< 0.0200	< 0.0190	< 0.0190	< 0.0180	< 0.0150	< 0.0190
S Refinery	MW-66	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.00409	< 0.000381	< 0.000361	< 0.000306	0.000859 J
S Refinery	MW-99	Nov -14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	0.33	< 0.0038	< 0.0036	< 0.0031	0.036
S Refinery	MW-99	Apr-15		< 0.00798	< 0.00320	< 0.00960	< 0.00650	< 0.0100	0.337	< 0.00950	< 0.00900	< 0.00760	0.0706
S Refinery	MW-99	Oct-15		< 0.00798	< 0.00325	< 0.00958	< 0.00648	< 0.00995	0.4	< 0.00952	< 0.00902	< 0.00765	0.0169 J
S Refinery	MW-101	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-101	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-101	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0022 J	< 0.00040	< 0.00050	< 0.00070	0.00092 J
S Refinery	MW-101	Nov -14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	< 0.0037	< 0.0038	< 0.0036	< 0.0031	< 0.0039
S Refinery	MW-101	Apr-15		< 0.00160	< 0.000650	< 0.00190	< 0.00130	< 0.00200	< 0.00190	< 0.00190 J	< 0.00180 J	< 0.00150	< 0.00190
S Refinery	MW-101	Oct-15		< 0.00160	< 0.000650	< 0.00192	< 0.00130	< 0.00199	< 0.00186	< 0.00190	< 0.00180	< 0.00153	< 0.00194
S Refinery	MW-102	Nov -14		< 0.016	< 0.0065	< 0.019	< 0.013	< 0.02	0.26	< 0.019	< 0.018	< 0.015	0.059
S Refinery	MW-102	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.136	< 0.00380	0.00548 J	< 0.00310	0.0278
S Refinery	MW-102	Oct-15		< 0.0319	< 0.0130	< 0.0383	< 0.0259	< 0.0398	0.465	< 0.0381	< 0.0361	< 0.0306	0.115
S Refinery	MW-103	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-103	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.015	< 0.00040	< 0.00050	< 0.00070	< 0.00060
S Refinery	MW-103	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.0102	< 0.000380	< 0.000360	< 0.000310	< 0.000390
S Refinery	MW-104	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-104	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-104	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
S Refinery	MW-104	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
S Refinery	MW-104	Nov -14	FD	< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	< 0.0037	< 0.0038	< 0.0036	< 0.0031	< 0.0039
S Refinery	MW-104	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
S Refinery	MW-104	Apr-15	FD	< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
S Refinery	MW-104	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
S Refinery	MW-104	Oct-15	FD	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.000420 J	< 0.000381	< 0.000361	< 0.000306	< 0.000387
S Refinery	MW-104	Oct-15		< 0.00160	< 0.000650	< 0.00192	< 0.00130	< 0.00199	< 0.00186	< 0.00190	< 0.00180	< 0.00153	< 0.00194
S Refinery	MW-105	Nov -14		< 0.08	< 0.032	< 0.096	< 0.065	< 0.1	0.11 J	< 0.095	< 0.09	< 0.076	< 0.097
S Refinery	MW-105	Apr-15		< 0.00160	< 0.000650	< 0.00190	< 0.00130	< 0.00200	0.0678	< 0.00190 J	< 0.00180 J	< 0.00150	0.0325
S Refinery	MW-105	Oct-15		< 0.00319	< 0.00130	< 0.00383	< 0.00259	< 0.00398	0.0487	< 0.00381	< 0.00361	< 0.00306	0.0291
S Refinery	MW-106	Apr-13		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.16	< 0.050	< 0.050	< 0.050	< 0.050
S Refinery	MW-106	Oct-13		< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.12	< 0.050	< 0.050	< 0.050	< 0.050
S Refinery	MW-106	Apr-14		< 0.010	< 0.010	< 0.010	< 0.0080	< 0.010	0.097 J	< 0.0080	< 0.010	< 0.014	0.018 J
S Refinery	MW-106	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.0173	< 0.000380	< 0.000360	< 0.000310	0.00273
S Refinery	MW-106	Oct-15		< 0.0319	< 0.0130	< 0.0383	< 0.0259	< 0.0398	0.0921 J	< 0.0381	< 0.0361	< 0.0306	< 0.0387
S Refinery	MW-107	Apr-13		< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	0.052	< 0.025	< 0.025	< 0.025	0.031
S Refinery	MW-107	Oct-13		< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	0.03	< 0.025	< 0.025	< 0.025	< 0.025
S Refinery	MW-107	Apr-14		< 0.0050	< 0.0050	< 0.0050	< 0.0040	< 0.0050	0.017 J	< 0.0040	< 0.0050	< 0.0070	0.012 J
S Refinery	MW-107	Nov -14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	0.031	< 0.0038	< 0.0036	< 0.0031	0.0052 J
S Refinery	MW-107	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.0133	< 0.00380	< 0.00360	< 0.00310	< 0.00390

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
S Refinery	MW-107	Oct-15		< 0.0319	< 0.0130	< 0.0383	< 0.0259	< 0.0398	0.1	< 0.0381	< 0.0361	< 0.0306	< 0.0387
S Refinery	MW-109	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-109	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-109	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0027 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
S Refinery	MW-109	Nov -14		< 0.00032	< 0.00013 J5J3	< 0.00038 J5J3	< 0.00026 J3	< 0.00040	0.00063 JJ3	< 0.00038 J5J3	< 0.00036 J3	< 0.00031 J5J3	0.00040 JJ5J3
S Refinery	MW-109	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	< 0.00370	< 0.00380	< 0.00360	< 0.00310	< 0.00390
S Refinery	MW-109	Oct-15		< 0.00319	< 0.00130	< 0.00383	< 0.00259	< 0.00398	0.00487 J	< 0.00381	< 0.00361	< 0.00306	< 0.00387
S Refinery	MW-110	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.016	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-110	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	MW-110	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.03	< 0.00040	< 0.00050	< 0.00070	0.0043 J
S Refinery	MW-110	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.001	< 0.00038	< 0.00036	< 0.00031	< 0.00039
S Refinery	MW-110	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.00548	< 0.000380	< 0.000360	< 0.000310	0.00166
S Refinery	MW-110	Oct-15		< 0.00160	< 0.000650	< 0.00192	< 0.00130	< 0.00199	0.035	< 0.00190	< 0.00180	< 0.00153	0.00228 J
S Refinery	RA-313	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S Refinery	RA-313	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
S Refinery	RA-313	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
S Refinery	RW-4	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
S Refinery	RW-5R	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.298	< 0.00380	< 0.00360	< 0.00310	0.0558
S Refinery	RW-6	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.134	< 0.00380	< 0.00360	< 0.00310	0.028
S RO Reject Field	MW-114	Feb-13											
S RO Reject Field	MW-114*	Nov -13											
S RO Reject Field	MW-114	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
S RO Reject Field	MW-114	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
S RO Reject Field	MW-114	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
S RO Reject Field	MW-114	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
S RO Reject Field	MW-115*	Feb-13											
S RO Reject Field	MW-115*	Nov -13											
S RO Reject Field	MW-115	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
S RO Reject Field	MW-115	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
S RO Reject Field	MW-115	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
S RO Reject Field	MW-115	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
S RO Reject Field	MW-116*	Feb-13											
S RO Reject Field	MW-116*	Nov -13											
S RO Reject Field	MW-116*	Nov -13	FD										
S RO Reject Field	MW-116	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
S RO Reject Field	MW-116	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
S RO Reject Field	MW-116	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
S RO Reject Field	MW-116	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
TEL	MW-49	Apr-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.027	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TEL	MW-49	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.026	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TEL	MW-49	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.043	< 0.0050	< 0.0050	< 0.0050	0.0051
TEL	MW-49	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.022	< 0.00040	< 0.00050	< 0.00070	0.0018 J
TEL	MW-49	Nov -14		< 0.00064	< 0.00026	< 0.00077	< 0.00052	< 0.00080	0.017	< 0.00076	< 0.00072	< 0.00061	0.0018 J
TEL	MW-49	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400 J	0.00954	< 0.000380	< 0.000360	< 0.000310	< 0.000390
TEL	MW-49	Oct-15	1.05	< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.015	< 0.000381	< 0.000361	< 0.000306	0.000858 J
TEL	TEL-1	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TEL	TEL-1	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TEL	TEL-1	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0012 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TEL	TEL-1	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.0012 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
TEL	TEL-1	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.00086 J	< 0.00038	< 0.00036	< 0.00031	< 0.00039
TEL	TEL-1	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	0.00103	< 0.000380	< 0.000360	< 0.000310	< 0.000390
TEL	TEL-1	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.000971 J	< 0.000381	< 0.000361	< 0.000306	< 0.000387
TEL	TEL-2	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.19	< 0.0050	< 0.0050	< 0.0050	0.037
TEL	TEL-2	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.17	< 0.0050	< 0.0050	< 0.0050	0.031
TEL	TEL-2	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.2	< 0.00040	< 0.00050	< 0.00070	0.032
TEL	TEL-2	Nov -14		< 0.0032	< 0.0013	< 0.0038	< 0.0026	< 0.0040	0.14	< 0.0038	< 0.0036	< 0.0031	0.026
TEL	TEL-2	Apr-15		< 0.00638	< 0.00260	< 0.00770	< 0.00520	< 0.00800 J	0.138	< 0.00760	< 0.00720	< 0.00610	0.0198 J
TEL	TEL-2	Oct-15		< 0.00160	< 0.000650	< 0.00192	< 0.00130	< 0.00199	0.138	< 0.00190	< 0.00180	< 0.00153	0.0109
TEL	TEL-3	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.022	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TEL	TEL-3	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.024	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TEL	TEL-3	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.027	< 0.00040	< 0.00050	< 0.00070	0.0029 J
TEL	TEL-3	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	0.016	< 0.00038	< 0.00036	< 0.00031	0.0017
TEL	TEL-3	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.0104	< 0.00380	< 0.00360	< 0.00310	< 0.00390
TEL	TEL-3	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.0213	< 0.000381	< 0.000361	< 0.000306	0.00128
TEL	TEL-4	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.093	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TEL	TEL-4	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.089	< 0.0050	< 0.0050	< 0.0050	0.027
TEL	TEL-4	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.099	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TEL	TEL-4	Nov -14	FD	< 0.0064	< 0.0026	< 0.0077	< 0.0052	< 0.0080	0.11	< 0.0076	< 0.0072	< 0.0061	< 0.0077
TEL	TEL-4	Nov -14		< 0.0064	< 0.0026	< 0.0077	< 0.0052	< 0.0080	0.11	< 0.0076	< 0.0072	< 0.0061	< 0.0077
TEL	TEL-4	Apr-15	FD	< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.0758	< 0.00380	< 0.00360	< 0.00310	< 0.00390
TEL	TEL-4	Apr-15		< 0.00319	< 0.00130	< 0.00380	< 0.00260	< 0.00400	0.0742	< 0.00380	< 0.00360	< 0.00310	< 0.00390
TEL	TEL-4	Oct-15	FD	< 0.00319	< 0.00130	< 0.00383	< 0.00259	< 0.00398	0.0861	< 0.00381	< 0.00361	< 0.00306	< 0.00387
TEL	TEL-4	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	0.074	< 0.000381	< 0.000361	< 0.000306	0.000524 J
TMD	MW-8	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-8	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-8	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-8	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
TMD	MW-16	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-16	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-16	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380 UJ	< 0.000360 UJ	< 0.000310	< 0.000390
TMD	MW-20	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-20	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-20	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-20	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
TMD	MW-21	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-21	Oct-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-21	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-21	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-21	Nov -14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
TMD	MW-21	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380 UJ	< 0.000360 UJ	< 0.000310	< 0.000390
TMD	MW-21	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	< 0.000361	< 0.000306	< 0.000387
TMD	MW-25	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-25	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-25	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380 UJ	< 0.000360 UJ	< 0.000310	< 0.000390
TMD	MW-26	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-26	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-26	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
TMD	MW-27	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

Analyte:				1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Units:				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
CGWSL:				0.06	0.01	0.005	0.025	0.007	0.015	0.00005	0.005	0.005	0.12
CGWSL Source:				WQCC HH	WQCC HH	USEPA MCL	WQCC HH	USEPA MCL	USEPA TW	USEPA MCL	USEPA MCL	USEPA MCL	USEPA TW
Area	Location	Date	Dup										
TMD	MW-27	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-27	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
TMD	MW-46R	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-46R	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-46R	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	0.00074 J	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-46R	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040 J	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
TMD	MW-46R	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
TMD	MW-68	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-68	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-68	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
TMD	MW-71	Apr-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-71	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-71	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-71	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-71	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
TMD	MW-89	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	MW-89	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	MW-89	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380 UJ	< 0.000360 UJ	< 0.000310	< 0.000390
TMD	NP-1	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	NP-1	Oct-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	NP-1	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
TMD	NP-1	Nov-14		< 0.00032	< 0.00013	< 0.00038	< 0.00026	< 0.00040	< 0.00037	< 0.00038	< 0.00036	< 0.00031	< 0.00039
TMD	NP-1	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	0.000581 J	< 0.000310	< 0.000390
TMD	NP-1	Oct-15		< 0.000319	< 0.000130	< 0.000383	< 0.000259	< 0.000398	< 0.000373	< 0.000381	0.000431 J	< 0.000306	< 0.000387
TMD	NP-2	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	NP-6	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
TMD	NP-6	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380 UJ	< 0.000360 UJ	< 0.000310	< 0.000390
Upgradient	UG-1	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Upgradient	UG-1	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Upgradient	UG-1	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Upgradient	UG-2	Apr-13	FD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Upgradient	UG-2	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Upgradient	UG-2	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Upgradient	UG-2	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390
Upgradient	UG-3R	Apr-13		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Upgradient	UG-3R	Apr-14	FD	< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Upgradient	UG-3R	Apr-14		< 0.00050	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00050	< 0.00040	< 0.00050	< 0.00070	< 0.00060
Upgradient	UG-3R	Apr-15		< 0.000319	< 0.000130	< 0.000380	< 0.000260	< 0.000400	< 0.000370	< 0.000380	< 0.000360	< 0.000310	< 0.000390

Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane (ethyl chloride)	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.018	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038		< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	0.0191 J	0.000638 J	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00390	< 0.000360	< 0.00210	0.0120 J	0.000609 J	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0028 J		< 0.0010	0.023	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	0.0013	< 0.00038		< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.000502 J	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0039	< 0.00036	< 0.0021	< 0.01	0.0018	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0025 J		< 0.0010	0.011	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038		< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	0.0068 J	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060

2015 Annual Groundwater Report Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	ethane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.0039	< 0.00036	< 0.0021	< 0.01	0.00072 J	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0018 J		< 0.0010	0.0041 J	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	0.0184 J	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320 J	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0070 J		< 0.0010	0.019	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320 J	< 0.000280	< 0.000260
< 0.00393	0.000479 J	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	thane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.00393	0.000428 J	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	0.000381 J	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320 J	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0036 J		< 0.0010	0.011	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.014	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0028 J		< 0.0010	0.0092 J	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	0.02	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.039	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0036 J		< 0.0010	0.02	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	0.011 J	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	0.044	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.02	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0064 J		< 0.0010	0.043	0.0011 J	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.02		< 0.011	< 0.05	< 0.0016	< 0.0019	< 0.0043 J4	< 0.0014	< 0.0019	< 0.0017	< 0.0016	< 0.0023	< 0.0016	< 0.0014	< 0.0013
< 0.0390	< 0.00360	< 0.0210	< 0.1	< 0.00330	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.00393	0.000944 J	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	0.017	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.019	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0038 J		< 0.0010	0.019	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.02		< 0.011	< 0.05	0.0049 J	< 0.0019	< 0.0043 J4	< 0.0014	< 0.0019	< 0.0017	< 0.0016	< 0.0023	< 0.0016	< 0.0014	< 0.0013
< 0.00390	0.000429 J	< 0.00210	0.0203 J	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	0.000328 J	< 0.000260
< 0.00393	0.000493 J	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.050	< 0.025	< 0.050	0.051	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
< 0.010	< 0.0050	< 0.010	0.048	0.01	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.051	0.0086	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0066 J		< 0.0010	0.041	0.0020 J	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.02		< 0.011	0.056 J	0.019	< 0.0019	< 0.0043 J4	< 0.0014	< 0.0019	< 0.0017	< 0.0016	< 0.0023	< 0.0016	< 0.0014	< 0.0013
< 0.00390	0.0039	< 0.00210	0.135	0.00962	< 0.000380	< 0.000870	0.00204	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00394	< 0.00214	0.0357 J	0.00156	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.050	< 0.025	< 0.050	0.067	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
0.011		< 0.0010	0.07	0.0031 J	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	0.000558 J	0.00230 J	0.0649	0.0114	< 0.000380	< 0.000870	0.000862 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	0.000450 J	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.01	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026

2015 Annual Groundwater Report Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	ethane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	0.0045 J	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	0.012	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0031 J		< 0.0010	0.0097 J	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
0.0037 J		< 0.0010	0.015	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	0.000339 J	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	0.016	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.031	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0033 J		< 0.0010	0.021	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	0.019 J	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	0.0235 J	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	0.0103 J	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	0.042	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.061	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0054 J		< 0.0010	0.043	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
0.0042 J		< 0.0021	0.037 J	0.00070 J	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	0.0263 J	0.000664 J	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	0.0166 J	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	0.011	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J4	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020											

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	ethane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	0.011 J	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	0.01 J	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033				

2015 Annual Groundwater Report Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	ethane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0026 J		< 0.0010	0.015	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
0.0034 J		< 0.0010	0.019	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039	< 0.00036	< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00393		< 0.00214	< 0.01	< 0.000331	< 0.00038	< 0.000866 *	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.00026
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	0.000420 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.039		< 0.021	< 0.1	0.077	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045	< 0.0032	< 0.0028	< 0.0026
< 0.00390	0.0104	< 0.00210	< 0.0100	0.929	< 0.000380	< 0.000870	< 0.00280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00808	< 0.00214	< 0.0100	0.0164	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
0.4		< 0.054	< 0.25 J3	5.1	< 0.0095	< 0.022	< 0.0069	< 0.0095	< 0.0087	< 0.0082	< 0.011	< 0.0081	< 0.0069	< 0.0065
< 0.0390	0.0122	< 0.0210	< 0.1	5.65	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.00393	0.00927	< 0.00214	< 0.0100	6.77	< 0.000380	< 0.000866	< 0.0275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0039 J4J3		< 0.0021	< 0.01	0.0072	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039		< 0.0021	< 0.01	0.0078	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.000636 J	< 0.00210	0.0176 J	0.0248	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00457	< 0.00214	< 0.0100	0.00571	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
0.0053 J		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039 J4J3		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260

2015 Annual Groundwater Report Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	ethane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275 UJ	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276 UJ	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.012	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.0013 J	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	0.006	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	0.00123 J	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.10	< 0.050	< 0.10	< 0.10	2.5	< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
< 0.098		< 0.054	< 0.25	7.4	< 0.0095	< 0.022 J4	< 0.0069	< 0.0095	< 0.0087	< 0.0082	< 0.011	< 0.0081	< 0.0069	< 0.0065
< 0.0390	0.0119	< 0.0210	< 0.1	6.03	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.393	< 0.0365	< 0.214	< 1	6.89	< 0.0380	< 0.0866	< 0.0275	< 0.0379	< 0.0348	< 0.0327	< 0.0453	< 0.0324	< 0.0276	< 0.0260
< 0.010	< 0.0050	< 0.010	< 0.010	0.09	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.19	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	0.054	0.11	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	0.18	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	0.0755	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	0.0243	< 0.000380	< 0.000866	< 0.000688	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.098		< 0.054	< 0.25	8.5	< 0.0095	< 0.022 J4	< 0.0069	< 0.0095	< 0.0087	< 0.0082	< 0.011	< 0.0081	< 0.0069	< 0.0065
< 0.010	< 0.0050	< 0.010	< 0.010	0.0095	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.64	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	2.3	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.039 J4J3		< 0.021	< 0.1	1.2	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045	< 0.0032	< 0.0028	< 0.0026
< 0.0039		< 0.0021	< 0.01	1.5	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	0.000402 J	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	0.000533 J	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	0.000477 J	< 0.000380	< 0.000866	< 0.000275 J	< 0.000379 J	< 0.000348	< 0.000327 J	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.0010		< 0.0010	< 0.0020 B	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.0010		< 0.0010	< 0.0020	0.0034 J	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00415	< 0.00214	0.0351 J	0.0447	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01 J3	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
0.0036 J		< 0.0010	0.019	6.8	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01 J3	1.8	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.00324	< 0.00210	< 0.0100	4.41	< 0.000380	< 0.000870	< 0.0140	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.0786	< 0.00730	< 0.0428	< 0.2	1.51	< 0.00760	< 0.0173	< 0.00550	< 0.00758	< 0.00696	< 0.00654	< 0.00906	< 0.00648	< 0.00552	< 0.00520
< 0.0010		< 0.0010	< 0.0020	0.24	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	0.0028 J	< 0.00060
< 0.0039		< 0.0021	0.016 JJ3	0.12	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.000814 J	< 0.00210	< 0.0100	0.297	< 0.000380	< 0.000870	0.000321 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.0786	< 0.00730	< 0.0428	< 0.2	0.0297	< 0.00760	< 0.0173	< 0.00550	< 0.00758	< 0.00696	< 0.00654	< 0.00906	< 0.00648	< 0.00552	< 0.00520
< 0.039 J4J3		< 0.021	< 0.1	0.084	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045	< 0.0032	< 0.0028	< 0.0026
< 0.00390	0.00102	< 0.00210	< 0.0100	0.0372	< 0.000380	< 0.000870	< 0.0280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.393	< 0.0365	< 0.214	< 1	< 0.0331	< 0.0380	< 0.0866	< 0.0275	< 0.0379	< 0.0348	< 0.0327	< 0.0453	< 0.0324	< 0.0276	< 0.0260
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01 J3	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
0.0078 J		< 0.0010	0.016	3.1	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.039		< 0.021	< 0.1 J3	1.8	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045	< 0.0032	< 0.0028	< 0.0026
< 0.00390	0.00366	< 0.00210	< 0.0100	1.91	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00437	< 0.00214	< 0.0100	2.19	< 0.000380	< 0.000866	< 0.0138	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.39 J4J3		< 0.21	< 1	0.62	< 0.038	< 0.087	< 0.028	< 0.038	< 0.035	< 0.033	< 0.045	< 0.032	< 0.028	< 0.026
< 0.39	< 0.0360	< 0.21	< 1	0.788	< 0.0380	< 0.0870	< 0.0280	< 0.0380	< 0.0350	< 0.0330	< 0.0450	< 0.0320	< 0.0280	< 0.0260
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01 J3	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01 J3	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	0.000328 J	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01 J3	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	thane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.0390	0.00931 J	< 0.0210	< 0.1	1.87	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0390	0.00967 J	< 0.0210	< 0.1	4.07	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.10	< 0.050	< 0.10	< 0.10	14	< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
< 0.10	< 0.050	< 0.10	< 0.10	15	< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
< 0.020		< 0.020	< 0.040	11	< 0.012	< 0.010	< 0.018	< 0.012	< 0.0080	< 0.010	< 0.010	< 0.012	< 0.010	< 0.012
< 0.2		< 0.11	< 0.5	15	< 0.019	< 0.043	< 0.014	< 0.019	< 0.017	< 0.016	< 0.023	< 0.016	< 0.014	< 0.013
< 0.0980 J	< 0.00910	< 0.0540	< 0.25	11.6	< 0.00950	< 0.0220	0.0664	< 0.00950	< 0.00870	< 0.00820 J	< 0.0110	< 0.00810	< 0.00690	< 0.00650
< 0.00393	0.0152	< 0.00214	0.06	20.3	< 0.000380	< 0.000866	0.000766 J	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087 J3	0.00030 J	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.000750 J	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	0.000401 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.000791 J	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	0.0068	< 0.010	< 0.010	0.33	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	0.000987 J	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	0.000372 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.000697 J	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	0.00117	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	0.013	< 0.010	< 0.010	0.021	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	0.0055 J	0.011	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	0.0046	< 0.00210	< 0.0100	0.0198	< 0.000380	< 0.000870 J	0.000595 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	0.014	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	0.0049 J	0.018	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	0.0022	< 0.00210	< 0.0100	0.0019	< 0.000380	< 0.000870	0.000349 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	0.0074	< 0.010	< 0.010	0.62	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.0064	< 0.010	< 0.010	0.7	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.54	< 0.00060	< 0.00050	0.0013 J	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0390	0.00592 J	< 0.0210	< 0.1	0.216	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.010	0.0097	< 0.010	< 0.010	0.083	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.0098	< 0.010	< 0.010	1.6	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.0094	< 0.010	< 0.010	1.5	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.35	< 0.00060	< 0.00050	0.0010 J	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.039		< 0.021	< 0.1	1.1	< 0.0038	< 0.0087	0.0037 J	< 0.0038	< 0.0035	< 0.0033	< 0.0045	< 0.0032	< 0.0028	< 0.0026
< 0.0390 J	0.00912 J	< 0.0210	0.17 J	0.992	< 0.00380	< 0.00870	0.0262	< 0.00380	< 0.00350	< 0.00330 J	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0393	0.00763 J	< 0.0214	< 0.1	13	< 0.00380	< 0.00866	0.00398 J	< 0.00379	< 0.00348	< 0.00327	< 0.00453	< 0.00324	< 0.00276	< 0.00260
< 0.010	< 0.0050	< 0.010	< 0.010	0.037	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.013	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	0.00132	< 0.00210	< 0.0100	0.0119	< 0.000380	< 0.000870	0.000870 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	0.12	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.12	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.075	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.075	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.03	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	0.0032	< 0.00038	< 0.00087	0.00041 J	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.00112	< 0.00210	< 0.0100	0.00829 J	< 0.000380	< 0.000870	0.00374	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00390	0.00249	< 0.00210	0.0397 J	0.0127 J	< 0.000380	< 0.000870	0.00178	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00293	< 0.00214	< 0.0100	0.00307	< 0.000380	< 0.000866	0.000361 J	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.00393	0.00287	< 0.00214	< 0.0100	0.00326	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.050	< 0.025	< 0.050	< 0.050	1.5	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	0.12	< 0.025	< 0.025

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	thane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.050	< 0.025	< 0.050	0.11	1.7	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	0.069	< 0.025	< 0.025
< 0.0050		< 0.0050	< 0.010	1.6	< 0.0030	< 0.0025	< 0.0045	< 0.0030	< 0.0020	< 0.0025	< 0.0025	0.059	< 0.0025	< 0.0030
< 0.2		< 0.11	< 0.5	1.3	< 0.019	< 0.043	< 0.014	< 0.019	< 0.017	< 0.016	< 0.023	< 0.016	< 0.014	< 0.013
< 0.0390 J	0.0168	< 0.0210	0.254 J	1.74 J	< 0.00380	< 0.00870	0.0258	< 0.00380	< 0.00350	< 0.00330 J	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0393	0.0115	< 0.0214	< 0.1	0.681	< 0.00380	< 0.00866	0.00867 J	< 0.00379	< 0.00348	< 0.00327	< 0.00453	< 0.00324	< 0.00276	< 0.00260
< 0.010	0.015	< 0.010	< 0.010	0.55	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.0092	< 0.010	< 0.010	0.87	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	1	< 0.00060	< 0.00050	0.0026 J	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.2		< 0.11	< 0.5	17	< 0.019	< 0.043	< 0.014	< 0.019	< 0.017	< 0.016	< 0.023 J4	< 0.016	< 0.014	< 0.013
< 0.0390 J	0.0144	< 0.0210	0.106 J	12.8	< 0.00380	< 0.00870	0.0336	< 0.00380	< 0.00350	< 0.00330 J	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0786	0.0202	< 0.0428	< 0.2	1.5	< 0.00760	< 0.0173	0.0161 J	< 0.00758	< 0.00696	< 0.00654	< 0.00906	< 0.00648	< 0.00552	< 0.00520
< 0.010	0.014	< 0.010	< 0.010	0.19	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0064
< 0.02 J4		< 0.011	< 0.05 J4	0.14	< 0.0019	< 0.0043	0.0024 J	< 0.0019	< 0.0017	< 0.0016	< 0.0023	< 0.0016	< 0.0014	0.0022 J
< 0.00390	0.00907	< 0.0021	< 0.0100	0.143	< 0.000380	< 0.000870	0.00159	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	0.00198
< 0.0786	< 0.00730	< 0.0428	< 0.2	0.172	< 0.00760	< 0.0173	< 0.00550	< 0.00758	< 0.00696	< 0.00654	< 0.00906	< 0.00648	< 0.00552	< 0.00520
< 0.010	0.006	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.016	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.0035 J	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	0.015	< 0.00038	< 0.00087	0.00037 J	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.00285	< 0.0021	< 0.0100	0.0125	< 0.000380	< 0.000870	0.00171	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00206	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275 J	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276 J	< 0.000260
< 0.010	0.018	< 0.010	< 0.010	1.6	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.018	< 0.010	0.012	1.5	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0050		< 0.0050	0.027 J	2.2	< 0.0030	< 0.0025	0.0079 J	< 0.0030	< 0.0020	< 0.0025	< 0.0025	< 0.0030	< 0.0025	< 0.0030
< 0.98 J4J3		< 0.54	< 2.5	2.5	< 0.095	< 0.22	< 0.069	< 0.095	< 0.087	< 0.082	< 0.11	< 0.081	< 0.069	< 0.065
< 0.0390	0.00796 J	< 0.0021	< 0.1	2.91	< 0.00380	< 0.00870	0.0151	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0982	0.0134 J	< 0.0535	< 0.25	3.47	< 0.00950	< 0.0216	0.00849 J	< 0.00948	< 0.00870	< 0.00818	< 0.0113	< 0.00810	< 0.00690	< 0.00650
< 0.010	0.0077	< 0.010	< 0.010	2.1	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.011	< 0.010	0.016	2	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0050		< 0.0050	< 0.010	1.8	< 0.0030	< 0.0025	0.0059 J	< 0.0030	< 0.0020	< 0.0025	< 0.0025	< 0.0030	< 0.0025	< 0.0030
< 0.2		< 0.11	< 0.5	1.3	< 0.019	< 0.043	0.014 J	< 0.019	< 0.017	< 0.016	< 0.023 J4	< 0.016	< 0.014	< 0.013
< 0.0390 J	0.00716 J	< 0.0210	< 0.1	0.734 J	< 0.00380	< 0.00870	0.0188	< 0.00380	< 0.00350	< 0.00330 J	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0393	0.00653 J	< 0.0214	< 0.1	1.21	< 0.00380	< 0.00866	0.00341 J	< 0.00379	< 0.00348	< 0.00327	< 0.00453	< 0.00324	< 0.00276	< 0.00260
< 0.079 J4		< 0.043	< 0.2 J4	0.37	< 0.0076	< 0.017	0.02	< 0.0076	< 0.0070	< 0.0065	< 0.0091	< 0.0065	< 0.0055	< 0.0052
< 0.0393	0.0283	< 0.0214	< 0.1	0.339	< 0.00380	< 0.00866	0.00445 J	< 0.00379	< 0.00348	< 0.00327	< 0.00453	< 0.00324	< 0.00276	< 0.00260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	0.00288	< 0.0021	< 0.0100	0.00148	< 0.000380	< 0.000870	0.00181	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.10	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
< 0.10	< 0.050	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
< 0.025		< 0.025	< 0.050	0.056 J	< 0.015	< 0.012	< 0.022	< 0.015	< 0.010	< 0.012	< 0.012	< 0.015	< 0.012	< 0.015
< 0.098		< 0.054	< 0.25	< 0.0083	< 0.0095	< 0.022 J3	< 0.0069	< 0.0095	< 0.0087	< 0.0082	< 0.011	< 0.0081	< 0.0069	< 0.0065
< 0.00390	0.00551	< 0.0021	< 0.0100	0.00288	< 0.000380	< 0.000870	0.00168	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 1.96	< 0.182	< 1.07	< 5	< 0.166	< 0.19	< 0.433	< 0.138	< 0.19	< 0.174	< 0.164	< 0.226	< 0.162	< 0.138	< 0.13
< 0.10	< 0.050	< 0.10	< 0.10	6.8	< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
< 0.10	< 0.050	< 0.10	< 0.10	5.8	< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
< 0.010		< 0.010	0.059 J	6.1	< 0.0060	< 0.0050	< 0.0090	< 0.0060	< 0.0040	< 0.0050	< 0.0050	< 0.0060	< 0.0050	< 0.0060
0.046 J		< 0.010	0.038 J	5.8	< 0.0060	< 0.0050	0.016 J	< 0.0060	< 0.0040	< 0.0050	< 0.0050	< 0.0060	< 0.0050	< 0.0060
< 0.98		< 0.54	< 2.5	4.8	< 0.095	< 0.22	< 0.069	< 0.095	< 0.087	< 0.082	< 0.11 J4	< 0.081	< 0.069	< 0.065

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane (ethyl chloride)	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.0980 J	0.00919 J	< 0.0540	< 0.25	4.17	< 0.00950	< 0.0220	0.102	< 0.00950	< 0.00870	< 0.00820 J	< 0.0110	< 0.00810	< 0.00690	< 0.00650
< 0.0982	< 0.00912	< 0.0535	< 0.25	4.79	< 0.00950	< 0.0216	0.0344	< 0.00948	< 0.00870	< 0.00818	< 0.0113	< 0.00810	< 0.00690	< 0.00650
< 0.393	< 0.0365	< 0.214	< 1	9.44	< 0.0380	< 0.0866	< 0.0275	< 0.0379	< 0.0348	< 0.0327	< 0.0453	< 0.0324	< 0.0276	< 0.0260
< 0.0786	0.0144 J	< 0.0428	< 0.2	1.54	< 0.00760	< 0.0173	< 0.00550	< 0.00758	< 0.00696	< 0.00654	< 0.00906	< 0.00648	< 0.00552	< 0.00520
< 0.2	< 0.0180	< 0.11	< 0.5	0.962	< 0.0190	< 0.0430	< 0.0140	< 0.0190	< 0.0170	< 0.0160	< 0.0230	< 0.0160	< 0.0140	1.02
< 0.0390 J	0.012	< 0.0210	0.334 J	5.34	< 0.00380	< 0.00870	0.00899 J	< 0.00380	< 0.00350	< 0.00330 J	< 0.00450	< 0.00320	< 0.00280	0.619
< 0.00390	0.0146	< 0.00210	< 0.0100	0.0535	< 0.000380	< 0.000870	0.00171	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.0390	0.00942 J	< 0.0210	< 0.1	0.0412	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.010	0.02	< 0.010	< 0.010	1.1	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.68	< 0.00060	< 0.00050	0.0015 J	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.2	< 0.0180	< 0.11	< 0.5	0.79	< 0.0190	< 0.0430	< 0.0140	< 0.0190	< 0.0170	< 0.0160	< 0.0230	< 0.0160	< 0.0140	< 0.0130
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	0.01 J	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
				< 0.001								< 0.001		
				< 0.001								< 0.001		
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039 J4J3		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
				0.0042								< 0.001		
				< 0.001								< 0.001		
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
				0.0036								< 0.001		
				< 0.001								< 0.001		
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	0.0045 J	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	0.000695 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060

2015 Annual Groundwater Report Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	thane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.000428 J	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.000742 J	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390	< 0.000360	< 0.00210	0.0128 J	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	0.39	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	0.016	0.43	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		0.0012 J	0.0079 J	0.39	< 0.00060	< 0.00050	0.0020 J	0.009	< 0.00040	< 0.00050	< 0.00050	0.0037 J	< 0.00050	< 0.00060
< 0.02		< 0.011	< 0.05	0.41	< 0.0019	< 0.0043	0.014	< 0.0019	< 0.0017	< 0.0016	< 0.0023	< 0.0016	< 0.0014	< 0.0013
< 0.0390	0.00565 J	< 0.0210	< 0.1	0.423	< 0.00380	< 0.00870	0.0317	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0393	0.00655 J	< 0.0214	< 0.1	0.394	< 0.00380	< 0.00866	0.00291 J	< 0.00379	< 0.00348	< 0.00327	< 0.00453	< 0.00324	< 0.00276	< 0.00260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	0.0094	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.000683 J	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00164	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.0021	< 0.0100	0.00105	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275 J	< 0.000379 J	< 0.000348 J	< 0.000327 J	< 0.000453	< 0.000324	< 0.000276 J	< 0.000260
< 0.010	0.023	< 0.010	< 0.010	1.9	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	thane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.02		< 0.011	< 0.05	0.27	< 0.0019	< 0.0043	< 0.0014	< 0.0019	< 0.0017	< 0.0016	< 0.0023	< 0.0016	< 0.0014	< 0.0013
< 0.00390	0.0159	< 0.0021	< 0.0100	1.21	< 0.000380	< 0.000870	0.00152	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.0174	< 0.00214	< 0.0100	0.695 J	< 0.000380	< 0.000866	0.00167	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.0011 J	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.000390 J	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.000419 J	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.098		< 0.054	< 0.25 J3	4.4	< 0.0095	< 0.022	< 0.0069	< 0.0095	< 0.0087	< 0.0082	< 0.011	< 0.0081	< 0.0069	< 0.0065
< 0.0390	0.0107	< 0.0210	< 0.1	1.98	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.393	< 0.0365	< 0.214	< 1	4	< 0.0380	< 0.0866	< 0.0275	< 0.0379	< 0.0348	< 0.0327	< 0.0453	< 0.0324	< 0.0276	< 0.0260
< 0.10	< 0.050	< 0.10	< 0.10	0.7	< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
< 0.039		< 0.021	< 0.1 J3	0.41	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045	< 0.0032	< 0.0028	< 0.0026
< 0.00390	0.00291	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00314	< 0.00214	< 0.0100	1.2 J	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.039		< 0.021	< 0.1	5.1	< 0.0038	< 0.0087 J4	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045	< 0.0032	< 0.0028	< 0.0026
< 0.0980	0.00954 J	< 0.0540	< 0.25	15.9	< 0.00950	< 0.0220	< 0.00690	< 0.00950	< 0.00870	< 0.00820	< 0.0110	< 0.00810	< 0.00690	< 0.00650
< 1.96	< 0.182	< 1.07	< 5	8.61	< 0.19	< 0.433	< 0.138	< 0.19	< 0.174	< 0.164	< 0.226	< 0.162	< 0.138	< 0.13
< 0.010	< 0.0050	< 0.010	< 0.010	0.62	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.58	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020 B	0.81	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.098		< 0.054	0.56 J	3.3	< 0.0095	< 0.022	< 0.0069	< 0.0095	< 0.0087	< 0.0082	< 0.011	< 0.0081	< 0.0069	< 0.0065
< 0.39	< 0.0360	< 0.21	< 1	3.02	< 0.0380	< 0.0870	0.0471 J	< 0.0380	< 0.0350	< 0.0330	< 0.0450	< 0.0320	< 0.0280	< 0.0260
< 0.393	< 0.0365	< 0.214	< 1	3.05	< 0.0380	< 0.0866	< 0.0275	< 0.0379	< 0.0348	< 0.0327	< 0.0453	< 0.0324	< 0.0276	< 0.0260
< 0.098		< 0.054	< 0.25 J3	0.14	< 0.0095	< 0.022	< 0.0069	< 0.0095	< 0.0087	< 0.0082	< 0.011	< 0.0081	< 0.0069	< 0.0065
< 0.0390	0.00641 J	< 0.0210	< 0.1	0.89	< 0.00380	< 0.00870	0.00704 J	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0196	0.011	< 0.0107	< 0.0500	0.204 J	< 0.00190	< 0.00433	< 0.00138	< 0.00190	< 0.00174	< 0.00164	< 0.00226	< 0.00162	< 0.00138	< 0.00130
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	0.00031 J	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.000587 J	< 0.0021	< 0.0100	< 0.000330	< 0.000380	< 0.000870	0.0011	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.000946 J	< 0.00214	< 0.0100	< 0.000331 J	< 0.000380 J	0.000881 J	0.000553 J	< 0.000379 J	< 0.000348 J	< 0.000327 J	< 0.000453	< 0.000324 J	< 0.000276	< 0.000260 J
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	thane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866 J	< 0.000275 J	< 0.000379 J	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276 J	< 0.000260
< 0.2		< 0.11	< 0.5 J3	8.9	< 0.019	< 0.043	< 0.014	< 0.019	< 0.017	< 0.016	< 0.023	< 0.016	< 0.014	< 0.013
< 0.0390	0.0105	< 0.0021	< 0.1	9.99	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.010	0.013	< 0.010	< 0.010	1.2	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.014	< 0.010	< 0.010	2.2	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.015	< 0.010	< 0.010	2.0 J	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		0.0031 J	< 0.0020 B	0.89	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.039		< 0.021	< 0.1	6.5	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045 J4	< 0.0032	< 0.0028	< 0.0026
< 0.2	< 0.0180	< 0.11	< 0.5	3.16	< 0.0190	< 0.0430	< 0.0140	< 0.0190	< 0.0170	< 0.0160	< 0.0230	< 0.0160 J	< 0.0140	< 0.0130
< 0.00393	0.00938	< 0.00214	< 0.0100	4.1 J	< 0.000380	< 0.000866	0.000371 J	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.039		< 0.021	< 0.1 J3	2.6	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045	< 0.0032	< 0.0028	< 0.0026
< 0.0980	0.0108 J	< 0.0540	< 0.25	0.973	< 0.00950	< 0.0220	0.00720 J	< 0.00950	< 0.00870	< 0.00820	< 0.0110	< 0.00810 J	< 0.00690	< 0.00650
< 0.0982	0.0113 J	< 0.0535	< 0.25	7.28	< 0.00950	< 0.0216	< 0.00688	< 0.00948	< 0.00870	< 0.00818	< 0.0113	< 0.00810	< 0.00690	< 0.00650
< 0.010	< 0.0050	< 0.010	< 0.010	2.1	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.19	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020 B	1.1	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0013 R
< 0.039		< 0.021	< 0.1	0.22	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045 J4	< 0.0032	< 0.0028	< 0.0026
< 0.0200 J	< 0.00180	< 0.0110	< 0.0500	0.0187	< 0.00190	< 0.00430	< 0.00140	< 0.00190	< 0.00170	< 0.00160 J	< 0.00230	< 0.00160	< 0.00140	< 0.00130
< 0.0196	< 0.00182	< 0.0107	< 0.0500	< 0.00166	< 0.00190	< 0.00433	< 0.00138	< 0.00190	< 0.00174	< 0.00164	< 0.00226	< 0.00162	< 0.00138	< 0.00130
< 0.2		< 0.11	< 0.5 J3	11	< 0.019	< 0.043	< 0.014	< 0.019	< 0.017	< 0.016	< 0.023	< 0.016	< 0.014	< 0.013
< 0.0390	0.00509 J	< 0.0210	< 0.1	9.83	< 0.00380	< 0.00870	0.00959 J	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.393	< 0.0365	< 0.214	< 1	12.3	< 0.0380	< 0.0866	< 0.0275	< 0.0379	< 0.0348	< 0.0327	< 0.0453	< 0.0324	< 0.0276	< 0.0260
< 0.010	< 0.0050	< 0.010	< 0.010	0.58	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.76	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	0.00396	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	0.000597 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	0.048	< 0.010	< 0.010	0.033	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.041	< 0.0050	< 0.0050
< 0.010	0.037	< 0.010	< 0.010	0.076	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.013	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.058	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	0.14	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020	0.056	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	0.14	< 0.00050	< 0.00060
< 0.039 J4J3		< 0.021	< 0.1	0.11	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045	< 0.0032	< 0.0028	< 0.0026
< 0.0039		< 0.0021	< 0.01	0.094	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	0.014	< 0.00028	< 0.00026
< 0.00390	0.0328	< 0.00210	< 0.0100	0.0242	< 0.000380	< 0.000870	0.000723 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	0.00513 J	< 0.000280	< 0.000260
< 0.00390	0.032	< 0.00210	< 0.0100	0.0243	< 0.000380	< 0.000870	0.000469 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	0.00516 J	< 0.000280	< 0.000260
< 0.00393	0.0349	< 0.00214	< 0.0100	0.309	< 0.000380	< 0.000866	0.000979 J	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.0196	0.0378	< 0.0107	< 0.0500	0.257	< 0.00190	< 0.00433	0.00268 J	< 0.00190	< 0.00174	< 0.00164	< 0.00226	< 0.00162	< 0.00138	< 0.00130
< 0.98		< 0.54	< 2.5	3.4	< 0.095	< 0.22 J4	< 0.069	< 0.095	< 0.087	< 0.082	< 0.11	< 0.081	< 0.069	< 0.065
< 0.0200 J	0.0128	< 0.0110	0.126 J	1.71	< 0.00190	< 0.00430	< 0.00140	< 0.00190	< 0.00170	< 0.00160 J	< 0.00230	< 0.00160	< 0.00140	< 0.00130
< 0.0393	0.0121	< 0.0214	< 0.1	0.58	< 0.00380	< 0.00866	0.00557 J	< 0.00379	< 0.00348	< 0.00327	< 0.00453	< 0.00324	< 0.00276	< 0.00260
< 0.10	< 0.050	< 0.10	< 0.10	9.5	< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
< 0.10	< 0.050	< 0.10	< 0.10	11	< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
< 0.020		< 0.020	< 0.040	9.3	< 0.012	< 0.010	0.019 J	< 0.012	< 0.0080	< 0.010	< 0.010	< 0.012	< 0.010	< 0.012
< 0.00390	0.000810 J	< 0.00210	0.0270 J	0.395	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.393	< 0.0365	< 0.214	< 1	10.4	< 0.0380	< 0.0866	0.0914 J	< 0.0379	< 0.0348	< 0.0327	< 0.0453	< 0.0324	< 0.0276	< 0.0260
< 0.050	< 0.025	< 0.050	< 0.050	5.9	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
< 0.050	< 0.025	< 0.050	< 0.050	6.3	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
< 0.010		< 0.010	< 0.020	7	< 0.0060	< 0.0050 J	< 0.0090	< 0.0060	< 0.0040	< 0.0050	< 0.0050	< 0.0060	< 0.0050	< 0.0060
< 0.039		< 0.021	< 0.1	8.2	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045 J4	< 0.0032	< 0.0028	< 0.0026
< 0.0390	< 0.00360	< 0.0210	< 0.1	5.32	< 0.00380	< 0.00870	0.00287 J	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	thane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.393	< 0.0365	< 0.214	< 1	6.29	< 0.0380	< 0.0866	< 0.0275	< 0.0379	< 0.0348	< 0.0327	< 0.0453	< 0.0324	< 0.0276	< 0.0260
< 0.010	< 0.0050	< 0.010	< 0.010	0.38	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.095	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.31	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039 J5		< 0.0021 J5J3	< 0.01	0.28	< 0.00038 J5J3	< 0.00087 J3	0.00054 J	< 0.00038 J3	< 0.00035 J5J3	< 0.00033 J5J3	< 0.00045 J4J6	< 0.00032 J5J3	0.0010 J	< 0.00026 J3
< 0.0390	0.00453 J	< 0.0210	< 0.1	0.621	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0393	0.00396 J	< 0.0214	< 0.1 J	0.845 J	< 0.00380	< 0.00866	< 0.00275	< 0.00379	< 0.00348	< 0.00327	< 0.00453	< 0.00324	< 0.00276	< 0.00260
< 0.010	< 0.0050	< 0.010	< 0.010	0.061	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.039	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	0.081	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	0.0015	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	0.00674	< 0.00210	< 0.0100	0.132	< 0.000380	< 0.000870	0.00129	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.0196	0.00654	< 0.0107	< 0.0500 J	0.348 J	< 0.00190	< 0.00433	< 0.00138	< 0.00190	< 0.00174	< 0.00164	< 0.00226	< 0.00162	< 0.00138	< 0.00130
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	0.000366 J	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00390	0.00302	< 0.00210	0.0289 J	0.0167	< 0.000380	< 0.000870	0.000854 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320 J	< 0.000280	< 0.000260
< 0.0390	0.00691 J	< 0.0021	< 0.1	2.92	< 0.00380	< 0.00870	< 0.00280	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0390	0.00944 J	< 0.0021	< 0.1	0.636	< 0.00380	< 0.00870	0.00771 J	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
				< 0.001								< 0.001		
				< 0.001								< 0.001		
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100 J	< 0.000331	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
				< 0.001								< 0.001		
				< 0.001								< 0.001		
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275 UJ	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
				< 0.001								< 0.001		
				< 0.001								< 0.001		
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045 J4	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.000275 UJ	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	0.26	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.24	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	0.34	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020 B	0.22	< 0.00060	< 0.00050	0.0022 J	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0079		< 0.0043	< 0.02	0.17	< 0.00076	< 0.0017	0.0035	< 0.00076	< 0.00070	< 0.00065	< 0.00091	< 0.00065	< 0.00055	< 0.00052
< 0.00390	0.00245	< 0.00210	< 0.0100	0.077	< 0.000380	< 0.000870	0.00106 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00371	< 0.00214	< 0.0100	0.179	< 0.000380	< 0.000866	< 0.000275 UB	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050 J	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020 B	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020 B	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	thane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	0.0019	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	0.0104 J	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	0.00166	< 0.00214	< 0.0100	0.000378 J	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	1.5	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.0066	< 0.010	< 0.010	1.3	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	0.0071 J	1.2	< 0.00060	< 0.00050	0.0039 J	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.039		< 0.021	< 0.1	0.87	< 0.0038	< 0.0087	< 0.0028	< 0.0038	< 0.0035	< 0.0033	< 0.0045	< 0.0032	< 0.0028	< 0.0026
< 0.0790	< 0.00730	< 0.0430	< 0.2	0.905	< 0.00760	< 0.0170	0.00723 J	< 0.00760	< 0.00700	< 0.00650	< 0.00910	< 0.00650	< 0.00550	< 0.00520
< 0.0196	0.00649	< 0.0107	< 0.0500	0.535	< 0.00190	< 0.00433	0.00194 J	< 0.00190	< 0.00174	< 0.00164	< 0.00226	< 0.00162	< 0.00138	< 0.00130
< 0.010	0.011	< 0.010	< 0.010	0.0084	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.012	< 0.010	< 0.010	0.032	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020 B	0.0092	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	0.023	< 0.00038	< 0.00087	0.0047	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.0390	0.00899 J	< 0.0210	< 0.1	0.0206	< 0.00380	< 0.00870	0.00471 J	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.00393	0.0111	< 0.00214	< 0.0100	0.0385	< 0.000380	< 0.000866	0.00367	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	0.014	< 0.010	< 0.010	0.2	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	0.013	< 0.010	0.014	0.43	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020 B	0.37	< 0.00060	< 0.00050	0.0030 J	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.079		< 0.043	< 0.2	1.2	< 0.0076	< 0.017	0.038	< 0.0076	< 0.0070	< 0.0065	< 0.0091	< 0.0065	< 0.0055	< 0.0052
< 0.079		< 0.043	< 0.2	1.2	< 0.0076	< 0.017	0.042	< 0.0076	< 0.0070	< 0.0065	< 0.0091	< 0.0065	< 0.0055	< 0.0052
< 0.0390	0.0118	< 0.0210	0.216 J	0.155	< 0.00380	< 0.00870	0.00471 J	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0390	0.0117	< 0.0210	0.243 J	0.171	< 0.00380	< 0.00870	0.00333 J	< 0.00380	< 0.00350	< 0.00330	< 0.00450	< 0.00320	< 0.00280	< 0.00260
< 0.0393	0.0145	< 0.0214	< 0.1	0.657	< 0.00380	< 0.00866	0.00858 J	< 0.00379	< 0.00348	< 0.00327	< 0.00453	< 0.00324	< 0.00276	< 0.00260
< 0.00393	0.0119	< 0.00214	< 0.0100	0.637	< 0.000380	< 0.000866	< 0.000275 UB	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390 UJ	< 0.000360	< 0.00210	< 0.0100	< 0.00033	< 0.000380	< 0.000870	0.000446 J	< 0.000380	< 0.000350	< 0.000330 UJ	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390 UJ	< 0.000360	< 0.00210	< 0.0100	< 0.00033	< 0.000380	< 0.000870	0.0011	< 0.000380	< 0.000350	< 0.000330 UJ	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	0.000613 J	< 0.000380	< 0.000866	< 0.000275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390 UJ	< 0.000360	< 0.00210	< 0.0100	< 0.00033	< 0.000380	< 0.000870	0.000423 J	< 0.000380	< 0.000350	< 0.000330 UJ	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050

Navajo Refinery, Artesia, New Mexico

2-Butanone	2-Phenylbutane	4-Methyl-2-Pentanone	Acetone	Benzene	Bromodichloromethane	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane	ethane (ethyl ch	Chloroform	Chloromethane	cis-1,2-Dichloroethene
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
5.56	---	1.24	14.1	0.005	0.08	0.00754	0.81	0.005	0.1	0.08	20.86	0.08	0.0203	0.07
NMED TW		NMED TW	TMED TW	USEPA MCL	USEPA MCL	NMED TW	NMED TW	USEPA MCL	USEPA MCL	USEPA MCL	NMED TW	USEPA MCL	NMED TW	USEPA MCL
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028 J	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450 J	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390 UJ	< 0.000360	< 0.00210	< 0.0100	< 0.00033	< 0.000380	< 0.000870	0.000752 J	< 0.000380	< 0.000350	< 0.000330 UJ	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0039		< 0.0021	< 0.01	< 0.00033	< 0.00038	< 0.00087	< 0.00028	< 0.00038	< 0.00035	< 0.00033	< 0.00045	< 0.00032	< 0.00028	< 0.00026
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.00393	< 0.000365	< 0.00214	< 0.0100	< 0.000331	< 0.000380	< 0.000866	< 0.00275	< 0.000379	< 0.000348	< 0.000327	< 0.000453	< 0.000324	< 0.000276	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.00390 UJ	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	0.00376	< 0.000380	< 0.000350	< 0.000330 UJ	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	0.000348 J	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260
< 0.010	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.0010		< 0.0010	< 0.0020	< 0.00060	< 0.00060	< 0.00050	< 0.00090	< 0.00060	< 0.00040	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.00060
< 0.00390	< 0.000360	< 0.00210	< 0.0100	< 0.000330	< 0.000380	< 0.000870	< 0.000280	< 0.000380	< 0.000350	< 0.000330	< 0.000450	< 0.000320	< 0.000280	< 0.000260

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	0.00254	< 0.00380	< 0.000370	0.00317 J	< 0.000360	0.000373 J	< 0.000340	< 0.000310	< 0.000370	< 0.000780	0.00254 J
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038 J5	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	0.00034 J	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	0.00046 J	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	0.00199	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.000418	< 0.000350	< 0.00100	< 0.000384	0.00247	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	0.0026	< 0.00072	< 0.0038	0.00044 J	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	0.00159	0.00227	< 0.00380	0.000461 J	< 0.00100	< 0.000360	< 0.000350	0.000658 J	< 0.000310	< 0.000370	< 0.000780	0.00293 J
< 0.000418	< 0.000350	< 0.00100	< 0.000384	0.00613	0.00237	< 0.00382	0.000641 J	< 0.00100	< 0.000361	0.000436 J	< 0.000341	< 0.000307	< 0.000372	< 0.000780	0.00237 J
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00042	< 0.00035	< 0.0010	0.00046 J	0.00084 J	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0032 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.00081 J	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00138	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00174	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00148	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.000507 J	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	0.0016 J	< 0.00050	< 0.00060	< 0.00050	0.0016 J

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.00042	< 0.00035	< 0.0010	< 0.00038	0.00044 J	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	0.00092 J	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0018 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.0025	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.002	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00185	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00194	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00174	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00175	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0020 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.0018	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00195	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310 J	< 0.000370	< 0.000780 J	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00201	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	0.00039 J	< 0.00072	< 0.0038	0.00081 J	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.0051	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0055	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.0099	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.008	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.0073	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00557	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310 J	< 0.000370	< 0.000780 J	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00967	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00928	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.0065	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00634	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310 J	< 0.000370	< 0.000780 J	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0016 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.0029	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.00053 J	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.000826 J	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0047 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.0021	< 0.0018	< 0.0050	< 0.0019	0.012	< 0.0036	< 0.019	0.0028 J	< 0.0050	< 0.0018	< 0.0017	< 0.0017	< 0.0015	< 0.0019	< 0.0039	< 0.0053
< 0.00420	< 0.00350	< 0.0100	< 0.00380	0.00731 J	< 0.00720	< 0.0380	0.00935 J	< 0.0100	< 0.00360	< 0.00350	< 0.00340	< 0.00310	< 0.00370	< 0.00780	< 0.0110
< 0.000418	0.000623 J	< 0.00100	< 0.000384	0.0101	< 0.000719	< 0.00382	0.00463	< 0.00100	< 0.000361	0.00116	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.013	< 0.010	< 0.010	0.0059	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0037 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.0021	< 0.0018	< 0.0050	< 0.0019	0.02	< 0.0036	< 0.019	0.013	< 0.0050	< 0.0018	< 0.0017	< 0.0017	< 0.0015	< 0.0019	< 0.0039	< 0.0053
< 0.000420	< 0.000350	< 0.00100	< 0.000380	0.0161	< 0.000720	< 0.00380	0.0122	< 0.00100	< 0.000360	0.000534 J	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	0.023	< 0.000719	< 0.00382	0.00839	< 0.00100	< 0.000361	0.000663 J	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.050	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.075
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.0061	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.0064	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	0.0016 J	< 0.00050	0.0027 J	< 0.0010	0.0069	< 0.00070	< 0.0010	0.0028 J	< 0.00050	< 0.00050	< 0.00060	0.0011 J	0.0027 J
< 0.0021	0.0036 J	< 0.0050	0.0072	0.031	0.0066 J	< 0.019	0.0091	< 0.0050	< 0.0018	0.022	0.0036 J	< 0.0015	< 0.0019	0.0073 J	0.01 J
< 0.000420	0.00285	< 0.00100	0.00363	0.0274	0.0043	< 0.00380	0.0131	< 0.00100	< 0.000360	0.0108	0.00101	< 0.000310	< 0.000370	0.00216 J	0.00531
< 0.000418	0.0031	< 0.00100	0.00533	0.0291	0.00476	< 0.00382	0.00722	< 0.00100	0.000743 J	0.00989	0.00112	< 0.000307	< 0.000372	0.00386 J	0.00589
< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.050	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.075
< 0.00060	< 0.00050	< 0.0010	0.0013 J	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	0.0018 J	0.0021 J	< 0.00050	< 0.00060	0.0014 J	0.0021 J
< 0.000420	0.000443 J	< 0.00100	0.00262	0.00348	0.00146	< 0.00380	0.000629 J	< 0.00100	< 0.000360	0.0039	0.00356	< 0.000310	< 0.000370	0.00385 J	0.00502
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011

Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	0.00044 J	0.0028	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	0.0016	0.00087 J	< 0.00031	< 0.00037	0.0011 J	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	0.00159	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	0.000534 J	0.000607 J	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	0.00192	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	0.000461 J	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0020 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	0.00098 J	0.00052 J	< 0.00072	< 0.0038	0.0025	< 0.0010	< 0.00036	< 0.00035	0.00055 J	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	0.000574 J	0.000575 J	< 0.000720	< 0.00380	0.00279	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00125	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.000569 J	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.000696 J	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	0.0026 J	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072										

2015 Annual Groundwater Report Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0014 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.0017	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.0012	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00126	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0													

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0018 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0015 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.0022	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.002	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000418	< 0.00035	< 0.001	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00202	< 0.001	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.00078	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.0056	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0047 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0044 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.004	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00498	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.0051	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00155	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.012	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0042	0.0066 J	< 0.01	0.073	0.042	0.036	< 0.038	0.013	0.03 J	0.0037 J	0.048	0.015	< 0.0031	< 0.0037	< 0.0078	0.051
< 0.000420	< 0.000350	< 0.00100	0.0285	0.0338	0.00342	< 0.00380	0.0225	0.012	0.00299	0.0317	0.00377	< 0.000310	< 0.000370	0.00213 J	0.00718
< 0.000418	< 0.000350	< 0.00100	0.024	0.0223	0.000839 J	< 0.00382	0.00677	0.00225 J	0.00143	0.0221	0.000608 J	< 0.000307	< 0.000372	< 0.000780	0.00145 J
< 0.01	0.013 J	< 0.025	0.4	0.04	0.9	< 0.096	5.2	0.19	0.011 J	0.062	0.32	< 0.0077	< 0.0093	0.18	1.2
< 0.00420	0.00673 J	< 0.0100	0.528	0.0484	1.04	< 0.0380	3.87	0.138	0.0113	0.069	0.343	< 0.00310	< 0.00370	0.141	1.38
< 0.000418	0.00543	< 0.00100	0.523	0.0478	0.828	< 0.00382	4.66	0.186	0.01	0.0699	0.254	< 0.000307	< 0.000372	0.124	1.08
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.0075	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00042	0.00056 J	< 0.0010	< 0.00038	0.0024	0.0015 J	< 0.0038	0.0015	0.019	0.00092 J	< 0.00035	0.00068 J	< 0.00031	< 0.00037	< 0.00078	0.0022 J
< 0.00042	0.00062 J	< 0.0010	< 0.00038	0.0029	0.0017 J	< 0.0038	0.0012	0.015	0.00094 J	< 0.00035	0.00076 J	< 0.00031	< 0.00037	< 0.00078	0.0025 J
< 0.000420	0.000951 J	0.00102 J	< 0.000380	< 0.000330	0.00188	< 0.00380	0.00648	0.0233	< 0.000360	< 0.000350	0.000869 J	< 0.000310 JJ	< 0.000370	< 0.000780	0.00275 J
< 0.000418	0.000552 J	< 0.00100	< 0.000384	0.00301	0.0013	< 0.00382	0.00434	0.0165	0.00126	< 0.000349	0.000511 J	< 0.000307	< 0.000372	< 0.000780	0.00181 J
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	0.0065	< 0.0010	0.02	0.031	0.0043 J	< 0.0010	< 0.00060	0.011	0.017	0.046	< 0.00050	< 0.00050	< 0.00060	< 0.00050	0.0043 J
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	0.00106 J	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00121	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100 UJ	< 0.000384	< 0.000326	0.00157	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	0.000692 J	< 0.000307	< 0.000372	< 0.000780	0.00226 J
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	0.0010 J	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	0.000667 J	< 0.000330	0.00141	< 0.00380	< 0.000370	0.00156 J	< 0.000360	< 0.000350	0.000561 J	< 0.000310	< 0.000370	< 0.000780	0.00197 J
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.050	< 0.050	< 0.10	0.073	< 0.050	0.11	< 0.10	0.37	0.067	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.15
< 0.01	< 0.0088	< 0.025	2.4	0.066	1.6	< 0.096	< 0.0092	0.48	< 0.0090	0.1	0.076	< 0.0077	< 0.0093	< 0.02	1.6
< 0.00420	0.00770 J	< 0.0100	1.98	0.0732	2.08	< 0.0380	0.0187	0.318	0.00921 J	0.112	0.083	< 0.00310	< 0.00370	0.0174 J	2.16
< 0.0418	< 0.0350	< 0.1	2	0.0720 J	2.12	< 0.382	< 0.0367	0.354 J	< 0.0361	0.125	0.0603 J	< 0.0307	< 0.0372	< 0.0780	2.18
< 0.0050	< 0.0050	< 0.010	0.016	< 0.0050	< 0.010	< 0.010	2.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	0.016	< 0.0050	< 0.010	< 0.010	1.6	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	0.0085	0.0013 J	0.0046 J	< 0.0010	2	0.0016 J	< 0.0010	0.00082 J	0.0011 J	< 0.00050	< 0.00060	0.0011 J	0.0057 J
< 0.00042	< 0.00035	< 0.0010	0.026	0.0024	0.022	< 0.0038	1.6 E	0.0064 J4	< 0.00036	0.0022	0.0052	< 0.00031	< 0.00037	0.0016 J	0.027
< 0.000420	< 0.000350	< 0.00100	0.00824	0.000607 J	0.00723	< 0.00380	< 0.000370	0.00294 J	< 0.000360	0.000827 J	0.00158	< 0.000310	< 0.000370	< 0.000780	0.00881
< 0.000418	< 0.000350	< 0.00100	0.00615	0.000862 J	0.00113	< 0.00382	1.32	0.00645	< 0.000361	0.000839 J	< 0.000341	< 0.000307	< 0.000372	< 0.000780	0.00113 J
< 0.01	< 0.0088	< 0.025	0.97	0.057	1.4	< 0.096	1	0.2	< 0.0090	0.1	0.6	< 0.0077	< 0.0093	0.73	2
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.024	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	0.19	< 0.0050	0.26	< 0.010	0.02	< 0.0050	< 0.0050	< 0.0050	0.033	< 0.0050	< 0.0050	0.07	0.29
< 0.00060	0.0015 J	< 0.0010	0.4	0.013	0.82	< 0.0010	0.01	< 0.00070	< 0.0010	0.011	0.090 J	< 0.00050	< 0.00060	0.064	0.91
< 0.0042	< 0.0035	< 0.01	0.0079 J	0.0097 J	0.085	< 0.038	0.019	0.032 J	< 0.0036	< 0.0035	0.015	< 0.0031	< 0.0037	< 0.0078	0.1
< 0.00042	0.00094 J	< 0.0010	0.007	0.0097	0.086	< 0.0038	0.02	0.048 J4	0.00081 J	0.0033	0.016	< 0.00031	< 0.00037	0.0046 J	0.1
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.0158	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000420	< 0.000350	0.00114 J	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.0178	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	0.000723 J	< 0.00382	0.0176	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.0158	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372 J	< 0.000780	< 0.00106
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010 J4	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	0.0035 J	< 0.0010	< 0.00060	0.0013 J	< 0.0010	< 0.00050	0.0011 J	< 0.00050	< 0.00060	0.0022 J	0.0045 J
< 0.00042	< 0.00035	< 0.0010	< 0.00038	0.016	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	0.0032	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	0.00475	0.0208	0.0103	< 0.00382	< 0.000367	< 0.00100	< 0.000361	0.0104	< 0.000341	< 0.000307	< 0.000372	0.000858 J	0.0103
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.00060	0.0049 J	< 0.0010	0.93	0.049	0.54	< 0.0010	1.4	0.14	0.013	0.081	0.33	0.011	< 0.00060	2.4	0.87
< 0.00042	0.0018	< 0.0010	0.24	0.012	0.082	< 0.0038	0.76	0.04	0.0013	0.02	0.068	< 0.00031	< 0.00037	0.15	0.15
< 0.000420	0.00159	< 0.00100	0.424	0.0213	0.153	< 0.00380	0.868	0.0658	0.00251	0.0335	0.142	< 0.000310	< 0.000370	0.183	0.296
< 0.00836	< 0.00700	< 0.0200	0.299	0.0183 J	0.0856	< 0.0764	0.73	0.0415 J	< 0.00722	0.0305	0.0552	< 0.00614	< 0.00744	0.216	0.141
< 0.00060	< 0.00050	< 0.0010	0.043	0.0063	0.014	< 0.0010	1.3	0.012	0.0029 J	0.01	< 0.00050	< 0.00050	< 0.00060	0.0019 J	0.014 J
< 0.00042	< 0.00035	< 0.0010	0.012	0.0023	0.0055	< 0.0038	0.95 E	0.0061	< 0.00036	0.0032	< 0.00034	< 0.00031	< 0.00037	0.00092 J	0.0055
< 0.000420	< 0.000350	< 0.00100	0.0114	0.0031	0.00326	< 0.00380	1.6	0.00346 J	0.000372 J	0.00369	< 0.000340	< 0.000310	< 0.000370	0.000928 J	0.00326
< 0.00836	< 0.00700	< 0.0200	< 0.00768	< 0.00652	< 0.0144	< 0.0764	0.86	< 0.0200	< 0.00722	< 0.00698	< 0.00682	< 0.00614	< 0.00744	< 0.0156	< 0.0212
< 0.0042	< 0.0035	< 0.01	0.025	0.0044 J	0.043	< 0.038	5.4 E	< 0.01	< 0.0036	0.0048 J	0.016	< 0.0031	< 0.0037	0.071	0.059
< 0.000420	< 0.000350	< 0.00100	0.00131	0.00198	0.00245	< 0.00380	7.04	0.00407 J	0.000458 J	0.000956 J	0.00112	< 0.000310	< 0.000370	< 0.000780	0.00357
< 0.0418	< 0.0350	< 0.1	< 0.0384	< 0.0326	< 0.0719	< 0.382	5.79	< 0.1	< 0.0361	< 0.0349	< 0.0341	< 0.0307	< 0.0372	< 0.0780	< 0.106
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.0012	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.000510 J	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.000449 J	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.00060	0.006	< 0.0010	0.21	0.036	0.47	< 0.0010	5.3	0.058	0.031	0.084	0.18	< 0.00050	< 0.00060	1.4	0.65
< 0.0042	0.0036 J	< 0.01	0.067	0.016	0.12	< 0.038	5.6 E	0.043 J	0.0056 J	0.03	0.065	< 0.0031	< 0.0037	0.31	0.18
< 0.000420	0.00103	< 0.00100	0.0692	0.0162	0.084	< 0.00380	5.23	0.0468	0.00368	0.028	0.0606	< 0.000310	< 0.000370	0.215	0.145
< 0.000418	0.00105	< 0.00100	0.048	0.022	0.0615	< 0.00382	4.54	0.0589	0.00375	0.037	0.0243	< 0.000307	< 0.000372	0.0522	0.0859
< 0.042	< 0.035	< 0.1	0.3	0.057 J	0.18 J	< 0.38	5.6	< 0.1	< 0.036	0.084 J	0.038 J	< 0.031	< 0.037	0.1 J	0.22 J
< 0.0420	< 0.0350	< 0.1	0.199	< 0.0330	0.108	< 0.38	6.67	< 0.1	< 0.0360	0.0451 J	< 0.0340	< 0.0310	< 0.0370	< 0.0780	< 0.11
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000420	< 0.000350	0.00122 J	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.000829 J	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.000608 J	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0026 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	0.00114 J	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00173	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00394	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.016	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0027 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.01	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.0086	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	0.00127 J	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.0163	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00858	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	&lt		

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.00420	0.00401 J	< 0.0100	0.973	0.0456	1.3	< 0.0380	0.209	0.183	0.00846 J	0.098	0.059	< 0.00310	< 0.00370	0.211	1.35
< 0.00420	0.00521 J	< 0.0100	1.09	0.0525	0.85	< 0.0380	0.178	0.164	0.00856 J	0.103	0.0952	< 0.00310	< 0.00370	0.216	0.945
< 0.050	< 0.050	< 0.10	0.64	0.13	< 0.10	< 0.10	< 0.050	0.2	< 0.050	0.17	< 0.050	< 0.050	< 0.050	< 0.050	< 0.15
< 0.050	< 0.050	< 0.10	0.35	0.087	< 0.10	< 0.10	< 0.050	0.16	< 0.050	0.12	< 0.050	< 0.050	< 0.050	< 0.050	< 0.15
< 0.012	< 0.010	< 0.020	0.32	0.097 J	0.035 J	< 0.020	< 0.012	0.2	< 0.020	0.15	< 0.010	< 0.010	< 0.010	< 0.010	0.035 J
< 0.021	< 0.018	< 0.05	0.19	0.048 J	0.9	< 0.19	0.019 J	0.12 J	< 0.018	0.068	0.17	< 0.015	< 0.019	0.52	1.1
< 0.0100	< 0.00880	< 0.0250 J	0.146	0.0652	1.19	< 0.0960 J	0.0253	0.15 J	< 0.00900	0.0952	0.181	< 0.00770	< 0.37	0.431	1.37
< 0.000418	0.000898 J	< 0.00100	0.519	0.121	0.00568	< 0.00382	0.02	0.213 J	0.0134	0.181	0.00237	< 0.000307	< 0.000372	0.00501	0.00805
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	0.0026 J	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	0.0022	< 0.0010	< 0.00038	0.002	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	0.00109	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	0.000961 J	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	0.0072	0.032	0.045	< 0.010	< 0.0050	< 0.0050	0.0053	0.04	0.041	< 0.0050	< 0.0050	0.0093	0.086
< 0.000420	< 0.000350	< 0.00100	0.000713 J	0.00675	0.00121	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	0.00632	< 0.000310	< 0.000370	0.00137 J	0.00753
< 0.000418	< 0.000350	< 0.00100	0.000727 J	0.006	0.00115	< 0.00382	< 0.000367	0.00583	< 0.000361	< 0.000349	0.0053	< 0.000307	< 0.000372	0.00108 J	0.00645
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.072	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	0.015	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	0.047	0.0056 J	< 0.0010	< 0.00060	0.0028 J	< 0.0010	0.0062	< 0.00050	< 0.00050	< 0.00060	< 0.00050	0.0056 J
< 0.000420	< 0.000350	< 0.00100	0.000399 J	0.0308	0.00606	< 0.00380	< 0.000370	< 0.00100	< 0.000360	0.00319	< 0.000340	< 0.000310	< 0.000370	< 0.000780	0.00606
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.014	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	0.014	< 0.00060	< 0.0010	0.0036 J	0.0026 J	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	0.00844	< 0.000720	< 0.00380	0.0044	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.042	0.16	< 0.010	0.028	0.0054	< 0.0050	0.042	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.16
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.041	0.22	< 0.010	0.021	< 0.0050	< 0.0050	0.042	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.22
< 0.00060	0.0011 J	< 0.0010	0.0030 J	0.039	0.11	< 0.0010	0.022	0.0043 J	< 0.0010	0.033	0.0011 J	< 0.00050	< 0.00060	0.0023 J	0.11
< 0.00420	< 0.00350	0.0106 J	< 0.00380	0.0326	0.0484	< 0.0380	0.0145	< 0.0100	< 0.00360	0.0205	< 0.00340	< 0.00310	< 0.00370	< 0.00780	0.0484
< 0.0050	< 0.0050	< 0.010	0.0091	0.059	0.093	< 0.010	0.011	< 0.0050	0.0073	0.066	0.0096	< 0.0050	< 0.0050	0.018	0.1
< 0.0050	< 0.0050	< 0.010	0.065	0.071	0.36	< 0.010	0.0078	0.0096	0.0083	0.094	0.015	< 0.0050	< 0.0050	0.045	0.38
< 0.0050	< 0.0050	< 0.010	0.061	0.069	0.35	< 0.010	0.0077	0.0099	0.008	0.092	0.015	< 0.0050	< 0.0050	0.044	0.37
< 0.00060	0.0017 J	< 0.0010	0.015	0.052	0.14	< 0.0010	0.014	0.005	0.0077	0.054	0.014	< 0.00050	< 0.00060	0.029	0.16
< 0.0042	< 0.0035	< 0.01	0.021	0.05	0.16	< 0.038	0.011	< 0.01	< 0.0036	0.046	0.012	< 0.0031	< 0.0037	0.03 J	0.17
< 0.00420	< 0.00350	< 0.0100 J	0.0483	0.0617	0.278	< 0.0380 J	0.0162	< 0.0100 J	0.00396 J	0.0702	0.0227	< 0.00310	< 0.00370	0.0538	0.3
< 0.00418	< 0.00350	< 0.0100	0.179	0.0642	1.15	< 0.0382	0.0274	0.212	0.00458 J	0.0949	0.333	< 0.00307	< 0.00372	0.808	1.48
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	0.0061	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	0.00066 J	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	0.00736	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	0.000389 J	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.024	0.019	< 0.010	< 0.0050	< 0.0050	< 0.0050	0.0066	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.019
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.025	0.019	< 0.010	< 0.0050	< 0.0050	< 0.0050	0.0065	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.019
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.019	0.012	< 0.010	< 0.0050	< 0.0050	< 0.0050	0.0068	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.018	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	0.0064	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	0.0019 J	0.018	0.0063 J	< 0.0010	< 0.00060	0.0041 J	< 0.0010	0.0041 J	< 0.00050	< 0.00050	< 0.00060	< 0.00050	0.0063 J
< 0.00042	< 0.00035	< 0.0010	< 0.00038	0.013	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	0.00092 J	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	0.000450 J	0.00798 J	0.00163	< 0.00380	< 0.000370	< 0.00100	< 0.000360	0.00113	< 0.000340	< 0.000310	< 0.000370	< 0.000780	0.00163 J
< 0.000420	< 0.000350	< 0.00100	0.000627 J	0.0148 J	0.0028	< 0.00380	< 0.000370	< 0.00100	< 0.000360	0.00228	< 0.000340	< 0.000310	< 0.000370	< 0.000780	0.00280 J
< 0.000418	< 0.000350	< 0.00100	0.000395 J	0.0179	0.00181	< 0.00382	< 0.000367	< 0.00100	< 0.000361	0.00128	< 0.000341	< 0.000307	< 0.000372	< 0.000780	0.00181 J
< 0.000418	< 0.000350	< 0.00100	0.000394 J	0.0182	0.00176	< 0.00382	< 0.000367	< 0.00100	< 0.000361	0.0012	< 0.000341	< 0.000307	< 0.000372	< 0.000780	0.00176 J
< 0.025	< 0.025	< 0.050	0.091	0.074	0.42	< 0.050	< 0.025	0.14	< 0.025	0.075	< 0.025	< 0.025	< 0.025	0.095	0.43

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.025	< 0.025	< 0.050	0.099	0.062	0.41	< 0.050	< 0.025	0.12	< 0.025	0.074	< 0.025	< 0.025	< 0.025	0.096	0.41
< 0.0030	0.0045 J	< 0.0050	0.11	0.065	0.41	< 0.0050	< 0.0030	0.14	0.0059 J	0.083	0.0041 J	< 0.0025	< 0.0030	0.093	0.42
< 0.021	< 0.018	< 0.05	0.16	0.11	1.2	< 0.19	< 0.018	0.14 J	< 0.018	0.16	< 0.017	< 0.015	< 0.019	< 0.039	1.2
< 0.00420	0.00425 J	< 0.0100 J	0.209	0.122	1.68	< 0.0380 J	< 0.00370	0.176 J	0.00782 J	0.201	0.00784 J	< 0.00310	< 0.00370	0.0130 J	1.69
< 0.00418	0.00467 J	< 0.0100	0.0659	0.107	0.369	< 0.0382	< 0.00367	0.0668	0.00529 J	0.137	0.00496 J	< 0.00307	< 0.00372	0.0379 J	0.374
< 0.0050	< 0.0050	< 0.010	0.031	0.099	0.17	< 0.010	0.047	0.016	0.0095	0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.17
< 0.0050	< 0.0050	< 0.010	0.53	0.076	1.9	< 0.010	< 0.0050	0.16	0.015	0.13	< 0.050	< 0.0050	< 0.0050	0.0079	1.9
< 0.00060	0.0034 J	< 0.0010	0.093	0.07	0.72	< 0.0010	0.0022 J	0.11	0.013	0.11	< 0.0050	< 0.00050	< 0.00060	0.0056	0.72
< 0.021	< 0.018	< 0.05	0.91	0.14	0.08 J	< 0.19	0.025 J	0.42 J4	< 0.018	0.21	< 0.017	< 0.015	< 0.019	< 0.039	0.08 J
< 0.00420	< 0.00350	< 0.0100 J	0.457	0.112	0.0405	< 0.0380 J	0.0151	0.158 J	0.00986 J	0.167	< 0.00340	< 0.00310	< 0.19	< 0.00780	0.0405
< 0.00836	< 0.00700	< 0.0200	0.163	0.138	1.72	< 0.0764	< 0.00734	0.186	0.00854 J	0.244	0.00886 J	< 0.00614	< 0.00744	< 0.0156	1.73
< 0.0050	< 0.0050	< 0.010	0.051	0.054	0.032	< 0.010	0.51	0.0088	0.011	0.046	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.032
< 0.0021	< 0.0018	< 0.0050	0.005	0.027	0.0084 J	< 0.019	0.46	0.0053 J	0.0029 J	0.019	< 0.0017	< 0.0015	< 0.0019	< 0.0039	0.0084 J
< 0.000420	0.00131	< 0.00100	0.00447	0.0376	0.00291	< 0.00380	0.869	< 0.00100	0.00452	0.0234	< 0.000340	< 0.000310	< 0.000370	0.00260 J	0.00291 J
< 0.00836	< 0.00700	< 0.0200	< 0.00768	0.0301	< 0.0144	< 0.0764	0.924	< 0.0200	< 0.00722	< 0.00698	< 0.00682	< 0.00614	< 0.00744	< 0.0156	< 0.0212
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.037	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.027	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	0.027	< 0.00060	< 0.0010	< 0.00060	0.0025 J	< 0.0010	0.0026 J	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	0.00039 J	0.012	< 0.00072	< 0.0038	< 0.00037	0.0049 JJ4	< 0.00036	0.0038	0.00037 J	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	0.000433 J	0.0185	< 0.000720	< 0.00380	0.00575	0.00178 J	< 0.000360	0.00291	< 0.000340	< 0.000310	< 0.000370	0.00194 J	< 0.00110
< 0.000418	0.000725 J	< 0.00100	< 0.000384	0.0095	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	0.000834 J	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	0.01	< 0.010	0.048	0.13	0.5	< 0.010	< 0.0050	0.059	0.015	0.14	< 0.050	< 0.0050	< 0.0050	0.023	0.5
< 0.0050	0.01	< 0.010	0.046	0.13	0.47	< 0.010	< 0.0050	0.055	0.015	0.14	< 0.050	< 0.0050	< 0.0050	0.023	0.47
< 0.0030	0.0077 J	< 0.0050	0.15	0.1	0.54	< 0.0050	< 0.0030	0.062	0.014 J	0.11	0.036	< 0.0025	< 0.0030	0.41	0.58
< 0.1	< 0.088	< 0.25	0.17 J	0.1 J	0.54	< 0.96	< 0.092	< 0.25	< 0.09	0.11 J	< 0.085	< 0.077	< 0.093	0.92 J	0.54 J
< 0.00420	0.00398 J	< 0.0100	0.491	0.0876	0.702	< 0.0380	< 0.00370	0.0490 J	< 0.00360	0.0882	0.15	< 0.00310	< 0.00370	1.91	0.852
< 0.0104	< 0.00875	< 0.0250	0.449	0.108	0.753	< 0.0955	< 0.00918	0.0884 J	< 0.00902	0.119	0.18	< 0.00768	< 0.00930	0.652	0.933
< 0.0050	< 0.0050	< 0.010	0.05	0.069	0.57	< 0.010	< 0.0050	0.14	0.011	0.1	< 0.12	< 0.0050	< 0.0050	0.031	0.6
< 0.0050	< 0.0050	< 0.010	0.12	0.068	0.54	< 0.010	< 0.0050	0.14	0.015	0.1	< 0.050	< 0.0050	< 0.0050	0.031	0.56
< 0.0030	0.0085 J	< 0.0050	0.067	0.068	0.6	< 0.0050	0.0059 J	0.12	0.024 J	0.11	0.015 J	< 0.0025	< 0.0030	0.019 J	0.61
< 0.021	< 0.018	< 0.05	0.039 J	0.05 J	0.45	< 0.19	< 0.018	0.17 JJ4	< 0.018	0.074	< 0.017	< 0.015	< 0.019	< 0.039	0.45
< 0.00420	0.00479 J	< 0.0100 J	0.0675	0.0425	0.31	< 0.0380 J	< 0.00370	0.0554 J	0.00461 J	0.0625	0.00938 J	< 0.00310	< 0.00370	0.00961 J	0.319
< 0.00418	< 0.00350	< 0.0100	0.0717	0.0518	0.483	< 0.0382	< 0.00367	0.1	0.00496 J	0.0743	0.011	< 0.00307	< 0.00372	0.0170 J	0.494
< 0.0084	0.02	< 0.02	0.58	0.084	0.31	< 0.076	1.3	0.22	0.04	0.13	0.4	< 0.0061	< 0.0074	0.7	0.71
< 0.00418	0.0301	< 0.0100	0.509	0.0646	0.214	< 0.0382	0.798	0.202	0.0219	0.0923	0.36	< 0.00307	< 0.00372	0.553	0.574
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.0053	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	0.0058	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	0.007	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.050	< 0.050	< 0.10	< 0.050	0.073	< 0.10	< 0.10	28	< 0.050	< 0.050	0.064	< 0.050	< 0.050	< 0.050	< 0.050	< 0.15
< 0.050	< 0.050	< 0.10	< 0.050	0.067	< 0.10	< 0.10	29	< 0.050	< 0.050	0.066	< 0.050	< 0.050	< 0.050	< 0.050	< 0.15
< 0.015	< 0.012	< 0.025	< 0.012	0.076 J	0.037 J	< 0.025	35	0.065 J	< 0.025	0.070 J	< 0.012	< 0.012	< 0.015	0.015 J	< 0.038
< 0.01	< 0.0088	< 0.025	< 0.0096	0.055	< 0.018	< 0.096	28 E	< 0.025	< 0.0090	0.044	< 0.0085	< 0.0077	< 0.0093	< 0.02	< 0.026
< 0.000420	0.000719 J	< 0.00100	0.00172	0.055	0.00438	< 0.00380	35	0.00126 J	0.00185	0.0395	0.0011	< 0.000310	< 0.000370	0.00156 J	0.00547
< 0.209	< 0.175	< 0.5	< 0.192	< 0.163	< 0.36	< 1.91	39.2	< 0.5	< 0.18	< 0.174	< 0.17	< 0.154	< 0.186	< 0.39	< 0.53
< 0.050	< 0.050	< 0.10	1	0.098	1.9	< 0.10	< 0.050	0.24	< 0.050	0.11	< 0.050	< 0.050	< 0.050	0.29	1.9
< 0.050	< 0.050	< 0.10	1.2	0.078	1.9	< 0.10	< 0.050	0.22	< 0.050	0.11	< 0.050	< 0.050	< 0.050	0.32	1.9
< 0.0060	< 0.0050	< 0.010	1	0.078	2	< 0.010	< 0.0060	0.21	< 0.010	0.11	0.033 J	< 0.0050	< 0.0060	0.32	2
< 0.0060	0.0080 J	< 0.010	1	0.085	1.9	< 0.010	< 0.0060	0.23	0.020 J	0.11	0.031 J	< 0.0050	< 0.0060	0.3	1.9
< 0.1	< 0.088	< 0.25	0.63	< 0.082	1.6	< 0.96	< 0.092	0.45 JJ4	< 0.09	0.097 J	< 0.085	< 0.077	< 0.093	0.28 J	1.6

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.0100	< 0.00880	< 0.0250 J	0.927	0.0716	1.7	< 0.0960 J	< 0.00920	0.174 J	< 0.00900	0.0968	0.0358	< 0.00770	< 0.0930	0.283	1.74
< 0.0104	< 0.00875	< 0.0250	0.659	0.0781	1.68	< 0.0955	< 0.00918	0.237	< 0.00902	0.0981	0.0316	< 0.00768	< 0.00930	0.268	1.71
< 0.0418	< 0.0350	< 0.1	1.59	0.0997 J	0.681	< 0.382	0.0606 J	0.215 J	< 0.0361	0.143	0.48	< 0.0307	< 0.0372	2.16	1.16
< 0.00836	< 0.00700	< 0.0200	0.569	0.0684	0.0339	< 0.0764	0.0926	0.0894 J	0.00966 J	0.0973	< 0.00682	< 0.00614	< 0.00744	< 0.0156	0.0339 J
< 0.0210	< 0.0180	< 0.0500	0.0470 J	< 0.0160	0.0365 J	< 0.19	< 0.0180	< 0.0500	< 0.0180	0.0175 J	< 0.0170	< 0.0150	< 0.0190	< 0.0390	< 0.0530
< 0.00420	0.00554 J	< 0.0100 J	1.02	0.0551	0.445	< 0.0380 J	< 0.00370	0.157 J	0.0106	0.0813	0.0853	< 0.00310	< 0.0930	0.115	0.53
< 0.000420	0.00705	< 0.00100	0.0185	0.0362	0.035	< 0.00380	0.0122	0.0112	0.0066	0.0441	0.00176	< 0.000310	< 0.000370	0.00396 J	0.0367
< 0.00420	< 0.00350	0.0113 J	0.00801 J	0.0204	< 0.00720	< 0.0380	2.41	< 0.0100	< 0.00360	0.00788 J	< 0.00340	< 0.00310	< 0.00370	< 0.00780	< 0.0110
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.13	0.015	< 0.010	< 0.0050	< 0.0050	0.009	0.086	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.015
< 0.00060	0.0013 J	< 0.0010	0.0015 J	0.1	0.024	< 0.0010	0.0034 J	0.0075	0.0099	0.035	< 0.00050	< 0.00050	< 0.00060	0.0019 J	0.024
< 0.0210	< 0.0180	0.0564 J	< 0.0190	0.0643	< 0.0360	< 0.19	< 0.0180	< 0.0500	< 0.0180	0.0179 J	< 0.0170	< 0.0150	< 0.0190	< 0.0390	< 0.0530
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	0.00120 J	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.0051	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	0.00084 J	< 0.00060	< 0.0010	0.012	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	0.00087 J	< 0.00060	< 0.0010	0.013	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	0.00114 J	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.019	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0031 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	0.00112 J	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00772	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
			< 0.001					< 0.0002							< 0.001
			< 0.001					< 0.0002							< 0.001
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010 J4	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	0.00179	< 0.00100	< 0.000380	< 0.000330	0.00135	< 0.00380	< 0.000370	0.00150 J	< 0.000360	< 0.000350	0.000942 J	< 0.000310	0.000710 J	< 0.000780	0.00229 J
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
			0.0024					< 0.0002							0.0047
			< 0.001					< 0.0002							< 0.001
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010 J4	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	0.000657 J	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
			0.0021					< 0.0002							0.0037
			< 0.001					< 0.0002							< 0.001
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010 J4	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0043 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.0048	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00356	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00268	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.00049 J	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00433	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0057	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.004	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.0129	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00975	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.034	0.048	< 0.010	< 0.0050	< 0.0050	< 0.0050	0.027	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.05
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.022	0.049	< 0.010	< 0.0050	0.011	< 0.0050	0.021	< 0.0050	< 0.0050	< 0.0050	0.007	0.051
< 0.00060	0.0019 J	< 0.0010	0.0049 J	0.023	0.051	< 0.0010	< 0.00060	0.0092	0.0029 J	0.021	0.0028 J	< 0.00050	< 0.00060	0.0065	0.054
< 0.0021	0.0028 J	< 0.0050	0.0056	0.024	0.056	< 0.019	< 0.0018	0.012 J	0.0027 J	0.025	0.0031 J	< 0.0015	< 0.0019	0.0078 J	0.059
< 0.00420	< 0.00350	< 0.0100	0.0101	0.033	0.0665	< 0.0380	< 0.00370	0.0113 J	< 0.00360	0.0311	0.00412 J	< 0.00310	< 0.00370	0.00956 J	0.0706
< 0.00418	< 0.00350	< 0.0100	0.00812 J	0.0345	0.081	< 0.0382	< 0.00367	0.0166 J	< 0.00361	0.0346	0.00444 J	< 0.00307	< 0.00372	0.00978 J	0.0855
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	0.00055 J	< 0.00060	< 0.0010	0.00060 J	0.0021 J	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	0.0087	< 0.00072	< 0.0038	0.00078 J	< 0.0010	< 0.00036	0.00041 J	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	0.000622 J	< 0.000720	< 0.00380	0.000497 J	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	0.00689	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.000476 J	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.000806 J	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100 J	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372 J	< 0.000780 J	< 0.00106
< 0.0050	< 0.0050	< 0.010	0.25	0.11	0.2	< 0.010	< 0.0050	0.069	0.019	0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.2

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.0021	0.0082	< 0.0050	0.0048 J	0.091	0.1	< 0.019	< 0.0018	< 0.0050	0.0066	0.091	< 0.0017	< 0.0015	< 0.0019	< 0.0039	0.1
< 0.000420	0.00696	< 0.00100	0.00565	0.0929	0.094	< 0.00380	< 0.00730	0.00636	0.00713	0.101	0.00121	< 0.000310	< 0.000370	< 0.000780	0.0952
< 0.000418	0.00732	< 0.00100	0.00215	0.0851	0.0653	< 0.00382	0.00168	< 0.00100	0.00646	0.0857	0.000477 J	< 0.000307	< 0.000372	< 0.000780	0.0658
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	0.0013 J	< 0.00060	< 0.0010	< 0.00060	0.0026 J	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	0.0018	< 0.00072	< 0.0038	0.00058 J	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	0.000652 J	< 0.000720	< 0.00380	0.000410 J	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	0.000446 J	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.01	< 0.0088	< 0.025	2.9	0.082	0.71	< 0.096	0.034	0.51	0.01 J	0.16	0.031	< 0.0077	< 0.0093	0.035 J	0.74
< 0.00420	0.00468 J	< 0.0100	0.992	0.0698	0.224	< 0.0380	0.0186	0.0260 J	0.00730 J	0.119	0.0115	< 0.00310	< 0.00370	0.0140 J	0.236
< 0.0418	< 0.0350	< 0.1	1.72	0.0921 J	0.448	< 0.382	< 0.0367	< 0.1	< 0.0361	0.169	< 0.0341	< 0.0307	< 0.0372	< 0.0780	0.448
< 0.050	< 0.050	< 0.10	< 0.050	< 0.050	< 0.10	< 0.10	10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.15
< 0.0042	< 0.0035	< 0.01	0.0095 J	0.0066 J	< 0.0072	< 0.038	9.9 E	0.023 J	< 0.0036	0.011	< 0.0034	< 0.0031	< 0.0037	< 0.0078	< 0.011
< 0.000420	0.000613 J	< 0.00100	0.0395	0.0146	0.0323	< 0.00380	< 0.000370	0.0392	0.0022	0.0226	0.00713	< 0.000310	< 0.000370	0.013	0.0394
< 0.000418	0.000434 J	< 0.00100	0.0151	0.0161	0.0135	< 0.00382	10.7	0.0156	0.00173	0.0276	0.00312	< 0.000307	< 0.000372	0.00578	0.0166
< 0.0042	0.0042 J	< 0.01	0.81	0.04	0.93	< 0.038	0.16	0.098	< 0.0036	0.058	0.2	< 0.0031	< 0.0037	0.53	1.1
< 0.0100	< 0.00880	< 0.0250	2.04	0.0738	2.71	< 0.0960	0.119	0.239	< 0.00900	0.121	0.76	< 0.00770	< 0.00930	1.7	3.47
< 0.209	< 0.175	< 0.5	0.831	< 0.163	1.03	< 1.91	9.07	< 0.5	< 0.18	< 0.174	0.297 J	< 0.154	< 0.186	< 0.39	1.33 J
< 0.0050	< 0.0050	< 0.010	0.0053	0.02	< 0.010	< 0.010	3.9	< 0.0050	< 0.0050	0.019	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.022	< 0.010	< 0.010	3.9	< 0.0050	< 0.0050	0.023	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	0.0052	0.019	0.0080 J	< 0.0010	3.6	0.0042 J	0.0013 J	0.02	0.00053 J	< 0.00050	< 0.00060	0.0053	0.0086 J
< 0.01	< 0.0088	< 0.025	0.15	0.066	0.22	< 0.096	2	0.06 J	< 0.0090	0.081	< 0.0085	< 0.0077	< 0.0093	0.054 J	0.22
< 0.0420	< 0.0350	< 0.1	0.0625 J	0.0689 J	0.194	< 0.38	1.33	< 0.1	< 0.0360	0.0744 J	< 0.0340	< 0.0310	< 0.0370	< 0.0780	0.194 J
< 0.0418	< 0.0350	< 0.1	0.0441 J	0.0671 J	0.243	< 0.382	1.11	< 0.1	< 0.0361	0.0890 J	< 0.0341	< 0.0307	< 0.0372	< 0.0780	0.243 J
< 0.01	< 0.0088	< 0.025	0.075	0.041	0.12	< 0.096	1.1	0.028 J	< 0.0090	0.068	0.01 J	< 0.0077	< 0.0093	0.03 J	0.13
< 0.00420	< 0.00350	< 0.0100	0.158	0.0361	0.143	< 0.0380	0.223	0.0245 J	< 0.00360	0.0478	0.00973 J	< 0.00310	< 0.00370	0.0146 J	0.153
< 0.00209	0.00472 J	< 0.00500	0.0655	0.0549	0.119	< 0.0191	0.832	0.0128 J	0.0065	0.0857	0.00658	< 0.00154	< 0.00186	0.0120 J	0.125
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	0.00086 J	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00219	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418 J	< 0.000350 J	< 0.00100	< 0.000384 J	< 0.000326 J	< 0.000719 J	< 0.00382	< 0.000367	< 0.00100 J	< 0.000361 J	< 0.000349	< 0.000341	< 0.000307 J	< 0.000372 J	< 0.000780 J	< 0.00106 J
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.001													

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100 J	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780 J	< 0.00106
< 0.021	< 0.018	< 0.05	1.2	0.053	0.18	< 0.19	3.4	0.22 J	< 0.018	0.083	0.025 J	< 0.015	< 0.019	< 0.039	0.21
< 0.00420	< 0.00350	< 0.0100	1.03	0.0578	0.135	< 0.0380	3.22	0.239	0.0101	0.085	0.0228	< 0.00310	< 0.00370	0.0294 J	0.158
< 0.0050	< 0.0050	< 0.010	0.0074	0.064	< 0.010	< 0.010	2.9	0.081	0.014	0.088	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	0.02	0.074	0.022	< 0.010	2.5	0.11	0.016	0.11	< 0.0050	< 0.0050	< 0.0050	0.0094	0.026
< 0.0050	< 0.0050 J	< 0.010	0.019	0.073	0.022	< 0.010	2.4	0.11	0.017 J	0.11 J	< 0.0050	< 0.0050	< 0.0050 J	0.0092	0.025
< 0.00060	< 0.00050	< 0.0010	0.0039 J	0.03	0.0055 J	< 0.0010	2.3	0.055	0.0069	0.038	0.0014 J	< 0.00050	< 0.00060	0.0027 J	0.0069 J
< 0.0042	< 0.0035	< 0.01	0.19	0.079	0.1	< 0.038	1.9	0.22 J4	0.01 J	0.12	0.015	< 0.0031	< 0.0037	0.052	0.12
< 0.0210	< 0.0180	< 0.0500	0.0615	0.0266 J	0.0668	< 0.19	1.66	0.0617 J	< 0.0180	0.0342 J	< 0.0170	< 0.0150 J	< 0.0190	< 0.0390 J	0.0668 J
< 0.000418	< 0.000350	< 0.00100	0.0234	0.0565	0.0281	< 0.00382	2.42	0.133	0.007	0.0807	0.0039	< 0.000307	< 0.000372	0.00722	0.032
< 0.0042	0.0083 J	< 0.01	0.59	0.037	0.69	< 0.038	3.4 E	0.044 J	0.0065 J	0.052	0.15	< 0.0031	< 0.0037	0.58	0.84
< 0.0100	< 0.00880	< 0.0250	0.252	0.0295	0.622	< 0.0960	0.0799	0.0376 J	< 0.00900	0.0338	0.315	< 0.00770 J	< 0.00930	0.149 J	0.937
< 0.0104	0.0122 J	< 0.0250	0.551	0.0559	0.509	< 0.0955	3.96	0.0453 J	0.0104 J	0.0768	0.0953	< 0.00768	< 0.00930	0.221	0.604
< 0.0050	< 0.0050	< 0.010	0.054	0.02	0.025	< 0.010	0.093	< 0.0050	< 0.0050	0.017	< 0.0050	< 0.0050	< 0.0050	0.0081	0.025
< 0.0050	< 0.0050	< 0.010	0.025	< 0.0050	0.013	< 0.010	0.086	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	0.015	0.0074	0.011	< 0.0010	< 0.00060	0.0029 J	< 0.0010	0.0032 J	< 0.00050	< 0.00050	< 0.00060	0.0038 J	0.011 J
< 0.0042	< 0.0035	< 0.01	0.0050 J	0.0078 J	< 0.0072	< 0.038	0.12	0.01 JJ4	< 0.0036	0.0050 J	< 0.0034	< 0.0031	< 0.0037	< 0.0078	< 0.011
< 0.00210	< 0.00180	< 0.00500 J	0.00202 J	0.00279 J	< 0.00360	< 0.0190 J	0.113	< 0.00500 J	< 0.00180	< 0.00170	< 0.00170	< 0.00150	< 0.00190	< 0.00390	< 0.00530
< 0.00209	< 0.00175	< 0.00500	< 0.00192	< 0.00163	< 0.00360	< 0.0191	0.0981	< 0.00500	< 0.00180	< 0.00174	< 0.00170	< 0.00154	< 0.00186	< 0.00390	< 0.00530
< 0.021	< 0.018	< 0.05	0.99	0.04 J	1.3	< 0.19	2	0.18 J	< 0.018	0.057	0.54	< 0.015	< 0.019	2	1.8
< 0.00420	< 0.00350	< 0.0100	0.602	0.0207	0.598	< 0.0380	1.88	0.129	< 0.00360	0.0257	0.247	< 0.00310	< 0.00370	1.45	0.846
< 0.0418	< 0.0350	< 0.1	1.04	0.0583 J	1.06	< 0.382	2.12	0.256 J	< 0.0361	0.0897 J	0.361	< 0.0307	< 0.0372	1.2	1.43
< 0.0050	< 0.0050	< 0.010	0.036	0.02	< 0.010	< 0.010	< 0.0050	0.013	< 0.0050	0.024	< 0.0050	< 0.0050	< 0.0050	0.006	< 0.015
< 0.00060	0.0036 J	< 0.0010	0.15	0.031	0.012	< 0.0010	< 0.00060	0.051	0.0061	0.046	0.0045 J	< 0.00050	< 0.00060	0.0094	0.017
< 0.000420	0.00207	< 0.00100	0.0879	0.0247	0.00819	< 0.00380	0.000441 J	0.022	0.00291	0.0357	0.00549	< 0.000310	< 0.000370	0.0154	0.0137
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.075	< 0.010	< 0.010	< 0.0050	< 0.0050	0.0051	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.051	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	0.021	0.0013 J	0.052	< 0.00060	< 0.0010	< 0.00060	0.0027 J	< 0.0010	0.0043 J	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	0.02	0.0012 J	0.052	< 0.00060	< 0.0010	< 0.00060	0.0030 J	< 0.0010	0.0046 J	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.0042	< 0.0035	< 0.01	< 0.0038	0.046	< 0.0072	< 0.038	< 0.0037	< 0.01	< 0.0036	0.0097 J	< 0.0034	< 0.0031	< 0.0037	< 0.0078	< 0.011
< 0.00042	< 0.00035	< 0.0010	0.0021	0.037	< 0.00072	< 0.0038	0.00049 J	0.0018 JJ4	0.00050 J	0.0074	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	0.000481 J	0.0441	< 0.000720	< 0.00380	0.00135	< 0.00100	< 0.000360	0.00335	< 0.000340	< 0.000310 J	< 0.000370	< 0.000780 J	< 0.00110
< 0.000420	< 0.000350	< 0.00100	< 0.000380	0.0432	< 0.000720	< 0.00380	0.00138	< 0.00100	< 0.000360	0.00324	< 0.000340	< 0.000310 J	< 0.000370	< 0.000780 J	< 0.00110
< 0.000418	< 0.000350	< 0.00100	0.0117	0.0406	0.000722 J	< 0.00382	0.00199	0.00132 J	0.000449 J	0.00402	< 0.000341	0.000881 J	< 0.000372	< 0.000780	< 0.00106
< 0.00209	< 0.00175	< 0.00500	0.0126	0.0449	< 0.00360	< 0.0191	0.00189 J	< 0.00500	< 0.00180	0.00458 J	< 0.00170	< 0.00154	< 0.00186	< 0.00390	< 0.00530
< 0.1	< 0.088	< 0.25	0.58	< 0.082	0.23 J	< 0.96	< 0.092	< 0.25	< 0.09	< 0.087	< 0.085	< 0.077	< 0.093	< 0.2	< 0.26
< 0.00210	0.00604	< 0.00500 J	0.545	0.0573	0.205	< 0.0190 J	< 0.00180	0.0623 J	0.00866	0.0639	0.00965	< 0.00150	< 0.0190	0.0314	0.214
< 0.00418	0.00614 J	< 0.0100	0.188	0.0321	0.109	< 0.0382	< 0.00367	0.0299 J	0.00651 J	0.0349	< 0.00341	< 0.00307	< 0.00372	< 0.00780	0.109
< 0.050	< 0.050	< 0.10	0.1	0.073	0.44	< 0.10	0.062	0.087	< 0.050	0.092	< 0.050	< 0.050	< 0.050	0.17	0.44
< 0.050	< 0.050	< 0.10	0.11	< 0.050	0.36	< 0.10	0.074	0.058	< 0.050	0.053	< 0.050	< 0.050	< 0.050	0.34	0.37
< 0.012	< 0.010	< 0.020	0.16	0.036 J	0.29	< 0.020	0.047 J	0.083 J	< 0.020	0.047 J	0.024 J	< 0.010	< 0.012	0.35	0.31
< 0.000420	0.000357 J	0.00100 J	0.0206	0.00691	0.0475	< 0.00380	< 0.000370	0.0126	0.000406 J	0.00815	0.00393	< 0.000310	< 0.000370	0.042	0.0514
< 0.0418	< 0.0350	< 0.1	0.0823 J	< 0.0326	0.217	< 0.382	0.0397 J	0.113 J	< 0.0361	< 0.0349	< 0.0341	< 0.0307	< 0.0372	0.216 J	0.217 J
< 0.025	< 0.025	< 0.050	0.3	0.037	0.18	< 0.050	2.3	0.12	< 0.025	0.041	< 0.025	< 0.025	< 0.025	< 0.025	0.18
< 0.025	< 0.025	< 0.050	0.2	0.028	0.12	< 0.050	1.9	0.1	< 0.025	0.039	< 0.025	< 0.025	< 0.025	< 0.025	0.12
< 0.0060	< 0.0050	< 0.010	0.048 J	0.024 J	0.12	< 0.010	1.6 J	0.11	< 0.010	0.031 J	< 0.0050	< 0.0050	< 0.0060	0.017 J	0.12 J
< 0.0042	< 0.0035	< 0.01	0.3	0.042	0.12	< 0.038	2.3 E	0.15 J4	< 0.0036	0.057	0.0035 J	< 0.0031	< 0.0037	0.02 J	0.12
< 0.00420	< 0.00350	< 0.0100	0.00658 J	0.0107	0.0146	< 0.0380	1.77	0.0157 J	< 0.00360	< 0.00350	< 0.00340	< 0.00310	< 0.00370	0.0106 J	0.0146 J

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.0418	< 0.0350	< 0.1	0.0403 J	0.0454 J	0.0867 J	< 0.382	2.77	< 0.1	< 0.0361	0.0689 J	0.0431 J	< 0.0307	< 0.0372	< 0.0780	0.13 J
< 0.0050	< 0.0050	< 0.010	0.06	0.011	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	0.0096	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	0.023	0.011	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	0.009	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	0.05	0.011	0.0059 J	< 0.0010	< 0.00060	0.0036 J	0.0020 J	0.01	< 0.00050	< 0.00050	< 0.00060	0.0045 J	0.0059 J
< 0.00042 J5J3	< 0.00035 J3	< 0.0010	0.02	0.028	0.0027 J3	< 0.0038 J5J3	< 0.00037 J3	0.0026 JJ4J5J3	0.0013 J5J3	0.021	0.00036 JJ5J3	< 0.00031 J5J3	< 0.00037 J3	0.0057 J3	0.0031 J3J5
< 0.00420	< 0.00350	< 0.0100	0.019	0.0351	0.0176	< 0.0380	< 0.00370	< 0.0100	< 0.00360	0.0297	< 0.00340	< 0.00310	< 0.00370	0.0117 J	0.0176 J
< 0.00418	< 0.00350	< 0.0100	0.0126	0.0344	0.0176	< 0.0382	< 0.00367	< 0.0100	< 0.00361	0.0305	< 0.00341	< 0.00307	< 0.00372	0.0141 J	0.0176 J
< 0.0050	< 0.0050	< 0.010	0.064	0.013	< 0.010	< 0.010	< 0.0050	0.0053	< 0.0050	0.012	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	0.0066	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	0.0017 J	< 0.0010	0.07	0.021	0.028	< 0.0010	< 0.00060	0.013	0.0021 J	0.02	< 0.00050	< 0.00050	< 0.00060	0.0023 J	0.028
< 0.00042	< 0.00035	< 0.0010	0.0016	0.0022	< 0.00072	< 0.0038	< 0.00037	0.0017 JJ4	< 0.00036	0.0015	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	0.000563 J	< 0.00100	0.00609	0.0331	0.00624	< 0.00380	< 0.000370	0.00482 J	0.00231	0.0279	< 0.000340	< 0.000310	< 0.000370	0.00352 J	0.00624
< 0.00209	0.00315 J	< 0.00500	0.182	0.0305	0.0298	< 0.0191	< 0.00184	0.00731 J	0.00291 J	0.0347	< 0.00170	< 0.00154	< 0.00186	0.00464 J	0.0298
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	0.00129 J	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000420	< 0.000350	< 0.00100	0.00245	0.00966	< 0.000720	< 0.00380	0.0902	< 0.00100	0.000393 J	0.00458	< 0.000340	< 0.000310 J	< 0.000370	< 0.000780 J	< 0.00110
< 0.00420	< 0.00350	< 0.0100	1.03	0.0398	1.39	< 0.0380	2.15	0.174	0.00606 J	0.0598	0.522	< 0.00310	< 0.00370	2.26	1.91
< 0.00420	< 0.00350	< 0.0100	0.0476	0.0173	0.102	< 0.0380	2.27	0.0602	0.00738 J	0.0237	0.0558	< 0.00310	< 0.00370	0.0126 J	0.158
			< 0.001					< 0.0002							< 0.001
			< 0.001					< 0.0002							< 0.001
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	0.0012 JJ4	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
			< 0.001					< 0.0002							< 0.001
			< 0.001					< 0.0002							< 0.001
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010 J4	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
			< 0.001					< 0.0002							< 0.001
			< 0.001					< 0.0002							< 0.001
			< 0.001					< 0.0002							< 0.001
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010 J4	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	< 0.000367	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	0.0064	0.028	0.044	< 0.010	0.04	< 0.0050	< 0.0050	0.016	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.044
< 0.0050	< 0.0050	< 0.010	0.007	0.026	0.043	< 0.010	0.039	< 0.0050	< 0.0050	0.015	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.043
< 0.0050	< 0.0050	< 0.010	0.0094	0.024	0.066	< 0.010	0.037	0.012	< 0.0050	0.022	< 0.0050	< 0.0050	< 0.0050	0.011	0.066
< 0.00060	0.00090 J	< 0.0010	0.0043 J	0.018	0.034	< 0.0010	0.049	0.0054	0.0032 J	0.015	< 0.00050	< 0.00050	< 0.00060	0.0040 J	0.034
< 0.00084	0.00095 J	< 0.0020	0.0036	0.022	0.026	< 0.0076	0.055	0.0031 J	0.0026	0.019	< 0.00068	< 0.00061	< 0.00074	0.0029 J	0.026
< 0.000420	0.000537 J	< 0.00100 J	0.00274	0.014	0.0175	< 0.00380	0.0553 J	0.00117 J	0.00116	0.00957	< 0.000340	< 0.000310	< 0.000370	< 0.000780	0.0175
< 0.000418	0.000770 J	< 0.00100	0.00457	0.0247	0.038	< 0.00382	0.0447	0.00255 J	0.00158	0.0157	< 0.000341	< 0.000307	< 0.000372	0.00201 J	0.038
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	0.0021 J	< 0.0010	< 0.00050	0.0019 J	< 0.00060	< 0.0010	0.0040 J	0.0029 J	< 0.0010	< 0.00050	0.0023 J	< 0.00050	< 0.00060	0.0011 J	0.0023 J
< 0.00060	< 0.00050	< 0.0010	< 0.00050	0.0020 J	< 0.00060	< 0.0010	0.0039 J	0.0029 J	< 0.0010	< 0.00050	0.0024 J	< 0.00050	< 0.00060	0.0010 J	0.0024 J

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.00042	< 0.00035	< 0.0010	0.00047 J	0.0013	< 0.00072	< 0.0038	0.0018	< 0.0010	< 0.00036	< 0.00035	0.0022	< 0.00031	< 0.00037	0.00099 J	0.0022 J
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.00478	< 0.00100	< 0.000360	< 0.000350	0.00214	< 0.000310	< 0.000370	< 0.000780	0.00214 J
< 0.000418	< 0.000350	< 0.00100	< 0.000384	0.000924 J	< 0.000719	< 0.00382	0.00245	0.00102 J	< 0.000361	< 0.000349	0.00197	< 0.000307	< 0.000372	0.00108 J	0.00197 J
< 0.0050	< 0.0050	< 0.010	0.014	0.059	0.26	< 0.010	0.0059	0.04	0.0089	0.069	0.022	< 0.0050	< 0.0050	0.068	0.29
< 0.0050	< 0.0050	< 0.010	0.012	0.047	0.23	< 0.010	0.0061	0.037	0.0078	0.057	0.018	< 0.0050	< 0.0050	0.052	0.25
< 0.00060	0.0055	< 0.0010	0.015	0.05	0.24	< 0.0010	0.011	0.023	0.0089	0.064	0.018	< 0.00050	< 0.00060	0.043	0.26
< 0.0042	0.0043 J	< 0.01	0.0099 J	0.043	0.18	< 0.038	0.012	0.017 J	0.0040 J	0.051	0.016	< 0.0031	< 0.0037	0.034 J	0.2
< 0.00840	< 0.00700	< 0.0200 J	0.0119 J	0.0407	0.171	< 0.0760	0.0113 JJ3	< 0.0200	< 0.00720	0.0462	0.0182 J	< 0.00610	< 0.00740	0.0372 J	0.189
< 0.00209	0.00397 J	< 0.00500	0.00577	0.0405	0.146	< 0.0191	0.011	0.00630 J	0.00382 J	0.0487	0.0097	< 0.00154	< 0.00186	0.0186 J	0.155
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.074	0.015	< 0.010	< 0.0050	< 0.0050	< 0.0050	0.013	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.018
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.063	0.016	< 0.010	< 0.0050	< 0.0050	< 0.0050	0.013	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.019
< 0.00060	0.0015 J	< 0.0010	< 0.00050	0.06	0.018	< 0.0010	0.0030 J	0.0034 J	< 0.0010	0.013	0.0032 J	< 0.00050	< 0.00060	< 0.00050	0.021
< 0.00042	0.00088 J	< 0.0010	0.00068 J	0.05	0.012	< 0.0038	< 0.00037	0.0010 J	0.0016	0.0087	0.0023	< 0.00031	< 0.00037	0.0010 J	0.014
< 0.00420	< 0.00350	< 0.0100	< 0.00380	0.0471	0.00929 J	< 0.0380	0.00560 J	< 0.0100	< 0.00360	0.00541 J	< 0.00340	< 0.00310	< 0.00370	< 0.00780	< 0.0110
< 0.000418	0.00128	< 0.00100	0.000880 J	0.0605	0.0171	< 0.00382	0.000964 J	0.00123 J	0.00133	0.0092	0.00316	< 0.000307	< 0.000372	0.00154 J	0.0202
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.052	0.058	< 0.010	0.14	< 0.0050	0.007	0.075	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.058
< 0.0050	< 0.0050	< 0.010	< 0.0050	0.039	0.054	< 0.010	0.073	< 0.0050	0.0066	0.063	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.055
< 0.00060	0.0029 J	< 0.0010	0.0035 J	0.044	0.06	< 0.0010	0.12	0.0035 J	0.0073	0.072	0.0013 J	< 0.00050	< 0.00060	0.0046 J	0.061
< 0.0084	< 0.0070	< 0.02	0.0085 J	0.048	0.12	< 0.076	0.066	< 0.02	< 0.0072	0.067	< 0.0068	< 0.0061	< 0.0074	< 0.016	0.12
< 0.0084	< 0.0070	< 0.02	0.0087 J	0.048	0.12	< 0.076	0.064	< 0.02	< 0.0072	0.068	< 0.0068	< 0.0061	< 0.0074	< 0.016	0.12
< 0.00420	< 0.00350	< 0.0100	< 0.00380	0.0334	0.0407	< 0.0380	0.142	< 0.0100	0.00405 J	0.0535	< 0.00340	< 0.00310	< 0.00370	< 0.00780	0.0407
< 0.00420	< 0.00350	< 0.0100	< 0.00380	0.0332	0.0394	< 0.0380	0.14	< 0.0100	0.00396 J	0.0523	< 0.00340	< 0.00310	< 0.00370	< 0.00780	0.0394
< 0.00418	< 0.00350	< 0.0100	0.00756 J	0.0625	0.0837	< 0.0382	0.0127	< 0.0100	0.00385 J	0.0751	< 0.00341	< 0.00307	< 0.00372	0.00878 J	0.0837
< 0.000418	0.00179	< 0.00100	0.00655	0.053	0.0703	< 0.00382	0.00902	0.00422 J	0.00309	0.0633	0.00162	< 0.000307	< 0.000372	0.00623	0.0719
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0014 J	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100 UJ	< 0.000380	< 0.000330	< 0.000720	< 0.00380 UJ	< 0.000370	< 0.00100 UJ	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350 J	< 0.00100	< 0.000380	< 0.000330 J	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0051	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.006	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100 UJ	< 0.000380	< 0.000330	< 0.000720	< 0.00380 UJ	0.00729	< 0.00100 UJ	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.00636	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100 UJ	< 0.000380	< 0.000330	< 0.000720	< 0.00380 UJ	< 0.000370	< 0.00100 UJ	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.0003		

Navajo Refinery, Artesia, New Mexico

cis-1,3-Dichloropropene	Cymene	Dichloromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl N-Butyl Ketone	MTBE	Naphthalene	N-Butylbenzene	N-Propylbenzene	o-Xylene	Styrene (Monomer)	Tetrachloroethene	Toluene	Total Xylenes
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
0.0047	---	0.005	0.7	0.447	---	---	0.143	0.03	---	---	0.193	0.1	0.005	0.75	0.62
USEPA TW		USEPA MCL	USEPA MCL	WQCC TW			WQCC TW	WQCC HH			WQCC TW	USEPA MCL	USEPA MCL	WQCC HH	WQCC HH
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	0.00086 J	< 0.00050	0.0015 J	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	< 0.00037	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100 UJ	< 0.000380	< 0.000330	< 0.000720	< 0.00380 UJ	< 0.000370	< 0.00100 UJ	< 0.000360	< 0.000350	0.000538 J	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.14	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	0.06	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	0.0056	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00042	< 0.00035	< 0.0010	< 0.00038	< 0.00033	< 0.00072	< 0.0038	0.084	< 0.0010	< 0.00036	< 0.00035	< 0.00034	< 0.00031	< 0.00037	< 0.00078	< 0.0011
< 0.000420	< 0.000350	< 0.00100 UJ	< 0.000380	< 0.000330	< 0.000720	< 0.00380	0.204	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310 UJ	< 0.000370	< 0.000780	< 0.00110
< 0.000418	< 0.000350	< 0.00100	< 0.000384	< 0.000326	< 0.000719	< 0.00382	0.291	< 0.00100	< 0.000361	< 0.000349	< 0.000341	< 0.000307	< 0.000372	< 0.000780	< 0.00106
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.000420	< 0.000350	< 0.00100 UJ	< 0.000380	< 0.000330	< 0.000720	< 0.00380 UJ	0.00878	< 0.00100 UJ	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110
< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.00060	< 0.00050	< 0.0010	< 0.00050	< 0.00050	< 0.00060	< 0.0010	< 0.00060	< 0.00070	< 0.0010	< 0.00050	< 0.00050	< 0.00050	< 0.00060	< 0.00050	< 0.0015
< 0.000420	< 0.000350	< 0.00100	< 0.000380	< 0.000330	< 0.000720	< 0.00380	< 0.000370	< 0.00100	< 0.000360	< 0.000350	< 0.000340	< 0.000310	< 0.000370	< 0.000780	< 0.00110

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0020	< 0.0021		< 0.0020	< 0.0013
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0020	< 0.0021		< 0.0020	< 0.0013
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.025	< 0.025	< 0.025	< 0.025	< 0.010
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0020	< 0.0021		< 0.0020	< 0.0013
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.025	< 0.025	< 0.025	< 0.025	< 0.010
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026

Navajo Refinery, Artesia, New Mexico

[illegible]

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042	< 0.00047	< 0.00040	< 0.00026
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0099	< 0.01		< 0.01	< 0.0065
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396 UJ	< 0.000419	< 0.000469	< 0.000398	< 0.000259 UJ
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.050	< 0.050	< 0.050	< 0.050	< 0.020
< 0.0099	< 0.01		< 0.01	< 0.0065
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.0396	< 0.0419	< 0.0469	< 0.0398	< 0.0259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0099	< 0.01		< 0.01	< 0.0065
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.000396 J	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.00792	< 0.00838	< 0.00938	< 0.00796	< 0.00518
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.00792	< 0.00838	< 0.00938	< 0.0004	< 0.00518
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0396	< 0.0419	< 0.0469	< 0.0398	< 0.0259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.04	< 0.042		< 0.04	< 0.026
< 0.0400	< 0.0420	< 0.0470	< 0.0400	< 0.0260
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.050	< 0.050	< 0.050	< 0.050	< 0.020
< 0.050	< 0.050	< 0.050	< 0.050	< 0.020
< 0.0080	< 0.012		< 0.010	< 0.0080
< 0.02	< 0.021		< 0.02	< 0.013
< 0.00990	< 0.0100	< 0.0120 J	< 0.0100	< 0.00650
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	0.000999 J
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.00400	< 0.00420	< 0.00470 J	< 0.00400	< 0.00260
< 0.00396	< 0.00419	< 0.00469	< 0.00398	< 0.00259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.025	< 0.025	< 0.025	< 0.025	< 0.010

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.025	< 0.025	< 0.025	< 0.025	< 0.010
< 0.0020	< 0.0030		< 0.0025	< 0.0020
< 0.02	< 0.021		< 0.02	< 0.013
< 0.00400	< 0.00420	< 0.00470 J	< 0.00400	< 0.00260
< 0.00396	< 0.00419	< 0.00469	< 0.00398 J	< 0.00259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.02	< 0.021		< 0.02	< 0.013
< 0.00400	< 0.00420	< 0.00470 J	< 0.00400	< 0.00260
< 0.00792	< 0.00838	< 0.00938	< 0.00796 J	< 0.00518
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0020	< 0.0021		< 0.0020	< 0.0013
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.00792	< 0.00838	< 0.00938	< 0.00796	< 0.00518
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396 J	< 0.000419	< 0.000469	< 0.000398	< 0.000259 J
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0020	< 0.0030		< 0.0025	< 0.0020
< 0.099	< 0.1		< 0.1	< 0.065
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.00990	< 0.0105	< 0.0117	< 0.00995	< 0.00648
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0020	< 0.0030		< 0.0025	< 0.0020
< 0.02	< 0.021		< 0.02	< 0.013
< 0.00400	< 0.00420	< 0.00470 J	< 0.00400	< 0.00260
< 0.00396	< 0.00419	< 0.00469	< 0.00398	< 0.00259
< 0.0079	< 0.0084		< 0.0080	< 0.0052
< 0.00396	< 0.00419	< 0.00469	< 0.00398	< 0.00259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.050	< 0.050	< 0.050	< 0.050	< 0.020
< 0.050	< 0.050	< 0.050	< 0.050	< 0.020
< 0.010	< 0.015		< 0.012	< 0.010
< 0.0099	< 0.01		< 0.01	< 0.0065
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.198	< 0.21	< 0.234	< 0.199	< 0.13
< 0.050	< 0.050	< 0.050	< 0.050	< 0.020
< 0.050	< 0.050	< 0.050	< 0.050	< 0.020
< 0.0040	< 0.0060		< 0.0050	< 0.0040
< 0.0040	< 0.0060		< 0.0050	< 0.0040
< 0.099	< 0.1		< 0.1	< 0.065

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.00990	< 0.0100	< 0.0120 J	< 0.0100	< 0.00650
< 0.00990	< 0.0105	< 0.0117	< 0.00995	< 0.00648
< 0.0396	< 0.0419	< 0.0469	< 0.0398	< 0.0259
< 0.00792	< 0.00838	< 0.00938	< 0.00796	< 0.00518
< 0.0200	< 0.0210	< 0.0230	< 0.0200	< 0.0130
< 0.00400	< 0.00420	< 0.00470 J	0.0326	< 0.00260
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0200	< 0.0210	< 0.0230	< 0.0200	< 0.0130
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0020	< 0.0021		< 0.0020	< 0.0013
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.00396	< 0.00419	< 0.00469	< 0.00398	< 0.00259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396 J	< 0.000419	< 0.000469 J	< 0.000398	< 0.000259 J
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.0020	< 0.0021		< 0.0020	< 0.0013
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0099	< 0.01		< 0.01	< 0.0065
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.0396	< 0.0419	< 0.0469	< 0.0398	< 0.0259
< 0.050	< 0.050	< 0.050	< 0.050	< 0.020
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.00990	< 0.0100	< 0.0120	< 0.0100	< 0.00650
< 0.198	< 0.21	< 0.234	< 0.199	< 0.13
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0099	< 0.01		< 0.01	< 0.0065
< 0.0400	< 0.0420	< 0.0470	< 0.0400	< 0.0260
< 0.0396	< 0.0419	< 0.0469	< 0.0398	< 0.0259
< 0.0099	< 0.01		< 0.01	< 0.0065
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.00198	< 0.00210	< 0.00234	< 0.00199	< 0.00130
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396 J	< 0.000419 J	< 0.000469 J	< 0.000398 J	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396 J	< 0.000419	< 0.000469	< 0.000398	< 0.000259 J
< 0.02	< 0.021		< 0.02	< 0.013
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.0200	< 0.0210	< 0.0230	< 0.0200	< 0.0130
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.00990	< 0.0100	< 0.0120	< 0.0100	< 0.00650
< 0.00990	< 0.0105	< 0.0117	< 0.00995	< 0.00648
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.00200	< 0.00210	< 0.00230 J	< 0.00200	< 0.00130
< 0.00198	< 0.00210	< 0.00234	< 0.00199	< 0.00130
< 0.02	< 0.021		< 0.02	< 0.013
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.0396	< 0.0419	< 0.0469	< 0.0398	< 0.0259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00198	< 0.00210	< 0.00234	< 0.00199	< 0.00130
< 0.099	< 0.1		< 0.1	< 0.065
< 0.00200	< 0.00210	< 0.00230 J	< 0.00200	< 0.00130
< 0.00396	< 0.00419	< 0.00469	< 0.00398	< 0.00259
< 0.050	< 0.050	< 0.050	< 0.050	< 0.020
< 0.050	< 0.050	< 0.050	< 0.050	< 0.020
< 0.0080	< 0.012		< 0.010	< 0.0080
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0396	< 0.0419	< 0.0469	< 0.0398	< 0.0259
< 0.025	< 0.025	< 0.025	< 0.025	< 0.010
< 0.025	< 0.025	< 0.025	< 0.025	< 0.010
< 0.0040	< 0.0060		< 0.0050	< 0.0040
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.0396	< 0.0419	< 0.0469	< 0.0398	< 0.0259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042 J5J3		< 0.00040 J3	< 0.00026
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.00396	< 0.00419	< 0.00469	< 0.00398	< 0.00259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.00198	< 0.00210	< 0.00234	< 0.00199	< 0.00130
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00079	< 0.00084		< 0.00080	< 0.00052
< 0.000400 J	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0040	< 0.0042		< 0.0040	< 0.0026
< 0.00790	< 0.00840	< 0.00940	< 0.00800	< 0.00520
< 0.00198	< 0.00210	< 0.00234	< 0.00199	< 0.00130
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.0079	< 0.0084		< 0.0080	< 0.0052
< 0.0079	< 0.0084		< 0.0080	< 0.0052
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.00400	< 0.00420	< 0.00470	< 0.00400	< 0.00260
< 0.00396	< 0.00419	< 0.00469	< 0.000398	< 0.00259
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470 UJ	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.000470 UJ	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470 UJ	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020

Table B.4 - Groundwater Analytical Results 2013-2015 - VOCs

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane	Trichloroethene	Vinyl Chloride
mg/l	mg/l	mg/l	mg/l	mg/l
0.1	0.0047	---	0.005	0.001
USEPA MCL	USEPA TW	USEPA TW	USEPA MCL	WQCC HH
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026 J
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00042		< 0.00040	< 0.00026
< 0.000400	< 0.000420	< 0.00047	< 0.000400	< 0.000260
< 0.000396	< 0.000419	< 0.000469	< 0.000398	< 0.000259
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.000400	< 0.000420	< 0.000470 UJ	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0020
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.00040	< 0.00060		< 0.00050	< 0.00040
< 0.000400	< 0.000420	< 0.000470	< 0.000400	< 0.000260

Table B.5 - Groundwater Analytical Results 2013-2015 - SVOCs
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Analyte: CGWSL: CGWSL Source:				1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)pyrene 0.0002 USEPA MCL	Naphthalene 0.03 NMED GW HH
Area	Location	Date	Dup				
North RO Field	MW-117	2/3/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
North RO Field	MW-117	5/15/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
North RO Field	MW-117	9/4/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
North RO Field	MW-117	11/20/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
North RO Field	MW-118	2/5/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
North RO Field	MW-118	5/15/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
North RO Field	MW-118	9/4/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
North RO Field	MW-118	11/20/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
North RO Field	MW-119	2/5/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
North RO Field	MW-119	5/15/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
North RO Field	MW-119	9/4/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
North RO Field	MW-119	11/20/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
South RO Field	MW-114	2/3/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
South RO Field	MW-114	5/15/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
South RO Field	MW-114	9/5/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
South RO Field	MW-114	11/21/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
South RO Field	MW-115	2/3/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
South RO Field	MW-115	5/15/2013	FD	< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
South RO Field	MW-115	5/15/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
South RO Field	MW-115	9/4/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
South RO Field	MW-115	11/21/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
South RO Field	MW-116	2/3/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
South RO Field	MW-116	5/16/2013		< 0.000050 U	< 0.000050 U	< 0.000050 U	< 0.000050 U
South RO Field	MW-116	9/4/2013	FD	< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
South RO Field	MW-116	9/4/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
South RO Field	MW-116	11/20/2013	FD	< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U
South RO Field	MW-116	11/20/2013		< 0.000030 U	< 0.000034 U	< 0.000030 U	< 0.000050 U

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
Crossgradient	KWB-13	Apr-13			< 0.0200	457	141	0.701	1.31	176	1820	3910	14.1
Crossgradient	KWB-13	Apr-14			< 0.00500 H	418	158	0.58	0.724	143	1820	3750	14.6
Crossgradient	KWB-13	Apr-15			< 0.00180	474	788	0.704	6.65	148	1970	3060	15.3
Crossgradient	MW-17	Apr-14				395	174	1.19	2.31	72.2	1200	2340	2.19
Crossgradient	NP-5	Apr-13				465	413	2.58	< 0.400	253	3090	5980	2.33
Crossgradient	NP-5	Apr-15				448	993	2.13	0.484 J	209	3030	6060 J	1.38
Crossgradient	RA-3156	Apr-13				516	245	< 0.500	3.03	162	1560	3050	6.62
Crossgradient	RA-3156	Nov-13				537	238	0.208	3.06	169	1450	3390	9.09
Crossgradient	RA-3156	Apr-14			< 0.500	278	0.299	2.67			1800	3280	7.89
Crossgradient	MW-136	Oct-15			< 0.00180	706	265	1.56	3.2	144	2740	4020	22.1
EP	MW-1R	Apr-13	FD			592	1610	0.869	4.66	904	1920	5400	< 1.00
EP	MW-1R	Apr-13				633	1650	0.877	4.56	816	1980	5460	< 1.00
EP	MW-1R	Apr-14				540	1560	0.567	4.27	1010	1900	5740	< 0.150
EP	MW-1R	Apr-15				760 J	2000	0.82	4.5 J	1100 J	2400	5000	< 0.02
EP	MW-2A	Mar-13				528	1410	5.18	4.68	785	1920	4970	2.87
EP	MW-2A	Nov-13				710	3780	3.4	8.18	3230	4030	13500	< 0.500
EP	MW-2A	Apr-14				794	5440	2.19	6.58	3440	4310	16200	< 0.150
EP	MW-2A	Nov-14					4900	2.3	5.8		3900	13000	1.3
EP	MW-2A	Apr-15				940	6700	1	7.7 J	4800	4800	14000	0.04 J
EP	MW-2A	Oct-15				677	3870	2.14	5.85	2590	3670	10500	0.0390 J
EP	MW-3	Mar-13				510	1030	2.59	6.23	721	2030	4610	< 1.00
EP	MW-3	Nov-13				696	2490	2.48	9.04	1390	2510	8000	9.72
EP	MW-3	Apr-14				827	2300	1.39	6.57	1300	1930	7400	9.07
EP	MW-3	Nov-14				760	2000	1.7	6.8	1200	2600	7200	4.8
EP	MW-3	Nov-14	FD			780	2600	2.2	7	1200	2700	7100	5.2
EP	MW-3	Apr-15	FD			927	3270	1.6	6.8	1790	3000	17800	20.2
EP	MW-3	Apr-15				839	33.2	2.1	6.16	1850	25	12200	24.5
EP	MW-3	Oct-15	FD			636	1920	1.84	7.11	1210	2730	6480	0.0580 J
EP	MW-3	Oct-15				613	1950	1.99	7.17	1220	2810	6140	0.182
EP	MW-4A	Apr-13				423	1360	2.3	6.44	962	1680	6420	< 1.00
EP	MW-4A	Nov-13				605	1380	1.66	5.71	1030	2170	5790	< 0.500
EP	MW-4A	Apr-14				571		1.47	4.24	990		5600	0.199 J
EP	MW-4A	Nov-14				690	1400	1.6	5.1	1000	2500	5700	0.96
EP	MW-4A	Apr-15				660	1560	1.29	4.12 J	1080	2850	7470	< 0.0200
EP	MW-4A	Oct-15				394	1380	1.92	5.23	1010	2110	4290	0.0530 J
EP	MW-4B	Apr-13				371	928	0.87	3.64	556	1330	3660	< 1.00
EP	MW-4B	Apr-15				370	1100	0.96	2.3	700	1300	3400 J	< 0.02
EP	MW-5A	Apr-13				519	3470	3.76	9.05	3150	6080	14400	< 1.00
EP	MW-5A	Nov-13				561	4290	3.22	7.08	4320	5540	18000	< 0.500
EP	MW-5A	Apr-14				562	4710	3.03	6.58	4230	8160	18100	< 0.150
EP	MW-5A	Nov-14				580	3300	1.9	6.4	4200	8100	16000	< 0.02
EP	MW-5A	Apr-15				519	4100	1.53	6.15 J	4220	9370	17000	< 0.0200
EP	MW-5A	Oct-15				513	4760	1.78	7.27	4500	8480	17800	0.0450 J
EP	MW-5B	Apr-13				473	1840	2.2	10.8	1600	2950	7500	2.93
EP	MW-5B	Apr-15				482	1590	1.41	9.01	1580	3510	5980	< 0.0200
EP	MW-5C	Apr-13				420	639	1.2	4.21	446	1580	3620	< 1.00
EP	MW-5C	Apr-15				427	585	0.91	3.97 J	485	2020	3290	< 0.0200
EP	MW-6A	Mar-13				301	980	2.05	1.36	735	1610	3950	< 1.00

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
EP	MW-6A	Apr-14				762	1620	1.31	2.44	998	1980	5600	0.245 J
EP	MW-6A	Apr-15				810	2000	1.8	2.1 J	1100	2200	6500	0.88
EP	MW-6B	Mar-13	FD			478	1420	0.814	4.87	753	1690	4510	< 1.00
EP	MW-6B	Mar-13				530	1370	0.533	4.31	710	1640	4480	< 1.00
EP	MW-6B	Apr-15				570	1700	0.67 J	5.1	870	2300	4800	< 0.02
EP	MW-7A	Apr-13				351	2060	1.54	4.11	1420	2570	6760	< 1.00
EP	MW-7A	Nov-13				464	2930	1.25	5.71	2190	2190	8280	< 0.500
EP	MW-7A	Apr-14				469	2670	1.19	4.46	1750	3290	7760	< 0.150
EP	MW-7A	Nov-14	FD			770	1800	1.2	5.2	2500	2100	11000	< 0.02
EP	MW-7A	Nov-14				760	3600	0.69	5.2	2600	4100	11000	< 0.02 J6
EP	MW-7A	Apr-15	FD			593	3100	0.996	4.21	2060	3190	9300	0.0262 J
EP	MW-7A	Apr-15				609	3080	0.693	4.18	2060	3620	9840	< 0.0200
EP	MW-7A	Oct-15	FD			404	2230	1.12	3.95	1690	3150	7180	< 0.0197
EP	MW-7A	Oct-15				403	2470	1.08	3.96	1590	4020	7100	< 0.0197
EP	MW-7B	Apr-13				545	1030	3.09	6.66	540	1800	4280	< 1.00
EP	MW-7B	Apr-15				556	1060	0.795	6.27	672	2200	4640	< 0.0200
EP	MW-10	Apr-13				502	1450	0.713	3.86	940	2070	5360	< 1.00
EP	MW-10	Nov-13				644	1560	0.743	4.46	1260	1940	5690	< 0.500
EP	MW-10	Apr-14				545	1660	0.551	4.06	1060	2290	5540	< 0.150
EP	MW-10	Nov-14				750	1700	0.88 J6	4.3	1200 V	2800	5900	0.23
EP	MW-10	Apr-15				466	1380	0.919	3.54 J	941	2110	5030	< 0.0200
EP	MW-10	Oct-15				518	1580	0.783	3.68	1080	2620	5340	0.28 J
EP	MW-11A	Mar-13				1060	9220	0.821	22.9	4510	3110	20000	< 1.00
EP	MW-11A	Apr-14				1250	12400	0.647	22.9	5140	2410	25400	0.488 J
EP	MW-11A	Nov-14				2600	17000	< 0.0099	21	8300	3000	30000	15
EP	MW-11A	Apr-15				1600	12000	0.064 J	19 J	6100	2900	24900 J	1.5
EP	MW-11B	Mar-13				855	6560	< 0.500	35.2	3340	3030	15100	< 1.00
EP	MW-11B	Apr-15				1100	6000	0.56	36	4000	3900	13000	< 0.02
EP	MW-12	Apr-14				728	2460	0.685	5.57	1280	2490	7960	4.1
EP	MW-13	Apr-14				682	1780	0.354	5.56	914	2180	6520	0.463 J
EP	MW-15	Mar-13				771	2640	2.13	6.02	1240	2180	8120	13.3
EP	MW-15	Apr-14				849	2960	2.33	5.68	1420	1770	19900	40.2
EP	MW-15	Apr-15				560	2200	2.1	5	1300	2000	5500	16
EP	MW-18A	Apr-13		< 0.0200		672	6800	3.4	41.5	4080	5810	18300	< 1.00
EP	MW-18A	Nov-13	FD	< 0.0200		690	11600	4.26	64.5	7210	7460	33300	4.4
EP	MW-18A	Nov-13		< 0.0200		678	14600	4.42	64.4	7080	8700	34100	3.41
EP	MW-18A	Apr-14		< 0.00500		723	10200	3.63	61.4	6620	6760	27700	2.61
EP	MW-18A	Nov-14		< 0.0018		850	12000	< 0.0099	54	7500	10000	32000	< 0.02
EP	MW-18A	Apr-15		< 0.00180		718	11600	6.14	56.7	7290	9490	32600	2.18
EP	MW-18A	Oct-15		< 0.00180		711	9930	5.43	51.8	6250	10600	27400	0.146
EP	MW-18B	Apr-13				592	803	1.1	6.32	474	1870	4060	< 1.00
EP	MW-18B	Apr-15				581	763	0.931	5.91	460	1840	4410	0.0280 J
EP	MW-22A	Apr-13				564	1920	< 0.500	4.17	1150	2310	6380	< 0.100
EP	MW-22A	Nov-13				667			4.68	1870			
EP	MW-22A	Apr-14				514	2290	0.766	4.02	1290	2540	6640	< 0.150
EP	MW-22A	Nov-14	FD			720	1700	0.77	3.9 J	1700	2200	6600	< 0.02
EP	MW-22A	Nov-14				610	2000	0.58	3.9	1400	2600	6600	< 0.02
EP	MW-22A	Apr-15	FD			490	2000	0.68	3.2 J	1200	2600	6600	< 0.02

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
EP	MW-22A	Apr-15				549	2150	0.758	3.79 J	1450	2500	7270	< 0.0200
EP	MW-22A	Oct-15	FD			527	1970	0.61	3.65	1640	2650	6090	0.441 J
EP	MW-22A	Oct-15				529	1980	0.621	3.64	1480	2660	6330	0.358 J
EP	MW-22B	Apr-13				530	1470	0.619	4.48	932	2240	5460	< 1.00
EP	MW-22B	Apr-15				477	1400	0.823	4.02 J	1150	2170	5590	< 0.0200
EP	MW-70	Apr-13				666	1110	0.704	5.1	634	2200	5360	< 1.00
EP	MW-70	Nov-13				660			6.61	746			
EP	MW-70	Apr-14				697	1310	0.56	5.38	729	2950	5080	0.210 J
EP	MW-70	Nov-14				700			5.5	730			
EP	MW-70	Apr-15				695	1240	0.74	4.9	774	2230	5700	< 0.0200 J
EP	MW-70	Oct-15				756			5.51	782			
EP	MW-72	Mar-13				745	3580	7.02	8.14	2070	2760	9740	< 1.00
EP	MW-72	Nov-13				753	3540	6.26	9.43	2340	2200	9890	< 0.500
EP	MW-72	Apr-14				795	4350	6.27	9.87	2440	3020	10300	3.1
EP	MW-72	Apr-15				896	5240	3.91	13.3	3030	3800	12900	6.37
EP	MW-73	Mar-13				585	2160	2.65	2.64	2250	3770	8980	< 1.00
EP	MW-73	Oct-13				571	2110	2.19	2.73	2430	3140	9720	< 0.500
EP	MW-73	Apr-14				590	2260	2.09	2.54	2160	3510	9120	< 0.150
EP	MW-73	Apr-15				659	2480	1.94	3.12 J	2200	4560	9360	0.757
EP	MW-74	Mar-13				660	2130	10.3	34.2	1960	3660	8460	< 1.00
EP	MW-74	Oct-13				597	1760	8.51	52.8	2290	3680	9590	109
EP	MW-74	Apr-14				656	1970	8.66	45.6	2250	4050	8940	67
EP	MW-74	Nov-14				670	1600	6.4	45	2300	4400	8700	420
EP	MW-74	Apr-15				552	1170	6.02	39.4	2230	4450	9360	176
EP	MW-74	Oct-15				558	1810	6.19	39.2	2330	4140	8720	12.3
EP	MW-75	Mar-13				360	1600	9.9	21.1	1540	2120	6030	< 1.00
EP	MW-75	Oct-13				353	1500	8.52	18.9	1600	1950	6000	< 0.500
EP	MW-75	Apr-14				379	1610	8.37	21.4	1550	1930	6180	< 0.150
EP	MW-75	Nov-14				410	1400	6.9	20	1500	2400	5700	< 0.02
EP	MW-75	Apr-15				372	11.8	8.2	20.3	1490	14.2	4020	< 0.2
EP	MW-75	Oct-15				352	1550	7.8	19.3	1560	2510	5280	0.0590 J
EP	MW-76	Mar-13				429	1350	4.48	27.8	1060	1980	5230	< 1.00
EP	MW-76	Oct-13				499	1300	4.38	29.9	1030	1960	5540	< 0.500
EP	MW-76	Apr-14				470	1200	3.16	30	980	1730	4980	< 0.150
EP	MW-76	Nov-14				610	1300	3	31	1100	2800	6000	< 0.02
EP	MW-76	Apr-15				558	18.1	3.15	29.7	1120	22	4650	< 0.2
EP	MW-76	Oct-15				445	1370	3.1	28	1070	2480	4840	0.0310 J
EP	MW-77	Mar-13		< 0.0200		481	1060	3.66	57.9	1330	3240	7230	< 1.00
EP	MW-77	Oct-13	FD	< 0.0200		519	852	5.22	59.3	1190	2790	7100	< 0.500
EP	MW-77	Oct-13		< 0.0200		541	846	5.59	59.2	1240	2840	7150	< 0.500
EP	MW-77	Apr-14				627	781	3.5	72.1	1540	3390	8060	2.85
EP	MW-77	Nov-14				630	500	2.7	84	1300	4100	8200	< 0.02
EP	MW-77	Apr-15				609	10.8	4.21	72.1	1410	37.7	5350	< 0.2
EP	MW-77	Oct-15	1.98			557	433	2.42	82.5	1490	4820	7510	0.211
EP	MW-78	Mar-13				286	655	19.7	22.7	660	2270	5260	2.51
EP	MW-78	Apr-14				542	215	10.9	25.2	524	2650	5760	< 0.150
EP	MW-78	Apr-15				576	63.2	0.0979 J	18.9	320	19.6	2560	4.24
EP	MW-79	Mar-13				546	1680	10.3	9.05	1200	2240	5880	< 1.00

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
EP	MW-79	Oct-13				597	1930	8.3	9.95	1220	2300	6060	1.47
EP	MW-79	Apr-14				599	1810	8.56	9.27	1510	2690	6920	12.5
EP	MW-79	Nov-14				650	1600	5.8	8.6	1100	2500	5600	2.9
EP	MW-79	Apr-15				649	1570	5.52	7.98	1150	2930	5660	1.9 J
EP	MW-79	Oct-15				517	1440	6.43	7.61	857	2440	5210	0.147
EP	MW-80	Mar-13				635	1310	3.82	4.02	911	2260	5130	< 1.00
EP	MW-80	Apr-14				645	1470	3.62	3.84	983	2070	6080	2.73
EP	MW-80	Apr-15				693	1600	3.15	3.08 J	1210	2700	5600	0.519
EP	MW-81	Mar-13	FD			563	1280	7.66	6.57	903	2120	5040	4.61
EP	MW-81	Mar-13				560	1260	7.57	6.47	915	2070	4950	12.2
EP	MW-81	Apr-14				111	1140	8.13	9.51	255	2350	6500	79.1
EP	MW-81	Apr-15				583	1110	6.2	9.4	1380	2800	6260	99.5
EP	MW-82	Mar-13				298	1520	19.2	10.3	1890	2600	6270	< 1.00
EP	MW-82	Apr-14	FD			286	1510	18	9.02	1810	2070	5460	< 0.150
EP	MW-82	Apr-14				279	2880	18.2	9.55	1800	3910	6260	< 0.150
EP	MW-82	Apr-15				284	1110	10.7	9.28	1700	2200	5770	< 0.0200
EP	MW-83	Mar-13				379	976	5.53	34	931	2620	5440	2.89
EP	MW-83	Oct-13				552	54.2	4.88	60	564	4310	7620	< 0.500
EP	MW-83	Apr-14				484	271	4.58	53.8	616	3920	7400	4.54
EP	MW-83	Nov-14				520	14	3.9	56	410	4200	6400	< 0.02
EP	MW-83	Apr-15				566	55.5	3.96	58.4	364	32.7	4810	< 0.2
EP	MW-83	Oct-15				388	202	7.32	34	271	3210	4530	0.0860 J
EP	MW-84	Mar-13				633	1970	6.48	6.59	1530	3920	8580	< 1.00
EP	MW-84	Oct-13				616			12.1	1680			
EP	MW-84	Apr-14				698	1620	6.07	8.8	1750	3660	10500	< 0.150
EP	MW-84	Nov-14				610	1300	5.2	14	1600	5800	11000	0.14
EP	MW-84	Apr-15				555	1460	4.41	7.41	1480	4620	4230	< 0.2
EP	MW-84	Oct-15				596	1070	8.23	17	1580	7300	12400	4.83
EP	MW-87	Apr-13				636	4310	2.25	23.8	2860	4690	12900	< 1.00
EP	MW-87	Nov-13				762			31.8	4470			
EP	MW-87	Apr-14				662	5340	1.5	28.6	3120	4760	13600	2.11
EP	MW-87	Nov-14				750			26	2700			
EP	MW-87	Apr-15				740	4880	1.19	27.3	3190	4390	13800	0.241
EP	MW-87	Oct-15				737			26.5	3250			
EP	MW-88	Apr-13				400	1490	1.35	3.39	992	2140	5160	< 0.100
EP	MW-88	Nov-13				670			3.36	1850			
EP	MW-88	Apr-14				377	2000	1.26	3.11	1330	2820	7340	< 0.150
EP	MW-88	Nov-14				570			3	1300			
EP	MW-88	Apr-15				519	3000	1.8	2.66 J	2250	4970	11000	< 0.0200
EP	MW-88	Oct-15				397			3.03	1270			
EP	MW-120	Oct-13				589	1920	4.08	4.64	1640	3220	8090	2.06
EP	MW-120	Apr-14				587	2180	3.56	3.99	1470	3430	8000	< 0.150
EP	MW-120	Nov-14				850	2800	2	5	1900	3600	8700	1.8
EP	MW-120	Apr-15				680	2500	2.5	3.9 J	1600	3100	7700	2.5
EP	MW-120	Oct-15				860 J	3640	2.38	3.6	1790 J	3100	9720	0.0350 J
EP	MW-121	Oct-13				751	1990	4.34	3.39	906	2050	6390	0.553
EP	MW-121	Apr-14				750	1880	3.85	3.15	922	2210	6040	2.41
EP	MW-121	Nov-14				720	1400	3.2	3.4	940	3100	6100	3.8 J6

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
EP	MW-121	Apr-15				640	1400	3.7	2.7	850	2700	6000	2.1
EP	MW-121	Oct-15				619	1220	4.24	3.38	942	3360	6290	2.96
EP	MW-122	Oct-13				384	1170	4.23	4.54	888	1510	4490	< 0.500
EP	MW-122	Apr-14				492	1370	3.53	5.14	1050	2190	5740	< 0.150
EP	MW-122	Nov-14				860	4200	2.1	5.9	3900	5700	16000	0.94
EP	MW-122	Apr-15				660	3000	3.4	5.5 J	2600	4400	11000	0.23
EP	MW-122	Oct-15				382	1580	3.29	4.06	1090	2560	5700	0.0380 J
EP	MW-123	Nov-13	FD			578	1030	1.14	4.18	1280	1880	5380	< 0.500
EP	MW-123	Nov-13				578	1590	1.07	4.35	1260	1860	5680	< 0.500
EP	MW-123	Apr-14				539	1680	1.21	4.25	1170	2050	5900	< 0.150
EP	MW-123	Nov-14				580	1400	1	3.9	1100	2300	5600	< 0.02
EP	MW-123	Apr-15				530	1600	1.2	3.8 J	1100	2200	5600	< 0.02
EP	MW-123	Oct-15	1.45			527	1710	1.11	3.71	1190	2360	5490	0.27 J
EP	MW-124	Nov-13				784	3450	1.39	9.37	1940	2820	10100	0.583
EP	MW-124	Apr-14				798	3380	0.968	6.94	1610	3800	10000	< 0.150
EP	MW-124	Nov-14				820	3000	0.66	7.1	1700	3800	9500	< 0.02
EP	MW-124	Apr-15				779	3240	0.922	6.8	1970	3610	11400	0.0265 J
EP	MW-124	Oct-15				780	3210	0.915	7.41	1840	4120	10100	0.0310 J
EP	OCD-1R	Nov-13				637			6.22	5010			
EP	OCD-1R	Apr-14				656	3940	3.4	4.52	3000	3410	11400	0.808 J
EP	OCD-1R	Nov-14				840	5800	1.1	4.1	4700	6300	11000	1.1
EP	OCD-1R	Apr-15				840	5300	2.5	4.9 J	4000	4800	15000	1.3
EP	OCD-2A	Mar-13				887	2820	0.798	7.04	1250	2360	7690	< 1.00
EP	OCD-2A	Nov-13				658			5.02	2030			
EP	OCD-2A	Apr-14				662	2490	0.77	4.78	1460	2060	7300	< 0.150
EP	OCD-2A	Nov-14				840			4.5	2700			
EP	OCD-2A	Apr-15				790	3000	0.97	5	1600	2700	8300	0.26
EP	OCD-2A	Oct-15				707			7.05	1490			
EP	OCD-3	Mar-13				512	953	1.13	12.5	523	1690	3950	< 1.00
EP	OCD-3	Nov-13				642			14.8	1410			
EP	OCD-3	Apr-14				514	990	0.768	13.4	680	2000	5160	< 0.150
EP	OCD-3	Nov-14				760			13 O1J5	1700 O1V			
EP	OCD-3	Apr-15				660	1600	1	13	1000	2200	6100	0.088 J
EP	OCD-3	Oct-15				760			14.1	904			
EP	OCD-4	Mar-13				872	4920	0.613	35.7	2520	3140	12500	< 1.00
EP	OCD-4	Nov-13				878			43.7	3010			
EP	OCD-4	Apr-14				818	5370	0.787	37.1	2520	2880	12900	< 0.150
EP	OCD-4	Nov-14				1100			36	3400			
EP	OCD-4	Apr-15				1000	5800	0.51	36	3600	4500	13000	< 0.02
EP	OCD-4	Oct-15				833			33.2	2560			
EP	OCD-5	Mar-13				866	4850	1	36.4	2620	3080	12400	< 1.00
EP	OCD-5	Nov-13				835			39.3	2940			
EP	OCD-5	Apr-14	FD			694	5250	0.67	35.1	2400	2970	11900	< 0.150
EP	OCD-5	Apr-14				744	4810	0.613	35.7	2580	2710	12400	< 0.150
EP	OCD-5	Nov-14				1000	5100	0.42	35	3500	3400	12000	< 0.02
EP	OCD-5	Apr-15				900	4500	0.69	40	2900	3100	11000	0.043 J
EP	OCD-5	Oct-15				836	4700	0.548	39.6	3130	3430	12000	0.0380 J
EP	OCD-6	Mar-13				603	4000	3.84	13.1	2900	3300	11200	< 1.00

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
EP	OCD-6	Nov-13				757			13.4	3130			
EP	OCD-6	Apr-14				806	4500	2.34	13.4	3120	2770	11900	0.232 J
EP	OCD-6	Nov-14				780	2900	2.5	11	1700	2600	7700	< 0.02
EP	OCD-6	Apr-15				779	4050	1.85	15.5	2470	3320	10300	0.211
EP	OCD-6	Oct-15				756	4510	2.09	15	3380	3400	10700	0.0280 J
EP	OCD-7AR	Mar-13				592	2190	4.9	7.49	2050	3670	9400	< 1.00
EP	OCD-7AR	Nov-13				623			7.48	2250			
EP	OCD-7AR	Apr-14	FD			651	2890	2.82	7.22	2220	4330	8700	< 0.150
EP	OCD-7AR	Apr-14				646	2290	2.74	6.92	2250	3450	8060	< 0.150
EP	OCD-7AR	Nov-14				700	2800	3.5	6.6	2500	3900	9100	0.15
EP	OCD-7AR	Apr-15				610	2100	2.9	5.5	2000	3600	8300	0.26
EP	OCD-7AR	Oct-15				635	2490	2.55	5.83	2870	4500	8960	0.025 J
EP	OCD-7B	Mar-13				552	867	1.33	12.2	650	2270	4670	< 1.00
EP	OCD-7B	Apr-15				641	910	0.852	11.9	685	2580	4520	< 0.0200
EP	OCD-8A	Apr-13	FD	< 0.0200		642	2630	3.78	8.76	2030	3910	5320	< 1.00
EP	OCD-8A	Apr-13		< 0.0200		674	2540	3.95	8.92	2050	3770	9760	< 1.00
EP	OCD-8A	Nov-13		< 0.0200		722			9.31	2050			
EP	OCD-8A	Apr-14	FD	< 0.00500		657	3030	1.92	8.73	2260	3330	9780	< 0.150
EP	OCD-8A	Apr-14		< 0.00500		671	3200	2.04	8.7	2170	3690	10300	< 0.150
EP	OCD-8A	Nov-14		< 0.0018		1200	6300	1.7	13	3500	3500	13000	< 0.02
EP	OCD-8A	Apr-15		< 0.00180		1190	6270	0.826	10.8	3330	3620	13700	< 0.0200
EP	OCD-8A	Oct-15		< 0.00180		946	5140	1.36	11	2870	3690	11900	< 0.0197
EP	OCD-8B	Apr-13				716	2180	0.98	8.75	1330	2880	7400	< 1.00
EP	OCD-8B	Apr-15				680	2020	0.934	9.51	1520	2910	7110	0.0233 J
Field E of Refinery	KWB-1A	Apr-13		< 0.0200		537	422	1.11	1.16	176	2430	4670	< 1.00
Field E of Refinery	KWB-1A	Oct-13		< 0.0200		583	489	1.28	1.11	206	2420	4850	< 0.500
Field E of Refinery	KWB-1A	Apr-14		< 0.00500		583	459	0.916	1.28	206	2440	5180	< 0.150
Field E of Refinery	KWB-1A	Nov-14		< 0.0018		590	470	1	0.99 J	220	2800	4500	1.4
Field E of Refinery	KWB-1A	Apr-15		< 0.00180		596	555	1.17	1.01	202	3400	5320	4.22
Field E of Refinery	KWB-1A	Oct-15		< 0.00180		549	539	1.15	1.09	230	2800	4580	0.666 J
Field E of Refinery	KWB-1C	Apr-13				474	380	1.03	5.68	161	2150	4420	1.75
Field E of Refinery	KWB-1C	Apr-15				619	1160	25.3	1.23	210	2920	5340	0.18
Field E of Refinery	KWB-7	Apr-13		< 0.0200		357	615	0.923	1.09	297	1080	3340	< 1.00
Field E of Refinery	KWB-7	Nov-14		< 0.0018		360	440	0.78	0.26 J	280	1000	2800	< 0.02
Field E of Refinery	KWB-7	Apr-15		< 0.00180 J		279	301	0.754	0.209 J	238	886	2100	< 0.2
Field E of Refinery	KWB-7	Oct-15		< 0.00180		320	358	0.813	0.152 J	252	1120	2570	0.202 J
Field E of Refinery	KWB-10R	Nov-14				170	190	0.59	0.51 J	160	< 0.077	1200	< 0.02
Field E of Refinery	KWB-10R	Apr-15				132	800	19.7	0.44 J	141	1.03 J	1190	< 0.2
Field E of Refinery	KWB-10R	Oct-15				132	192	1.31	0.491 J	136	0.117 J	1090	0.0420 J
Field E of Refinery	KWB-11A	Apr-13		< 0.0200		398	1070	0.818	0.643	323	1030	4020	17
Field E of Refinery	KWB-11A	Nov-14	FD	< 0.0018		740	1500	0.59	0.81 J	430	1400	4500	46
Field E of Refinery	KWB-11A	Nov-14		< 0.0018		720	1200	0.59	0.79 J	400	1100	4700	47
Field E of Refinery	KWB-11A	Apr-15		< 0.00180 UJ		568	1270	0.58	0.305 J	370	2280	4020	15.7
Field E of Refinery	KWB-11A	Oct-15		< 0.00180		674	1620	0.66	0.748 J	406	1570	5320	49.3
Field E of Refinery	KWB-11B	Apr-13		< 0.0200		420	294	< 0.500	3.26	93.8	1480	2820	2.7
Field E of Refinery	KWB-11B	Apr-14		< 0.00500 H		396	291	0.291	2.15	77.4	1250	2480	2.25
Field E of Refinery	KWB-11B	Nov-14		< 0.0018		450	240	0.4	2.2	86	1400	2100	2.4
Field E of Refinery	KWB-11B	Apr-15		< 0.00180 J		469	275	0.318	2.12	93	1760	2630	2.8

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
Field E of Refinery	KWB-11B	Oct-15		< 0.00180	410	247	0.467	2.07	80.6	1340	2350	2.17	
Field E of Refinery	KWB-12A	Oct-13		< 0.0200	495	125	0.5	0.732	135	2170	3470	4.58	
Field E of Refinery	KWB-12A	Nov-14		< 0.0018	590	140	0.47	0.89 J	140	2300	3400	4.3	
Field E of Refinery	KWB-12A	Nov-14	FD	< 0.0018	610	130	0.45	0.67 J	150	2400	3700	4.3	
Field E of Refinery	KWB-12A	Apr-15	FD	< 0.00180	493	133	0.605	0.63 J	123	2110	3630	4.34	
Field E of Refinery	KWB-12A	Apr-15		< 0.00180	528	668	18.5	0.723 J	128	2380	3660	4.31	
Field E of Refinery	KWB-12A	Oct-15		< 0.00180	560	138	0.618	0.963 J	155	2730	3490	4.55	
Field E of Refinery	KWB-12B	Apr-13	FD	< 0.0200	544	114	< 0.500	0.737	157	2450	4240	7.46	
Field E of Refinery	KWB-12B	Apr-13		< 0.0200	531	111	< 0.500	0.831	160	2460	4150	7.42	
Field E of Refinery	KWB-12B	Oct-13		< 0.0200	521	106	0.357	0.732	143	2040	3640	4.74	
Field E of Refinery	KWB-12B	Apr-14	FD	< 0.00500	569	129	0.291	0.795	143	2070	3620	5.55	
Field E of Refinery	KWB-12B	Apr-14		< 0.00500	526	122	0.296	0.756	138	2130	3800	5.56	
Field E of Refinery	KWB-12B	Nov-14		< 0.0018	650	120	0.31	0.72 J	170	2400	3600	4.5	
Field E of Refinery	KWB-12B	Apr-15		< 0.00180	549	689	20.2	0.523 J	130	2520	3730	3.8	
Field E of Refinery	KWB-12B	Oct-15	FD	< 0.00180	538	123	0.43	0.569 J	127	2450	3270	4.82	
Field E of Refinery	KWB-12B	Oct-15		< 0.00180	537	124	0.398	0.537 J	131	2580	3320	4.77	
Field E of Refinery	KWB-P4	Apr-13											
Field E of Refinery	KWB-P4	Apr-15											
Field E of Refinery	MW-57	Apr-13			273	476	2.08	0.825	343	1140	3210	< 1.00	
Field E of Refinery	MW-57	Oct-13			235	172	0.706	0.349	116	387	1490	< 0.500	
Field E of Refinery	MW-57	Apr-14			674	152	0.395	11.2	118	464	1700	< 0.150	
Field E of Refinery	MW-57	Nov-14			570	540	1.8	1.2	440	1900	4100	2.7	
Field E of Refinery	MW-57	Apr-15			641	1430	22.3	1.57	460	2890	6010	16.2	
Field E of Refinery	MW-57	Oct-15			487	541	1.69	1.16	342	2050	3330	12.9	
Field E of Refinery	MW-58	Oct-13		< 0.0200	223	342	1.15	0.755	131	199	1770	< 0.500	
Field E of Refinery	MW-58	Nov-14		< 0.0018	340	140	1.4	0.55 J	66	160	1300	< 0.02	
Field E of Refinery	MW-58	Apr-15		< 0.00180	200	149	1.15	0.317 J	58.8	9.63	1150	< 0.2	
Field E of Refinery	MW-58	Oct-15		< 0.00180	234	239	1.35	0.459 J	71.5	4.8 J	1240	< 0.197	
Field E of Refinery	MW-111	Apr-13			214	548	1.19	0.652	184	198	2150	< 1.00	
Field E of Refinery	MW-111	Oct-13			219	559	1.34	0.31	218	188	1840	< 0.500	
Field E of Refinery	MW-111	Apr-14			214	525	1.01	0.456	198	235	2020	0.153 J	
Field E of Refinery	MW-111	Nov-14			260	510	2	0.49 J	220	250	1700	< 0.02	
Field E of Refinery	MW-111	Apr-15			270	427	1.01	0.521 J	172	294	1600	< 0.0200	
Field E of Refinery	MW-111	Oct-15			227	408	1.51	0.415 J	222	473 J	1530	0.0220 J	
Field E of Refinery	MW-112	Nov-14			190	230	1	0.31 J	190	5.4	1200	< 0.02	
Field E of Refinery	MW-113	Apr-13			249	219	< 0.500	0.849	151	756	2260	< 1.00	
Field E of Refinery	MW-113	Oct-13			270	220	0.566	0.723	151	746	2110	< 0.500	
Field E of Refinery	MW-113	Apr-14			300	205	0.282	1.45	152	693	2440	< 0.150	
Field E of Refinery	MW-113	Nov-14	FD		320	190	0.49	0.4 J	170	860	2000	< 0.02	
Field E of Refinery	MW-113	Nov-14			300	180	0.56	0.4 J	160	800	1900	< 0.02	
Field E of Refinery	MW-113	Apr-15	FD		259	191	0.607	0.622 J	132	877	1980	< 0.0200	
Field E of Refinery	MW-113	Apr-15			285	194	0.606	0.526 J	151	957	2030	< 0.0200	
Field E of Refinery	MW-113	Oct-15	FD		288	197	0.493	0.529 J	156	998	2140	< 0.197	
Field E of Refinery	MW-113	Oct-15			287	197	0.503	0.528 J	153	1000	2020	0.243 J	
Field E of Refinery	MW-125	Apr-14			636	361	1.17	1.56	297	2700	4960	0.399 J	
Field E of Refinery	MW-125	Nov-14			610	340	1	1.3	260	2900	4100	0.2	
Field E of Refinery	MW-125	Apr-15			523 J	329	1.17	1.21	217	2680	4700	0.295	
Field E of Refinery	MW-125	Oct-15			524	316	1.22	1.31	224	2750	4200	0.348 J	

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
Field E of Refinery	MW-126A	Apr-14				472	331	0.599	3.09	197	2080	4510	< 0.150
Field E of Refinery	MW-126A	Nov-14				360	190	0.98	0.66 J	180	1400	2400	< 0.02
Field E of Refinery	MW-126A	Apr-15				355	898	0.833	0.602 J	189	1530	2900	< 0.2
Field E of Refinery	MW-126A	Oct-15				281	200	1.03	0.511 J	178	1300	2500	< 0.197
Field E of Refinery	MW-126B	Apr-14				354	341	0.795	0.531	196	1600	4030	< 0.150
Field E of Refinery	MW-126B	Nov-14				600	290	0.68	2.4	210	2400	3500	0.39
Field E of Refinery	MW-126B	Apr-15				548	319	0.658	2.1 J	196	2550	3660	0.684 J
Field E of Refinery	MW-126B	Oct-15				531	295	0.85	2.18	201	2330	4060	0.438 J
Field E of Refinery	MW-127	Apr-14				185	275	0.95	0.612	145	392	2040	< 0.150
Field E of Refinery	MW-127	Nov-14				290	240	0.93	0.99 J	160	620	1800	< 0.02
Field E of Refinery	MW-127	Apr-15				238	209	0.902	0.579 J	147	511	1750	< 0.2
Field E of Refinery	MW-127	Oct-15				234	243	1.06	0.256 J	143	642	1900	< 0.197
Field E of Refinery	MW-128	Apr-14				207	283	0.991	0.515	106	172	1380	< 0.150
Field E of Refinery	MW-128	Nov-14				250	320	1.1	1.2	110	250	1400	< 0.02
Field E of Refinery	MW-128	Apr-15				214 J	307	1.22	0.414 J	104	290	1490	< 0.0200
Field E of Refinery	MW-128	Oct-15				202	282	1.22	0.341 J	105	280	1560	< 0.197
Field E of Refinery	MW-129	Nov-14				270	320	0.98	0.8 J	210	52	1300	< 0.02
Field E of Refinery	MW-129	Apr-15				192	302	0.9	0.53 J	195	69.4	1330	< 0.2
Field E of Refinery	MW-129	Oct-15				169	313	1.08	0.315 J	194	57.8	1280	< 0.197
Field E of Refinery	MW-130	Apr-14				321	316	0.533	1.34	284	1020	3080	0.975 J
Field E of Refinery	MW-130	Nov-14				310	250	0.73	1	310	1200	2600	0.35
Field E of Refinery	MW-130	Apr-15				81.8 J	259	0.952	6.71	125	1080	3710	0.471
Field E of Refinery	MW-130	Oct-15				261	237	0.829	0.688 J	293	1200	2380	0.495 J
Field E of Refinery	MW-131	Apr-14				147	337	0.637	0.573	150	12.2	1360	< 0.150
Field E of Refinery	MW-131	Nov-14				200	290	0.47	0.64 J	160	8.3	1200	< 0.02
Field E of Refinery	MW-131	Apr-15				168	271	0.683	0.328 J	157	9.57	1980	< 0.0200
Field E of Refinery	MW-131	Oct-15				197	295	0.787	0.622 J	161	16.1	1180	0.0380 J
Field E of Refinery	MW-133	Nov-14				200	170	1.1	0.46 J	140 V	140	1300	< 0.02
Field E of Refinery	MW-133	Apr-15				163	174	1.19	0.323 J	122	116	1190	< 0.2
Field E of Refinery	MW-134	Apr-14				569	459	0.952	1.94	273	2650	5540	2.64
Field E of Refinery	MW-134	Nov-14				660	580	0.91	1.8	310	3100	4600	7.4
Field E of Refinery	MW-134	Apr-15	FD			710	752	1.35	1.46	307	3380	6400	8.04
Field E of Refinery	MW-134	Apr-15				840	767	1.24	2.21 J	454	3470	5520	8.15
Field E of Refinery	MW-134	Oct-15	FD			529	516	1.32	1.58	301	3030	4690	2.98
Field E of Refinery	MW-134	Oct-15				532	521	1.31	1.6	302	2980	5040	3.33
Field E of Refinery	MW-135	Apr-14				618	1030	0.739	1.58	507	2090	5700	47.3
Field E of Refinery	MW-135	Nov-14				840	1300	0.78	2.8	570	2500	5600	69
Field E of Refinery	MW-135	Apr-15				848	1100	0.764	1.42 J	552	2170	5040	67.8
Field E of Refinery	MW-135	Oct-15				677	1380	1.17	1.32	544	2460	5800	76.9
Field E of Refinery	RA-4196	Apr-13	FD			430	268	< 0.500	2.62	91.7	1340	2420	< 1.00
Field E of Refinery	RA-4196	Apr-13				436	204	< 0.500	2.61	84.4	1220	2290	< 1.00
Field E of Refinery	RA-4196	Nov-13	FD			408	146	0.31	2.67	90.7	1160	2580	< 0.500
Field E of Refinery	RA-4196	Nov-13				416	144	0.318	2.56	91.3	1080	2340	< 0.500
Field E of Refinery	RA-4196	Apr-14				813	137	0.375	2.15		1100	2600	< 0.150
Field E of Refinery	RA-4196	Apr-15				391	144	0.41	2.07	93.4	1400	2170	< 0.0200
Field E of Refinery	RA-4196	Oct-15				417	145	0.324	2.26	104	1470	2290	0.269 J
Field E of Refinery	RA-4798	Apr-13				440	155	< 0.500	2.68	117	1460	2580	1.39
Field E of Refinery	RA-4798	Nov-13				348	99.1	0.309	2.65	80.4	871	2030	2.35

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
Field E of Refinery	RA-4798	Apr-14	FD			489	146	0.37	2.49		1150	2280	< 0.150
Field E of Refinery	RA-4798	Apr-14				412	137	0.389	2.07		1270	2340	2.73
Field E of Refinery	RA-4798	Nov-14				400	150	0.33	2.2	110	1400	2200	1.5
Field E of Refinery	RA-4798	Apr-15				465	183	0.415	2.21	128	1740	2740	0.936
Field E of Refinery	RA-4798	Oct-15				396	142	0.335	2.12	105	1520	2230	1.53
Field E of Refinery	RW-18	Apr-13				474	411	2.4	1.13	226	3230	5820	3.24
Field E of Refinery	RW-18	Apr-14				545	347	1.78	0.984	218	2860	5600	3.33
Field E of Refinery	RW-18	Apr-15				482	232	2.46	1.3	230	3670	4440	6.55
Field E of Refinery	RW-20	Apr-15				228	256	0.53	< 0.18	228	125	1430	< 0.2
Field E of Refinery	RW-22	Apr-15				184	402	0.86	0.319 J	274	78.4	1680	< 0.2
N Refinery	MW-23	Apr-13				91.7	498	1.15	0.97	489	2.81	2270	< 1.00
N Refinery	MW-23	Oct-13				96	521	1.87	1.22	437	9.12	2130	< 0.500
N Refinery	MW-23	Apr-14				88.3	509	1.33	1.12	483	24	1940	< 0.150
N Refinery	MW-23	Nov-14				260	920	2.4	1.3	740	740	4000	< 0.02
N Refinery	MW-23	Apr-15				222	864	1.63	0.562 J	577	509	3030	0.0259 J
N Refinery	MW-23	Oct-15				114	480	1.72	1.92	463	29.9	2190	2.7 J
N Refinery	MW-29	Apr-13				520	414	3.32	9.81	342	2540	5100	< 1.00
N Refinery	MW-29	Oct-13				324	310	1.24	2.02	310	1310	3310	< 0.500
N Refinery	MW-29	Apr-14				539	319	2.66	9.84	293	2450	4860	< 0.150
N Refinery	MW-29	Nov-14				570	320	1.8	4.6	300	2500	4100	< 0.02 J6
N Refinery	MW-29	Apr-15				427	283	0.795	1.52	207	2100	1000	< 0.0200
N Refinery	MW-29	Oct-15				397	115	0.722	0.823 J	167	2080	3330	< 0.197
N Refinery	MW-39	Oct-13				89.9	385	2.31	0.353	1080	893	3600	< 0.500
N Refinery	MW-39	Apr-15				509	190	3.09	3.62 J	179	1380	2640	< 0.2
N Refinery	MW-39	Oct-15				432	152	2.48	3.14	133	1660	2960	0.3 J
N Refinery	MW-40	Apr-13				374	153	1.34	1.34	109	1220	2720	< 1.00
N Refinery	MW-40	Apr-14				386	179	1.28	1.56	124	1340	2700	< 0.150
N Refinery	MW-40	Apr-15				571	298	1.66	1.89 J	134	1380	2640	< 0.2
N Refinery	MW-41	Apr-13				236	322	0.865	0.463	431	1260	3160	< 1.00
N Refinery	MW-41	Oct-13				232	373	1.05	0.404	425	1170	3140	< 0.500
N Refinery	MW-41	Apr-14				242	275	0.747	0.444	387	1450	3760	< 0.150
N Refinery	MW-41	Apr-15				313	290	1.07	0.648 J	501	1410	2710	< 0.0200
N Refinery	MW-42	Apr-13				274	752	0.569	0.583	500	911	3780	< 1.00
N Refinery	MW-42	Oct-13				233	697	0.987	0.535	455	862	3610	< 0.500
N Refinery	MW-42	Apr-14				248	914	0.545	0.56	508	954	3440	< 0.150
N Refinery	MW-42	Apr-15				309	562	0.962	0.579 J	611	1110	3440	< 0.0200
N Refinery	MW-43	Apr-13		< 0.0200		205	638	0.614	0.477	465	304	2400	< 1.00
N Refinery	MW-43	Oct-13	FD	< 0.0200		126	731	1.19	0.556	520	73.2	2530	< 0.500
N Refinery	MW-43	Oct-13		0.0321		115	720	0.883	0.538	557	73.7	2420	< 0.500
N Refinery	MW-43	Apr-14		< 0.0500		205	886	0.25	0.596	531	218	2650	< 0.150
N Refinery	MW-43	Nov-14		0.0025 J		200	750	0.78	0.61 J	590 V	98	2300	< 0.02
N Refinery	MW-43	Apr-15		< 0.00180		186	726	0.709	< 0.18	511	122	2290	< 0.0200
N Refinery	MW-43	Oct-15		0.081		241	984	2.19	1.26	658	677	4160	< 0.197 J
N Refinery	MW-59	Apr-13				478	197	1.06	0.657	152	1790	3320	< 1.00
N Refinery	MW-59	Apr-14				514	176	0.475	0.643	156	1890	3420	< 0.150
N Refinery	MW-59	Apr-15				489 J	178	1.23	0.489 J	139	1760	3300	0.0241 J
N Refinery	MW-60	Apr-13	FD	< 0.0200		365	271	0.935	0.65	220	1660	3790	< 1.00
N Refinery	MW-60	Apr-13		< 0.0200		403	275	0.942	0.532	216	1630	3480	< 1.00

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
N Refinery	MW-60	Oct-13	FD	< 0.0200 J	415	235	1.08	0.495	219	1660	3570	< 0.500	
N Refinery	MW-60	Oct-13		< 0.0200	399	237	1.04	0.511	205	1670	3590	< 0.500	
N Refinery	MW-60	Apr-14		0.140 J	374	238	2.5	0.586	181	1860	3440	< 0.150	
N Refinery	MW-60	Nov-14		< 0.0018	530	200	1.1	0.63 J	240	1900	3400	< 0.02	
N Refinery	MW-60	Apr-15	FD	< 0.00180	403 J	241	1.07	0.541 J	186	1910	3710	< 0.2	
N Refinery	MW-60	Apr-15		< 0.00180	411 J	198	0.968	0.558 J	190	1810	3530	< 0.2	
N Refinery	MW-60	Oct-15	FD	< 0.00180	416	210	0.996	0.569 J	191 J	1990	3660	0.276 J	
N Refinery	MW-60	Oct-15		< 0.00180	395	209	0.964	0.565 J	185	1910	3560	< 0.197	
N Refinery	MW-61	Apr-13			345	514	1.08	0.678	404	1120	3130	< 1.00	
N Refinery	MW-61	Oct-13			314	632	1.33	0.741	375	1060	3280	< 0.500	
N Refinery	MW-61	Apr-14			365	520	0.813	0.629	420	1070	3400	< 0.150	
N Refinery	MW-61	Nov-14			470	250	1.5	1.1	290	930	2700	< 0.02	
N Refinery	MW-61	Apr-15			457	287	1.3	1.1 J	349	1280	2910	< 0.2	
N Refinery	MW-61	Oct-15			375	179	2.61	2.28	286	2080	2520	< 0.197	
N Refinery	MW-62	Apr-13			282	257	0.895	1.75	136	407	1870	< 1.00	
N Refinery	MW-62	Oct-13			293	256	1.91	1.16	207	735	2450	< 0.500	
N Refinery	MW-62	Apr-14			285	240	1.11	1.12	224	440	3430	< 0.150	
N Refinery	MW-62	Nov-14			160	470	1.6	1.8	480	5.5	2100	< 0.02	
N Refinery	MW-62	Apr-15			126	485	1.52	1.72	478	21	1930	< 0.0200	
N Refinery	MW-62	Oct-15			425	273	1.93	1.31	399	1900	4050	< 0.197	
N Refinery	MW-67	Oct-13		< 0.0200	167	211	0.793	0.461	149	180	1580	< 0.500	
N Refinery	MW-67	Nov-14		< 0.0018	240	170	0.61	0.59 J	160	380	1600	< 0.02	
N Refinery	MW-67	Apr-15		< 0.00180	194	208	0.698	0.531 J	160	329	1510	< 0.2	
N Refinery	MW-67	Oct-15		< 0.00180	192	225	0.589	0.533 J	177	311	1450	< 0.197	
N Refinery	MW-90	Apr-13			285	157	1.26	1	186	1140	2700	< 1.00	
N Refinery	MW-90	Oct-13			343	163	1.8	1.52	301	1650	3560	0.525	
N Refinery	MW-90	Apr-14			270	162	0.892	0.928	185	1070	2600	< 0.150	
N Refinery	MW-90	Nov-14			520	160	9.3	3.5	500	6200	8800	4.8	
N Refinery	MW-90	Apr-15			302	104	2.73	1.63	286	2230	3800	< 0.2	
N Refinery	MW-90	Oct-15			481	22.7	6.77	2.07	135	4530	5130	3.44	
N Refinery	MW-91	Oct-13	FD		319	35.7	1.24	0.687	39.6	536	2090	< 0.500	
N Refinery	MW-91	Oct-13			331	37.6	1.37	0.727	40.4	529	1860	< 0.500	
N Refinery	MW-91	Apr-14			251	29	0.933	0.435	38.8	240	1540	< 0.150	
N Refinery	MW-91	Nov-14			460	36	1.3	1	37	830	2000	< 0.02	
N Refinery	MW-91	Apr-15			355	32.8	1.4	0.523 J	30.8	643	1980	< 0.2	
N Refinery	MW-91	Oct-15			361	35.7	1.34	0.686 J	35	854	2280	< 1.97	
N Refinery	MW-93	Apr-13			312	85	1.24	3.21	99.7	554	1810	< 1.00	
N Refinery	MW-93	Oct-13			368	114	1.66	3.52	87.6	795	2140	< 0.500	
N Refinery	MW-93	Apr-14			414	173	1.16	3.11	103	645	2130	< 0.150	
N Refinery	MW-93	Nov-14			640	200	3.1	4.7	130	1700	3100	< 0.02	
N Refinery	MW-93	Apr-15			579	221	2.23	2.58 J	126	2050	3080	< 0.0200	
N Refinery	MW-93	Oct-15			516	251	2.37	5.23	133	3070	3080	2.92 J	
N Refinery	MW-94	Nov-14			190	230	0.59	0.58 J	370	240	2600	< 0.02	
N Refinery	MW-94	Oct-15			109	245	1.01	0.224 J	355	75.8	2530	< 0.197	
N Refinery	MW-95	Apr-13			177	207	0.569	0.541	136	169	1450	< 1.00	
N Refinery	MW-95	Apr-14			177	226	0.56	0.494	143	160	1440	< 0.150	
N Refinery	MW-95	Apr-15			178	275	1.02	0.655 J	177	359	1680	< 0.2	
N Refinery	MW-96	Apr-13			161	165	0.693	1.04	232	332	1720	< 1.00	

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
N Refinery	MW-96	Oct-13			236	195	1.15	1.26	259	509	2160	< 0.500	
N Refinery	MW-96	Apr-14			154	146	0.606	0.891	234	286	1750	< 0.150	
N Refinery	MW-96	Nov-14			390	220	1.8	1.9	310	1200	3000	< 0.02	
N Refinery	MW-96	Apr-15			208	884	1.19	1.03	224	1730	1680	0.211 J	
N Refinery	MW-96	Oct-15			230	190	1.23	1.21	244	583	1990	0.202 J	
N Refinery	MW-98	Apr-13			464	103	1.37	< 0.200	90.3	1750	3590	< 1.00	
N Refinery	MW-98	Oct-13			480	79.9	2.05	< 0.200	93.9	1650	3220	< 0.500	
N Refinery	MW-98	Apr-14	FD		475	38	1.02	0.229	92.8	1810	3390	< 0.150	
N Refinery	MW-98	Apr-14			471	36.3	0.962	0.218	92.1	1800	3360	< 0.150	
N Refinery	MW-98	Nov-14			460	32	1.9	0.2 J	81	1600	2800	< 0.02	
N Refinery	MW-98	Apr-15			497	41.6	1.29	< 0.18	91.5	2010	3040	< 0.0200	
N Refinery	MW-98	Oct-15			427	55.7	1.53	0.134 J	74.9	1790	3340	< 0.197	
N Refinery	MW-137	Oct-15		0.144	142	390	1.97	1.9	1320	1090	3880	< 0.197	
N Refinery	MW-138	Oct-15		< 0.00180	139	490	1.08	1.75	410	154	1920	< 0.197	
N Refinery	RW-1	Apr-15			358	224	1.33	3.57	210	1330	2410	< 0.2	
N Refinery	RW-2	Apr-15			726	365	1.75	5.55 J	383	3510	5310	< 0.2	
N Refinery	RW-7	Apr-15			252	237	1.15	1.88 J	192	19	1500	< 0.2	
N Refinery	RW-8	Apr-15			227	115	0.801	0.353 J	209	473	1600	< 0.2	
N Refinery	RW-9	Apr-13			262	292	1.46	1.95	314	775	2670	< 1.00	
N Refinery	RW-9	Apr-14			291	318	1.1	1.57	306	1260	3380	< 0.150	
N Refinery	RW-9	Apr-15			315	313	1.68	1.69	318	1310	3150	< 0.2	
N Refinery	RW-10	Apr-13			343	190	2.38	6.78	236	1730	3190	< 1.00	
N Refinery	RW-10	Apr-14			324	231	2.17	5.84	227	2060	3420	< 0.150	
N Refinery	RW-10	Apr-15			494	187	3.34	9.04	172	2010	3290	0.639	
N Refinery	RW-16	Apr-13			580	451	4.54	1.14	522	2700	5350	< 1.00	
N Refinery	RW-16	Apr-14	FD		556	429	3.89	0.767	455	2550	5150	< 0.150	
N Refinery	RW-16	Apr-14			531	452	3.74	0.799	430	2680	5130	< 0.150	
N Refinery	RW-16	Apr-15			641	534	4.61	1.69 J	594	3220	5430	2.87	
N Refinery	RW-17	Apr-13			598	505	2.19	4.13	383	2960	5470	< 1.00	
N Refinery	RW-17	Apr-14			585	524	1.84	3.88	405	3280	6100	< 0.150	
N Refinery	RW-17	Apr-15			683	494	2.58	9.1	631	4180	5840	31.6	
N RO Reject Field	MW-117*	Feb-13		< 0.02		67.5	3.32			1690	3150	3.22 H	
N RO Reject Field	MW-117*	Nov-13		< 0.02		92.4	3.95			2190	4150	< 1.00	
N RO Reject Field	MW-117	Apr-14			646	97	3.03	9.29	167	2140	4980	< 0.150	
N RO Reject Field	MW-117	Nov-14	FD		640	96	2.4	5	98	2200	3300	0.64	
N RO Reject Field	MW-117	Nov-14			610	96	3	5.2	110	2000	3000	0.65	
N RO Reject Field	MW-117	Apr-15			613	87.2	3.79	5.97	102	2220	3670	0.372 J	
N RO Reject Field	MW-117	Oct-15			478	55.4	3.4	6.44	109	1690	2980	0.779 J	
N RO Reject Field	MW-118*	Feb-13		< 0.02		296	5.16			2450	4610	2.39	
N RO Reject Field	MW-118*	Nov-13		< 0.02		90.1	6.78			2470	4640	< 1.00	
N RO Reject Field	MW-118	Apr-14			732	92.3	5.58	6.15	134	2190	5200	< 0.150	
N RO Reject Field	MW-118	Nov-14			670	160	4.9 J6	6.2	140	2700	3700	0.98	
N RO Reject Field	MW-118	Apr-15			601	767	4.14	5.3	153	2510	3960	1.7	
N RO Reject Field	MW-118	Oct-15			583	86.6	5.13	5.64	162	2690	3960	0.622 J	
N RO Reject Field	MW-119*	Feb-13		< 0.02		116	2.36			2090	3670	2.35	
N RO Reject Field	MW-119*	Nov-13		< 0.02		185	3.17			2210	4130	< 1.00	
N RO Reject Field	MW-119	Apr-14	FD		655	216	2.62	1.08	136	1830	4140	0.174 J	
N RO Reject Field	MW-119	Apr-14			680	235	2.61	1.13	140	1980	4200	0.176 J	

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
N RO Reject Field	MW-119	Nov-14				670	49	2.6	1.8	77	2300	3200	< 0.02
N RO Reject Field	MW-119	Apr-15				590	48.2	1.99	0.232 J	54.5	2040	3030	0.292 J
N RO Reject Field	MW-119	Oct-15				624	152	2.65	0.985 J	86.3	2290	3500	0.437 J
NCL	MW-18	Apr-13	FD	< 0.0200	480	141	1.11	2.85	97.1	97.1	1640	3440	32.5
NCL	MW-18	Apr-13		< 0.0200	494	143	1.13	2.86	97.3	97.3	1590	3110	32.5
NCL	MW-18	Oct-13		< 0.0200	456	114	2.26	13.3	64.7	64.7	1450	3260	21.3
NCL	MW-18	Apr-14		< 0.00500	507	159	0.954	2.89	83.2	83.2	1830	3700	35.2
NCL	MW-18	Apr-15		< 0.00180	407	185	1.45	7.18	66.7	66.7	1600	3110 J	36.1
NCL	MW-45	Apr-13		< 0.0200	460	380	1.4	4.31	317	317	1980	4330	< 1.00
NCL	MW-45	Oct-13		< 0.0200	535	344	1.77	4.3	391	391	1840	4060	< 0.500
NCL	MW-45	Apr-14		< 0.00500	524	441	0.877	4.12	348	348	2130	4640	< 0.150
NCL	MW-45	Nov-14		< 0.0018	590	470	1.5	4.6	360	360	2000	4300	< 0.02
NCL	MW-45	Apr-15		< 0.00180	605	1260	1.44	4.47	346	346	2580	5300 J	< 0.0200
NCL	MW-45	Oct-15		< 0.00180	610	454	1.37	5.02	376	376	2910	4660	0.0290 J
NCL	MW-53	Apr-13			284	107	1.2	1.06	103	103	1080	2570	< 1.00
NCL	MW-53	Apr-14			290	95.4	0.827	0.935	87.6	87.6	1190	2060	< 0.150
NCL	MW-53	Apr-15			348	1010	0.922	1.16	104	104	1290	2810 J	34.5
NCL	MW-54A	Apr-13			347	212	0.947	0.302	66.5	66.5	621	1950	< 1.00
NCL	MW-54A	Oct-13			355	224	1.27	0.393	74.9	74.9	657	2060	1.66
NCL	MW-54A	Apr-14			354	211	0.6	0.275	69.2	69.2	666	1800	< 0.150
NCL	MW-54A	Nov-14			370	190	1.2	0.38 J	74	74	680	1900	0.85 J
NCL	MW-54A	Apr-15			318	192	1.1	0.276 J	62.9	62.9	712	2080 J	0.45
NCL	MW-54A	Oct-15			356	210	1.1	0.33 J	70.2	70.2	796	2140	4.32 J
NCL	MW-54B	Apr-13			345	176	< 0.500	1.16	48.8	48.8	747	2050	< 1.00
NCL	MW-54B	Apr-15			307	166	0.613	0.767 J	48	48	752	1890 J	0.0276 J
NCL	MW-55	Apr-13		< 0.0200	596	337	1.37	1.08	235	235	2460	4620	7.65
NCL	MW-55	Oct-13		< 0.0200	519	327	1.6	0.835	214	214	2280	4450	5.25
NCL	MW-55	Apr-14	FD	< 0.00500	573	445	1.1	0.882	231	231	2600	5360	9.43
NCL	MW-55	Apr-14		< 0.00500	560	357	1.14	0.926	233	233	2670	5100	9.61
NCL	MW-55	Nov-14		< 0.0018	610	190	2.4	0.9 J	130	130	2300	3600	6.5 J
NCL	MW-55	Apr-15		< 0.00180	627	266	1.88	0.692 J	167	167	2940	4910 J	15.5
NCL	MW-55	Oct-15		< 0.00180	411	216	1.85	0.756 J	166	166	2300	4000	5.57
NCL	MW-56	Apr-13			546	328	0.961	2.14	223	223	1890	3780	< 1.00
NCL	MW-56	Oct-13			483	226	1.16	1.91	203	203	1860	3750	1.04
NCL	MW-56	Apr-14			559	365	0.639	1.88	237	237	1840	4320	2.32
NCL	MW-56	Nov-14			540	340	1.2	2.1	250	250	1900	3500	< 0.02
NCL	MW-56	Apr-15			485	927	1.11	1.9	272	272	1900	3640 J	1.28
NCL	MW-56	Oct-15			514	399	1.12	2.05	342	342	2490	4080	4.34
NCL	MW-108	Apr-13			220	110	2.24	0.601	58.7	58.7	552	1870	< 1.00
NCL	MW-108	Oct-13			368	154	3.01	3.64	168	168	1280	3300	< 0.500
NCL	MW-108	Apr-14			316	101	1.58	1.07	89.3	89.3	1130	2820	< 0.150
NCL	MW-108	Nov-14			350	82	3.3	3.2	110	110	1200	2500	0.19
NCL	MW-108	Apr-15			289	78.8	2.52	1.5	76.8	76.8	962	2540 J	< 0.39
NCL	MW-108	Oct-15			298	77.5	2.3	1.31	88.9	88.9	1090	2530	< 0.197
NCL	NCL-31	Apr-13			246	91.3	1	0.261	112	112	997	2320	< 1.00
NCL	NCL-31	Oct-13			245	94.2	1.26	0.382	121	121	849	2110	< 0.500
NCL	NCL-31	Apr-14			267	69.6	0.776	0.321	112	112	1030	2300	< 0.150
NCL		Nov-14			380	160	1.4	0.43 J	150	150	1300	2600	0.11

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
NCL	NCL-31	Apr-15				266	89.5	1.25	0.22 J	100	1240	2670 J	< 0.2
NCL	NCL-31	Oct-15				392	129	1.2	0.418 J	125	2100	3220	< 0.197
NCL	NCL-32	Nov-14				440	460	4.6	19	82	800	2000	0.57
NCL	NCL-32	Apr-15				446	177	1.92	4.15 J	92.6	1050	2250	< 0.2
NCL	NCL-32	Oct-15				540	329	1.57	4.98	97	1430	2280	< 0.197
NCL	NCL-33	Apr-13				343	321	1.85	3.65	111	401	2010	< 1.00
NCL	NCL-33	Oct-13				303	340	2.52	3.7	98.2	448	1820	< 0.500
NCL	NCL-33	Apr-14				358	302	1.83	3.78	105	557	1920	< 0.150
NCL	NCL-33	Nov-14				450	340	2.6	5	110	720	2100	< 0.02
NCL	NCL-33	Apr-15				431	281	2.58	4.31 J	111	800	2280	< 0.0200
NCL	NCL-33	Oct-15				419	404	2.49	4.86	119	847	2140	< 0.197
NCL	NCL-34A	Oct-13				207	246	1.42	1.16	108	125	1450	< 0.500
NCL	NCL-34A	Nov-14				250	180	1.4	0.86 J	120	100	1200	< 0.02
NCL	NCL-34A	Apr-15				275	249	1.36	0.57 J	117	110	1490	< 0.2
NCL	NCL-34A	Oct-15				202	182	1.43	0.877 J	103	104 J	1250	0.284 J
NCL	NCL-44	Apr-13				283	153	1.42	2.43	65.1	471	1780	< 1.00
NCL	NCL-44	Oct-13				250	146	1.7	2.09	64.6	399	1810	< 0.500
NCL	NCL-44	Apr-14				265	149	1.2	2.06	66	454	1720	< 0.150
NCL	NCL-44	Nov-14				290	850	1.8	2.2	70	450	1500	< 0.02
NCL	NCL-44	Apr-15				269	161	1.78	1.64 J	73.4	468	2510	< 0.2
NCL	NCL-44	Oct-15				276	182	1.69	2.07	71.4	633	1890	< 0.197
NCL	NCL-49	Apr-13				397	117	0.553	0.737	126	1580	3190	5.16
NCL	NCL-49	Oct-13				450	106	0.622	0.699	130	1490	2940	4.65
NCL	NCL-49	Apr-14				430	104	0.501	0.625	116	1680	3000	5.21
NCL	NCL-49	Nov-14				440	98	0.65	0.72 J	120	1500	2600	4.3
NCL	NCL-49	Nov-14	FD			430	98	0.59	0.75 J	120	1700	2600	4.5
NCL	NCL-49	Apr-15	FD			380	395	0.531	0.589 J	105	1650	2850 J	4.5
NCL	NCL-49	Apr-15				377	109	1.64	0.552 J	105	1400	2840 J	4.53
NCL	NCL-49	Oct-15	FD			407	113	0.598	0.613 J	114	1800	2860	5.79
NCL	NCL-49	Oct-15				406	112	0.593	0.607 J	115	1770	2830	5.79
S Refinery	KWB-2R	Nov-14				330	160	1.2	1.2	200	1200	2600	< 0.02
S Refinery	KWB-2R	Apr-15				233	259	0.879	0.777 J	267	884	2450	< 0.2
S Refinery	KWB-2R	Oct-15				168	228	1.21	1.23	296	418	1970	< 0.197
S Refinery	KWB-5	Oct-13				221	620	0.948	1.19	212	4.15	1690	< 0.500
S Refinery	KWB-5	Nov-14				270	570	0.77	1	210	12	1500	0.2
S Refinery	KWB-5	Apr-15				237	518	0.687	1.79	198	8.08	1500	< 0.0200
S Refinery	KWB-5	Oct-15				228	575	0.853	1.6	203	6.81	1540	0.243 J
S Refinery	KWB-6	Nov-14				260	240	0.8	0.2 J	150	330	1600	0.37
S Refinery	KWB-6	Apr-15				212	305	0.366	0.22 J	193	16.2	1460	0.148
S Refinery	KWB-6	Oct-15				229	265	0.935	0.181 J	144	264	1410	0.273 J
S Refinery	MW-28	Apr-13		< 0.0200		190	168	0.975	0.497	108	378	1680	< 1.00
S Refinery	MW-28	Oct-13		< 0.0200		195	179	1.47	0.382	107	174	1420	< 0.500
S Refinery	MW-28	Apr-14		0.0500 J		164	157	1.02	0.382	102	166	1560	< 0.150
S Refinery	MW-28	Nov-14		< 0.0018		590	140	0.73	0.92 J	96	1300	3000	< 0.02
S Refinery	MW-28	Apr-15		0.0132		439 J	160	1.59	0.685 J	89.5	1080	2760	< 0.39
S Refinery	MW-28	Oct-15		0.0108		379	159	1.67	0.632 J	92.7	1060	3000	0.211 J
S Refinery	MW-48	Nov-14				190	410	0.29	2.4	380	260	1800	< 0.02
S Refinery	MW-48	Apr-15				258 J	161	0.498	0.68 J	276	47.6	725	< 0.2

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
S Refinery	MW-48	Oct-15				186	391	0.644	2.61	355	235	1940	< 0.197
S Refinery	MW-50	Apr-13				382	181	0.785	2.17	130	1230	2880	< 1.00
S Refinery	MW-50	Oct-13				399	191	0.958	2.58	131	1310	2720	< 0.500
S Refinery	MW-50	Apr-14				410	172	0.671	2.36	130	1300	2910	< 0.150
S Refinery	MW-50	Nov-14				450	200	0.83	2.3	160	1600	2800	< 0.02
S Refinery	MW-50	Apr-15				450	259	0.966	2.18	178	1680	2860	< 0.2
S Refinery	MW-50	Oct-15				403	226	0.899	2.29	175	1740	2770	2.61 J
S Refinery	MW-52	Apr-13		< 0.0200	171	287	1.83	0.321	289	289	944	2570	2.06
S Refinery	MW-52	Oct-13	FD	< 0.0200	172	149	1.87	0.381	279	279	856	2250	2.09
S Refinery	MW-52	Oct-13		< 0.0200	181	149	1.84	0.379	288	288	856	2270	2.17
S Refinery	MW-52	Apr-14	FD	< 0.00500 H	161	225	1.51	0.186 J	218	218	821	2510	1.38
S Refinery	MW-52	Apr-14		< 0.00500 H	156	223	1.57	0.204	257	257	820	2580	1.19
S Refinery	MW-52	Nov-14		< 0.0018	190	150	1.5	0.3 J	320	320	990	2000	1.9
S Refinery	MW-52	Apr-15		< 0.00180	168 J	158	1.88	0.252 J	267	267	832	3740	1.54
S Refinery	MW-52	Oct-15		< 0.00180	196	144	1.76	0.242 J	285	285	998	2040	3.13
S Refinery	MW-65	Nov-14			260	470	0.72	0.89 J	290	290	310	1900	< 0.02
S Refinery	MW-65	Apr-15			147	382	1.21	0.783 J	257	257	< 0.0770	1410	0.0613 J
S Refinery	MW-66	Apr-13		< 0.0200	152	229	1.12	0.984	188	188	1.66	1160	< 1.00
S Refinery	MW-66	Oct-13	FD	< 0.0200	146	237	1.3	0.936	184	184	0.841	1140	< 0.500
S Refinery	MW-66	Oct-13		< 0.0200	141	237	1.25	0.935	177	177	0.99	1100	< 0.500
S Refinery	MW-66	Apr-14		< 0.00500 B	151	209	1.12	0.785	180	180	< 0.200 B	1170	< 0.150
S Refinery	MW-66	Nov-14		< 0.0018	140	150	1.2	1	160	160	0.51 J	990	< 0.02
S Refinery	MW-66	Apr-15		< 0.00180	120	141	1.53	0.858 J	134	134	0.596 J	948	0.0292 J
S Refinery	MW-66	Oct-15		0.00180 J	134	201	1.34	0.742 J	163	163	0.11 J	1090	< 0.197
S Refinery	MW-99	Nov-14			170	180	0.42	3.9	170	170	140	1100	< 0.02
S Refinery	MW-99	Apr-15			48.7	33.4	0.328	5.3	23.9	23.9	41.3	267	0.789
S Refinery	MW-99	Oct-15			176	249	0.706	0.955 J	215	215	127	1390	< 0.197
S Refinery	MW-101	Apr-13			175	242	1.24	0.565	145	145	191	1350	< 1.00
S Refinery	MW-101	Oct-13			201	238	0.985	0.5	158	158	171	1430	< 0.500
S Refinery	MW-101	Apr-14			209	217	0.779	0.504	153	153	161	1440	< 0.150
S Refinery	MW-101	Nov-14			280	230	1	0.81 J	150	150	340	1600	< 0.02
S Refinery	MW-101	Apr-15			188	201	0.708	0.485 J	141	141	188	1340	< 0.2
S Refinery	MW-101	Oct-15			188	236	0.993	0.483 J	138	138	206	1470	0.23 J
S Refinery	MW-102	Nov-14			290	220	0.61	0.8 J	430	430	590	2200	< 0.02
S Refinery	MW-102	Apr-15			94.4	175	0.825	0.419 J	357	357	1.75 J	1470	0.0642 J
S Refinery	MW-102	Oct-15			193	219	1.13	0.683 J	385	385	296	1750	< 0.197
S Refinery	MW-103	Apr-13			19.2	661	6.88	0.759	1120	1120	82.2	2800	< 1.00
S Refinery	MW-103	Apr-14			24.5	1040	7.45	0.831	1420	1420	< 10.0 B	3820	< 0.150
S Refinery	MW-103	Apr-15			192	7890	3.44	2.46 J	6710	6710	19.6	12500	< 0.0200
S Refinery	MW-104	Apr-13			264	104	1.64	6.85	89.8	89.8	863	1580	< 1.00
S Refinery	MW-104	Oct-13			247	124	2.22	8.35	108	108	798	1570	< 0.500
S Refinery	MW-104	Apr-14	FD		235	82.4	2.24	5.52	91.9	91.9	679	1440	< 0.150
S Refinery	MW-104	Apr-14			232	86	2.26	5.06	95.7	95.7	690	1390	< 0.150
S Refinery	MW-104	Nov-14	FD		230	54	1.8	6.3	67	67	800	1300	< 0.02
S Refinery	MW-104	Nov-14			230	54	2.1	6	69	69	710	1300	< 0.02
S Refinery	MW-104	Apr-15	FD		207	31	2.12	4.63	42.3	42.3	679	1130	0.185
S Refinery	MW-104	Apr-15			208	31.4	1.67	4.73	42.7	42.7	856	1070	< 0.0200
S Refinery	MW-104	Oct-15	FD		170	21.6	2.07	4.86	40.3	40.3	473	925	< 0.197

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
S Refinery	MW-104	Oct-15				169	21	2.01	4.92	38.6	510	912	< 0.197
S Refinery	MW-105	Nov-14				660	37	0.96	7	29	1300	2400	< 0.02
S Refinery	MW-105	Apr-15				111	25.3	0.7 J	4.26	17.2	263	530	< 0.2
S Refinery	MW-105	Oct-15				148	13.4	0.33	4.41	12	297	664	0.221 J
S Refinery	MW-106	Apr-13				330	151	0.901	1.08	129	1090	2550	< 1.00
S Refinery	MW-106	Oct-13				335	174	1.17	0.594	141	1010	2290	< 0.500
S Refinery	MW-106	Apr-14				400	160	1	1.9	195	1500	3350	< 0.150
S Refinery	MW-106	Apr-15				197	280	6.81	10.4	162	559	1400	22.3
S Refinery	MW-106	Oct-15				373	148	1.76	2.43	221	1790	3420	< 0.197
S Refinery	MW-107	Apr-13				140	280	1.34	0.695	70.2	< 0.500	1190	< 1.00
S Refinery	MW-107	Oct-13				130	298	1.55	0.795	68.6	0.57	1240	< 0.500
S Refinery	MW-107	Apr-14				144	261	1.2	0.562	75.2	< 0.200 B	1250	< 0.150
S Refinery	MW-107	Nov-14				230	300	1.7	0.73 J	83	160	1200	< 0.02
S Refinery	MW-107	Apr-15				160 J	291	1.54	0.583 J	73.1	27.1	1220	< 0.0200
S Refinery	MW-107	Oct-15				176	297	1.67	0.88 J	76.9	102	1390	< 0.197
S Refinery	MW-109	Apr-13				87.4	464	1.51	0.69	515	228	2060	< 1.00
S Refinery	MW-109	Oct-13				77.9	349	1.53	0.577	516	270	1930	< 0.500
S Refinery	MW-109	Apr-14				92.9	393	1.26	0.634	465	237	1980	< 0.150
S Refinery	MW-109	Nov-14				280	270	2.4	1.3	490	920	2500	< 0.02
S Refinery	MW-109	Apr-15				192 J	261	2.04	0.929 J	406	931	2910	< 0.39
S Refinery	MW-109	Oct-15				181	232	1.81	0.862 J	438	950	2170	< 0.197
S Refinery	MW-110	Apr-13				129	85.9	1.38	< 0.200	306	626	1750	< 1.00
S Refinery	MW-110	Oct-13				115	88.5	1.49	< 0.200	294	474	1490	< 0.500
S Refinery	MW-110	Apr-14				79	92.4	1.25	0.129 J	249	364	1260	< 0.150
S Refinery	MW-110	Nov-14				100	86	1.5	0.14 J	270	1100	1200	< 0.02
S Refinery	MW-110	Apr-15				107 J	93.8	1.64	0.244 J	244	283	1420	< 0.0200
S Refinery	MW-110	Oct-15				174	136	1.62	0.268 J	294	787	1680	< 0.197
S Refinery	RA-313	Apr-13				166	14.8	0.699	1.11	16.4	389	824	< 1.00
S Refinery	RA-313	Apr-14				171	17.2	1.01	0.935		450	868	< 0.150
S Refinery	RA-313	Apr-15				150	19.1	0.914	1.04	17.8	605	808	< 0.0200
S Refinery	RW-4	Apr-15				202	258	0.845	1.67	144	468	1710 J	< 0.0200
S Refinery	RW-5R	Apr-15				4.82	260	0.965	0.461 J	189	0.376 J	565	< 0.0200
S Refinery	RW-6	Apr-15				168	414	0.628	0.686 J	205	129	1650	0.0335 J
S RO Reject Field	MW-114	Feb-13		< 0.02			158	1.76			2200	3760	1.43 H
S RO Reject Field	MW-114*	Nov-13		< 0.02			422	1.37			3060	5390	< 1.00
S RO Reject Field	MW-114	Apr-14				611	167	2.07	2.84	152	1920	3620	< 0.150
S RO Reject Field	MW-114	Nov-14				620	200	2.2	2.7	130	2300	3400	0.36
S RO Reject Field	MW-114	Apr-15				570 J	80.3	1.95	2.29	114	2140	3640	0.0752 J
S RO Reject Field	MW-114	Oct-15				579	111	1.89	2.46	104	2250	2990	< 0.197
S RO Reject Field	MW-115*	Feb-13		< 0.02			422	1.1			2790	4960	0.962 H
S RO Reject Field	MW-115*	Nov-13		< 0.02			428	1.36			3090	5370	< 1.00
S RO Reject Field	MW-115	Apr-14				569	222	1.29	0.645	227	2470	4880	< 0.150
S RO Reject Field	MW-115	Nov-14				690	500	1.5	0.72 J	340 V	3000	5700	< 0.02
S RO Reject Field	MW-115	Apr-15				546 J	464	2.42	0.425 J	385	3510	6200	0.0333 J
S RO Reject Field	MW-115	Oct-15				532	326	2.8	0.578 J	320	3640	4640	< 0.197
S RO Reject Field	MW-116*	Feb-13		< 0.02			389	1.31			2250	3650	1.37 H
S RO Reject Field	MW-116*	Nov-13		< 0.02			331	1.61			2470	4570	0.457 J
S RO Reject Field	MW-116*	Nov-13	FD	< 0.02			331	1.51			2470	4210	0.487 J

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
S RO Reject Field	MW-116	Apr-14				607	221	1.43	1.39	241	2160	4520	2.86
S RO Reject Field	MW-116	Nov-14				580	240	1.7	1.6	230	2200	3700	0.74
S RO Reject Field	MW-116	Apr-15				534 J	131	2.28	3.57	92.1	1800	3300	0.0753 J
S RO Reject Field	MW-116	Oct-15				644	223	2.8	5.67	145	2280	3800	< 0.197
TEL	MW-49	Apr-13	FD	< 0.0200	173	365	1.04	1.69	316	439	2180	2180	< 1.00
TEL	MW-49	Apr-13		< 0.0200	177	376	1.05	1.76	322	450	2010	2010	< 1.00
TEL	MW-49	Oct-13		< 0.0200	175	390	1.54	2.17	311	416	1940	1940	< 0.500
TEL	MW-49	Apr-14		< 0.00500 B	189	366	0.896	1.6	338	472	2280	2280	< 0.150
TEL	MW-49	Nov-14		< 0.0018	280	380	1.6	3.3	320	500	2100	2100	< 0.02
TEL	MW-49	Apr-15		< 0.00180	197	423	1.18	2.04	309	665	2340	2340	< 0.2
TEL	MW-49	Oct-15	1.05	0.00280 J	192	381	1.45	2.48	326	621	2260	2260	< 0.197
TEL	TEL-1	Apr-13			493	169	2.05	1.72	362	1770	3630	3630	< 1.00
TEL	TEL-1	Oct-13			383	257	2.62	1.37	413	1430	3260	3260	< 0.500
TEL	TEL-1	Apr-14	FD		359	224	1.9	1.3	427	1370	3140	3140	< 0.150
TEL	TEL-1	Apr-14			383	228	2	1.35	460	1380	3080	3080	< 0.150
TEL	TEL-1	Nov-14			600	150	3.1	1.9	340	1900	3600	3600	< 0.02
TEL	TEL-1	Apr-15			209	269	2.26	0.962 J	434	1230	2480	2480	< 0.2
TEL	TEL-1	Oct-15			479	195	2.54	1.92	374	2060	3390	3390	< 0.197
TEL	TEL-2	Apr-13			222	224	0.902	2.04	343	696	2590	2590	< 1.00
TEL	TEL-2	Oct-13			202	242	1.07	2.03	350	623	2600	2600	< 0.500
TEL	TEL-2	Apr-14			158	312	1.22	1.42	378	554	2340	2340	< 0.150
TEL	TEL-2	Nov-14			250	300	1.4	1.3	390	580	2400	2400	< 0.02
TEL	TEL-2	Apr-15			164	949	0.914	0.945 J	372	498 J	2390	2390	< 0.2
TEL	TEL-2	Oct-15			188	371	1.18	1.1	404	680	2460	2460	< 0.197
TEL	TEL-3	Apr-13			616	49.1	2.54	6.29	61.6	1410	2950	2950	< 1.00
TEL	TEL-3	Oct-13			592	39.6	3.39	7.79	36	1370	2720	2720	< 0.500
TEL	TEL-3	Apr-14			573	127	3.06	7.6	143	1320	2900	2900	< 0.150
TEL	TEL-3	Nov-14			710	50	3.7	6.6	49	1600	2900	2900	< 0.02
TEL	TEL-3	Apr-15			485	829	2.52	6.12	184	1330	2750	2750	0.224 J
TEL	TEL-3	Oct-15			550	66.4	2.95	6.85	74.7	1520	2960	2960	< 0.197
TEL	TEL-4	Apr-13			278	504	0.872	0.479	316	860	3360	3360	< 1.00
TEL	TEL-4	Oct-13			397	545	1.29	0.64	549	2040	4940	4940	< 0.500
TEL	TEL-4	Apr-14			332	588	0.429	0.575	565	1480	4480	4480	< 0.150
TEL	TEL-4	Nov-14	FD		360	480	1.3	0.62 J	520	2100	4100	4100	< 0.02
TEL	TEL-4	Nov-14			380	440	1.9	0.62 J	530	1800	4200	4200	< 0.02
TEL	TEL-4	Apr-15	FD		289	535	0.69	0.411 J	281	1140	3300	3300	< 0.2
TEL	TEL-4	Apr-15			301	1190	0.678	0.455 J	294	947	3200	3200	< 0.2
TEL	TEL-4	Oct-15	FD		417	353	3.14	0.95 J	693	4040	6590	6590	< 0.197
TEL	TEL-4	Oct-15			412	347	2.55	0.934 J	657	4000	7150	7150	0.385 J
TMD	MW-8	Apr-13			469	424	1.99	2.12	408	2630	5220	5220	9.43
TMD	MW-8	Oct-13			454	399	2.31	1.91	410	2590	4960	4960	5.33
TMD	MW-8	Apr-14			486	383	1.78	2.05	388	2710	5060	5060	5.2
TMD	MW-8	Apr-15			390	321	1.51	1.59	328	2940	4210	4210	1.1
TMD	MW-16	Apr-13			503	346	2.04	9.42	363	2000	4710	4710	< 1.00
TMD	MW-16	Apr-14			531	422	2.79	8.99	388	2170	4020	4020	0.269 J
TMD	MW-16	Apr-15			666	660	2.32	10.2	545	2670	4890	4890	0.461
TMD	MW-20	Apr-13			479	347	2.27	< 0.400	237	2730	5020	5020	1.29
TMD	MW-20	Apr-14	FD		487	440	1.72	0.419	247	2700	4840	4840	6.5

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters

**2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico**

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
TMD	MW-20	Apr-14				505	457	2.11	0.416	249	2580	4900	6.74
TMD	MW-20	Apr-15				510	429	1.51	0.398 J	232	3490	4790	5.08
TMD	MW-21	Apr-13				514	577	1.74	2.2	430	2830	5500	27.9
TMD	MW-21	Oct-13	FD			562	524	2.08	1.74	475	2760	5550	17.5
TMD	MW-21	Oct-13				529	522	2.08	1.87	449	2760	5580	19.3
TMD	MW-21	Apr-14				510	537	1.7	0.491	97.1	2970	5560	22.6
TMD	MW-21	Nov-14				600	450	2.4	1.9	430	2900	5200	17
TMD	MW-21	Apr-15				542	481	1.9	1.81 J	468	3210	5210	17
TMD	MW-21	Oct-15				530	550	1.75	2	436	3520	5190	16.5
TMD	MW-25	Apr-13				325	776	1.36	3.7	469	1320	3120	< 1.00
TMD	MW-25	Apr-14				985	4440	0.635	6.8	1220	2060	11700	< 0.150
TMD	MW-25	Apr-15				896	6780	1.03	8.34	3710	5740	17000	0.0974 J
TMD	MW-26	Apr-13				497	378	1.83	4.86	352	2580	4720	< 1.00
TMD	MW-26	Apr-14				718	953	2.16	6.01	662	4330	8280	0.252 J
TMD	MW-26	Apr-15				698	1130	1.15	5.42	704	5950	8660	0.268
TMD	MW-27	Apr-13				350	139	1.44	9.67	139	1320	2420	< 1.00
TMD	MW-27	Apr-14				431	148	0.983	9.89	159	1600	2600	0.632 J
TMD	MW-27	Apr-15				607	246	0.928	11.2	128	2320	3640	0.703
TMD	MW-46R	Apr-13				503	231	1.56	1.6	194	2150	4180	< 1.00
TMD	MW-46R	Oct-13				566	232	1.66	0.86	214	2060	3890	< 0.500
TMD	MW-46R	Apr-14				592	191	1.61	1.56	165	2120	4540	0.394 J
TMD	MW-46R	Nov-14				650	290	1.9	2.3	170	2300	3800	< 0.02
TMD	MW-46R	Apr-15				599	288	1.24	1.82	152	2590	3980	0.169
TMD	MW-68	Apr-13				376	426	1.68	5.57	238	1380	3240	7.58
TMD	MW-68	Apr-14				375	299	1.79	4.84	207	1330	2920	5.1
TMD	MW-68	Apr-15				552	397	1.15	4.65	242	2610	4460	4.52
TMD	MW-71	Apr-13	FD	< 0.0200	626	937	1.44	4.14	466	466	2610	6280	58.3
TMD	MW-71	Apr-13		< 0.0200	638	926	1.49	3.92	443	443	2590	6600	59.5
TMD	MW-71	Oct-13		< 0.0200	656	1080	1.49	3.76	472	472	2790	6250	52.3
TMD	MW-71	Apr-14		< 0.00500	558	887	1.39	4.15	399	399	2740	6280	53.6
TMD	MW-71	Apr-15		< 0.00180	642	906	1.09	3.59	447	447	3150	6110	50.6
TMD	MW-89	Apr-13				456	200	2.48	9.81	150	1530	2960	< 1.00
TMD	MW-89	Apr-14				542	248	2.4	10.5	188	2030	3360	1.34
TMD	MW-89	Apr-15				528	324	3.61	13.5	302	2200	3720	2.34
TMD	NP-1	Apr-13				477	486	1.83	5.64	366	2600	5040	12.9
TMD	NP-1	Oct-13											
TMD	NP-1	Apr-14				439	434	1.82	4.95	352	2560	4820	11.6
TMD	NP-1	Nov-14											
TMD	NP-1	Apr-15				473	436	2.06	3.53 J	451	2930	4450	8.41
TMD	NP-1	Oct-15											
TMD	NP-2	Apr-13				517	379	1.7	1.63	258	2660	5160	1.74
TMD	NP-6	Apr-13											
TMD	NP-6	Apr-15											
Upgradient	UG-1	Apr-13		< 0.0200	466	132	0.62	1.62	79.8	79.8	1580	3090	7.8
Upgradient	UG-1	Apr-14		< 0.00500	474	126	0.58	1.59	79.6	79.6	1720	2960	10.1
Upgradient	UG-1	Apr-15		< 0.00180	455 J	133	0.865	1.11	84.6	84.6	1880	2920	14.4
Upgradient	UG-2	Apr-13	FD	< 0.0200	338	136	1.13	2.52	117	117	1080	2400	4.59
Upgradient	UG-2	Apr-13		< 0.0200	331	137	1.16	2.52	123	123	1090	2410	4.44

Table B.6 - Groundwater Analytical Results 2013-2015 - Water Quality Parameters
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

				Analyte:	Cyanide	Calcium	Chloride	Fluoride	Potassium	Sodium	Sulfate	TDS	Nitrate/Nitrite
				cas_rn	57-12-5	7440-70-2	16887-00-6	16984-48-8	7440-09-7	7440-23-5	14808-79-8	ARC-TDS	ARC-NO3NO2N
				Units:	mg/l	mg/L	mg/L	mg/L	mg/l	mg/L	mg/L	mg/l	mg/l
				CGWSL:	0.2	---	250	1.6	---	---	600	1000	10
				CGWSL Source:	EPA MCL		WQCC Dom	WQCC HH			WQCC Dom	WQCC Dom	USEPA MCL
Area	Location	Date	Dup										
Upgradient	UG-2	Apr-14		< 0.00500	403	97.1	1.14	1.75	104	1530	2660	3.77	
Upgradient	UG-2	Apr-15		< 0.00180	337 J	72.2	1.65	1.73	82.6	1080	1170	4.62	
Upgradient	UG-3R	Apr-13		< 0.0200	270	20.9	0.561	1.57	42	785	1590	1.11	
Upgradient	UG-3R	Apr-14	FD	< 0.00500	389	46.8	0.496	1.53	53.6	1500	2400	2.2	
Upgradient	UG-3R	Apr-14		< 0.00500	422	46.8	0.492	1.65	56.9	1480	2340	2.26	
Upgradient	UG-3R	Apr-15		< 0.00180	420 J	27.5	0.716	2.36	59.1	1450	1420	1.03	

Table B - Footnotes
2015 Annual Groundwater Report
Navajo Refinery, Artesia, New Mexico

Abbreviations	Definitions
X	Reported concentration equal to X was above the CGWSL.
X	Analyte was detected above the reporting limit at a concentration equal to X.
< x	Analyte was not detected at reporting limit equal to x. If the < x value is bolded, the reporting limit exceeded the CGWSL.
CGWSL	Critical Groundwater Screening Level (see Table 3)
CGWSL Source	Source for CGWSL value (see Table 3)
DRO	diesel range organics
DRO-EP	diesel range organics reported from the wells located in the Evaporation Ponds area
Dup	duplicate sample indicator
FD	field duplicate sample
GRO	gasoline range organics
mg/L	milligrams per liter
MTBE	methyl tert-butyl ether
NMED TPH	New Mexico Environment Department Risk Assessment Guidance for Site Investigations and Remediation, February 2012, Table 6-2 TPH Screening Guidelines for Potable Groundwater
NMED TW	New Mexico Environment Department Risk Assessment Guidance for Site Investigations and Remediation, July 2015, Table A-1, Tap Water Screening Level
TDS	total dissolved solids
TPH	total petroleum hydrocarbons
µg/L	micrograms per liter
USEPA MCL	United States Environmental Protection Agency Maximum Contaminant Level from "Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites", November 2015
USEPA TW	United States Environmental Protection Agency Tap Water screening level from "Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites", November 2015
WQCC Dom	NMED Groundwater standard for domestic exposure taken from 20.6.2.3103.B
WQCC HH	NMED Groundwater standard for human health exposure taken from 20.6.2.3103.A
WQCC Irr	NMED Groundwater standard for irrigation exposure taken from 20.6.2.3103.C

Notes
Blank cell indicates analyte was not analyzed for during the indicated sampling event.
Anion (chloride, flouride and/or sulfate) data during the April 2015 event for wells MW-75, MW-76, MW-77, MW-78 and MW-83 was not adjusted for dilution due to laboratory error.

Lab Footnote	Definition
J	Indicates an estimated value.
U or "<"	The compound was analyzed for but not detected at the reporting limit shown.
*	LCS/LCSD recovery outside the control limit or RPD value outside the control limit.
B	Analyte was also detected in the associated method blank.
E	The sample concentration exceeds machine calibration.
H	The reported result is from a sample analyzed outside of Holding Time.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
R	The sample concnetration is rejected based on data validation.
V	The sample concentration is too high to evaluate accurate spike recoveries.

2015 Analytical Data Reports



ARCADIS US - TX

Sample Delivery Group: L760039
Samples Received: 04/17/2015
Project Number: TX000836.0007.15008
Description: Navajo Refining Company - Artesia, NM
Site: REST
Report To: Pam Krueger
2929 Briarpark Dr., Suite 300
Houston, TX 77042

Entire Report Reviewed By:

[Preliminary Report]

Pam Langford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹Cp: Cover Page	1
²Tc: Table of Contents	2
³Ss: Sample Summary	3
⁴Cn: Case Narrative	9
⁵Sr: Sample Results	10
MW-117 L760039-01	10
MW-118 L760039-02	12
MW-119 L760039-03	14
MW-126A L760039-04	16
MW-126B L760039-05	18
MW-127 L760039-06	20
MW-129 L760039-07	22
KWB-7 L760039-08	24
MW-135 L760039-09	26
KWB-11A L760039-10	28
KWB-11B L760039-11	31
MW-101 L760039-12	34
MW-105 L760039-13	36
RW-2 L760039-14	38
MW-61 L760039-15	40
MW-62 L760039-16	42
MW-93 L760039-17	44
MW-43 L760039-18	46
MW-23 L760039-19	49
MW-98 L760039-20	51
⁶Qc: Quality Control Summary	53
Gravimetric Analysis by Method 2540 C-2011	53
Wet Chemistry by Method 353.2	56
Wet Chemistry by Method 9012B	59
Wet Chemistry by Method 9056MOD	61
Mercury by Method 7470A	66
Metals (ICPMS) by Method 6020	67
Volatile Organic Compounds (GC) by Method 8015D/GRO	71
Volatile Organic Compounds (GC/MS) by Method 8260B	74
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	92
⁷Gl: Glossary of Terms	93
⁸Al: Accreditations & Locations	94
⁹Sc: Chain of Custody	95



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-117 L760039-01 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 09:20	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783029	1	04/19/15 23:24	04/22/15 18:11	JM
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 21:20	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/27/15 21:41	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 01:53	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783013	1	04/24/15 23:45	04/24/15 23:45	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782990	1	04/21/15 18:27	04/21/15 18:27	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783796	1	04/22/15 11:22	04/22/15 11:22	MCB
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:22	05/05/15 11:22	ASK
Wet Chemistry by Method 9056MOD	WG785856	100	05/01/15 00:50	05/01/15 00:50	NJM
Wet Chemistry by Method 9056MOD	WG786347	1	05/05/15 02:15	05/05/15 02:15	NJM
Wet Chemistry by Method 9056MOD	WG787263	5	05/07/15 09:22	05/07/15 09:22	DJD

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MW-118 L760039-02 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 10:00	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:49	MF
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 21:29	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 00:52	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 02:11	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783013	1	04/25/15 00:07	04/25/15 00:07	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782990	1	04/21/15 18:44	04/21/15 18:44	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783796	1	04/22/15 11:40	04/22/15 11:40	MCB
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:23	05/05/15 11:23	ASK
Wet Chemistry by Method 9056MOD	WG785856	100	05/01/15 01:05	05/01/15 01:05	NJM
Wet Chemistry by Method 9056MOD	WG786347	1	05/05/15 02:57	05/05/15 02:57	NJM

MW-119 L760039-03 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 10:45	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:45	MF
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 21:31	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 00:54	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 02:30	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783013	1	04/25/15 00:29	04/25/15 00:29	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782990	1	04/21/15 19:02	04/21/15 19:02	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783796	1	04/22/15 13:25	04/22/15 13:25	MCB
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:24	05/05/15 11:24	ASK
Wet Chemistry by Method 9056MOD	WG785856	1	04/30/15 19:44	04/30/15 19:44	NJM
Wet Chemistry by Method 9056MOD	WG785856	100	05/01/15 01:20	05/01/15 01:20	NJM
Wet Chemistry by Method 9056MOD	WG786347	1	05/05/15 03:10	05/05/15 03:10	NJM

MW-126A L760039-04 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 11:45	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:43	MF
Metals (ICPMS) by Method 6020	WG783150	1	04/23/15 10:21	04/27/15 13:04	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 00:57	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 02:49	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783013	1	04/25/15 00:51	04/25/15 00:51	JHH



MW-126A L760039-04 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 11:45	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782990	1	04/21/15 19:19	04/21/15 19:19	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784381	1	04/26/15 00:04	04/26/15 00:04	JHH
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:25	05/05/15 11:25	ASK
Wet Chemistry by Method 9056MOD	WG785856	100	05/01/15 01:36	05/01/15 01:36	NJM
Wet Chemistry by Method 9056MOD	WG786347	1	05/05/15 03:24	05/05/15 03:24	NJM

1
Cp2
Tc3
Ss4
Cn

MW-126B L760039-05 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 12:30	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:45	MF
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 22:37	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 00:59	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 03:07	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783013	1	04/25/15 01:13	04/25/15 01:13	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782990	1	04/21/15 19:37	04/21/15 19:37	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783796	1	04/22/15 14:00	04/22/15 14:00	MCB
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:26	05/05/15 11:26	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 15:21	04/22/15 15:21	NJM
Wet Chemistry by Method 9056MOD	WG782967	100	04/22/15 16:47	04/22/15 16:47	NJM

5
Sr6
Qc7
Gl8
Al9
Sc

MW-127 L760039-06 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 13:15	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:45	MF
Metals (ICPMS) by Method 6020	WG783150	1	04/23/15 10:21	04/27/15 13:06	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:02	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 03:26	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783013	1	04/25/15 01:35	04/25/15 01:35	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782990	1	04/21/15 19:54	04/21/15 19:54	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783796	50	04/22/15 14:18	04/22/15 14:18	MCB
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:28	05/05/15 11:28	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 15:49	04/22/15 15:49	NJM
Wet Chemistry by Method 9056MOD	WG782967	20	04/22/15 17:14	04/22/15 17:14	NJM

MW-129 L760039-07 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 14:05	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:48	MF
Metals (ICPMS) by Method 6020	WG783150	1	04/23/15 10:21	04/27/15 13:09	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:04	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 03:45	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	1	04/22/15 23:21	04/22/15 23:21	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782990	1	04/21/15 20:12	04/21/15 20:12	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783796	100	04/22/15 14:35	04/22/15 14:35	MCB
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:29	05/05/15 11:29	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 16:03	04/22/15 16:03	NJM
Wet Chemistry by Method 9056MOD	WG782967	20	04/22/15 17:28	04/22/15 17:28	NJM

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



KWB-7 L760039-08 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 15:00	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:44	MF
Mercury by Method 7470A	WG783254	1	04/20/15 11:25	04/20/15 20:14	MPT
Metals (ICPMS) by Method 6020	WG783150	1	04/23/15 10:21	04/27/15 13:11	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:07	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 04:04	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782990	1	04/21/15 20:30	04/21/15 20:30	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	10	04/25/15 21:36	04/25/15 21:36	ACG
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:30	05/05/15 11:30	ASK
Wet Chemistry by Method 9012B	WG786334	1	05/05/15 12:31	05/05/15 17:13	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 16:17	04/22/15 16:17	NJM
Wet Chemistry by Method 9056MOD	WG782967	100	04/22/15 17:42	04/22/15 17:42	NJM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MW-135 L760039-09 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 12:30	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:46	MF
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 22:47	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:10	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 04:23	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	1	04/22/15 23:46	04/22/15 23:46	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782990	1	04/21/15 20:47	04/21/15 20:47	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	1	04/25/15 21:57	04/25/15 21:57	ACG
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:41	05/05/15 11:41	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 16:30	04/22/15 16:30	NJM
Wet Chemistry by Method 9056MOD	WG782967	50	04/23/15 11:36	04/23/15 11:36	NJM

KWB-11A L760039-10 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 13:20	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:44	MF
Mercury by Method 7470A	WG783254	1	04/20/15 11:25	04/20/15 20:17	MPT
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 22:49	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:12	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 04:41	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	1	04/23/15 00:11	04/23/15 00:11	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	1	04/25/15 21:16	04/25/15 21:16	ACG
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:42	05/05/15 11:42	ASK
Wet Chemistry by Method 9012B	WG786334	1	05/05/15 12:31	05/05/15 16:47	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 18:38	04/22/15 18:38	NJM
Wet Chemistry by Method 9056MOD	WG782967	100	04/22/15 20:29	04/22/15 20:29	NJM

KWB-11B L760039-11 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 14:10	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:47	MF
Mercury by Method 7470A	WG783254	1	04/20/15 11:25	04/20/15 20:19	MPT
Metals (ICPMS) by Method 6020	WG783150	1	04/23/15 10:21	04/27/15 13:14	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:15	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 06:15	JNS



KWB-11B L760039-11 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 14:10	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	1	04/23/15 00:37	04/23/15 00:37	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	1	04/25/15 22:17	04/25/15 22:17	ACG
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:43	05/05/15 11:43	ASK
Wet Chemistry by Method 9012B	WG786334	1	05/05/15 12:31	05/05/15 16:48	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 18:52	04/22/15 18:52	NJM
Wet Chemistry by Method 9056MOD	WG782967	100	04/22/15 20:43	04/22/15 20:43	NJM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

MW-101 L760039-12 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 08:55	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:43	MF
Metals (ICPMS) by Method 6020	WG783150	1	04/23/15 10:21	04/27/15 13:17	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:23	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 06:34	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	1	04/23/15 01:02	04/23/15 01:02	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	5	04/23/15 03:37	04/23/15 03:37	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	5	04/25/15 22:37	04/25/15 22:37	ACG
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:44	05/05/15 11:44	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 19:06	04/22/15 19:06	NJM
Wet Chemistry by Method 9056MOD	WG782967	5	04/22/15 20:56	04/22/15 20:56	NJM

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MW-105 L760039-13 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 09:25	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:50	MF
Metals (ICPMS) by Method 6020	WG783150	1	04/23/15 10:21	04/27/15 13:19	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:25	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 06:53	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	1	04/23/15 01:27	04/23/15 01:27	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	5	04/23/15 03:57	04/23/15 03:57	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	50	04/25/15 22:57	04/25/15 22:57	ACG
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:46	05/05/15 11:46	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 19:20	04/22/15 19:20	NJM
Wet Chemistry by Method 9056MOD	WG782967	1	04/23/15 11:50	04/23/15 11:50	NJM
Wet Chemistry by Method 9056MOD	WG782967	10	04/23/15 12:04	04/23/15 12:04	NJM

RW-2 L760039-14 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 11:20	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:43	MF
Metals (ICPMS) by Method 6020	WG783150	10	04/23/15 10:21	04/27/15 13:22	LAT
Metals (ICPMS) by Method 6020	WG783150	20	04/23/15 10:21	04/27/15 14:22	VSS
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 22:58	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:28	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	20	04/19/15 22:44	04/21/15 18:20	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG785183	20	04/28/15 15:36	04/28/15 15:36	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	10	04/23/15 04:17	04/23/15 04:17	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	250	04/25/15 23:17	04/25/15 23:17	ACG
Wet Chemistry by Method 353.2	WG786264	10	05/05/15 11:47	05/05/15 11:47	ASK

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



RW-2 L760039-14 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 11:20	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 20:01	04/22/15 20:01	NJM
Wet Chemistry by Method 9056MOD	WG782967	100	04/22/15 21:10	04/22/15 21:10	NJM

¹ Cp

² Tc

³ Ss

MW-61 L760039-15 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 12:25	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:50	MF
Metals (ICPMS) by Method 6020	WG783150	10	04/23/15 10:21	04/27/15 13:24	LAT
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 23:39	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:30	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 07:30	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	5	04/23/15 02:17	04/23/15 02:17	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	10	04/23/15 04:37	04/23/15 04:37	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	10	04/25/15 23:37	04/25/15 23:37	ACG
Wet Chemistry by Method 353.2	WG786265	10	05/05/15 12:12	05/05/15 12:12	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 20:15	04/22/15 20:15	NJM
Wet Chemistry by Method 9056MOD	WG782967	100	04/23/15 00:23	04/23/15 00:23	NJM

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MW-62 L760039-16 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 13:35	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:49	MF
Metals (ICPMS) by Method 6020	WG783150	1	04/23/15 10:21	04/27/15 13:47	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:33	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	20	04/19/15 22:44	04/21/15 18:39	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG785183	50	04/28/15 16:01	04/28/15 16:01	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	10	04/23/15 04:58	04/23/15 04:58	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	500	04/25/15 23:57	04/25/15 23:57	ACG
Wet Chemistry by Method 353.2	WG785013	1	04/30/15 12:03	04/30/15 12:03	JAL
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 21:52	04/22/15 21:52	NJM
Wet Chemistry by Method 9056MOD	WG782967	20	04/23/15 01:14	04/23/15 01:14	NJM

MW-93 L760039-17 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 15:35	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:50	MF
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 23:44	JD
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:36	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	20	04/19/15 22:44	04/21/15 18:57	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	1	04/23/15 03:08	04/23/15 03:08	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	10	04/23/15 05:18	04/23/15 05:18	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	10	04/26/15 00:17	04/26/15 00:17	ACG
Wet Chemistry by Method 353.2	WG785013	1	04/30/15 12:05	04/30/15 12:05	JAL
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 22:06	04/22/15 22:06	NJM
Wet Chemistry by Method 9056MOD	WG782967	100	04/23/15 01:32	04/23/15 01:32	NJM



MW-43 L760039-18 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 14:40	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:44	MF
Mercury by Method 7470A	WG783254	1	04/20/15 11:25	04/20/15 20:22	MPT
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 23:46	JD
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:38	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 08:27	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	5	04/23/15 08:07	04/23/15 08:07	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	10	04/23/15 05:38	04/23/15 05:38	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	10	04/26/15 00:38	04/26/15 00:38	ACG
Wet Chemistry by Method 353.2	WG785013	1	04/30/15 12:06	04/30/15 12:06	JAL
Wet Chemistry by Method 9012B	WG785489	1	04/29/15 12:41	04/29/15 15:11	ASK
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 22:20	04/22/15 22:20	NJM
Wet Chemistry by Method 9056MOD	WG782967	20	04/23/15 01:50	04/23/15 01:50	NJM

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

MW-23 L760039-19 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 16:35	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783324	1	04/20/15 16:36	04/22/15 18:43	MF
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 23:49	JD
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:41	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 08:45	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	10	04/23/15 08:32	04/23/15 08:32	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	25	04/23/15 05:58	04/23/15 05:58	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784046	1000	04/29/15 17:33	04/29/15 17:33	JAH
Wet Chemistry by Method 353.2	WG785013	1	04/30/15 12:07	04/30/15 12:07	JAL
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 22:33	04/22/15 22:33	NJM
Wet Chemistry by Method 9056MOD	WG782967	100	04/23/15 02:07	04/23/15 02:07	NJM

MW-98 L760039-20 GW

			Collected by GS/BB/TB	Collected date/time 04/15/15 17:35	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:37	MF
Metals (ICPMS) by Method 6020	WG783150	10	04/23/15 10:21	04/27/15 13:50	LAT
Metals (ICPMS) by Method 6020	WG783150	5	04/23/15 10:21	04/24/15 23:51	LAT
Metals (ICPMS) by Method 6020	WG783168	1	04/22/15 08:45	04/28/15 01:43	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783172	1	04/19/15 22:44	04/21/15 09:04	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783015	10	04/23/15 08:57	04/23/15 08:57	JAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	25	04/23/15 06:18	04/23/15 06:18	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	250	04/26/15 00:58	04/26/15 00:58	ACG
Wet Chemistry by Method 353.2	WG785013	1	04/30/15 12:08	04/30/15 12:08	JAL
Wet Chemistry by Method 9056MOD	WG782967	1	04/22/15 22:47	04/22/15 22:47	NJM
Wet Chemistry by Method 9056MOD	WG782967	50	04/23/15 02:24	04/23/15 02:24	NJM



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

[Preliminary Report]

Pam Langford
Technical Service Representative

Project Narrative

The cyanide analysis for samples -08, -10 and -11 were performed outside the holding time prescribed by the method.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3670000		2800	10000	1	04/22/2015 18:11	WG783029

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	372	J	200	1000	10	05/05/2015 11:22	WG786264

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	87200		52.0	1000	1	05/05/2015 02:15	WG786347
Fluoride	3790		50.0	500	5	05/07/2015 09:22	WG787263
Sulfate	2220000		7700	500000	100	05/01/2015 00:50	WG785856

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	2.49	J	1.20	10.0	5	04/24/2015 21:20	WG783150
Arsenic,Dissolved	2.41		0.250	2.00	1	04/27/2015 21:41	WG783168
Barium	16.2	J	1.80	25.0	5	04/24/2015 21:20	WG783150
Barium,Dissolved	8.87		0.360	5.00	1	04/27/2015 21:41	WG783168
Calcium	613000	4	230	5000	5	04/24/2015 21:20	WG783150
Chromium	U		2.70	10.0	5	04/24/2015 21:20	WG783150
Chromium,Dissolved	0.697	J	0.540	2.00	1	04/27/2015 21:41	WG783168
Iron	492	J	75.0	500	5	04/24/2015 21:20	WG783150
Iron,Dissolved	96.3	* F J	15.0	100	1	04/27/2015 21:41	WG783168
Lead	U		1.20	10.0	5	04/24/2015 21:20	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/27/2015 21:41	WG783168
Manganese	8.09	J	1.20	25.0	5	04/24/2015 21:20	WG783150
Manganese,Dissolved	1.60	* F J	0.250	5.00	1	04/27/2015 21:41	WG783168
Potassium	5970		180	5000	5	04/24/2015 21:20	WG783150
Selenium	16.8		1.90	10.0	5	04/24/2015 21:20	WG783150
Selenium,Dissolved	16.6		0.380	2.00	1	04/27/2015 21:41	WG783168
Sodium	102000	4	550	5000	5	04/24/2015 21:20	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/24/2015 23:45	WG783013
(S) a,a,a-Trifluorotoluene(FID) 93.0				62.0-128		04/24/2015 23:45	WG783013

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/21/2015 18:27	WG782990
Benzene	U		0.330	1.00	1	04/21/2015 18:27	WG782990
Bromodichloromethane	U		0.380	1.00	1	04/21/2015 18:27	WG782990
Bromoform	U		0.470	1.00	1	04/21/2015 18:27	WG782990
Bromomethane	U		0.870	5.00	1	04/21/2015 18:27	WG782990
n-Butylbenzene	U		0.360	1.00	1	04/21/2015 18:27	WG782990
sec-Butylbenzene	U		0.360	1.00	1	04/21/2015 18:27	WG782990
Carbon disulfide	U		0.280	1.00	1	04/22/2015 11:22	WG783796
Carbon tetrachloride	U		0.380	1.00	1	04/21/2015 18:27	WG782990



Collected date/time: 04/15/15 09:20

L760039

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/21/2015 18:27	WG782990
Chlorodibromomethane	U		0.330	1.00	1	04/21/2015 18:27	WG782990
Chloroethane	U		0.450	5.00	1	04/21/2015 18:27	WG782990
Chloroform	U		0.320	5.00	1	04/21/2015 18:27	WG782990
Chloromethane	U		0.280	2.50	1	04/21/2015 18:27	WG782990
1,2-Dibromoethane	U		0.380	1.00	1	04/21/2015 18:27	WG782990
1,1-Dichloroethane	U		0.260	1.00	1	04/21/2015 18:27	WG782990
1,2-Dichloroethane	U		0.360	1.00	1	04/21/2015 18:27	WG782990
1,1-Dichloroethene	U		0.400	1.00	1	04/21/2015 18:27	WG782990
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/21/2015 18:27	WG782990
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/21/2015 18:27	WG782990
1,2-Dichloropropane	U		0.310	1.00	1	04/21/2015 18:27	WG782990
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 18:27	WG782990
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 18:27	WG782990
Ethylbenzene	U		0.380	1.00	1	04/21/2015 18:27	WG782990
Isopropylbenzene	U		0.330	1.00	1	04/21/2015 18:27	WG782990
p-Isopropyltoluene	1.79		0.350	1.00	1	04/21/2015 18:27	WG782990
2-Butanone (MEK)	U		3.90	10.0	1	04/21/2015 18:27	WG782990
2-Hexanone	U		3.80	10.0	1	04/21/2015 18:27	WG782990
Methylene Chloride	U		1.00	5.00	1	04/21/2015 18:27	WG782990
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/21/2015 18:27	WG782990
Methyl tert-butyl ether	U		0.370	1.00	1	04/21/2015 18:27	WG782990
Naphthalene	1.50	U	1.00	5.00	1	04/21/2015 18:27	WG782990
n-Propylbenzene	U		0.350	1.00	1	04/21/2015 18:27	WG782990
Styrene	U		0.310	1.00	1	04/21/2015 18:27	WG782990
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/21/2015 18:27	WG782990
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/21/2015 18:27	WG782990
Tetrachloroethene	0.710	U	0.370	1.00	1	04/21/2015 18:27	WG782990
Toluene	U		0.780	5.00	1	04/21/2015 18:27	WG782990
1,1,1-Trichloroethane	U		0.319	1.00	1	04/21/2015 18:27	WG782990
1,1,2-Trichloroethane	U		0.380	1.00	1	04/21/2015 18:27	WG782990
Trichloroethene	U		0.400	1.00	1	04/21/2015 18:27	WG782990
1,2,4-Trimethylbenzene	2.85		0.370	1.00	1	04/21/2015 18:27	WG782990
1,3,5-Trimethylbenzene	0.897	U	0.390	1.00	1	04/21/2015 18:27	WG782990
Vinyl chloride	U		0.260	1.00	1	04/21/2015 18:27	WG782990
o-Xylene	0.942	U	0.340	1.00	1	04/21/2015 18:27	WG782990
m&p-Xylene	1.35		0.720	1.00	1	04/21/2015 18:27	WG782990
Xylenes, Total	2.29	U	1.10	3.00	1	04/21/2015 18:27	WG782990
(S) Toluene-d8	103			88.5-111		04/21/2015 18:27	WG782990
(S) Dibromofluoromethane	104			78.3-121		04/21/2015 18:27	WG782990
(S) 4-Bromofluorobenzene	102			71.0-126		04/21/2015 18:27	WG782990

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	32.3	U	25.0	100	1	04/21/2015 01:53	WG783172
(S) o-Terphenyl	115			50.0-150		04/21/2015 01:53	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3960000		2800	10000	1	04/22/2015 18:49	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	1700		200	1000	10	05/05/2015 11:23	WG786264

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	767000		5200	100000	100	05/01/2015 01:05	WG785856
Fluoride	4140		9.90	100	1	05/05/2015 02:57	WG786347
Sulfate	2510000		7700	500000	100	05/01/2015 01:05	WG785856

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	9.77	J	1.20	10.0	5	04/24/2015 21:29	WG783150
Arsenic,Dissolved	9.84		0.250	2.00	1	04/28/2015 00:52	WG783168
Barium	18.0	J	1.80	25.0	5	04/24/2015 21:29	WG783150
Barium,Dissolved	9.52		0.360	5.00	1	04/28/2015 00:52	WG783168
Calcium	601000		230	5000	5	04/24/2015 21:29	WG783150
Chromium	U		2.70	10.0	5	04/24/2015 21:29	WG783150
Chromium,Dissolved	1.31	J	0.540	2.00	1	04/28/2015 00:52	WG783168
Iron	253	J	75.0	500	5	04/24/2015 21:29	WG783150
Iron,Dissolved	69.8	J	15.0	100	1	04/28/2015 00:52	WG783168
Lead	1.75	J	1.20	10.0	5	04/24/2015 21:29	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 00:52	WG783168
Manganese	4.54	J	1.20	25.0	5	04/24/2015 21:29	WG783150
Manganese,Dissolved	1.69	J	0.250	5.00	1	04/28/2015 00:52	WG783168
Potassium	5300		180	5000	5	04/24/2015 21:29	WG783150
Selenium	8.63	J	1.90	10.0	5	04/24/2015 21:29	WG783150
Selenium,Dissolved	7.99		0.380	2.00	1	04/28/2015 00:52	WG783168
Sodium	153000		550	5000	5	04/24/2015 21:29	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/25/2015 00:07	WG783013
(S) a,a,a-Trifluorotoluene(FID) 92.7				62.0-128		04/25/2015 00:07	WG783013

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/21/2015 18:44	WG782990
Benzene	U		0.330	1.00	1	04/21/2015 18:44	WG782990
Bromodichloromethane	U		0.380	1.00	1	04/21/2015 18:44	WG782990
Bromoform	U		0.470	1.00	1	04/21/2015 18:44	WG782990
Bromomethane	U		0.870	5.00	1	04/21/2015 18:44	WG782990
n-Butylbenzene	U		0.360	1.00	1	04/21/2015 18:44	WG782990
sec-Butylbenzene	U		0.360	1.00	1	04/21/2015 18:44	WG782990
Carbon disulfide	U		0.280	1.00	1	04/22/2015 11:40	WG783796
Carbon tetrachloride	U		0.380	1.00	1	04/21/2015 18:44	WG782990



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/21/2015 18:44	WG782990
Chlorodibromomethane	U		0.330	1.00	1	04/21/2015 18:44	WG782990
Chloroethane	U		0.450	5.00	1	04/21/2015 18:44	WG782990
Chloroform	U		0.320	5.00	1	04/21/2015 18:44	WG782990
Chloromethane	U		0.280	2.50	1	04/21/2015 18:44	WG782990
1,2-Dibromoethane	U		0.380	1.00	1	04/21/2015 18:44	WG782990
1,1-Dichloroethane	U		0.260	1.00	1	04/21/2015 18:44	WG782990
1,2-Dichloroethane	U		0.360	1.00	1	04/21/2015 18:44	WG782990
1,1-Dichloroethene	U		0.400	1.00	1	04/21/2015 18:44	WG782990
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/21/2015 18:44	WG782990
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/21/2015 18:44	WG782990
1,2-Dichloropropane	U		0.310	1.00	1	04/21/2015 18:44	WG782990
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 18:44	WG782990
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 18:44	WG782990
Ethylbenzene	U		0.380	1.00	1	04/21/2015 18:44	WG782990
Isopropylbenzene	U		0.330	1.00	1	04/21/2015 18:44	WG782990
p-Isopropyltoluene	0.657	U	0.350	1.00	1	04/21/2015 18:44	WG782990
2-Butanone (MEK)	U		3.90	10.0	1	04/21/2015 18:44	WG782990
2-Hexanone	U		3.80	10.0	1	04/21/2015 18:44	WG782990
Methylene Chloride	U		1.00	5.00	1	04/21/2015 18:44	WG782990
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/21/2015 18:44	WG782990
Methyl tert-butyl ether	U		0.370	1.00	1	04/21/2015 18:44	WG782990
Naphthalene	U		1.00	5.00	1	04/21/2015 18:44	WG782990
n-Propylbenzene	U		0.350	1.00	1	04/21/2015 18:44	WG782990
Styrene	U		0.310	1.00	1	04/21/2015 18:44	WG782990
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/21/2015 18:44	WG782990
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/21/2015 18:44	WG782990
Tetrachloroethene	U		0.370	1.00	1	04/21/2015 18:44	WG782990
Toluene	U		0.780	5.00	1	04/21/2015 18:44	WG782990
1,1,1-Trichloroethane	U		0.319	1.00	1	04/21/2015 18:44	WG782990
1,1,2-Trichloroethane	U		0.380	1.00	1	04/21/2015 18:44	WG782990
Trichloroethene	U		0.400	1.00	1	04/21/2015 18:44	WG782990
1,2,4-Trimethylbenzene	0.863	U	0.370	1.00	1	04/21/2015 18:44	WG782990
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/21/2015 18:44	WG782990
Vinyl chloride	U		0.260	1.00	1	04/21/2015 18:44	WG782990
o-Xylene	U		0.340	1.00	1	04/21/2015 18:44	WG782990
m&p-Xylene	U		0.720	1.00	1	04/21/2015 18:44	WG782990
Xylenes, Total	U		1.10	3.00	1	04/21/2015 18:44	WG782990
(S) Toluene-d8	103			88.5-111		04/21/2015 18:44	WG782990
(S) Dibromofluoromethane	105			78.3-121		04/21/2015 18:44	WG782990
(S) 4-Bromofluorobenzene	101			71.0-126		04/21/2015 18:44	WG782990

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	30.7	U	25.0	100	1	04/21/2015 02:11	WG783172
(S) o-Terphenyl	113			50.0-150		04/21/2015 02:11	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3030000		2800	10000	1	04/22/2015 18:45	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	292	J	200	1000	10	05/05/2015 11:24	WG786264

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	48200		52.0	1000	1	04/30/2015 19:44	WG785856
Fluoride	1990		9.90	100	1	05/05/2015 03:10	WG786347
Sulfate	2040000		7700	500000	100	05/01/2015 01:20	WG785856

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	3.98	J	1.20	10.0	5	04/24/2015 21:31	WG783150
Arsenic,Dissolved	3.74		0.250	2.00	1	04/28/2015 00:54	WG783168
Barium	15.6	J	1.80	25.0	5	04/24/2015 21:31	WG783150
Barium,Dissolved	7.58		0.360	5.00	1	04/28/2015 00:54	WG783168
Calcium	590000		230	5000	5	04/24/2015 21:31	WG783150
Chromium	U		2.70	10.0	5	04/24/2015 21:31	WG783150
Chromium,Dissolved	0.834	J	0.540	2.00	1	04/28/2015 00:54	WG783168
Iron	309	J	75.0	500	5	04/24/2015 21:31	WG783150
Iron,Dissolved	262		15.0	100	1	04/28/2015 00:54	WG783168
Lead	U		1.20	10.0	5	04/24/2015 21:31	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 00:54	WG783168
Manganese	15.1	J	1.20	25.0	5	04/24/2015 21:31	WG783150
Manganese,Dissolved	8.63		0.250	5.00	1	04/28/2015 00:54	WG783168
Potassium	232	J	180	5000	5	04/24/2015 21:31	WG783150
Selenium	U		1.90	10.0	5	04/24/2015 21:31	WG783150
Selenium,Dissolved	U		0.380	2.00	1	04/28/2015 00:54	WG783168
Sodium	54500		550	5000	5	04/24/2015 21:31	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/25/2015 00:29	WG783013
(S) a,a,a-Trifluorotoluene(FID) 92.9				62.0-128		04/25/2015 00:29	WG783013

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/21/2015 19:02	WG782990
Benzene	U		0.330	1.00	1	04/21/2015 19:02	WG782990
Bromodichloromethane	U		0.380	1.00	1	04/21/2015 19:02	WG782990
Bromoform	U		0.470	1.00	1	04/21/2015 19:02	WG782990
Bromomethane	U		0.870	5.00	1	04/21/2015 19:02	WG782990
n-Butylbenzene	U		0.360	1.00	1	04/21/2015 19:02	WG782990
sec-Butylbenzene	U		0.360	1.00	1	04/21/2015 19:02	WG782990
Carbon disulfide	U		0.280	1.00	1	04/22/2015 13:25	WG783796
Carbon tetrachloride	U		0.380	1.00	1	04/21/2015 19:02	WG782990



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/21/2015 19:02	WG782990
Chlorodibromomethane	U		0.330	1.00	1	04/21/2015 19:02	WG782990
Chloroethane	U		0.450	5.00	1	04/21/2015 19:02	WG782990
Chloroform	U		0.320	5.00	1	04/21/2015 19:02	WG782990
Chloromethane	U		0.280	2.50	1	04/21/2015 19:02	WG782990
1,2-Dibromoethane	U		0.380	1.00	1	04/21/2015 19:02	WG782990
1,1-Dichloroethane	U		0.260	1.00	1	04/21/2015 19:02	WG782990
1,2-Dichloroethane	U		0.360	1.00	1	04/21/2015 19:02	WG782990
1,1-Dichloroethene	U		0.400	1.00	1	04/21/2015 19:02	WG782990
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/21/2015 19:02	WG782990
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/21/2015 19:02	WG782990
1,2-Dichloropropane	U		0.310	1.00	1	04/21/2015 19:02	WG782990
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 19:02	WG782990
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 19:02	WG782990
Ethylbenzene	U		0.380	1.00	1	04/21/2015 19:02	WG782990
Isopropylbenzene	U		0.330	1.00	1	04/21/2015 19:02	WG782990
p-Isopropyltoluene	U		0.350	1.00	1	04/21/2015 19:02	WG782990
2-Butanone (MEK)	U		3.90	10.0	1	04/21/2015 19:02	WG782990
2-Hexanone	U		3.80	10.0	1	04/21/2015 19:02	WG782990
Methylene Chloride	U		1.00	5.00	1	04/21/2015 19:02	WG782990
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/21/2015 19:02	WG782990
Methyl tert-butyl ether	U		0.370	1.00	1	04/21/2015 19:02	WG782990
Naphthalene	U		1.00	5.00	1	04/21/2015 19:02	WG782990
n-Propylbenzene	U		0.350	1.00	1	04/21/2015 19:02	WG782990
Styrene	U		0.310	1.00	1	04/21/2015 19:02	WG782990
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/21/2015 19:02	WG782990
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/21/2015 19:02	WG782990
Tetrachloroethene	U		0.370	1.00	1	04/21/2015 19:02	WG782990
Toluene	U		0.780	5.00	1	04/21/2015 19:02	WG782990
1,1,1-Trichloroethane	U		0.319	1.00	1	04/21/2015 19:02	WG782990
1,1,2-Trichloroethane	U		0.380	1.00	1	04/21/2015 19:02	WG782990
Trichloroethene	U		0.400	1.00	1	04/21/2015 19:02	WG782990
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/21/2015 19:02	WG782990
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/21/2015 19:02	WG782990
Vinyl chloride	U		0.260	1.00	1	04/21/2015 19:02	WG782990
o-Xylene	U		0.340	1.00	1	04/21/2015 19:02	WG782990
m&p-Xylene	U		0.720	1.00	1	04/21/2015 19:02	WG782990
Xylenes, Total	U		1.10	3.00	1	04/21/2015 19:02	WG782990
(S) Toluene-d8	103			88.5-111		04/21/2015 19:02	WG782990
(S) Dibromofluoromethane	103			78.3-121		04/21/2015 19:02	WG782990
(S) 4-Bromofluorobenzene	104			71.0-126		04/21/2015 19:02	WG782990

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	35.3	J	25.0	100	1	04/21/2015 02:30	WG783172
(S) o-Terphenyl	117			50.0-150		04/21/2015 02:30	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2900000		2800	10000	1	04/22/2015 18:43	WG783324

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		200	1000	10	05/05/2015 11:25	WG786264

⁶ Qc⁷ Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	898000		5200	100000	100	05/01/2015 01:36	WG785856
Fluoride	833		9.90	100	1	05/05/2015 03:24	WG786347
Sulfate	1530000		7700	500000	100	05/01/2015 01:36	WG785856

⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	2.70		0.250	2.00	1	04/27/2015 13:04	WG783150
Arsenic,Dissolved	2.57		0.250	2.00	1	04/28/2015 00:57	WG783168
Barium	18.5		0.360	5.00	1	04/27/2015 13:04	WG783150
Barium,Dissolved	15.9		0.360	5.00	1	04/28/2015 00:57	WG783168
Calcium	355000		46.0	1000	1	04/27/2015 13:04	WG783150
Chromium	1.64	J	0.540	2.00	1	04/27/2015 13:04	WG783150
Chromium,Dissolved	0.604	J	0.540	2.00	1	04/28/2015 00:57	WG783168
Iron	1020		15.0	100	1	04/27/2015 13:04	WG783150
Iron,Dissolved	1170		15.0	100	1	04/28/2015 00:57	WG783168
Lead	0.293	J	0.240	2.00	1	04/27/2015 13:04	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 00:57	WG783168
Manganese	824		0.250	5.00	1	04/27/2015 13:04	WG783150
Manganese,Dissolved	829		0.250	5.00	1	04/28/2015 00:57	WG783168
Potassium	602	J	37.0	1000	1	04/27/2015 13:04	WG783150
Selenium	U		0.380	2.00	1	04/27/2015 13:04	WG783150
Selenium,Dissolved	U		0.380	2.00	1	04/28/2015 00:57	WG783168
Sodium	189000		110	1000	1	04/27/2015 13:04	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/25/2015 00:51	WG783013
(S) a,a,a-Trifluorotoluene(FID) 93.2				62.0-128		04/25/2015 00:51	WG783013

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/21/2015 19:19	WG782990
Benzene	U		0.330	1.00	1	04/21/2015 19:19	WG782990
Bromodichloromethane	U		0.380	1.00	1	04/21/2015 19:19	WG782990
Bromoform	U		0.470	1.00	1	04/21/2015 19:19	WG782990
Bromomethane	U		0.870	5.00	1	04/21/2015 19:19	WG782990
n-Butylbenzene	U		0.360	1.00	1	04/21/2015 19:19	WG782990
sec-Butylbenzene	U		0.360	1.00	1	04/21/2015 19:19	WG782990
Carbon disulfide	U		0.280	1.00	1	04/26/2015 00:04	WG784381
Carbon tetrachloride	U		0.380	1.00	1	04/21/2015 19:19	WG782990



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/21/2015 19:19	WG782990
Chlorodibromomethane	U		0.330	1.00	1	04/21/2015 19:19	WG782990
Chloroethane	U		0.450	5.00	1	04/21/2015 19:19	WG782990
Chloroform	U		0.320	5.00	1	04/21/2015 19:19	WG782990
Chloromethane	U		0.280	2.50	1	04/21/2015 19:19	WG782990
1,2-Dibromoethane	U		0.380	1.00	1	04/21/2015 19:19	WG782990
1,1-Dichloroethane	U		0.260	1.00	1	04/21/2015 19:19	WG782990
1,2-Dichloroethane	U		0.360	1.00	1	04/21/2015 19:19	WG782990
1,1-Dichloroethene	U		0.400	1.00	1	04/21/2015 19:19	WG782990
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/21/2015 19:19	WG782990
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/21/2015 19:19	WG782990
1,2-Dichloropropane	U		0.310	1.00	1	04/21/2015 19:19	WG782990
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 19:19	WG782990
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 19:19	WG782990
Ethylbenzene	U		0.380	1.00	1	04/21/2015 19:19	WG782990
Isopropylbenzene	U		0.330	1.00	1	04/21/2015 19:19	WG782990
p-Isopropyltoluene	U		0.350	1.00	1	04/21/2015 19:19	WG782990
2-Butanone (MEK)	U		3.90	10.0	1	04/21/2015 19:19	WG782990
2-Hexanone	U		3.80	10.0	1	04/21/2015 19:19	WG782990
Methylene Chloride	U		1.00	5.00	1	04/21/2015 19:19	WG782990
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/21/2015 19:19	WG782990
Methyl tert-butyl ether	U		0.370	1.00	1	04/21/2015 19:19	WG782990
Naphthalene	U		1.00	5.00	1	04/21/2015 19:19	WG782990
n-Propylbenzene	U		0.350	1.00	1	04/21/2015 19:19	WG782990
Styrene	U		0.310	1.00	1	04/21/2015 19:19	WG782990
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/21/2015 19:19	WG782990
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/21/2015 19:19	WG782990
Tetrachloroethene	U		0.370	1.00	1	04/21/2015 19:19	WG782990
Toluene	U		0.780	5.00	1	04/21/2015 19:19	WG782990
1,1,1-Trichloroethane	U		0.319	1.00	1	04/21/2015 19:19	WG782990
1,1,2-Trichloroethane	U		0.380	1.00	1	04/21/2015 19:19	WG782990
Trichloroethene	U		0.400	1.00	1	04/21/2015 19:19	WG782990
1,2,4-Trimethylbenzene	0.397	J	0.370	1.00	1	04/21/2015 19:19	WG782990
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/21/2015 19:19	WG782990
Vinyl chloride	U		0.260	1.00	1	04/21/2015 19:19	WG782990
o-Xylene	U		0.340	1.00	1	04/21/2015 19:19	WG782990
m&p-Xylene	U		0.720	1.00	1	04/21/2015 19:19	WG782990
Xylenes, Total	U		1.10	3.00	1	04/21/2015 19:19	WG782990
(S) Toluene-d8	104			88.5-111		04/21/2015 19:19	WG782990
(S) Dibromofluoromethane	103			78.3-121		04/21/2015 19:19	WG782990
(S) 4-Bromofluorobenzene	102			71.0-126		04/21/2015 19:19	WG782990

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	757		25.0	100	1	04/21/2015 02:49	WG783172
(S) o-Terphenyl	117			50.0-150		04/21/2015 02:49	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3660000		2800	10000	1	04/22/2015 18:45	WG783324

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	684	J	200	1000	10	05/05/2015 11:26	WG786264

⁶ Qc⁷ Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	319000		5200	100000	100	04/22/2015 16:47	WG782967
Fluoride	658		9.90	100	1	04/22/2015 15:21	WG782967
Sulfate	2550000		7700	500000	100	04/22/2015 16:47	WG782967

⁸ Al

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	3.77	J	1.20	10.0	5	04/24/2015 22:37	WG783150
Arsenic,Dissolved	3.84		0.250	2.00	1	04/28/2015 00:59	WG783168
Barium	11.0	J	1.80	25.0	5	04/24/2015 22:37	WG783150
Barium,Dissolved	10.2		0.360	5.00	1	04/28/2015 00:59	WG783168
Calcium	548000		230	5000	5	04/24/2015 22:37	WG783150
Chromium	U		2.70	10.0	5	04/24/2015 22:37	WG783150
Chromium,Dissolved	0.682	J	0.540	2.00	1	04/28/2015 00:59	WG783168
Iron	U		75.0	500	5	04/24/2015 22:37	WG783150
Iron,Dissolved	32.0	J	15.0	100	1	04/28/2015 00:59	WG783168
Lead	U		1.20	10.0	5	04/24/2015 22:37	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 00:59	WG783168
Manganese	89.2		1.20	25.0	5	04/24/2015 22:37	WG783150
Manganese,Dissolved	80.7		0.250	5.00	1	04/28/2015 00:59	WG783168
Potassium	2100	J	180	5000	5	04/24/2015 22:37	WG783150
Selenium	2.15	J	1.90	10.0	5	04/24/2015 22:37	WG783150
Selenium,Dissolved	2.22		0.380	2.00	1	04/28/2015 00:59	WG783168
Sodium	196000		550	5000	5	04/24/2015 22:37	WG783150

⁹ Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/25/2015 01:13	WG783013
(S) a,a,a-Trifluorotoluene(FID) 93.1				62.0-128		04/25/2015 01:13	WG783013

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/21/2015 19:37	WG782990
Benzene	U		0.330	1.00	1	04/21/2015 19:37	WG782990
Bromodichloromethane	U		0.380	1.00	1	04/21/2015 19:37	WG782990
Bromoform	U		0.470	1.00	1	04/21/2015 19:37	WG782990
Bromomethane	U		0.870	5.00	1	04/21/2015 19:37	WG782990
n-Butylbenzene	U		0.360	1.00	1	04/21/2015 19:37	WG782990
sec-Butylbenzene	U		0.360	1.00	1	04/21/2015 19:37	WG782990
Carbon disulfide	U		0.280	1.00	1	04/22/2015 14:00	WG783796
Carbon tetrachloride	U		0.380	1.00	1	04/21/2015 19:37	WG782990



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	1 Cp
Chlorobenzene	U		0.350	1.00	1	04/21/2015 19:37	WG782990	2 Tc
Chlorodibromomethane	U		0.330	1.00	1	04/21/2015 19:37	WG782990	3 Ss
Chloroethane	U		0.450	5.00	1	04/21/2015 19:37	WG782990	4 Cn
Chloroform	U		0.320	5.00	1	04/21/2015 19:37	WG782990	5 Sr
Chloromethane	U		0.280	2.50	1	04/21/2015 19:37	WG782990	6 Qc
1,2-Dibromoethane	U		0.380	1.00	1	04/21/2015 19:37	WG782990	7 Gl
1,1-Dichloroethane	U		0.260	1.00	1	04/21/2015 19:37	WG782990	8 Al
1,2-Dichloroethane	U		0.360	1.00	1	04/21/2015 19:37	WG782990	9 Sc
1,1-Dichloroethene	U		0.400	1.00	1	04/21/2015 19:37	WG782990	
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/21/2015 19:37	WG782990	
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/21/2015 19:37	WG782990	
1,2-Dichloropropane	U		0.310	1.00	1	04/21/2015 19:37	WG782990	
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 19:37	WG782990	
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 19:37	WG782990	
Ethylbenzene	U		0.380	1.00	1	04/21/2015 19:37	WG782990	
Isopropylbenzene	U		0.330	1.00	1	04/21/2015 19:37	WG782990	
p-Isopropyltoluene	U		0.350	1.00	1	04/21/2015 19:37	WG782990	
2-Butanone (MEK)	U		3.90	10.0	1	04/21/2015 19:37	WG782990	
2-Hexanone	U		3.80	10.0	1	04/21/2015 19:37	WG782990	
Methylene Chloride	U		1.00	5.00	1	04/21/2015 19:37	WG782990	
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/21/2015 19:37	WG782990	
Methyl tert-butyl ether	U		0.370	1.00	1	04/21/2015 19:37	WG782990	
Naphthalene	U		1.00	5.00	1	04/21/2015 19:37	WG782990	
n-Propylbenzene	U		0.350	1.00	1	04/21/2015 19:37	WG782990	
Styrene	U		0.310	1.00	1	04/21/2015 19:37	WG782990	
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/21/2015 19:37	WG782990	
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/21/2015 19:37	WG782990	
Tetrachloroethene	U		0.370	1.00	1	04/21/2015 19:37	WG782990	
Toluene	U		0.780	5.00	1	04/21/2015 19:37	WG782990	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/21/2015 19:37	WG782990	
1,1,2-Trichloroethane	U		0.380	1.00	1	04/21/2015 19:37	WG782990	
Trichloroethene	U		0.400	1.00	1	04/21/2015 19:37	WG782990	
1,2,4-Trimethylbenzene	0.409	J	0.370	1.00	1	04/21/2015 19:37	WG782990	
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/21/2015 19:37	WG782990	
Vinyl chloride	U		0.260	1.00	1	04/21/2015 19:37	WG782990	
o-Xylene	U		0.340	1.00	1	04/21/2015 19:37	WG782990	
m&p-Xylene	U		0.720	1.00	1	04/21/2015 19:37	WG782990	
Xylenes, Total	U		1.10	3.00	1	04/21/2015 19:37	WG782990	
(S) Toluene-d8	102			88.5-111		04/21/2015 19:37	WG782990	
(S) Dibromofluoromethane	107			78.3-121		04/21/2015 19:37	WG782990	
(S) 4-Bromofluorobenzene	102			71.0-126		04/21/2015 19:37	WG782990	

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	392		25.0	100	1	04/21/2015 03:07	WG783172
(S) o-Terphenyl	123			50.0-150		04/21/2015 03:07	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	1750000		2800	10000	1	04/22/2015 18:45	WG783324

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		200	1000	10	05/05/2015 11:28	WG786264

⁶ Qc⁷ Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	209000		1000	20000	20	04/22/2015 17:14	WG782967
Fluoride	902		9.90	100	1	04/22/2015 15:49	WG782967
Sulfate	511000		1500	100000	20	04/22/2015 17:14	WG782967

⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	6.26		0.250	2.00	1	04/27/2015 13:06	WG783150
Arsenic,Dissolved	3.74		0.250	2.00	1	04/28/2015 01:02	WG783168
Barium	534		0.360	5.00	1	04/27/2015 13:06	WG783150
Barium,Dissolved	204		0.360	5.00	1	04/28/2015 01:02	WG783168
Calcium	238000		46.0	1000	1	04/27/2015 13:06	WG783150
Chromium	2.41		0.540	2.00	1	04/27/2015 13:06	WG783150
Chromium,Dissolved	0.841	J	0.540	2.00	1	04/28/2015 01:02	WG783168
Iron	1640		15.0	100	1	04/27/2015 13:06	WG783150
Iron,Dissolved	486		15.0	100	1	04/28/2015 01:02	WG783168
Lead	1.38	J	0.240	2.00	1	04/27/2015 13:06	WG783150
Lead,Dissolved	0.441	J	0.240	2.00	1	04/28/2015 01:02	WG783168
Manganese	109		0.250	5.00	1	04/27/2015 13:06	WG783150
Manganese,Dissolved	91.9		0.250	5.00	1	04/28/2015 01:02	WG783168
Potassium	579	J	37.0	1000	1	04/27/2015 13:06	WG783150
Selenium	U		0.380	2.00	1	04/27/2015 13:06	WG783150
Selenium,Dissolved	U		0.380	2.00	1	04/28/2015 01:02	WG783168
Sodium	147000		110	1000	1	04/27/2015 13:06	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	9730		31.0	100	1	04/25/2015 01:35	WG783013
(S) a,a,a-Trifluorotoluene(FID) 91.7				62.0-128		04/25/2015 01:35	WG783013

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/21/2015 19:54	WG782990
Benzene	4410		16.0	50.0	50	04/22/2015 14:18	WG783796
Bromodichloromethane	U		0.380	1.00	1	04/21/2015 19:54	WG782990
Bromoform	U		0.470	1.00	1	04/21/2015 19:54	WG782990
Bromomethane	U		0.870	5.00	1	04/21/2015 19:54	WG782990
n-Butylbenzene	2.51		0.360	1.00	1	04/21/2015 19:54	WG782990
sec-Butylbenzene	3.24		0.360	1.00	1	04/21/2015 19:54	WG782990
Carbon disulfide	U		14.0	50.0	50	04/22/2015 14:18	WG783796
Carbon tetrachloride	U		0.380	1.00	1	04/21/2015 19:54	WG782990



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/21/2015 19:54	WG782990
Chlorodibromomethane	U		0.330	1.00	1	04/21/2015 19:54	WG782990
Chloroethane	U		0.450	5.00	1	04/21/2015 19:54	WG782990
Chloroform	U		0.320	5.00	1	04/21/2015 19:54	WG782990
Chloromethane	U		0.280	2.50	1	04/21/2015 19:54	WG782990
1,2-Dibromoethane	U		0.380	1.00	1	04/21/2015 19:54	WG782990
1,1-Dichloroethane	U		0.260	1.00	1	04/21/2015 19:54	WG782990
1,2-Dichloroethane	0.418	U	0.360	1.00	1	04/21/2015 19:54	WG782990
1,1-Dichloroethene	U		0.400	1.00	1	04/21/2015 19:54	WG782990
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/21/2015 19:54	WG782990
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/21/2015 19:54	WG782990
1,2-Dichloropropane	U		0.310	1.00	1	04/21/2015 19:54	WG782990
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 19:54	WG782990
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 19:54	WG782990
Ethylbenzene	424		19.0	50.0	50	04/22/2015 14:18	WG783796
Isopropylbenzene	21.3		0.330	1.00	1	04/21/2015 19:54	WG782990
p-Isopropyltoluene	1.59		0.350	1.00	1	04/21/2015 19:54	WG782990
2-Butanone (MEK)	U		3.90	10.0	1	04/21/2015 19:54	WG782990
2-Hexanone	U		3.80	10.0	1	04/21/2015 19:54	WG782990
Methylene Chloride	U		1.00	5.00	1	04/21/2015 19:54	WG782990
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/21/2015 19:54	WG782990
Methyl tert-butyl ether	868		18.0	50.0	50	04/22/2015 14:18	WG783796
Naphthalene	65.8		1.00	5.00	1	04/21/2015 19:54	WG782990
n-Propylbenzene	33.5		0.350	1.00	1	04/21/2015 19:54	WG782990
Styrene	U		0.310	1.00	1	04/21/2015 19:54	WG782990
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/21/2015 19:54	WG782990
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/21/2015 19:54	WG782990
Tetrachloroethene	U		0.370	1.00	1	04/21/2015 19:54	WG782990
Toluene	183		0.780	5.00	1	04/21/2015 19:54	WG782990
1,1,1-Trichloroethane	U		0.319	1.00	1	04/21/2015 19:54	WG782990
1,1,2-Trichloroethane	U		0.380	1.00	1	04/21/2015 19:54	WG782990
Trichloroethene	U		0.400	1.00	1	04/21/2015 19:54	WG782990
1,2,4-Trimethylbenzene	126		0.370	1.00	1	04/21/2015 19:54	WG782990
1,3,5-Trimethylbenzene	8.54		0.390	1.00	1	04/21/2015 19:54	WG782990
Vinyl chloride	U		0.260	1.00	1	04/21/2015 19:54	WG782990
o-Xylene	142		0.340	1.00	1	04/21/2015 19:54	WG782990
m&p-Xylene	153		0.720	1.00	1	04/21/2015 19:54	WG782990
Xylenes, Total	296		1.10	3.00	1	04/21/2015 19:54	WG782990
(S) Toluene-d8	101			88.5-111		04/21/2015 19:54	WG782990
(S) Dibromofluoromethane	91.2			78.3-121		04/21/2015 19:54	WG782990
(S) 4-Bromofluorobenzene	97.0			71.0-126		04/21/2015 19:54	WG782990

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1680		25.0	100	1	04/21/2015 03:26	WG783172
(S) o-Terphenyl	120			50.0-150		04/21/2015 03:26	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	1330000		2800	10000	1	04/22/2015 18:48	WG783324

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		200	1000	10	05/05/2015 11:29	WG786264

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	302000		1000	20000	20	04/22/2015 17:28	WG782967
Fluoride	900		9.90	100	1	04/22/2015 16:03	WG782967
Sulfate	69400		77.0	5000	1	04/22/2015 16:03	WG782967

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	33.8		0.250	2.00	1	04/27/2015 13:09	WG783150
Arsenic,Dissolved	27.9		0.250	2.00	1	04/28/2015 01:04	WG783168
Barium	498		0.360	5.00	1	04/27/2015 13:09	WG783150
Barium,Dissolved	536		0.360	5.00	1	04/28/2015 01:04	WG783168
Calcium	192000		46.0	1000	1	04/27/2015 13:09	WG783150
Chromium	2.27		0.540	2.00	1	04/27/2015 13:09	WG783150
Chromium,Dissolved	U		0.540	2.00	1	04/28/2015 01:04	WG783168
Iron	6420		15.0	100	1	04/27/2015 13:09	WG783150
Iron,Dissolved	4930		15.0	100	1	04/28/2015 01:04	WG783168
Lead	2.77		0.240	2.00	1	04/27/2015 13:09	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 01:04	WG783168
Manganese	1210		0.250	5.00	1	04/27/2015 13:09	WG783150
Manganese,Dissolved	1110		0.250	5.00	1	04/28/2015 01:04	WG783168
Potassium	530	J	37.0	1000	1	04/27/2015 13:09	WG783150
Selenium	U		0.380	2.00	1	04/27/2015 13:09	WG783150
Selenium,Dissolved	U		0.380	2.00	1	04/28/2015 01:04	WG783168
Sodium	195000		110	1000	1	04/27/2015 13:09	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	3290		31.0	100	1	04/22/2015 23:21	WG783015
(S) a,a,a-Trifluorotoluene(FID) 95.4				62.0-128		04/22/2015 23:21	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/21/2015 20:12	WG782990
Benzene	37.2		0.330	1.00	1	04/21/2015 20:12	WG782990
Bromodichloromethane	U		0.380	1.00	1	04/21/2015 20:12	WG782990
Bromoform	U		0.470	1.00	1	04/21/2015 20:12	WG782990
Bromomethane	U		0.870	5.00	1	04/21/2015 20:12	WG782990
n-Butylbenzene	0.458	J	0.360	1.00	1	04/21/2015 20:12	WG782990
sec-Butylbenzene	1.02		0.360	1.00	1	04/21/2015 20:12	WG782990
Carbon disulfide	U		28.0	100	100	04/22/2015 14:35	WG783796
Carbon tetrachloride	U		0.380	1.00	1	04/21/2015 20:12	WG782990



Collected date/time: 04/15/15 14:05

L760039

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	1 Cp
Chlorobenzene	U		0.350	1.00	1	04/21/2015 20:12	WG782990	2 Tc
Chlorodibromomethane	U		0.330	1.00	1	04/21/2015 20:12	WG782990	3 Ss
Chloroethane	U		0.450	5.00	1	04/21/2015 20:12	WG782990	4 Cn
Chloroform	U		0.320	5.00	1	04/21/2015 20:12	WG782990	5 Sr
Chloromethane	U		0.280	2.50	1	04/21/2015 20:12	WG782990	6 Qc
1,2-Dibromoethane	U		0.380	1.00	1	04/21/2015 20:12	WG782990	7 Gl
1,1-Dichloroethane	U		0.260	1.00	1	04/21/2015 20:12	WG782990	8 Al
1,2-Dichloroethane	U		0.360	1.00	1	04/21/2015 20:12	WG782990	9 Sc
1,1-Dichloroethene	U		0.400	1.00	1	04/21/2015 20:12	WG782990	
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/21/2015 20:12	WG782990	
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/21/2015 20:12	WG782990	
1,2-Dichloropropane	U		0.310	1.00	1	04/21/2015 20:12	WG782990	
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 20:12	WG782990	
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 20:12	WG782990	
Ethylbenzene	1.31		0.380	1.00	1	04/21/2015 20:12	WG782990	
Isopropylbenzene	1.98		0.330	1.00	1	04/21/2015 20:12	WG782990	
p-Isopropyltoluene	U		0.350	1.00	1	04/21/2015 20:12	WG782990	
2-Butanone (MEK)	U		3.90	10.0	1	04/21/2015 20:12	WG782990	
2-Hexanone	U		3.80	10.0	1	04/21/2015 20:12	WG782990	
Methylene Chloride	U		1.00	5.00	1	04/21/2015 20:12	WG782990	
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/21/2015 20:12	WG782990	
Methyl tert-butyl ether	7040		37.0	100	100	04/22/2015 14:35	WG783796	
Naphthalene	4.07	U	1.00	5.00	1	04/21/2015 20:12	WG782990	
n-Propylbenzene	0.956	U	0.350	1.00	1	04/21/2015 20:12	WG782990	
Styrene	U		0.310	1.00	1	04/21/2015 20:12	WG782990	
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/21/2015 20:12	WG782990	
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/21/2015 20:12	WG782990	
Tetrachloroethene	U		0.370	1.00	1	04/21/2015 20:12	WG782990	
Toluene	U		0.780	5.00	1	04/21/2015 20:12	WG782990	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/21/2015 20:12	WG782990	
1,1,2-Trichloroethane	U		0.380	1.00	1	04/21/2015 20:12	WG782990	
Trichloroethene	U		0.400	1.00	1	04/21/2015 20:12	WG782990	
1,2,4-Trimethylbenzene	2.86		0.370	1.00	1	04/21/2015 20:12	WG782990	
1,3,5-Trimethylbenzene	0.679	U	0.390	1.00	1	04/21/2015 20:12	WG782990	
Vinyl chloride	U		0.260	1.00	1	04/21/2015 20:12	WG782990	
o-Xylene	1.12		0.340	1.00	1	04/21/2015 20:12	WG782990	
m&p-Xylene	2.45		0.720	1.00	1	04/21/2015 20:12	WG782990	
Xylenes, Total	3.57		1.10	3.00	1	04/21/2015 20:12	WG782990	
(S) Toluene-d8	102			88.5-111		04/21/2015 20:12	WG782990	
(S) Dibromofluoromethane	104			78.3-121		04/21/2015 20:12	WG782990	
(S) 4-Bromofluorobenzene	103			71.0-126		04/21/2015 20:12	WG782990	

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	2450		25.0	100	1	04/21/2015 03:45	WG783172
(S) o-Terphenyl	112			50.0-150		04/21/2015 03:45	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2100000		2800	10000	1	04/22/2015 18:44	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		200	1000	10	05/05/2015 11:30	WG786264

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U	H	1.80	5.00	1	05/05/2015 17:13	WG786334

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	301000		5200	100000	100	04/22/2015 17:42	WG782967
Fluoride	754		9.90	100	1	04/22/2015 16:17	WG782967
Sulfate	886000		7700	500000	100	04/22/2015 17:42	WG782967

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	04/20/2015 20:14	WG783254

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	20.0		0.250	2.00	1	04/27/2015 13:11	WG783150
Arsenic,Dissolved	19.1		0.250	2.00	1	04/28/2015 01:07	WG783168
Barium	64.5		0.360	5.00	1	04/27/2015 13:11	WG783150
Barium,Dissolved	62.8		0.360	5.00	1	04/28/2015 01:07	WG783168
Calcium	279000		46.0	1000	1	04/27/2015 13:11	WG783150
Chromium	0.832	J	0.540	2.00	1	04/27/2015 13:11	WG783150
Chromium,Dissolved	U		0.540	2.00	1	04/28/2015 01:07	WG783168
Iron	1440		15.0	100	1	04/27/2015 13:11	WG783150
Iron,Dissolved	1510		15.0	100	1	04/28/2015 01:07	WG783168
Lead	0.625	J	0.240	2.00	1	04/27/2015 13:11	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 01:07	WG783168
Manganese	5650		0.250	5.00	1	04/27/2015 13:11	WG783150
Manganese,Dissolved	5860		0.250	5.00	1	04/28/2015 01:07	WG783168
Nickel	9.01		0.350	2.00	1	04/27/2015 13:11	WG783150
Nickel,Dissolved	7.84		0.350	2.00	1	04/28/2015 01:07	WG783168
Potassium	209	J	37.0	1000	1	04/27/2015 13:11	WG783150
Selenium	U		0.380	2.00	1	04/27/2015 13:11	WG783150
Selenium,Dissolved	0.486	J	0.380	2.00	1	04/28/2015 01:07	WG783168
Sodium	238000		110	1000	1	04/27/2015 13:11	WG783150
Vanadium	1.33	J	0.180	5.00	1	04/27/2015 13:11	WG783150
Vanadium,Dissolved	1.11	J	0.180	5.00	1	04/28/2015 01:07	WG783168



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	04/21/2015 20:30	WG782990
Benzene	929		3.30	10.0	10	04/25/2015 21:36	WG784352
Bromodichloromethane	U		0.380	1.00	1	04/21/2015 20:30	WG782990
Bromoform	U		0.470	1.00	1	04/21/2015 20:30	WG782990
Bromomethane	U		0.870	5.00	1	04/21/2015 20:30	WG782990
n-Butylbenzene	2.99		0.360	1.00	1	04/21/2015 20:30	WG782990
sec-Butylbenzene	10.4		0.360	1.00	1	04/21/2015 20:30	WG782990
Carbon disulfide	U		2.80	10.0	10	04/25/2015 21:36	WG784352
Carbon tetrachloride	U		0.380	1.00	1	04/21/2015 20:30	WG782990
Chlorobenzene	U		0.350	1.00	1	04/21/2015 20:30	WG782990
Chlorodibromomethane	U		0.330	1.00	1	04/21/2015 20:30	WG782990
Chloroethane	U		0.450	5.00	1	04/21/2015 20:30	WG782990
Chloroform	U		0.320	5.00	1	04/21/2015 20:30	WG782990
Chloromethane	U		0.280	2.50	1	04/21/2015 20:30	WG782990
1,2-Dibromoethane	U		0.380	1.00	1	04/21/2015 20:30	WG782990
1,1-Dichloroethane	U		0.260	1.00	1	04/21/2015 20:30	WG782990
1,2-Dichloroethane	U		0.360	1.00	1	04/21/2015 20:30	WG782990
1,1-Dichloroethene	U		0.400	1.00	1	04/21/2015 20:30	WG782990
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/21/2015 20:30	WG782990
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/21/2015 20:30	WG782990
1,2-Dichloropropane	U		0.310	1.00	1	04/21/2015 20:30	WG782990
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 20:30	WG782990
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 20:30	WG782990
Ethylbenzene	28.5		0.380	1.00	1	04/21/2015 20:30	WG782990
Isopropylbenzene	33.8		0.330	1.00	1	04/21/2015 20:30	WG782990
p-Isopropyltoluene	U		0.350	1.00	1	04/21/2015 20:30	WG782990
2-Butanone (MEK)	U		3.90	10.0	1	04/21/2015 20:30	WG782990
2-Hexanone	U		3.80	10.0	1	04/21/2015 20:30	WG782990
Methylene Chloride	U		1.00	5.00	1	04/21/2015 20:30	WG782990
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/21/2015 20:30	WG782990
Methyl tert-butyl ether	22.5		3.70	10.0	10	04/25/2015 21:36	WG784352
Naphthalene	12.0		1.00	5.00	1	04/21/2015 20:30	WG782990
n-Propylbenzene	31.7		0.350	1.00	1	04/21/2015 20:30	WG782990
Styrene	U		0.310	1.00	1	04/21/2015 20:30	WG782990
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/21/2015 20:30	WG782990
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/21/2015 20:30	WG782990
Tetrachloroethene	U		0.370	1.00	1	04/21/2015 20:30	WG782990
Toluene	2.13	U	0.780	5.00	1	04/21/2015 20:30	WG782990
1,1,1-Trichloroethane	U		0.319	1.00	1	04/21/2015 20:30	WG782990
1,1,2-Trichloroethane	U		0.380	1.00	1	04/21/2015 20:30	WG782990
Trichloroethene	U		0.400	1.00	1	04/21/2015 20:30	WG782990
1,2,4-Trimethylbenzene	76.6		0.370	1.00	1	04/21/2015 20:30	WG782990
1,3,5-Trimethylbenzene	0.982	U	0.390	1.00	1	04/21/2015 20:30	WG782990
Vinyl chloride	U		0.260	1.00	1	04/21/2015 20:30	WG782990
o-Xylene	3.77		0.340	1.00	1	04/21/2015 20:30	WG782990
m&p-Xylene	3.42		0.720	1.00	1	04/21/2015 20:30	WG782990
Xylenes, Total	7.18		1.10	3.00	1	04/21/2015 20:30	WG782990
(S) Toluene-d8	102			88.5-111		04/21/2015 20:30	WG782990
(S) Dibromofluoromethane	103			78.3-121		04/21/2015 20:30	WG782990
(S) 4-Bromofluorobenzene	97.4			71.0-126		04/21/2015 20:30	WG782990

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1430		25.0	100	1	04/21/2015 04:04	WG783172
(S) o-Terphenyl	124			50.0-150		04/21/2015 04:04	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	5040000		2800	10000	1	04/22/2015 18:46	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	67800		200	1000	10	05/05/2015 11:41	WG786264

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1100000		2600	50000	50	04/23/2015 11:36	WG782967
Fluoride	764		9.90	100	1	04/22/2015 16:30	WG782967
Sulfate	2170000		3900	250000	50	04/23/2015 11:36	WG782967

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	8.71	J	1.20	10.0	5	04/24/2015 22:47	WG783150
Arsenic,Dissolved	2.91		0.250	2.00	1	04/28/2015 01:10	WG783168
Barium	413		1.80	25.0	5	04/24/2015 22:47	WG783150
Barium,Dissolved	10.6		0.360	5.00	1	04/28/2015 01:10	WG783168
Calcium	848000		230	5000	5	04/24/2015 22:47	WG783150
Chromium	16.8		2.70	10.0	5	04/24/2015 22:47	WG783150
Chromium,Dissolved	0.881	J	0.540	2.00	1	04/28/2015 01:10	WG783168
Iron	5330		75.0	500	5	04/24/2015 22:47	WG783150
Iron,Dissolved	U		15.0	100	1	04/28/2015 01:10	WG783168
Lead	11.9		1.20	10.0	5	04/24/2015 22:47	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 01:10	WG783168
Manganese	500		1.20	25.0	5	04/24/2015 22:47	WG783150
Manganese,Dissolved	3.29	J	0.250	5.00	1	04/28/2015 01:10	WG783168
Potassium	1420	J	180	5000	5	04/24/2015 22:47	WG783150
Selenium	33.7		1.90	10.0	5	04/24/2015 22:47	WG783150
Selenium,Dissolved	34.5		0.380	2.00	1	04/28/2015 01:10	WG783168
Sodium	552000		550	5000	5	04/24/2015 22:47	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/22/2015 23:46	WG783015
(S) a,a,a-Trifluorotoluene(FID) 94.8				62.0-128		04/22/2015 23:46	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/21/2015 20:47	WG782990
Benzene	U		0.330	1.00	1	04/25/2015 21:57	WG784352
Bromodichloromethane	U		0.380	1.00	1	04/21/2015 20:47	WG782990
Bromoform	U		0.470	1.00	1	04/21/2015 20:47	WG782990
Bromomethane	U		0.870	5.00	1	04/21/2015 20:47	WG782990
n-Butylbenzene	U		0.360	1.00	1	04/21/2015 20:47	WG782990
sec-Butylbenzene	U		0.360	1.00	1	04/21/2015 20:47	WG782990
Carbon disulfide	U		0.280	1.00	1	04/25/2015 21:57	WG784352
Carbon tetrachloride	U		0.380	1.00	1	04/21/2015 20:47	WG782990



Collected date/time: 04/15/15 12:30

L760039

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/21/2015 20:47	WG782990
Chlorodibromomethane	U		0.330	1.00	1	04/21/2015 20:47	WG782990
Chloroethane	U		0.450	5.00	1	04/21/2015 20:47	WG782990
Chloroform	U		0.320	5.00	1	04/21/2015 20:47	WG782990
Chloromethane	U		0.280	2.50	1	04/21/2015 20:47	WG782990
1,2-Dibromoethane	U		0.380	1.00	1	04/21/2015 20:47	WG782990
1,1-Dichloroethane	U		0.260	1.00	1	04/21/2015 20:47	WG782990
1,2-Dichloroethane	U		0.360	1.00	1	04/21/2015 20:47	WG782990
1,1-Dichloroethene	U		0.400	1.00	1	04/21/2015 20:47	WG782990
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/21/2015 20:47	WG782990
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/21/2015 20:47	WG782990
1,2-Dichloropropane	U		0.310	1.00	1	04/21/2015 20:47	WG782990
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 20:47	WG782990
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/21/2015 20:47	WG782990
Ethylbenzene	U		0.380	1.00	1	04/21/2015 20:47	WG782990
Isopropylbenzene	U		0.330	1.00	1	04/21/2015 20:47	WG782990
p-Isopropyltoluene	U		0.350	1.00	1	04/21/2015 20:47	WG782990
2-Butanone (MEK)	U		3.90	10.0	1	04/21/2015 20:47	WG782990
2-Hexanone	U		3.80	10.0	1	04/21/2015 20:47	WG782990
Methylene Chloride	U		1.00	5.00	1	04/21/2015 20:47	WG782990
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/21/2015 20:47	WG782990
Methyl tert-butyl ether	0.829	U	0.370	1.00	1	04/25/2015 21:57	WG784352
Naphthalene	U		1.00	5.00	1	04/21/2015 20:47	WG782990
n-Propylbenzene	U		0.350	1.00	1	04/21/2015 20:47	WG782990
Styrene	U		0.310	1.00	1	04/21/2015 20:47	WG782990
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/21/2015 20:47	WG782990
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/21/2015 20:47	WG782990
Tetrachloroethene	U		0.370	1.00	1	04/21/2015 20:47	WG782990
Toluene	U		0.780	5.00	1	04/21/2015 20:47	WG782990
1,1,1-Trichloroethane	U		0.319	1.00	1	04/21/2015 20:47	WG782990
1,1,2-Trichloroethane	U		0.380	1.00	1	04/21/2015 20:47	WG782990
Trichloroethene	U		0.400	1.00	1	04/21/2015 20:47	WG782990
1,2,4-Trimethylbenzene	0.793	U	0.370	1.00	1	04/21/2015 20:47	WG782990
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/21/2015 20:47	WG782990
Vinyl chloride	U		0.260	1.00	1	04/21/2015 20:47	WG782990
o-Xylene	U		0.340	1.00	1	04/21/2015 20:47	WG782990
m&p-Xylene	U		0.720	1.00	1	04/21/2015 20:47	WG782990
Xylenes, Total	U		1.10	3.00	1	04/21/2015 20:47	WG782990
(S) Toluene-d8	102			88.5-111		04/21/2015 20:47	WG782990
(S) Dibromofluoromethane	106			78.3-121		04/21/2015 20:47	WG782990
(S) 4-Bromofluorobenzene	99.2			71.0-126		04/21/2015 20:47	WG782990

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	82.3	U	25.0	100	1	04/21/2015 04:23	WG783172
(S) o-Terphenyl	109			50.0-150		04/21/2015 04:23	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	4020000		2800	10000	1	04/22/2015 18:44	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	15700		200	1000	10	05/05/2015 11:42	WG786264

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U	H	1.80	5.00	1	05/05/2015 16:47	WG786334

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1270000		5200	100000	100	04/22/2015 20:29	WG782967
Fluoride	580		9.90	100	1	04/22/2015 18:38	WG782967
Sulfate	2280000		7700	500000	100	04/22/2015 20:29	WG782967

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	04/20/2015 20:17	WG783254

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	2.51	J	1.20	10.0	5	04/24/2015 22:49	WG783150
Arsenic,Dissolved	2.41		0.250	2.00	1	04/28/2015 01:12	WG783168
Barium	24.0	J	1.80	25.0	5	04/24/2015 22:49	WG783150
Barium,Dissolved	21.7		0.360	5.00	1	04/28/2015 01:12	WG783168
Calcium	568000		230	5000	5	04/24/2015 22:49	WG783150
Chromium	U		2.70	10.0	5	04/24/2015 22:49	WG783150
Chromium,Dissolved	U		0.540	2.00	1	04/28/2015 01:12	WG783168
Iron	U		75.0	500	5	04/24/2015 22:49	WG783150
Iron,Dissolved	U		15.0	100	1	04/28/2015 01:12	WG783168
Lead	8.25	J	1.20	10.0	5	04/24/2015 22:49	WG783150
Lead,Dissolved	8.17		0.240	2.00	1	04/28/2015 01:12	WG783168
Manganese	294		1.20	25.0	5	04/24/2015 22:49	WG783150
Manganese,Dissolved	265		0.250	5.00	1	04/28/2015 01:12	WG783168
Nickel	6.75	J	1.80	10.0	5	04/24/2015 22:49	WG783150
Nickel,Dissolved	4.42		0.350	2.00	1	04/28/2015 01:12	WG783168
Potassium	305	J	180	5000	5	04/24/2015 22:49	WG783150
Selenium	2.62	J	1.90	10.0	5	04/24/2015 22:49	WG783150
Selenium,Dissolved	2.60		0.380	2.00	1	04/28/2015 01:12	WG783168
Sodium	370000		550	5000	5	04/24/2015 22:49	WG783150
Vanadium	12.2	J	0.900	25.0	5	04/24/2015 22:49	WG783150
Vanadium,Dissolved	12.3		0.180	5.00	1	04/28/2015 01:12	WG783168

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	339		31.0	100	1	04/23/2015 00:11	WG783015



Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	94.7			62.0-128		04/23/2015 00:11	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	17.6	U	10.0	50.0	1	04/25/2015 21:16	WG784352
Benzene	24.8		0.330	1.00	1	04/25/2015 21:16	WG784352
Bromodichloromethane	U		0.380	1.00	1	04/25/2015 21:16	WG784352
Bromoform	U		0.470	1.00	1	04/25/2015 21:16	WG784352
Bromomethane	U		0.870	5.00	1	04/25/2015 21:16	WG784352
n-Butylbenzene	U		0.360	1.00	1	04/25/2015 21:16	WG784352
sec-Butylbenzene	0.636	U	0.360	1.00	1	04/25/2015 21:16	WG784352
Carbon disulfide	U		0.280	1.00	1	04/25/2015 21:16	WG784352
Carbon tetrachloride	U		0.380	1.00	1	04/25/2015 21:16	WG784352
Chlorobenzene	U		0.350	1.00	1	04/25/2015 21:16	WG784352
Chlorodibromomethane	U		0.330	1.00	1	04/25/2015 21:16	WG784352
Chloroethane	U		0.450	5.00	1	04/25/2015 21:16	WG784352
Chloroform	U		0.320	5.00	1	04/25/2015 21:16	WG784352
Chloromethane	U		0.280	2.50	1	04/25/2015 21:16	WG784352
1,2-Dibromoethane	U		0.380	1.00	1	04/25/2015 21:16	WG784352
1,1-Dichloroethane	U		0.260	1.00	1	04/25/2015 21:16	WG784352
1,2-Dichloroethane	U		0.360	1.00	1	04/25/2015 21:16	WG784352
1,1-Dichloroethene	U		0.400	1.00	1	04/25/2015 21:16	WG784352
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/25/2015 21:16	WG784352
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/25/2015 21:16	WG784352
1,2-Dichloropropane	U		0.310	1.00	1	04/25/2015 21:16	WG784352
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/25/2015 21:16	WG784352
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/25/2015 21:16	WG784352
Ethylbenzene	U		0.380	1.00	1	04/25/2015 21:16	WG784352
Isopropylbenzene	U		0.330	1.00	1	04/25/2015 21:16	WG784352
p-Isopropyltoluene	0.951	U	0.350	1.00	1	04/25/2015 21:16	WG784352
2-Butanone (MEK)	U		3.90	10.0	1	04/25/2015 21:16	WG784352
2-Hexanone	U		3.80	10.0	1	04/25/2015 21:16	WG784352
Methylene Chloride	1.02	U	1.00	5.00	1	04/25/2015 21:16	WG784352
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/25/2015 21:16	WG784352
Methyl tert-butyl ether	6.48		0.370	1.00	1	04/25/2015 21:16	WG784352
Naphthalene	23.3		1.00	5.00	1	04/25/2015 21:16	WG784352
n-Propylbenzene	U		0.350	1.00	1	04/25/2015 21:16	WG784352
Styrene	U	* F	0.310	1.00	1	04/25/2015 21:16	WG784352
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/25/2015 21:16	WG784352
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/25/2015 21:16	WG784352
Tetrachloroethene	U		0.370	1.00	1	04/25/2015 21:16	WG784352
Toluene	U		0.780	5.00	1	04/25/2015 21:16	WG784352
1,1,1-Trichloroethane	U		0.319	1.00	1	04/25/2015 21:16	WG784352
1,1,2-Trichloroethane	U		0.380	1.00	1	04/25/2015 21:16	WG784352
Trichloroethene	U		0.400	1.00	1	04/25/2015 21:16	WG784352
1,2,4-Trimethylbenzene	65.8		0.370	1.00	1	04/25/2015 21:16	WG784352
1,3,5-Trimethylbenzene	1.68		0.390	1.00	1	04/25/2015 21:16	WG784352
Vinyl chloride	U		0.260	1.00	1	04/25/2015 21:16	WG784352
o-Xylene	0.869	U	0.340	1.00	1	04/25/2015 21:16	WG784352
m&p-Xylene	1.88		0.720	1.00	1	04/25/2015 21:16	WG784352
Xylenes, Total	2.75	U	1.10	3.00	1	04/25/2015 21:16	WG784352
(S) Toluene-d8	104			88.5-111		04/25/2015 21:16	WG784352
(S) Dibromofluoromethane	104			78.3-121		04/25/2015 21:16	WG784352
(S) 4-Bromofluorobenzene	107			71.0-126		04/25/2015 21:16	WG784352

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/15/15 13:20

L760039

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) High Fraction	1870		25.0	100	1	04/21/2015 04:41	WG783172
(S) o-Terphenyl	118			50.0-150		04/21/2015 04:41	WG783172

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2630000		2800	10000	1	04/22/2015 18:47	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	2800		200	1000	10	05/05/2015 11:43	WG786264

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U	H	1.80	5.00	1	05/05/2015 16:48	WG786334

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	275000		5200	100000	100	04/22/2015 20:43	WG782967
Fluoride	318		9.90	100	1	04/22/2015 18:52	WG782967
Sulfate	1760000		7700	500000	100	04/22/2015 20:43	WG782967

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	04/20/2015 20:19	WG783254

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	1.47	J	0.250	2.00	1	04/27/2015 13:14	WG783150
Arsenic,Dissolved	1.39	J	0.250	2.00	1	04/28/2015 01:15	WG783168
Barium	12.7		0.360	5.00	1	04/27/2015 13:14	WG783150
Barium,Dissolved	13.5		0.360	5.00	1	04/28/2015 01:15	WG783168
Calcium	469000		46.0	1000	1	04/27/2015 13:14	WG783150
Chromium	1.16	J	0.540	2.00	1	04/27/2015 13:14	WG783150
Chromium,Dissolved	0.786	J	0.540	2.00	1	04/28/2015 01:15	WG783168
Iron	U		15.0	100	1	04/27/2015 13:14	WG783150
Iron,Dissolved	U		15.0	100	1	04/28/2015 01:15	WG783168
Lead	U		0.240	2.00	1	04/27/2015 13:14	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 01:15	WG783168
Manganese	2.71	J	0.250	5.00	1	04/27/2015 13:14	WG783150
Manganese,Dissolved	0.825	J	0.250	5.00	1	04/28/2015 01:15	WG783168
Nickel	U		0.350	2.00	1	04/27/2015 13:14	WG783150
Nickel,Dissolved	0.504	J	0.350	2.00	1	04/28/2015 01:15	WG783168
Potassium	2120		37.0	1000	1	04/27/2015 13:14	WG783150
Selenium	7.83		0.380	2.00	1	04/27/2015 13:14	WG783150
Selenium,Dissolved	9.72		0.380	2.00	1	04/28/2015 01:15	WG783168
Sodium	93000		110	1000	1	04/27/2015 13:14	WG783150
Vanadium	8.06		0.180	5.00	1	04/27/2015 13:14	WG783150
Vanadium,Dissolved	8.11		0.180	5.00	1	04/28/2015 01:15	WG783168

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/23/2015 00:37	WG783015



Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	94.7			62.0-128		04/23/2015 00:37	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	04/25/2015 22:17	WG784352
Benzene	U		0.330	1.00	1	04/25/2015 22:17	WG784352
Bromodichloromethane	U		0.380	1.00	1	04/25/2015 22:17	WG784352
Bromoform	U		0.470	1.00	1	04/25/2015 22:17	WG784352
Bromomethane	U		0.870	5.00	1	04/25/2015 22:17	WG784352
n-Butylbenzene	U		0.360	1.00	1	04/25/2015 22:17	WG784352
sec-Butylbenzene	U		0.360	1.00	1	04/25/2015 22:17	WG784352
Carbon disulfide	U		0.280	1.00	1	04/25/2015 22:17	WG784352
Carbon tetrachloride	U		0.380	1.00	1	04/25/2015 22:17	WG784352
Chlorobenzene	U		0.350	1.00	1	04/25/2015 22:17	WG784352
Chlorodibromomethane	U		0.330	1.00	1	04/25/2015 22:17	WG784352
Chloroethane	U		0.450	5.00	1	04/25/2015 22:17	WG784352
Chloroform	U		0.320	5.00	1	04/25/2015 22:17	WG784352
Chloromethane	U		0.280	2.50	1	04/25/2015 22:17	WG784352
1,2-Dibromoethane	U		0.380	1.00	1	04/25/2015 22:17	WG784352
1,1-Dichloroethane	U		0.260	1.00	1	04/25/2015 22:17	WG784352
1,2-Dichloroethane	U		0.360	1.00	1	04/25/2015 22:17	WG784352
1,1-Dichloroethene	U		0.400	1.00	1	04/25/2015 22:17	WG784352
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/25/2015 22:17	WG784352
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/25/2015 22:17	WG784352
1,2-Dichloropropane	U		0.310	1.00	1	04/25/2015 22:17	WG784352
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/25/2015 22:17	WG784352
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/25/2015 22:17	WG784352
Ethylbenzene	U		0.380	1.00	1	04/25/2015 22:17	WG784352
Isopropylbenzene	U		0.330	1.00	1	04/25/2015 22:17	WG784352
p-Isopropyltoluene	U		0.350	1.00	1	04/25/2015 22:17	WG784352
2-Butanone (MEK)	U		3.90	10.0	1	04/25/2015 22:17	WG784352
2-Hexanone	U		3.80	10.0	1	04/25/2015 22:17	WG784352
Methylene Chloride	1.06	U	1.00	5.00	1	04/25/2015 22:17	WG784352
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/25/2015 22:17	WG784352
Methyl tert-butyl ether	1.21		0.370	1.00	1	04/25/2015 22:17	WG784352
Naphthalene	U		1.00	5.00	1	04/25/2015 22:17	WG784352
n-Propylbenzene	U		0.350	1.00	1	04/25/2015 22:17	WG784352
Styrene	U		0.310	1.00	1	04/25/2015 22:17	WG784352
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/25/2015 22:17	WG784352
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/25/2015 22:17	WG784352
Tetrachloroethene	U		0.370	1.00	1	04/25/2015 22:17	WG784352
Toluene	U		0.780	5.00	1	04/25/2015 22:17	WG784352
1,1,1-Trichloroethane	U		0.319	1.00	1	04/25/2015 22:17	WG784352
1,1,2-Trichloroethane	U		0.380	1.00	1	04/25/2015 22:17	WG784352
Trichloroethene	U		0.400	1.00	1	04/25/2015 22:17	WG784352
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/25/2015 22:17	WG784352
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/25/2015 22:17	WG784352
Vinyl chloride	U		0.260	1.00	1	04/25/2015 22:17	WG784352
o-Xylene	U		0.340	1.00	1	04/25/2015 22:17	WG784352
m&p-Xylene	U		0.720	1.00	1	04/25/2015 22:17	WG784352
Xylenes, Total	U		1.10	3.00	1	04/25/2015 22:17	WG784352
(S) Toluene-d8	104			88.5-111		04/25/2015 22:17	WG784352
(S) Dibromofluoromethane	104			78.3-121		04/25/2015 22:17	WG784352
(S) 4-Bromofluorobenzene	109			71.0-126		04/25/2015 22:17	WG784352

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/15/15 14:10

L760039

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) High Fraction	36.5	J	25.0	100	1	04/21/2015 06:15	WG783172
(S) o-Terphenyl	116			50.0-150		04/21/2015 06:15	WG783172

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	1340000		2800	10000	1	04/22/2015 18:43	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		200	1000	10	05/05/2015 11:44	WG786264

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	201000		260	5000	5	04/22/2015 20:56	WG782967
Fluoride	708		9.90	100	1	04/22/2015 19:06	WG782967
Sulfate	188000		390	25000	5	04/22/2015 20:56	WG782967

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	93.9		0.250	2.00	1	04/27/2015 13:17	WG783150
Arsenic,Dissolved	76.7		0.250	2.00	1	04/28/2015 01:23	WG783168
Barium	50.1		0.360	5.00	1	04/27/2015 13:17	WG783150
Barium,Dissolved	56.5		0.360	5.00	1	04/28/2015 01:23	WG783168
Calcium	188000		46.0	1000	1	04/27/2015 13:17	WG783150
Chromium	0.581	J	0.540	2.00	1	04/27/2015 13:17	WG783150
Chromium,Dissolved	U		0.540	2.00	1	04/28/2015 01:23	WG783168
Iron	3580		15.0	100	1	04/27/2015 13:17	WG783150
Iron,Dissolved	2200		15.0	100	1	04/28/2015 01:23	WG783168
Lead	U		0.240	2.00	1	04/27/2015 13:17	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 01:23	WG783168
Manganese	1080		0.250	5.00	1	04/27/2015 13:17	WG783150
Manganese,Dissolved	1130		0.250	5.00	1	04/28/2015 01:23	WG783168
Potassium	485	J	37.0	1000	1	04/27/2015 13:17	WG783150
Selenium	U		0.380	2.00	1	04/27/2015 13:17	WG783150
Selenium,Dissolved	0.395	J	0.380	2.00	1	04/28/2015 01:23	WG783168
Sodium	141000		110	1000	1	04/27/2015 13:17	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	180		31.0	100	1	04/23/2015 01:02	WG783015
(S) a,a,a-Trifluorotoluene(FID) 94.7				62.0-128		04/23/2015 01:02	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		50.0	250	5	04/23/2015 03:37	WG782999
Benzene	18.7	*	1.60	5.00	5	04/23/2015 03:37	WG782999
Bromodichloromethane	U		1.90	5.00	5	04/23/2015 03:37	WG782999
Bromoform	U	*	2.30	5.00	5	04/23/2015 03:37	WG782999
Bromomethane	U		4.30	25.0	5	04/23/2015 03:37	WG782999
n-Butylbenzene	U		1.80	5.00	5	04/23/2015 03:37	WG782999
sec-Butylbenzene	U		1.80	5.00	5	04/23/2015 03:37	WG782999
Carbon disulfide	U		1.40	5.00	5	04/23/2015 03:37	WG782999
Carbon tetrachloride	U		1.90	5.00	5	04/23/2015 03:37	WG782999



Collected date/time: 04/15/15 08:55

L760039

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		1.70	5.00	5	04/23/2015 03:37	WG782999
Chlorodibromomethane	U	*	1.60	5.00	5	04/23/2015 03:37	WG782999
Chloroethane	U		2.30	25.0	5	04/23/2015 03:37	WG782999
Chloroform	U		1.60	25.0	5	04/23/2015 03:37	WG782999
Chloromethane	U		1.40	12.5	5	04/23/2015 03:37	WG782999
1,2-Dibromoethane	U	*	1.90	5.00	5	04/23/2015 03:37	WG782999
1,1-Dichloroethane	U		1.30	5.00	5	04/23/2015 03:37	WG782999
1,2-Dichloroethane	U	*	1.80	5.00	5	04/23/2015 03:37	WG782999
1,1-Dichloroethene	U		2.00	5.00	5	04/23/2015 03:37	WG782999
cis-1,2-Dichloroethene	U		1.30	5.00	5	04/23/2015 03:37	WG782999
trans-1,2-Dichloroethene	U		2.00	5.00	5	04/23/2015 03:37	WG782999
1,2-Dichloropropane	U		1.50	5.00	5	04/23/2015 03:37	WG782999
cis-1,3-Dichloropropene	U		2.10	5.00	5	04/23/2015 03:37	WG782999
trans-1,3-Dichloropropene	U		2.10	5.00	5	04/23/2015 03:37	WG782999
Ethylbenzene	2.02	U	1.90	5.00	5	04/23/2015 03:37	WG782999
Isopropylbenzene	2.79	U	1.60	5.00	5	04/23/2015 03:37	WG782999
p-Isopropyltoluene	U		1.80	5.00	5	04/23/2015 03:37	WG782999
2-Butanone (MEK)	U	*	20.0	50.0	5	04/23/2015 03:37	WG782999
2-Hexanone	U	* *	19.0	50.0	5	04/23/2015 03:37	WG782999
Methylene Chloride	U	*	5.00	25.0	5	04/23/2015 03:37	WG782999
4-Methyl-2-pentanone (MIBK)	U		11.0	50.0	5	04/23/2015 03:37	WG782999
Methyl tert-butyl ether	113		1.80	5.00	5	04/23/2015 03:37	WG782999
Naphthalene	U	*	5.00	25.0	5	04/23/2015 03:37	WG782999
n-Propylbenzene	U		1.70	5.00	5	04/23/2015 03:37	WG782999
Styrene	U		1.50	5.00	5	04/23/2015 03:37	WG782999
1,1,1,2-Tetrachloroethane	U		1.90	5.00	5	04/23/2015 03:37	WG782999
1,1,2,2-Tetrachloroethane	U		0.650	5.00	5	04/23/2015 03:37	WG782999
Tetrachloroethene	U		1.90	5.00	5	04/25/2015 22:37	WG784352
Toluene	U		3.90	25.0	5	04/23/2015 03:37	WG782999
1,1,1-Trichloroethane	U		1.60	5.00	5	04/23/2015 03:37	WG782999
1,1,2-Trichloroethane	U		1.90	5.00	5	04/23/2015 03:37	WG782999
Trichloroethene	U		2.00	5.00	5	04/23/2015 03:37	WG782999
1,2,4-Trimethylbenzene	U		1.90	5.00	5	04/23/2015 03:37	WG782999
1,3,5-Trimethylbenzene	U		1.90	5.00	5	04/23/2015 03:37	WG782999
Vinyl chloride	U		1.30	5.00	5	04/23/2015 03:37	WG782999
o-Xylene	U		1.70	5.00	5	04/23/2015 03:37	WG782999
m&p-Xylene	U		3.60	5.00	5	04/23/2015 03:37	WG782999
Xylenes, Total	U		5.30	15.0	5	04/23/2015 03:37	WG782999
(S) Toluene-d8	102			88.5-111		04/23/2015 03:37	WG782999
(S) Dibromofluoromethane	102			78.3-121		04/23/2015 03:37	WG782999
(S) 4-Bromofluorobenzene	105			71.0-126		04/23/2015 03:37	WG782999

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	6000		25.0	100	1	04/21/2015 06:34	WG783172
(S) o-Terphenyl	111			50.0-150		04/21/2015 06:34	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	530000		2800	10000	1	04/22/2015 18:50	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		200	1000	10	05/05/2015 11:46	WG786264

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	25300		52.0	1000	1	04/23/2015 11:50	WG782967
Fluoride	700	* F	9.90	100	1	04/22/2015 19:20	WG782967
Sulfate	263000		770	50000	10	04/23/2015 12:04	WG782967

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	6.62		0.250	2.00	1	04/27/2015 13:19	WG783150
Arsenic,Dissolved	8.29		0.250	2.00	1	04/28/2015 01:25	WG783168
Barium	108		0.360	5.00	1	04/27/2015 13:19	WG783150
Barium,Dissolved	114		0.360	5.00	1	04/28/2015 01:25	WG783168
Calcium	111000		46.0	1000	1	04/27/2015 13:19	WG783150
Chromium	1.84	J	0.540	2.00	1	04/27/2015 13:19	WG783150
Chromium,Dissolved	0.786	J	0.540	2.00	1	04/28/2015 01:25	WG783168
Iron	2550		15.0	100	1	04/27/2015 13:19	WG783150
Iron,Dissolved	2070		15.0	100	1	04/28/2015 01:25	WG783168
Lead	2.79		0.240	2.00	1	04/27/2015 13:19	WG783150
Lead,Dissolved	0.320	J	0.240	2.00	1	04/28/2015 01:25	WG783168
Manganese	105		0.250	5.00	1	04/27/2015 13:19	WG783150
Manganese,Dissolved	111		0.250	5.00	1	04/28/2015 01:25	WG783168
Potassium	4260		37.0	1000	1	04/27/2015 13:19	WG783150
Selenium	U		0.380	2.00	1	04/27/2015 13:19	WG783150
Selenium,Dissolved	1.03	J	0.380	2.00	1	04/28/2015 01:25	WG783168
Sodium	17200		110	1000	1	04/27/2015 13:19	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	6500		31.0	100	1	04/23/2015 01:27	WG783015
(S) a,a,a-Trifluorotoluene(FID) 87.2				62.0-128		04/23/2015 01:27	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	126	J	50.0	250	5	04/23/2015 03:57	WG782999
Benzene	1710		16.0	50.0	50	04/25/2015 22:57	WG784352
Bromodichloromethane	U		1.90	5.00	5	04/23/2015 03:57	WG782999
Bromoform	U	*	2.30	5.00	5	04/23/2015 03:57	WG782999
Bromomethane	U		4.30	25.0	5	04/23/2015 03:57	WG782999
n-Butylbenzene	8.66		1.80	5.00	5	04/23/2015 03:57	WG782999
sec-Butylbenzene	12.8		1.80	5.00	5	04/23/2015 03:57	WG782999
Carbon disulfide	U		1.40	5.00	5	04/23/2015 03:57	WG782999
Carbon tetrachloride	U		1.90	5.00	5	04/23/2015 03:57	WG782999



Collected date/time: 04/15/15 09:25

L760039

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		1.70	5.00	5	04/23/2015 03:57	WG782999
Chlorodibromomethane	U	*	1.60	5.00	5	04/23/2015 03:57	WG782999
Chloroethane	U		2.30	25.0	5	04/23/2015 03:57	WG782999
Chloroform	U		1.60	25.0	5	04/23/2015 03:57	WG782999
Chloromethane	U		1.40	12.5	5	04/23/2015 03:57	WG782999
1,2-Dibromoethane	U	*	1.90	5.00	5	04/23/2015 03:57	WG782999
1,1-Dichloroethane	U		1.30	5.00	5	04/23/2015 03:57	WG782999
1,2-Dichloroethane	U	*	1.80	5.00	5	04/23/2015 03:57	WG782999
1,1-Dichloroethene	U		2.00	5.00	5	04/23/2015 03:57	WG782999
cis-1,2-Dichloroethene	U		1.30	5.00	5	04/23/2015 03:57	WG782999
trans-1,2-Dichloroethene	U		2.00	5.00	5	04/23/2015 03:57	WG782999
1,2-Dichloropropane	U		1.50	5.00	5	04/23/2015 03:57	WG782999
cis-1,3-Dichloropropene	U		2.10	5.00	5	04/23/2015 03:57	WG782999
trans-1,3-Dichloropropene	U		2.10	5.00	5	04/23/2015 03:57	WG782999
Ethylbenzene	545		1.90	5.00	5	04/23/2015 03:57	WG782999
Isopropylbenzene	57.3		1.60	5.00	5	04/23/2015 03:57	WG782999
p-Isopropyltoluene	6.04		1.80	5.00	5	04/23/2015 03:57	WG782999
2-Butanone (MEK)	U	*	20.0	50.0	5	04/23/2015 03:57	WG782999
2-Hexanone	U	*	19.0	50.0	5	04/23/2015 03:57	WG782999
Methylene Chloride	U	**	5.00	25.0	5	04/23/2015 03:57	WG782999
4-Methyl-2-pentanone (MIBK)	U		11.0	50.0	5	04/23/2015 03:57	WG782999
Methyl tert-butyl ether	U		1.80	5.00	5	04/23/2015 03:57	WG782999
Naphthalene	62.3	*	5.00	25.0	5	04/23/2015 03:57	WG782999
n-Propylbenzene	63.9		1.70	5.00	5	04/23/2015 03:57	WG782999
Styrene	U		1.50	5.00	5	04/23/2015 03:57	WG782999
1,1,1,2-Tetrachloroethane	U		1.90	5.00	5	04/23/2015 03:57	WG782999
1,1,2,2-Tetrachloroethane	U		0.650	5.00	5	04/23/2015 03:57	WG782999
Tetrachloroethene	U		19.0	50.0	50	04/25/2015 22:57	WG784352
Toluene	31.4		3.90	25.0	5	04/23/2015 03:57	WG782999
1,1,1-Trichloroethane	U		1.60	5.00	5	04/23/2015 03:57	WG782999
1,1,2-Trichloroethane	U		1.90	5.00	5	04/23/2015 03:57	WG782999
Trichloroethene	U		2.00	5.00	5	04/23/2015 03:57	WG782999
1,2,4-Trimethylbenzene	67.8		1.90	5.00	5	04/23/2015 03:57	WG782999
1,3,5-Trimethylbenzene	32.5		1.90	5.00	5	04/23/2015 03:57	WG782999
Vinyl chloride	U		1.30	5.00	5	04/23/2015 03:57	WG782999
o-Xylene	9.65		1.70	5.00	5	04/23/2015 03:57	WG782999
m&p-Xylene	205		3.60	5.00	5	04/23/2015 03:57	WG782999
Xylenes, Total	214		5.30	15.0	5	04/23/2015 03:57	WG782999
(S) Toluene-d8	103			88.5-111		04/23/2015 03:57	WG782999
(S) Dibromofluoromethane	101			78.3-121		04/23/2015 03:57	WG782999
(S) 4-Bromofluorobenzene	106			71.0-126		04/23/2015 03:57	WG782999

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3740		25.0	100	1	04/21/2015 06:53	WG783172
(S) o-Terphenyl	115			50.0-150		04/21/2015 06:53	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	5310000		2800	10000	1	04/22/2015 18:43	WG783324

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		200	1000	10	05/05/2015 11:47	WG786264

⁶ Qc⁷ Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	365000		5200	100000	100	04/22/2015 21:10	WG782967
Fluoride	1750		9.90	100	1	04/22/2015 20:01	WG782967
Sulfate	3510000		7700	500000	100	04/22/2015 21:10	WG782967

⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	26.4		2.50	20.0	10	04/27/2015 13:22	WG783150
Arsenic,Dissolved	19.4		0.250	2.00	1	04/28/2015 01:28	WG783168
Barium	24.5	J	3.60	50.0	10	04/27/2015 13:22	WG783150
Barium,Dissolved	17.4		0.360	5.00	1	04/28/2015 01:28	WG783168
Calcium	726000		460	10000	10	04/27/2015 13:22	WG783150
Chromium	5.53	J	2.70	10.0	5	04/24/2015 22:58	WG783150
Chromium,Dissolved	4.94		0.540	2.00	1	04/28/2015 01:28	WG783168
Iron	381	J	150	1000	10	04/27/2015 13:22	WG783150
Iron,Dissolved	47.1	J	15.0	100	1	04/28/2015 01:28	WG783168
Lead	2.33	J	1.20	10.0	5	04/24/2015 22:58	WG783150
Lead,Dissolved	0.546	J	0.240	2.00	1	04/28/2015 01:28	WG783168
Manganese	313		2.50	50.0	10	04/27/2015 13:22	WG783150
Manganese,Dissolved	285		0.250	5.00	1	04/28/2015 01:28	WG783168
Potassium	5550	J	370	10000	10	04/27/2015 13:22	WG783150
Selenium	70.5		7.60	40.0	20	04/27/2015 14:22	WG783150
Selenium,Dissolved	1.33	J	0.380	2.00	1	04/28/2015 01:28	WG783168
Sodium	383000		1100	10000	10	04/27/2015 13:22	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	18300		630	2000	20	04/28/2015 15:36	WG785183
(S) a,a,q-Trifluorotoluene(FID) 95.8				62.0-128		04/28/2015 15:36	WG785183

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	334	J	100	500	10	04/23/2015 04:17	WG782999
Benzene	5340		83.0	250	250	04/25/2015 23:17	WG784352
Bromodichloromethane	U		3.80	10.0	10	04/23/2015 04:17	WG782999
Bromoform	U	*	4.70	10.0	10	04/23/2015 04:17	WG782999
Bromomethane	U		8.70	50.0	10	04/23/2015 04:17	WG782999
n-Butylbenzene	10.6		3.60	10.0	10	04/23/2015 04:17	WG782999
sec-Butylbenzene	12.0		3.60	10.0	10	04/23/2015 04:17	WG782999
Carbon disulfide	8.99	J	2.80	10.0	10	04/23/2015 04:17	WG782999
Carbon tetrachloride	U		3.80	10.0	10	04/23/2015 04:17	WG782999



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		3.50	10.0	10	04/23/2015 04:17	WG782999
Chlorodibromomethane	U	*	3.30	10.0	10	04/23/2015 04:17	WG782999
Chloroethane	U		4.50	50.0	10	04/23/2015 04:17	WG782999
Chloroform	U		3.20	50.0	10	04/23/2015 04:17	WG782999
Chloromethane	U		2.80	25.0	10	04/23/2015 04:17	WG782999
1,2-Dibromoethane	U	*	3.80	10.0	10	04/23/2015 04:17	WG782999
1,1-Dichloroethane	U		2.60	10.0	10	04/23/2015 04:17	WG782999
1,2-Dichloroethane	U	*	3.60	10.0	10	04/23/2015 04:17	WG782999
1,1-Dichloroethene	U		4.00	10.0	10	04/23/2015 04:17	WG782999
cis-1,2-Dichloroethene	619		2.60	10.0	10	04/23/2015 04:17	WG782999
trans-1,2-Dichloroethene	U		4.00	10.0	10	04/23/2015 04:17	WG782999
1,2-Dichloropropane	U		3.10	10.0	10	04/23/2015 04:17	WG782999
cis-1,3-Dichloropropene	U		4.20	10.0	10	04/23/2015 04:17	WG782999
trans-1,3-Dichloropropene	U		4.20	10.0	10	04/23/2015 04:17	WG782999
Ethylbenzene	1020		3.80	10.0	10	04/23/2015 04:17	WG782999
Isopropylbenzene	55.1		3.30	10.0	10	04/23/2015 04:17	WG782999
p-Isopropyltoluene	5.54	U	3.50	10.0	10	04/23/2015 04:17	WG782999
2-Butanone (MEK)	U		39.0	100	10	04/23/2015 04:17	WG782999
2-Hexanone	U		38.0	100	10	04/23/2015 04:17	WG782999
Methylene Chloride	U		10.0	50.0	10	04/23/2015 04:17	WG782999
4-Methyl-2-pentanone (MIBK)	U		21.0	100	10	04/23/2015 04:17	WG782999
Methyl tert-butyl ether	U		3.70	10.0	10	04/23/2015 04:17	WG782999
Naphthalene	157	*	10.0	50.0	10	04/23/2015 04:17	WG782999
n-Propylbenzene	81.3		3.50	10.0	10	04/23/2015 04:17	WG782999
Styrene	U		3.10	10.0	10	04/23/2015 04:17	WG782999
1,1,1,2-Tetrachloroethane	U		3.80	10.0	10	04/23/2015 04:17	WG782999
1,1,2,2-Tetrachloroethane	U		1.30	10.0	10	04/23/2015 04:17	WG782999
Tetrachloroethene	U		93.0	250	250	04/25/2015 23:17	WG784352
Toluene	115		7.80	50.0	10	04/23/2015 04:17	WG782999
1,1,1-Trichloroethane	U		3.19	10.0	10	04/23/2015 04:17	WG782999
1,1,2-Trichloroethane	U		3.80	10.0	10	04/23/2015 04:17	WG782999
Trichloroethene	32.6		4.00	10.0	10	04/23/2015 04:17	WG782999
1,2,4-Trimethylbenzene	330		3.70	10.0	10	04/23/2015 04:17	WG782999
1,3,5-Trimethylbenzene	77.2		3.90	10.0	10	04/23/2015 04:17	WG782999
Vinyl chloride	U		2.60	10.0	10	04/23/2015 04:17	WG782999
o-Xylene	85.3		3.40	10.0	10	04/23/2015 04:17	WG782999
m&p-Xylene	445		7.20	10.0	10	04/23/2015 04:17	WG782999
Xylenes, Total	530		11.0	30.0	10	04/23/2015 04:17	WG782999
(S) Toluene-d8	103			88.5-111		04/23/2015 04:17	WG782999
(S) Dibromofluoromethane	97.8			78.3-121		04/23/2015 04:17	WG782999
(S) 4-Bromofluorobenzene	106			71.0-126		04/23/2015 04:17	WG782999

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	19700		490	2000	20	04/21/2015 18:20	WG783172
(S) o-Terphenyl	0.000	X		50.0-150		04/21/2015 18:20	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2910000		2800	10000	1	04/22/2015 18:50	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		200	1000	10	05/05/2015 12:12	WG786265

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	287000		5200	100000	100	04/23/2015 00:23	WG782967
Fluoride	1300		9.90	100	1	04/22/2015 20:15	WG782967
Sulfate	1280000		7700	500000	100	04/23/2015 00:23	WG782967

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	4.63	J	2.50	20.0	10	04/27/2015 13:24	WG783150
Arsenic,Dissolved	3.81		0.250	2.00	1	04/28/2015 01:30	WG783168
Barium	49.9	J	3.60	50.0	10	04/27/2015 13:24	WG783150
Barium,Dissolved	44.2		0.360	5.00	1	04/28/2015 01:30	WG783168
Calcium	457000		460	10000	10	04/27/2015 13:24	WG783150
Chromium	U		2.70	10.0	5	04/24/2015 23:39	WG783150
Chromium,Dissolved	U		0.540	2.00	1	04/28/2015 01:30	WG783168
Iron	U		150	1000	10	04/27/2015 13:24	WG783150
Iron,Dissolved	U		15.0	100	1	04/28/2015 01:30	WG783168
Lead	U		2.40	20.0	10	04/27/2015 13:24	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 01:30	WG783168
Manganese	4.44	J	1.20	25.0	5	04/24/2015 23:39	WG783150
Manganese,Dissolved	4.70	J	0.250	5.00	1	04/28/2015 01:30	WG783168
Potassium	1100	J	370	10000	10	04/27/2015 13:24	WG783150
Selenium	168		3.80	20.0	10	04/27/2015 13:24	WG783150
Selenium,Dissolved	0.496	J	0.380	2.00	1	04/28/2015 01:30	WG783168
Sodium	349000		1100	10000	10	04/27/2015 13:24	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	6770		160	500	5	04/23/2015 02:17	WG783015
(S) a,a,a-Trifluorotoluene(FID) 92.7				62.0-128		04/23/2015 02:17	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	254	J	100	500	10	04/23/2015 04:37	WG782999
Benzene	1740	*	3.30	10.0	10	04/23/2015 04:37	WG782999
Bromodichloromethane	U		3.80	10.0	10	04/23/2015 04:37	WG782999
Bromoform	U	*	4.70	10.0	10	04/23/2015 04:37	WG782999
Bromomethane	U		8.70	50.0	10	04/23/2015 04:37	WG782999
n-Butylbenzene	7.82	J	3.60	10.0	10	04/23/2015 04:37	WG782999
sec-Butylbenzene	16.8		3.60	10.0	10	04/23/2015 04:37	WG782999
Carbon disulfide	25.8		2.80	10.0	10	04/23/2015 04:37	WG782999
Carbon tetrachloride	U		3.80	10.0	10	04/23/2015 04:37	WG782999



Collected date/time: 04/15/15 12:25

L760039

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		3.50	10.0	10	04/23/2015 04:37	WG782999
Chlorodibromomethane	U	*	3.30	10.0	10	04/23/2015 04:37	WG782999
Chloroethane	U		4.50	50.0	10	04/23/2015 04:37	WG782999
Chloroform	U		3.20	50.0	10	04/23/2015 04:37	WG782999
Chloromethane	U		2.80	25.0	10	04/23/2015 04:37	WG782999
1,2-Dibromoethane	U	*	3.80	10.0	10	04/23/2015 04:37	WG782999
1,1-Dichloroethane	U		2.60	10.0	10	04/23/2015 04:37	WG782999
1,2-Dichloroethane	U	*	3.60	10.0	10	04/23/2015 04:37	WG782999
1,1-Dichloroethene	U		4.00	10.0	10	04/23/2015 04:37	WG782999
cis-1,2-Dichloroethene	U		2.60	10.0	10	04/23/2015 04:37	WG782999
trans-1,2-Dichloroethene	U		4.00	10.0	10	04/23/2015 04:37	WG782999
1,2-Dichloropropane	U		3.10	10.0	10	04/23/2015 04:37	WG782999
cis-1,3-Dichloropropene	U		4.20	10.0	10	04/23/2015 04:37	WG782999
trans-1,3-Dichloropropene	U		4.20	10.0	10	04/23/2015 04:37	WG782999
Ethylbenzene	209		3.80	10.0	10	04/23/2015 04:37	WG782999
Isopropylbenzene	122		3.30	10.0	10	04/23/2015 04:37	WG782999
p-Isopropyltoluene	4.25	U	3.50	10.0	10	04/23/2015 04:37	WG782999
2-Butanone (MEK)	U		39.0	100	10	04/23/2015 04:37	WG782999
2-Hexanone	U		38.0	100	10	04/23/2015 04:37	WG782999
Methylene Chloride	U		10.0	50.0	10	04/23/2015 04:37	WG782999
4-Methyl-2-pentanone (MIBK)	U		21.0	100	10	04/23/2015 04:37	WG782999
Methyl tert-butyl ether	U		3.70	10.0	10	04/23/2015 04:37	WG782999
Naphthalene	176	*	10.0	50.0	10	04/23/2015 04:37	WG782999
n-Propylbenzene	201		3.50	10.0	10	04/23/2015 04:37	WG782999
Styrene	U		3.10	10.0	10	04/23/2015 04:37	WG782999
1,1,1,2-Tetrachloroethane	U		3.80	10.0	10	04/23/2015 04:37	WG782999
1,1,2,2-Tetrachloroethane	U		1.30	10.0	10	04/23/2015 04:37	WG782999
Tetrachloroethene	U		3.70	10.0	10	04/25/2015 23:37	WG784352
Toluene	13.0	U	7.80	50.0	10	04/23/2015 04:37	WG782999
1,1,1-Trichloroethane	U		3.19	10.0	10	04/23/2015 04:37	WG782999
1,1,2-Trichloroethane	U		3.80	10.0	10	04/23/2015 04:37	WG782999
Trichloroethene	U		4.00	10.0	10	04/23/2015 04:37	WG782999
1,2,4-Trimethylbenzene	531		3.70	10.0	10	04/23/2015 04:37	WG782999
1,3,5-Trimethylbenzene	130		3.90	10.0	10	04/23/2015 04:37	WG782999
Vinyl chloride	U		2.60	10.0	10	04/23/2015 04:37	WG782999
o-Xylene	7.84	U	3.40	10.0	10	04/23/2015 04:37	WG782999
m&p-Xylene	1680		7.20	10.0	10	04/23/2015 04:37	WG782999
Xylenes, Total	1690		11.0	30.0	10	04/23/2015 04:37	WG782999
(S) Toluene-d8	102			88.5-111		04/23/2015 04:37	WG782999
(S) Dibromofluoromethane	106			78.3-121		04/23/2015 04:37	WG782999
(S) 4-Bromofluorobenzene	107			71.0-126		04/23/2015 04:37	WG782999

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	9400		25.0	100	1	04/21/2015 07:30	WG783172
(S) o-Terphenyl	90.5			50.0-150		04/21/2015 07:30	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	1930000		2800	10000	1	04/22/2015 18:49	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/30/2015 12:03	WG785013

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	485000		1000	20000	20	04/23/2015 01:14	WG782967
Fluoride	1520		9.90	100	1	04/22/2015 21:52	WG782967
Sulfate	21000		77.0	5000	1	04/22/2015 21:52	WG782967

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	13.6		0.250	2.00	1	04/27/2015 13:47	WG783150
Arsenic,Dissolved	11.0		0.250	2.00	1	04/28/2015 01:33	WG783168
Barium	9300		0.360	5.00	1	04/27/2015 13:47	WG783150
Barium,Dissolved	9930		0.360	5.00	1	04/28/2015 01:33	WG783168
Calcium	126000		46.0	1000	1	04/27/2015 13:47	WG783150
Chromium	1.49	J	0.540	2.00	1	04/27/2015 13:47	WG783150
Chromium,Dissolved	0.662	J	0.540	2.00	1	04/28/2015 01:33	WG783168
Iron	54.2	J	15.0	100	1	04/27/2015 13:47	WG783150
Iron,Dissolved	U		15.0	100	1	04/28/2015 01:33	WG783168
Lead	4.19		0.240	2.00	1	04/27/2015 13:47	WG783150
Lead,Dissolved	0.487	J	0.240	2.00	1	04/28/2015 01:33	WG783168
Manganese	67.7		0.250	5.00	1	04/27/2015 13:47	WG783150
Manganese,Dissolved	68.8		0.250	5.00	1	04/28/2015 01:33	WG783168
Potassium	1720		37.0	1000	1	04/27/2015 13:47	WG783150
Selenium	18.7		0.380	2.00	1	04/27/2015 13:47	WG783150
Selenium,Dissolved	0.755	J	0.380	2.00	1	04/28/2015 01:33	WG783168
Sodium	478000		110	1000	1	04/27/2015 13:47	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	21100		1600	5000	50	04/28/2015 16:01	WG785183
(S) a,a,a-Trifluorotoluene(FID) 96.1				62.0-128		04/28/2015 16:01	WG785183

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	106	J	100	500	10	04/23/2015 04:58	WG782999
Benzene	12800		160	500	500	04/25/2015 23:57	WG784352
Bromodichloromethane	U		3.80	10.0	10	04/23/2015 04:58	WG782999
Bromoform	U	+	4.70	10.0	10	04/23/2015 04:58	WG782999
Bromomethane	U		8.70	50.0	10	04/23/2015 04:58	WG782999
n-Butylbenzene	9.86	J	3.60	10.0	10	04/23/2015 04:58	WG782999
sec-Butylbenzene	14.4		3.60	10.0	10	04/23/2015 04:58	WG782999
Carbon disulfide	33.6		2.80	10.0	10	04/23/2015 04:58	WG782999
Carbon tetrachloride	U		3.80	10.0	10	04/23/2015 04:58	WG782999



Collected date/time: 04/15/15 13:35

L760039

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	¹ Cp
Chlorobenzene	U		3.50	10.0	10	04/23/2015 04:58	WG782999	² Tc
Chlorodibromomethane	U	*	3.30	10.0	10	04/23/2015 04:58	WG782999	³ Ss
Chloroethane	U		4.50	50.0	10	04/23/2015 04:58	WG782999	⁴ Cn
Chloroform	U		3.20	50.0	10	04/23/2015 04:58	WG782999	⁵ Sr
Chloromethane	U		2.80	25.0	10	04/23/2015 04:58	WG782999	⁶ Qc
1,2-Dibromoethane	U	*	3.80	10.0	10	04/23/2015 04:58	WG782999	⁷ Gl
1,1-Dichloroethane	U		2.60	10.0	10	04/23/2015 04:58	WG782999	⁸ Al
1,2-Dichloroethane	U	*	3.60	10.0	10	04/23/2015 04:58	WG782999	⁹ Sc
1,1-Dichloroethene	U		4.00	10.0	10	04/23/2015 04:58	WG782999	
cis-1,2-Dichloroethene	U		2.60	10.0	10	04/23/2015 04:58	WG782999	
trans-1,2-Dichloroethene	U		4.00	10.0	10	04/23/2015 04:58	WG782999	
1,2-Dichloropropane	U		3.10	10.0	10	04/23/2015 04:58	WG782999	
cis-1,3-Dichloropropene	U		4.20	10.0	10	04/23/2015 04:58	WG782999	
trans-1,3-Dichloropropene	U		4.20	10.0	10	04/23/2015 04:58	WG782999	
Ethylbenzene	457		3.80	10.0	10	04/23/2015 04:58	WG782999	
Isopropylbenzene	112		3.30	10.0	10	04/23/2015 04:58	WG782999	
p-Isopropyltoluene	U		3.50	10.0	10	04/23/2015 04:58	WG782999	
2-Butanone (MEK)	U	*	39.0	100	10	04/23/2015 04:58	WG782999	
2-Hexanone	U	*	38.0	100	10	04/23/2015 04:58	WG782999	
Methylene Chloride	U	**	10.0	50.0	10	04/23/2015 04:58	WG782999	
4-Methyl-2-pentanone (MIBK)	U		21.0	100	10	04/23/2015 04:58	WG782999	
Methyl tert-butyl ether	15.1		3.70	10.0	10	04/23/2015 04:58	WG782999	
Naphthalene	158	*	10.0	50.0	10	04/23/2015 04:58	WG782999	
n-Propylbenzene	167		3.50	10.0	10	04/23/2015 04:58	WG782999	
Styrene	U		3.10	10.0	10	04/23/2015 04:58	WG782999	
1,1,1,2-Tetrachloroethane	U		3.80	10.0	10	04/23/2015 04:58	WG782999	
1,1,2,2-Tetrachloroethane	U		1.30	10.0	10	04/23/2015 04:58	WG782999	
Tetrachloroethene	U		190	500	500	04/25/2015 23:57	WG784352	
Toluene	U		7.80	50.0	10	04/23/2015 04:58	WG782999	
1,1,1-Trichloroethane	U		3.19	10.0	10	04/23/2015 04:58	WG782999	
1,1,2-Trichloroethane	U		3.80	10.0	10	04/23/2015 04:58	WG782999	
Trichloroethene	U		4.00	10.0	10	04/23/2015 04:58	WG782999	
1,2,4-Trimethylbenzene	U		3.70	10.0	10	04/23/2015 04:58	WG782999	
1,3,5-Trimethylbenzene	U		3.90	10.0	10	04/23/2015 04:58	WG782999	
Vinyl chloride	U		2.60	10.0	10	04/23/2015 04:58	WG782999	
o-Xylene	U		3.40	10.0	10	04/23/2015 04:58	WG782999	
m&p-Xylene	40.5		7.20	10.0	10	04/23/2015 04:58	WG782999	
Xylenes, Total	40.5		11.0	30.0	10	04/23/2015 04:58	WG782999	
(S) Toluene-d8	102			88.5-111		04/23/2015 04:58	WG782999	
(S) Dibromofluoromethane	94.7			78.3-121		04/23/2015 04:58	WG782999	
(S) 4-Bromofluorobenzene	109			71.0-126		04/23/2015 04:58	WG782999	

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	36900		490	2000	20	04/21/2015 18:39	WG783172
(S) o-Terphenyl	0.000	X		50.0-150		04/21/2015 18:39	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3080000		2800	10000	1	04/22/2015 18:50	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/30/2015 12:05	WG785013

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	221000		5200	100000	100	04/23/2015 01:32	WG782967
Fluoride	2230		9.90	100	1	04/22/2015 22:06	WG782967
Sulfate	2050000		7700	500000	100	04/23/2015 01:32	WG782967

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	6.87	J	1.20	10.0	5	04/24/2015 23:44	WG783150
Arsenic,Dissolved	12.4		0.250	2.00	1	04/28/2015 01:36	WG783168
Barium	34.6		1.80	25.0	5	04/24/2015 23:44	WG783150
Barium,Dissolved	32.7		0.360	5.00	1	04/28/2015 01:36	WG783168
Calcium	579000		230	5000	5	04/24/2015 23:44	WG783150
Chromium	4.42	J	2.70	10.0	5	04/24/2015 23:44	WG783150
Chromium,Dissolved	3.41		0.540	2.00	1	04/28/2015 01:36	WG783168
Iron	1830		75.0	500	5	04/24/2015 23:44	WG783150
Iron,Dissolved	37.5	J	15.0	100	1	04/28/2015 01:36	WG783168
Lead	1.26	J	1.20	10.0	5	04/24/2015 23:44	WG783150
Lead,Dissolved	0.293	J	0.240	2.00	1	04/28/2015 01:36	WG783168
Manganese	227		1.20	25.0	5	04/24/2015 23:44	WG783150
Manganese,Dissolved	215		0.250	5.00	1	04/28/2015 01:36	WG783168
Potassium	2580	J	180	5000	5	04/24/2015 23:44	WG783150
Selenium	64.6		1.90	10.0	5	04/24/2015 23:44	WG783150
Selenium,Dissolved	4.68		0.380	2.00	1	04/28/2015 01:36	WG783168
Sodium	126000		550	5000	5	04/24/2015 23:44	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	3670		31.0	100	1	04/23/2015 03:08	WG783015
(S) a,a,a-Trifluorotoluene(FID) 92.9				62.0-128		04/23/2015 03:08	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		100	500	10	04/23/2015 05:18	WG782999
Benzene	734	*	3.30	10.0	10	04/23/2015 05:18	WG782999
Bromodichloromethane	U		3.80	10.0	10	04/23/2015 05:18	WG782999
Bromoform	U	*	4.70	10.0	10	04/23/2015 05:18	WG782999
Bromomethane	U		8.70	50.0	10	04/23/2015 05:18	WG782999
n-Butylbenzene	4.61	J	3.60	10.0	10	04/23/2015 05:18	WG782999
sec-Butylbenzene	7.16	J	3.60	10.0	10	04/23/2015 05:18	WG782999
Carbon disulfide	18.8		2.80	10.0	10	04/23/2015 05:18	WG782999
Carbon tetrachloride	U		3.80	10.0	10	04/23/2015 05:18	WG782999



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Chlorobenzene	U		3.50	10.0	10	04/23/2015 05:18	WG782999	¹ Cp
Chlorodibromomethane	U	*	3.30	10.0	10	04/23/2015 05:18	WG782999	² Tc
Chloroethane	U		4.50	50.0	10	04/23/2015 05:18	WG782999	
Chloroform	U		3.20	50.0	10	04/23/2015 05:18	WG782999	³ Ss
Chloromethane	U		2.80	25.0	10	04/23/2015 05:18	WG782999	
1,2-Dibromoethane	U	*	3.80	10.0	10	04/23/2015 05:18	WG782999	⁴ Cn
1,1-Dichloroethane	U		2.60	10.0	10	04/23/2015 05:18	WG782999	
1,2-Dichloroethane	U	*	3.60	10.0	10	04/23/2015 05:18	WG782999	
1,1-Dichloroethene	U		4.00	10.0	10	04/23/2015 05:18	WG782999	⁵ Sr
cis-1,2-Dichloroethene	U		2.60	10.0	10	04/23/2015 05:18	WG782999	
trans-1,2-Dichloroethene	U		4.00	10.0	10	04/23/2015 05:18	WG782999	⁶ Qc
1,2-Dichloropropane	U		3.10	10.0	10	04/23/2015 05:18	WG782999	
cis-1,3-Dichloropropene	U		4.20	10.0	10	04/23/2015 05:18	WG782999	⁷ Gl
trans-1,3-Dichloropropene	U		4.20	10.0	10	04/23/2015 05:18	WG782999	
Ethylbenzene	67.5		3.80	10.0	10	04/23/2015 05:18	WG782999	⁸ Al
Isopropylbenzene	42.5		3.30	10.0	10	04/23/2015 05:18	WG782999	
p-Isopropyltoluene	4.79	U	3.50	10.0	10	04/23/2015 05:18	WG782999	⁹ Sc
2-Butanone (MEK)	U		39.0	100	10	04/23/2015 05:18	WG782999	
2-Hexanone	U		38.0	100	10	04/23/2015 05:18	WG782999	
Methylene Chloride	U		10.0	50.0	10	04/23/2015 05:18	WG782999	
4-Methyl-2-pentanone (MIBK)	U		21.0	100	10	04/23/2015 05:18	WG782999	
Methyl tert-butyl ether	U		3.70	10.0	10	04/23/2015 05:18	WG782999	
Naphthalene	55.4	*	10.0	50.0	10	04/23/2015 05:18	WG782999	
n-Propylbenzene	62.5		3.50	10.0	10	04/23/2015 05:18	WG782999	
Styrene	U		3.10	10.0	10	04/23/2015 05:18	WG782999	
1,1,1,2-Tetrachloroethane	U		3.80	10.0	10	04/23/2015 05:18	WG782999	
1,1,2,2-Tetrachloroethane	U		1.30	10.0	10	04/23/2015 05:18	WG782999	
Tetrachloroethene	U		3.70	10.0	10	04/26/2015 00:17	WG784352	
Toluene	9.61	U	7.80	50.0	10	04/23/2015 05:18	WG782999	
1,1,1-Trichloroethane	U		3.19	10.0	10	04/23/2015 05:18	WG782999	
1,1,2-Trichloroethane	U		3.80	10.0	10	04/23/2015 05:18	WG782999	
Trichloroethene	U		4.00	10.0	10	04/23/2015 05:18	WG782999	
1,2,4-Trimethylbenzene	206		3.70	10.0	10	04/23/2015 05:18	WG782999	
1,3,5-Trimethylbenzene	36.8		3.90	10.0	10	04/23/2015 05:18	WG782999	
Vinyl chloride	U		2.60	10.0	10	04/23/2015 05:18	WG782999	
o-Xylene	9.38	U	3.40	10.0	10	04/23/2015 05:18	WG782999	
m&p-Xylene	310		7.20	10.0	10	04/23/2015 05:18	WG782999	
Xylenes, Total	319		11.0	30.0	10	04/23/2015 05:18	WG782999	
(S) Toluene-d8	104			88.5-111		04/23/2015 05:18	WG782999	
(S) Dibromofluoromethane	102			78.3-121		04/23/2015 05:18	WG782999	
(S) 4-Bromofluorobenzene	107			71.0-126		04/23/2015 05:18	WG782999	

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	15300		490	2000	20	04/21/2015 18:57	WG783172
(S) o-Terphenyl	0.000	X		50.0-150		04/21/2015 18:57	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	2290000		2800	10000	1	04/22/2015 18:44	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/30/2015 12:06	WG785013

Wet Chemistry by Method 9012B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Cyanide	U		1.80	5.00	1	04/29/2015 15:11	WG785489

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	726000		1000	20000	20	04/23/2015 01:50	WG782967
Fluoride	709		9.90	100	1	04/22/2015 22:20	WG782967
Sulfate	122000		1500	100000	20	04/23/2015 01:50	WG782967

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury	U		0.0490	0.200	1	04/20/2015 20:22	WG783254

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	13.4		1.20	10.0	5	04/24/2015 23:46	WG783150
Arsenic,Dissolved	11.4		0.250	2.00	1	04/28/2015 01:38	WG783168
Barium	239		1.80	25.0	5	04/24/2015 23:46	WG783150
Barium,Dissolved	250		0.360	5.00	1	04/28/2015 01:38	WG783168
Calcium	186000		230	5000	5	04/24/2015 23:46	WG783150
Chromium	U		2.70	10.0	5	04/24/2015 23:46	WG783150
Chromium,Dissolved	U		0.540	2.00	1	04/28/2015 01:38	WG783168
Iron	U		75.0	500	5	04/24/2015 23:46	WG783150
Iron,Dissolved	U		15.0	100	1	04/28/2015 01:38	WG783168
Lead	U		1.20	10.0	5	04/24/2015 23:46	WG783150
Lead,Dissolved	U		0.240	2.00	1	04/28/2015 01:38	WG783168
Manganese	402		1.20	25.0	5	04/24/2015 23:46	WG783150
Manganese,Dissolved	374		0.250	5.00	1	04/28/2015 01:38	WG783168
Nickel	4.82	J	1.80	10.0	5	04/24/2015 23:46	WG783150
Nickel,Dissolved	3.84		0.350	2.00	1	04/28/2015 01:38	WG783168
Potassium	U		180	5000	5	04/24/2015 23:46	WG783150
Selenium	51.8		1.90	10.0	5	04/24/2015 23:46	WG783150
Selenium,Dissolved	0.428	J	0.380	2.00	1	04/28/2015 01:38	WG783168
Sodium	511000		550	5000	5	04/24/2015 23:46	WG783150
Vanadium	U		0.900	25.0	5	04/24/2015 23:46	WG783150
Vanadium,Dissolved	0.695	J	0.180	5.00	1	04/28/2015 01:38	WG783168

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	2650		160	500	5	04/23/2015 08:07	WG783015



Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	90.8			62.0-128		04/23/2015 08:07	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	170	U	100	500	10	04/23/2015 05:38	WG782999
Benzene	992	I *	3.30	10.0	10	04/23/2015 05:38	WG782999
Bromodichloromethane	U		3.80	10.0	10	04/23/2015 05:38	WG782999
Bromoform	U	I *	4.70	10.0	10	04/23/2015 05:38	WG782999
Bromomethane	U		8.70	50.0	10	04/23/2015 05:38	WG782999
n-Butylbenzene	3.96	U	3.60	10.0	10	04/23/2015 05:38	WG782999
sec-Butylbenzene	9.12	U	3.60	10.0	10	04/23/2015 05:38	WG782999
Carbon disulfide	26.2		2.80	10.0	10	04/23/2015 05:38	WG782999
Carbon tetrachloride	U		3.80	10.0	10	04/23/2015 05:38	WG782999
Chlorobenzene	U		3.50	10.0	10	04/23/2015 05:38	WG782999
Chlorodibromomethane	U	I *	3.30	10.0	10	04/23/2015 05:38	WG782999
Chloroethane	U		4.50	50.0	10	04/23/2015 05:38	WG782999
Chloroform	U		3.20	50.0	10	04/23/2015 05:38	WG782999
Chloromethane	U		2.80	25.0	10	04/23/2015 05:38	WG782999
1,2-Dibromoethane	U	I *	3.80	10.0	10	04/23/2015 05:38	WG782999
1,1-Dichloroethane	U		2.60	10.0	10	04/23/2015 05:38	WG782999
1,2-Dichloroethane	U	I *	3.60	10.0	10	04/23/2015 05:38	WG782999
1,1-Dichloroethene	U		4.00	10.0	10	04/23/2015 05:38	WG782999
cis-1,2-Dichloroethene	U		2.60	10.0	10	04/23/2015 05:38	WG782999
trans-1,2-Dichloroethene	U		4.00	10.0	10	04/23/2015 05:38	WG782999
1,2-Dichloropropane	3.76	U	3.10	10.0	10	04/23/2015 05:38	WG782999
cis-1,3-Dichloropropene	U		4.20	10.0	10	04/23/2015 05:38	WG782999
trans-1,3-Dichloropropene	U		4.20	10.0	10	04/23/2015 05:38	WG782999
Ethylbenzene	48.3		3.80	10.0	10	04/23/2015 05:38	WG782999
Isopropylbenzene	61.7		3.30	10.0	10	04/23/2015 05:38	WG782999
p-Isopropyltoluene	U		3.50	10.0	10	04/23/2015 05:38	WG782999
2-Butanone (MEK)	U	I *	39.0	100	10	04/23/2015 05:38	WG782999
2-Hexanone	U	I *	38.0	100	10	04/23/2015 05:38	WG782999
Methylene Chloride	U	I *	10.0	50.0	10	04/23/2015 05:38	WG782999
4-Methyl-2-pentanone (MIBK)	U		21.0	100	10	04/23/2015 05:38	WG782999
Methyl tert-butyl ether	16.2		3.70	10.0	10	04/23/2015 05:38	WG782999
Naphthalene	U	I *	10.0	50.0	10	04/23/2015 05:38	WG782999
n-Propylbenzene	70.2		3.50	10.0	10	04/23/2015 05:38	WG782999
Styrene	U		3.10	10.0	10	04/23/2015 05:38	WG782999
1,1,1,2-Tetrachloroethane	U		3.80	10.0	10	04/23/2015 05:38	WG782999
1,1,2,2-Tetrachloroethane	U		1.30	10.0	10	04/23/2015 05:38	WG782999
Tetrachloroethene	U		3.70	10.0	10	04/26/2015 00:38	WG784352
Toluene	53.8		7.80	50.0	10	04/23/2015 05:38	WG782999
1,1,1-Trichloroethane	U		3.19	10.0	10	04/23/2015 05:38	WG782999
1,1,2-Trichloroethane	U		3.80	10.0	10	04/23/2015 05:38	WG782999
Trichloroethene	U		4.00	10.0	10	04/23/2015 05:38	WG782999
1,2,4-Trimethylbenzene	57.6		3.70	10.0	10	04/23/2015 05:38	WG782999
1,3,5-Trimethylbenzene	4.48	U	3.90	10.0	10	04/23/2015 05:38	WG782999
Vinyl chloride	U		2.60	10.0	10	04/23/2015 05:38	WG782999
o-Xylene	22.7		3.40	10.0	10	04/23/2015 05:38	WG782999
m&p-Xylene	278		7.20	10.0	10	04/23/2015 05:38	WG782999
Xylenes, Total	300		11.0	30.0	10	04/23/2015 05:38	WG782999
(S) Toluene-d8	104			88.5-111		04/23/2015 05:38	WG782999
(S) Dibromofluoromethane	104			78.3-121		04/23/2015 05:38	WG782999
(S) 4-Bromofluorobenzene	103			71.0-126		04/23/2015 05:38	WG782999

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/15/15 14:40

L760039

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) High Fraction	8040		25.0	100	1	04/21/2015 08:27	WG783172
(S) o-Terphenyl	112			50.0-150		04/21/2015 08:27	WG783172

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3030000		2800	10000	1	04/22/2015 18:43	WG783324

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	25.9	J	20.0	100	1	04/30/2015 12:07	WG785013

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	864000		5200	100000	100	04/23/2015 02:07	WG782967
Fluoride	1630		9.90	100	1	04/22/2015 22:33	WG782967
Sulfate	509000		7700	500000	100	04/23/2015 02:07	WG782967

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	16.4		1.20	10.0	5	04/24/2015 23:49	WG783150
Arsenic,Dissolved	20.6		0.250	2.00	1	04/28/2015 01:41	WG783168
Barium	319		1.80	25.0	5	04/24/2015 23:49	WG783150
Barium,Dissolved	215		0.360	5.00	1	04/28/2015 01:41	WG783168
Calcium	222000		230	5000	5	04/24/2015 23:49	WG783150
Chromium	U		2.70	10.0	5	04/24/2015 23:49	WG783150
Chromium,Dissolved	0.653	J	0.540	2.00	1	04/28/2015 01:41	WG783168
Iron	560		75.0	500	5	04/24/2015 23:49	WG783150
Iron,Dissolved	156		15.0	100	1	04/28/2015 01:41	WG783168
Lead	3.36	J	1.20	10.0	5	04/24/2015 23:49	WG783150
Lead,Dissolved	0.295	J	0.240	2.00	1	04/28/2015 01:41	WG783168
Manganese	212		1.20	25.0	5	04/24/2015 23:49	WG783150
Manganese,Dissolved	203		0.250	5.00	1	04/28/2015 01:41	WG783168
Potassium	562	J	180	5000	5	04/24/2015 23:49	WG783150
Selenium	125		1.90	10.0	5	04/24/2015 23:49	WG783150
Selenium,Dissolved	0.997	J	0.380	2.00	1	04/28/2015 01:41	WG783168
Sodium	577000		550	5000	5	04/24/2015 23:49	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	31100		310	1000	10	04/23/2015 08:32	WG783015
(S) a,a,a-Trifluorotoluene(FID) 91.7				62.0-128		04/23/2015 08:32	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		250	1250	25	04/23/2015 05:58	WG782999
Benzene	11600		330	1000	1000	04/29/2015 17:33	WG784046
Bromodichloromethane	U		9.50	25.0	25	04/23/2015 05:58	WG782999
Bromoform	U	*	12.0	25.0	25	04/23/2015 05:58	WG782999
Bromomethane	U		22.0	125	25	04/23/2015 05:58	WG782999
n-Butylbenzene	U		9.00	25.0	25	04/23/2015 05:58	WG782999
sec-Butylbenzene	U		9.10	25.0	25	04/23/2015 05:58	WG782999
Carbon disulfide	66.4		6.90	25.0	25	04/23/2015 05:58	WG782999
Carbon tetrachloride	U		9.50	25.0	25	04/23/2015 05:58	WG782999



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		8.70	25.0	25	04/23/2015 05:58	WG782999
Chlorodibromomethane	U	*	8.20	25.0	25	04/23/2015 05:58	WG782999
Chloroethane	U		11.0	125	25	04/23/2015 05:58	WG782999
Chloroform	U		8.10	125	25	04/23/2015 05:58	WG782999
Chloromethane	U		6.90	62.5	25	04/23/2015 05:58	WG782999
1,2-Dibromoethane	U	*	9.50	25.0	25	04/23/2015 05:58	WG782999
1,1-Dichloroethane	U		6.50	25.0	25	04/23/2015 05:58	WG782999
1,2-Dichloroethane	U	*	9.00	25.0	25	04/23/2015 05:58	WG782999
1,1-Dichloroethene	U		10.0	25.0	25	04/23/2015 05:58	WG782999
cis-1,2-Dichloroethene	U		6.50	25.0	25	04/23/2015 05:58	WG782999
trans-1,2-Dichloroethene	U		9.90	25.0	25	04/23/2015 05:58	WG782999
1,2-Dichloropropane	U		7.60	25.0	25	04/23/2015 05:58	WG782999
cis-1,3-Dichloropropene	U		10.0	25.0	25	04/23/2015 05:58	WG782999
trans-1,3-Dichloropropene	U		10.0	25.0	25	04/23/2015 05:58	WG782999
Ethylbenzene	146		9.60	25.0	25	04/23/2015 05:58	WG782999
Isopropylbenzene	65.2		8.20	25.0	25	04/23/2015 05:58	WG782999
p-Isopropyltoluene	U		8.80	25.0	25	04/23/2015 05:58	WG782999
2-Butanone (MEK)	U	*	98.0	250	25	04/23/2015 05:58	WG782999
2-Hexanone	U	*	96.0	250	25	04/23/2015 05:58	WG782999
Methylene Chloride	U	**	25.0	125	25	04/23/2015 05:58	WG782999
4-Methyl-2-pentanone (MIBK)	U		54.0	250	25	04/23/2015 05:58	WG782999
Methyl tert-butyl ether	25.3		9.20	25.0	25	04/23/2015 05:58	WG782999
Naphthalene	150	*	25.0	125	25	04/23/2015 05:58	WG782999
n-Propylbenzene	95.2		8.70	25.0	25	04/23/2015 05:58	WG782999
Styrene	U		7.70	25.0	25	04/23/2015 05:58	WG782999
1,1,1,2-Tetrachloroethane	U		9.60	25.0	25	04/23/2015 05:58	WG782999
1,1,2,2-Tetrachloroethane	U		3.20	25.0	25	04/23/2015 05:58	WG782999
Tetrachloroethene	U		370	1000	1000	04/29/2015 17:33	WG784046
Toluene	431		20.0	125	25	04/23/2015 05:58	WG782999
1,1,1-Trichloroethane	U		7.98	25.0	25	04/23/2015 05:58	WG782999
1,1,2-Trichloroethane	U		9.60	25.0	25	04/23/2015 05:58	WG782999
Trichloroethene	U		10.0	25.0	25	04/23/2015 05:58	WG782999
1,2,4-Trimethylbenzene	473		9.30	25.0	25	04/23/2015 05:58	WG782999
1,3,5-Trimethylbenzene	99.7		9.70	25.0	25	04/23/2015 05:58	WG782999
Vinyl chloride	U		6.50	25.0	25	04/23/2015 05:58	WG782999
o-Xylene	181		8.50	25.0	25	04/23/2015 05:58	WG782999
m&p-Xylene	1190		18.0	25.0	25	04/23/2015 05:58	WG782999
Xylenes, Total	1370		26.0	75.0	25	04/23/2015 05:58	WG782999
(S) Toluene-d8	104			88.5-111		04/23/2015 05:58	WG782999
(S) Dibromofluoromethane	96.8			78.3-121		04/23/2015 05:58	WG782999
(S) 4-Bromofluorobenzene	108			71.0-126		04/23/2015 05:58	WG782999

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	6790		25.0	100	1	04/21/2015 08:45	WG783172
(S) o-Terphenyl	102			50.0-150		04/21/2015 08:45	WG783172



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3040000		2800	10000	1	04/23/2015 09:37	WG783398

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/30/2015 12:08	WG785013

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	41600		52.0	1000	1	04/22/2015 22:47	WG782967
Fluoride	1290		9.90	100	1	04/22/2015 22:47	WG782967
Sulfate	2010000		3900	250000	50	04/23/2015 02:24	WG782967

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	U		2.50	20.0	10	04/27/2015 13:50	WG783150
Arsenic,Dissolved	1.39	J	0.250	2.00	1	04/28/2015 01:43	WG783168
Barium	17.7	J	3.60	50.0	10	04/27/2015 13:50	WG783150
Barium,Dissolved	15.1		0.360	5.00	1	04/28/2015 01:43	WG783168
Calcium	497000		460	10000	10	04/27/2015 13:50	WG783150
Chromium	U		2.70	10.0	5	04/24/2015 23:51	WG783150
Chromium,Dissolved	U		0.540	2.00	1	04/28/2015 01:43	WG783168
Iron	U		75.0	500	5	04/24/2015 23:51	WG783150
Iron,Dissolved	U		15.0	100	1	04/28/2015 01:43	WG783168
Lead	8.94	J	2.40	20.0	10	04/27/2015 13:50	WG783150
Lead,Dissolved	9.08		0.240	2.00	1	04/28/2015 01:43	WG783168
Manganese	19.2	J	2.50	50.0	10	04/27/2015 13:50	WG783150
Manganese,Dissolved	25.9		0.250	5.00	1	04/28/2015 01:43	WG783168
Potassium	U		180	5000	5	04/24/2015 23:51	WG783150
Selenium	108		3.80	20.0	10	04/27/2015 13:50	WG783150
Selenium,Dissolved	0.446	J	0.380	2.00	1	04/28/2015 01:43	WG783168
Sodium	91500		1100	10000	10	04/27/2015 13:50	WG783150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	19300		310	1000	10	04/23/2015 08:57	WG783015
(S) a,a,a-Trifluorotoluene(FID) 89.3				62.0-128		04/23/2015 08:57	WG783015

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		250	1250	25	04/23/2015 06:18	WG782999
Benzene	4170		83.0	250	250	04/26/2015 00:58	WG784352
Bromodichloromethane	U		9.50	25.0	25	04/23/2015 06:18	WG782999
Bromoform	U	*	12.0	25.0	25	04/23/2015 06:18	WG782999
Bromomethane	U		22.0	125	25	04/23/2015 06:18	WG782999
n-Butylbenzene	U		9.00	25.0	25	04/23/2015 06:18	WG782999
sec-Butylbenzene	9.19	J	9.10	25.0	25	04/23/2015 06:18	WG782999
Carbon disulfide	102		6.90	25.0	25	04/23/2015 06:18	WG782999
Carbon tetrachloride	U		9.50	25.0	25	04/23/2015 06:18	WG782999



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		8.70	25.0	25	04/23/2015 06:18	WG782999
Chlorodibromomethane	U	*	8.20	25.0	25	04/23/2015 06:18	WG782999
Chloroethane	U		11.0	125	25	04/23/2015 06:18	WG782999
Chloroform	U		8.10	125	25	04/23/2015 06:18	WG782999
Chloromethane	U		6.90	62.5	25	04/23/2015 06:18	WG782999
1,2-Dibromoethane	U	*	9.50	25.0	25	04/23/2015 06:18	WG782999
1,1-Dichloroethane	U		6.50	25.0	25	04/23/2015 06:18	WG782999
1,2-Dichloroethane	U	*	9.00	25.0	25	04/23/2015 06:18	WG782999
1,1-Dichloroethene	U		10.0	25.0	25	04/23/2015 06:18	WG782999
cis-1,2-Dichloroethene	U		6.50	25.0	25	04/23/2015 06:18	WG782999
trans-1,2-Dichloroethene	U		9.90	25.0	25	04/23/2015 06:18	WG782999
1,2-Dichloropropane	U		7.60	25.0	25	04/23/2015 06:18	WG782999
cis-1,3-Dichloropropene	U		10.0	25.0	25	04/23/2015 06:18	WG782999
trans-1,3-Dichloropropene	U		10.0	25.0	25	04/23/2015 06:18	WG782999
Ethylbenzene	927		9.60	25.0	25	04/23/2015 06:18	WG782999
Isopropylbenzene	71.6		8.20	25.0	25	04/23/2015 06:18	WG782999
p-Isopropyltoluene	U		8.80	25.0	25	04/23/2015 06:18	WG782999
2-Butanone (MEK)	U	*	98.0	250	25	04/23/2015 06:18	WG782999
2-Hexanone	U	*	96.0	250	25	04/23/2015 06:18	WG782999
Methylene Chloride	U	**	25.0	125	25	04/23/2015 06:18	WG782999
4-Methyl-2-pentanone (MIBK)	U		54.0	250	25	04/23/2015 06:18	WG782999
Methyl tert-butyl ether	U		9.20	25.0	25	04/23/2015 06:18	WG782999
Naphthalene	174	*	25.0	125	25	04/23/2015 06:18	WG782999
n-Propylbenzene	96.8		8.70	25.0	25	04/23/2015 06:18	WG782999
Styrene	U		7.70	25.0	25	04/23/2015 06:18	WG782999
1,1,1,2-Tetrachloroethane	U		9.60	25.0	25	04/23/2015 06:18	WG782999
1,1,2,2-Tetrachloroethane	U		3.20	25.0	25	04/23/2015 06:18	WG782999
Tetrachloroethene	U		93.0	250	250	04/26/2015 00:58	WG784352
Toluene	283		20.0	125	25	04/23/2015 06:18	WG782999
1,1,1-Trichloroethane	U		7.98	25.0	25	04/23/2015 06:18	WG782999
1,1,2-Trichloroethane	U		9.60	25.0	25	04/23/2015 06:18	WG782999
Trichloroethene	U		10.0	25.0	25	04/23/2015 06:18	WG782999
1,2,4-Trimethylbenzene	360		9.30	25.0	25	04/23/2015 06:18	WG782999
1,3,5-Trimethylbenzene	87.0		9.70	25.0	25	04/23/2015 06:18	WG782999
Vinyl chloride	U		6.50	25.0	25	04/23/2015 06:18	WG782999
o-Xylene	35.8		8.50	25.0	25	04/23/2015 06:18	WG782999
m&p-Xylene	1700		18.0	25.0	25	04/23/2015 06:18	WG782999
Xylenes, Total	1740		26.0	75.0	25	04/23/2015 06:18	WG782999
(S) Toluene-d8	102			88.5-111		04/23/2015 06:18	WG782999
(S) Dibromofluoromethane	100			78.3-121		04/23/2015 06:18	WG782999
(S) 4-Bromofluorobenzene	106			71.0-126		04/23/2015 06:18	WG782999

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	7060		25.0	100	1	04/21/2015 09:04	WG783172
(S) o-Terphenyl	107			50.0-150		04/21/2015 09:04	WG783172



Method Blank (MB)

(MB) 04/22/15 17:49

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L760039-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/22/15 18:11 • (DUP) 04/22/15 18:12

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3670	3820	1	4.14		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 18:08 • (LCSD) 04/22/15 17:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dissolved Solids	8800	8360	8570	95.0	97.4	85.0-115			2.48	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 04/22/15 18:48

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

L760039-02 Original Sample (OS) • Duplicate (DUP)

(OS) 04/22/15 18:49 • (DUP) 04/22/15 18:49

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	3960	3980	1	0.378		5

L760039-17 Original Sample (OS) • Duplicate (DUP)

(OS) 04/22/15 18:50 • (DUP) 04/22/15 18:50

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	3080	3130	1	1.77		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 18:46 • (LCSD) 04/22/15 18:47

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8620	8640	98.0	98.2	85.0-115			0.232	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/23/15 09:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L760039-20 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 09:37 • (DUP) 04/23/15 09:37

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3040	3010	1	0.993		5

L760074-10 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 09:37 • (DUP) 04/23/15 09:37

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	5650	5670	1	0.353		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 09:29 • (LCSD) 04/23/15 09:29

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dissolved Solids	8800	8500	8570	96.6	97.4	85.0-115			0.820	5



Method Blank (MB)

(MB) 04/30/15 11:47

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0197	0.100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L760463-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/30/15 12:17 • (DUP) 04/30/15 12:18

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	0.74	0.74	1	0.00		20

L759253-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/30/15 11:55 • (DUP) 04/30/15 11:56

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/30/15 11:50 • (LCSD) 04/30/15 11:51

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.10	4.58	102	91.6	90.0-110			10.7	20

L759253-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/30/15 12:30 • (MS) 04/30/15 12:31 • (MSD) 04/30/15 12:32

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	5.00	0.0135	3.92	3.92	78.4	78.4	1	90.0-110	F	F	0.000	20



Method Blank (MB)

(MB) 05/05/15 11:14

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0197	0.100

L761018-01 Original Sample (OS) • Duplicate (DUP)

(OS) 05/05/15 11:31 • (DUP) 05/05/15 11:32

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	0.75	0.75	1	0.00		20

L760960-04 Original Sample (OS) • Duplicate (DUP)

(OS) 05/05/15 11:48 • (DUP) 05/05/15 11:49

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	5.3	5.3	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 05/05/15 11:18 • (LCSD) 05/05/15 11:19

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.12	5.21	102	104	90.0-110			1.74	20

L761106-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 05/05/15 11:34 • (MS) 05/05/15 11:35 • (MSD) 05/05/15 11:36

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	5.00	0.00760	4.83	4.82	96.6	96.4	1	90.0-110			0.207	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 05/05/15 12:05

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0197	0.100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L761181-11 Original Sample (OS) • Duplicate (DUP)

(OS) 05/05/15 12:22 • (DUP) 05/05/15 12:23

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	1	0.00		20

L761223-09 Original Sample (OS) • Duplicate (DUP)

(OS) 05/05/15 12:38 • (DUP) 05/05/15 12:40

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 05/05/15 12:08 • (LCSD) 05/05/15 12:10

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.32	5.39	106	108	90.0-110			1.31	20

L761223-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 05/05/15 02:09 • (MS) 05/05/15 02:10 • (MSD) 05/05/15 02:12

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	5.00	0.00860	0.518	0.552	10.4	11.0	1	90.0-110	F	F	6.36	20



Method Blank (MB)

(MB) 04/29/15 14:41

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Cyanide	U		0.00180	0.00500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L760094-09 Original Sample (OS) • Duplicate (DUP)

(OS) 04/29/15 14:56 • (DUP) 04/29/15 14:57

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.00		20

L760094-16 Original Sample (OS) • Duplicate (DUP)

(OS) 04/29/15 15:08 • (DUP) 04/29/15 15:09

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/29/15 14:43 • (LCSD) 04/29/15 14:44

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Cyanide	0.100	0.109	0.106	109	106	90.0-110			2.79	20

L760048-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/29/15 15:05 • (MS) 04/29/15 15:06 • (MSD) 04/29/15 15:07

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Cyanide	0.200	ND	0.216	0.204	108	102	1	90.0-110			5.71	20



Method Blank (MB)

(MB) 05/05/15 16:39

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Cyanide	U		0.00180	0.00500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L761142-01 Original Sample (OS) • Duplicate (DUP)

(OS) 05/05/15 17:05 • (DUP) 05/05/15 17:06

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.00		20

L760039-08 Original Sample (OS) • Duplicate (DUP)

(OS) 05/05/15 17:13 • (DUP) 05/05/15 16:46

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Cyanide	ND	ND	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 05/05/15 16:41 • (LCSD) 05/05/15 16:42

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Cyanide	0.100	0.104	0.102	104	102	90.0-110			1.94	20

L760978-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 05/05/15 16:53 • (MS) 05/05/15 16:54 • (MSD) 05/05/15 16:55

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Cyanide	0.200	ND	0.200	0.195	100	97.5	1	90.0-110			2.53	20



Method Blank (MB)

(MB) 04/22/15 09:40

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L760039-05 Original Sample (OS) • Duplicate (DUP)

(OS) 04/22/15 15:21 • (DUP) 04/22/15 15:35

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Fluoride	0.658	0.652	1	1		20

L760039-05 Original Sample (OS) • Duplicate (DUP)

(OS) 04/22/15 16:47 • (DUP) 04/22/15 17:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	319	288	100	10		20
Sulfate	2550	2520	100	1		20

L760044-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/22/15 23:02 • (DUP) 04/22/15 23:18

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	69.9	69.4	1	1		20
Fluoride	0.425	0.286	1	39	*	20
Sulfate	28.3	28.0	1	1		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 09:54 • (LCSD) 04/22/15 10:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	39.4	39.4	98	99	90-110			0	20
Fluoride	8.00	8.11	8.12	101	101	90-110			0	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 09:54 • (LCSD) 04/22/15 10:08

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Sulfate	40.0	40.5	40.5	101	101	90-110			0	20

L760039-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/22/15 19:20 • (MS) 04/22/15 19:33 • (MSD) 04/22/15 19:47

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	5.00	0.700	4.58	5.66	78	99	1	80-120	F	*	21	20

L760039-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 12:04 • (MS) 04/23/15 12:18 • (MSD) 04/23/15 12:32

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Sulfate	5.00	263	690	692	85	86	10	80-120			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 04/30/15 08:24

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Chloride	U		0.0519	1.00
Sulfate	U		0.0774	5.00

L762266-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/30/15 16:24 • (DUP) 04/30/15 16:39

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	85.1	84.4	1	1		20
Sulfate	43.9	43.7	1	1		20

L760281-07 Original Sample (OS) • Duplicate (DUP)

(OS) 04/30/15 20:45 • (DUP) 04/30/15 21:01

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	6.20	5.82	1	6		20
Sulfate	0.0246	0.0954	1	118	* J	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/30/15 08:39 • (LCSD) 04/30/15 08:55

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Chloride	40.0	40.7	40.7	102	102	90-110			0	20
Sulfate	40.0	40.4	40.5	101	101	90-110			0	20

L762272-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/30/15 17:25 • (MS) 04/30/15 17:40 • (MSD) 04/30/15 17:56

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	50.0	8.33	59.7	54.8	103	93	1	80-120			9	20
Sulfate	50.0	46.9	94.0	94.6	94	95	1	80-120			1	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) 05/05/15 00:57

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L761098-06 Original Sample (OS) • Duplicate (DUP)

(OS) 05/05/15 03:52 • (DUP) 05/05/15 04:06

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	28.1	28.1	1	0		20
Fluoride	1.04	1.05	1	0		20

L761223-05 Original Sample (OS) • Duplicate (DUP)

(OS) 05/05/15 09:09 • (DUP) 05/05/15 09:23

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Chloride	35.4	35.3	2	0		20
Fluoride	0.555	0.586	2	5		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 05/05/15 01:14 • (LCSD) 05/05/15 01:30

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Chloride	40.0	40.2	40.4	101	101	90-110			1	20
Fluoride	8.00	8.18	8.20	102	103	90-110			0	20

L760039-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 05/05/15 02:15 • (MS) 05/05/15 02:29 • (MSD) 05/05/15 02:43

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	50.0	87.2	134	133	93	92	1	80-120			0	20



Method Blank (MB)

(MB) 05/07/15 07:49

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0099	0.100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L761297-14 Original Sample (OS) • Duplicate (DUP)

(OS) 05/07/15 10:06 • (DUP) 05/07/15 10:20

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.945	0.966	1	2		20

L762064-01 Original Sample (OS) • Duplicate (DUP)

(OS) 05/07/15 17:04 • (DUP) 05/07/15 17:18

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.685	0.703	1	3		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 05/07/15 08:04 • (LCSD) 05/07/15 08:18

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Fluoride	8.00	7.99	8.00	100	100	90-110			0	20

L762073-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 05/07/15 17:32 • (MS) 05/07/15 18:07 • (MSD) 05/07/15 18:21

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	5.00	0.743	5.67	5.77	99	100	1	80-120			2	20

Method Blank (MB)

(MB) 04/20/15 17:58

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000049	0.000200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/20/15 18:01 • (LCSD) 04/20/15 18:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Mercury	0.00300	0.00298	0.00283	99	94	80-120			5	20

L760182-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/20/15 18:06 • (MS) 04/20/15 18:09 • (MSD) 04/20/15 18:11

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Mercury	0.00300	0.0000236	0.00277	0.00281	92	93	1	75-125			1	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 04/24/15 21:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	0.00054		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Nickel	0.000465		0.00035	0.00200
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00
Vanadium	0.000571		0.00018	0.00500

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/24/15 21:15 • (LCSD) 04/25/15 00:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0488	0.0479	98	96	80-120			2	20
Barium	0.0500	0.0500	0.0473	100	95	80-120			5	20
Calcium	5.00	5.01	4.86	100	97	80-120			3	20
Chromium	0.0500	0.0480	0.0466	96	93	80-120			3	20
Iron	5.00	4.66	4.60	93	92	80-120			1	20
Lead	0.0500	0.0483	0.0454	97	91	80-120			6	20
Manganese	0.0500	0.0473	0.0475	95	95	80-120			0	20
Nickel	0.0500	0.0492	0.0483	98	97	80-120			2	20
Potassium	5.00	4.78	4.75	96	95	80-120			1	20
Selenium	0.0500	0.0493	0.0472	99	94	80-120			4	20
Sodium	5.00	4.87	4.87	97	97	80-120			0	20
Vanadium	0.0500	0.0481	0.0469	96	94	80-120			3	20

L760039-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/24/15 21:20 • (MS) 04/24/15 21:24 • (MSD) 04/24/15 21:27

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0100	0.00249	0.0588	0.0535	113	102	5	75-125			9	20
Barium	0.0100	0.0162	0.0732	0.0645	114	97	5	75-125			13	20
Calcium	1.00	613	654	585	815	0	5	75-125	4	4	11	20
Chromium	0.0100	0.00144	0.0554	0.0504	108	98	5	75-125			10	20
Potassium	1.00	5.97	11.7	10.5	115	90	5	75-125			11	20
Iron	1.00	0.492	5.83	5.22	107	95	5	75-125			11	20
Lead	0.0100	0.000712	0.0541	0.0494	107	97	5	75-125			9	20
Manganese	0.0100	0.00809	0.0615	0.0568	107	97	5	75-125			8	20
Nickel	0.0100	0.00281	0.0570	0.0506	108	96	5	75-125			12	20
Selenium	0.0100	0.0168	0.0740	0.0649	114	96	5	75-125			13	20
Sodium	1.00	102	113	101	228	0	5	75-125	4	4	11	20
Vanadium	0.0100	0.0156	0.0713	0.0638	111	96	5	75-125			11	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 04/27/15 21:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	0.000575		0.00054	0.00200
Iron,Dissolved	0.0168		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000376		0.00025	0.00500
Nickel,Dissolved	0.000436		0.00035	0.00200
Selenium,Dissolved	U		0.00038	0.00200
Vanadium,Dissolved	U		0.00018	0.00500

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/27/15 21:36 • (LCSD) 04/27/15 21:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0500	0.0485	0.0496	97	99	80-120			2	20
Barium,Dissolved	0.0500	0.0494	0.0495	99	99	80-120			0	20
Chromium,Dissolved	0.0500	0.0488	0.0498	98	100	80-120			2	20
Iron,Dissolved	5.00	4.72	4.80	94	96	80-120			2	20
Lead,Dissolved	0.0500	0.0496	0.0496	99	99	80-120			0	20
Manganese,Dissolved	0.0500	0.0478	0.0493	96	99	80-120			3	20
Nickel,Dissolved	0.0500	0.0515	0.0508	103	102	80-120			1	20
Selenium,Dissolved	0.0500	0.0488	0.0491	98	98	80-120			1	20
Vanadium,Dissolved	0.0500	0.0488	0.0495	98	99	80-120			1	20

L760039-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/27/15 21:41 • (MS) 04/27/15 21:46 • (MSD) 04/27/15 21:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0500	0.00241	0.0560	0.0531	107	101	1	75-125			5	20
Barium,Dissolved	0.0500	0.00887	0.0574	0.0578	97	98	1	75-125			1	20
Chromium,Dissolved	0.0500	0.000697	0.0510	0.0480	101	95	1	75-125			6	20
Iron,Dissolved	5.00	0.0963	7.42	4.78	146	94	1	75-125	F	*	43	20
Lead,Dissolved	0.0500	0.0000794	0.0500	0.0494	100	99	1	75-125			1	20



L760039-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/27/15 21:41 • (MS) 04/27/15 21:46 • (MSD) 04/27/15 21:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Manganese,Dissolved	0.0500	0.00160	0.0647	0.0494	126	96	1	75-125	F	*	27	20
Nickel,Dissolved	0.0500	0.00140	0.0511	0.0474	99	92	1	75-125			7	20
Selenium,Dissolved	0.0500	0.0166	0.0684	0.0646	104	96	1	75-125			6	20
Vanadium,Dissolved	0.0500	0.0141	0.0651	0.0629	102	98	1	75-125			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/24/15 16:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	92.7			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/24/15 13:59 • (LCSD) 04/24/15 14:21

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.80	5.64	105	103	67.0-132			2.80	20
(S) a,a,a-Trifluorotoluene(FID)				101	101	62.0-128				



Method Blank (MB)

(MB) 04/22/15 22:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.3			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 20:46 • (LCSD) 04/22/15 21:11

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.60	4.66	102	84.7	67.0-132			18.3	20
(S) a,a,a-Trifluorotoluene(FID)				102	100	62.0-128				

L760039-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/22/15 23:21 • (MS) 04/22/15 21:36 • (MSD) 04/22/15 22:01

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	3.29	7.56	6.57	77.5	59.5	1	50.0-143			14.0	20
(S) a,a,a-Trifluorotoluene(FID)					101	100		62.0-128				



Method Blank (MB)

(MB) 04/28/15 10:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	97.6			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/28/15 09:23 • (LCSD) 04/28/15 09:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.44	5.19	98.9	94.4	67.0-132			4.65	20
(S) a,a,a-Trifluorotoluene(FID)				105	105	62.0-128				

L760239-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/28/15 14:46 • (MS) 04/28/15 13:31 • (MSD) 04/28/15 13:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	1.17	6.08	6.03	89.2	88.2	1	50.0-143			0.880	20
(S) a,a,a-Trifluorotoluene(FID)					107	108		62.0-128				



Method Blank (MB)

(MB) 04/21/15 11:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) 04/21/15 11:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	102			88.5-111
(S) Dibromofluoromethane	99.6			78.3-121
(S) 4-Bromofluorobenzene	102			71.0-126

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/21/15 10:34 • (LCSD) 04/21/15 12:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.125	0.133	99.9	106	35.6-163			5.97	23.9
Benzene	0.0250	0.0217	0.0225	86.9	89.9	74.8-121			3.44	20
Bromodichloromethane	0.0250	0.0227	0.0243	90.6	97.4	75.1-116			7.17	20
Bromoform	0.0250	0.0247	0.0250	98.9	100	67.5-130			1.34	20
Bromomethane	0.0250	0.0159	0.0172	63.5	68.8	49.9-162			7.88	20
n-Butylbenzene	0.0250	0.0262	0.0254	105	102	76.2-126			2.74	20
sec-Butylbenzene	0.0250	0.0248	0.0243	99.1	97.2	74.4-127			1.94	20
Carbon tetrachloride	0.0250	0.0242	0.0246	96.8	98.2	70.2-123			1.50	20
Chlorobenzene	0.0250	0.0225	0.0226	89.9	90.3	78.1-119			0.440	20
Chlorodibromomethane	0.0250	0.0236	0.0240	94.4	96.1	74.0-121			1.79	20
Chloroethane	0.0250	0.0185	0.0190	73.9	76.2	61.7-135			3.06	20
Chloroform	0.0250	0.0229	0.0247	91.5	98.9	76.0-121			7.83	20
Chloromethane	0.0250	0.0164	0.0168	65.6	67.3	61.5-129			2.65	20
1,2-Dibromoethane	0.0250	0.0212	0.0215	84.7	86.1	76.6-121			1.64	20
1,1-Dichloroethane	0.0250	0.0235	0.0245	94.1	97.9	70.7-126			3.95	20
1,2-Dichloroethane	0.0250	0.0210	0.0226	84.0	90.3	68.8-124			7.16	20
1,1-Dichloroethene	0.0250	0.0202	0.0210	80.7	84.1	67.8-129			4.15	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/21/15 10:34 • (LCSD) 04/21/15 12:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	0.0250	0.0222	0.0241	88.8	96.6	76.0-119			8.44	20
trans-1,2-Dichloroethene	0.0250	0.0201	0.0217	80.4	86.7	72.6-121			7.60	20
1,2-Dichloropropane	0.0250	0.0229	0.0235	91.4	94.1	76.5-119			2.84	20
cis-1,3-Dichloropropene	0.0250	0.0231	0.0233	92.5	93.1	78.2-120			0.590	20
trans-1,3-Dichloropropene	0.0250	0.0236	0.0227	94.3	90.8	74.3-123			3.80	20
Ethylbenzene	0.0250	0.0225	0.0217	90.2	86.8	78.8-122			3.82	20
2-Hexanone	0.125	0.126	0.116	101	92.6	65.6-144			8.44	20
Isopropylbenzene	0.0250	0.0239	0.0233	95.4	93.1	78.6-132			2.46	20
p-Isopropyltoluene	0.0250	0.0247	0.0243	98.8	97.1	74.0-131			1.77	20
2-Butanone (MEK)	0.125	0.134	0.131	107	104	55.0-149			2.49	20
Methylene Chloride	0.0250	0.0207	0.0234	82.9	93.6	70.3-120			12.1	20
4-Methyl-2-pentanone (MIBK)	0.125	0.123	0.120	98.8	96.3	70.5-133			2.57	20
Methyl tert-butyl ether	0.0250	0.0233	0.0254	93.1	102	71.2-126			8.80	20
Naphthalene	0.0250	0.0226	0.0239	90.6	95.5	68.4-128			5.25	20
n-Propylbenzene	0.0250	0.0238	0.0233	95.4	93.3	78.2-122			2.22	20
Styrene	0.0250	0.0233	0.0235	93.4	94.2	80.4-126			0.840	20
1,1,1,2-Tetrachloroethane	0.0250	0.0239	0.0249	95.8	99.5	74.2-124			3.76	20
1,1,2,2-Tetrachloroethane	0.0250	0.0238	0.0240	95.1	96.0	70.7-122			0.940	20
Tetrachloroethene	0.0250	0.0212	0.0199	84.7	79.7	72.6-126			6.04	20
Toluene	0.0250	0.0217	0.0212	86.6	84.9	79.7-116			1.99	20
1,1,1-Trichloroethane	0.0250	0.0243	0.0244	97.2	97.8	73.2-123			0.590	20
1,1,2-Trichloroethane	0.0250	0.0232	0.0232	92.8	92.9	77.7-118			0.0300	20
Trichloroethene	0.0250	0.0219	0.0224	87.7	89.8	77.7-118			2.41	20
1,2,4-Trimethylbenzene	0.0250	0.0228	0.0230	91.0	91.8	75.0-123			0.900	20
1,3,5-Trimethylbenzene	0.0250	0.0228	0.0229	91.3	91.6	75.6-124			0.380	20
Vinyl chloride	0.0250	0.0183	0.0194	73.1	77.5	65.9-128			5.83	20
Xylenes, Total	0.0750	0.0673	0.0670	89.8	89.4	78.7-121			0.440	20
o-Xylene	0.0250	0.0228	0.0230	91.1	92.0	77.6-122			1.02	20
m&p-Xylenes	0.0500	0.0446	0.0440	89.1	88.1	78.8-121			1.19	20
(S) Toluene-d8				103	102	88.5-111				
(S) Dibromofluoromethane				102	109	78.3-121				
(S) 4-Bromofluorobenzene				99.5	97.5	71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L759757-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/21/15 16:07 • (MS) 04/21/15 14:23 • (MSD) 04/21/15 14:40

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0126	0.213	0.192	161	144	1	10.0-130	F	F	10.4	27.9
Benzene	0.0250	ND	0.0310	0.0266	124	107	1	54.3-133			15.1	20
Bromodichloromethane	0.0250	ND	0.0296	0.0259	118	103	1	63.9-121			13.5	20
Bromoform	0.0250	ND	0.0318	0.0271	127	108	1	59.5-134			15.9	20.5
Bromomethane	0.0250	ND	0.0274	0.0249	109	99.5	1	41.7-155			9.48	21.9
n-Butylbenzene	0.0250	ND	0.0314	0.0274	126	109	1	62.7-140			13.8	20.3
sec-Butylbenzene	0.0250	ND	0.0296	0.0253	119	101	1	62.2-136			15.8	20.3
Carbon tetrachloride	0.0250	ND	0.0298	0.0266	119	107	1	55.7-134			11.3	20
Chlorobenzene	0.0250	ND	0.0292	0.0246	117	98.5	1	67.0-125			16.9	20
Chlorodibromomethane	0.0250	ND	0.0299	0.0256	120	102	1	64.3-125			15.4	20.8
Chloroethane	0.0250	ND	0.0291	0.0254	117	102	1	51.5-136			13.7	40
Chloroform	0.0250	ND	0.0303	0.0262	121	105	1	63.0-129			14.7	20
Chloromethane	0.0250	ND	0.0290	0.0259	116	103	1	42.4-135			11.3	20
1,2-Dibromoethane	0.0250	ND	0.0293	0.0253	117	101	1	67.1-125			14.6	20
1,1-Dichloroethane	0.0250	ND	0.0311	0.0271	124	109	1	58.5-132			13.5	20
1,2-Dichloroethane	0.0250	ND	0.0302	0.0259	121	104	1	60.0-126			15.3	20
1,1-Dichloroethene	0.0250	ND	0.0302	0.0261	121	104	1	51.1-140			14.6	20.2
cis-1,2-Dichloroethene	0.0250	ND	0.0310	0.0274	124	110	1	59.2-129			12.2	20
trans-1,2-Dichloroethene	0.0250	ND	0.0311	0.0267	124	107	1	56.5-129			15.3	20
1,2-Dichloropropane	0.0250	0.00214	0.0305	0.0260	114	95.4	1	64.2-123			16.0	20
cis-1,3-Dichloropropene	0.0250	ND	0.0306	0.0264	122	105	1	66.4-125			14.8	20
trans-1,3-Dichloropropene	0.0250	ND	0.0319	0.0286	128	114	1	64.1-128			11.1	20
Ethylbenzene	0.0250	ND	0.0291	0.0244	117	97.7	1	61.4-133			17.6	20
2-Hexanone	0.125	0.000700	0.170	0.150	136	120	1	43.3-137			12.4	25.5
Isopropylbenzene	0.0250	ND	0.0288	0.0250	115	100	1	66.8-141			14.0	20
p-Isopropyltoluene	0.0250	ND	0.0305	0.0259	122	104	1	63.2-139			16.3	20.4
2-Butanone (MEK)	0.125	0.000753	0.190	0.168	151	134	1	22.4-138	F		11.9	27
Methylene Chloride	0.0250	ND	0.0311	0.0273	124	109	1	58.1-122	F		13.1	20
4-Methyl-2-pentanone (MIBK)	0.125	0.000472	0.160	0.142	128	113	1	60.8-140			11.9	25.1
Methyl tert-butyl ether	0.0250	0.00691	0.0394	0.0353	130	114	1	57.7-134			11.0	20
Naphthalene	0.0250	0.000441	0.0313	0.0286	123	113	1	58.0-135			8.95	25.5
n-Propylbenzene	0.0250	ND	0.0299	0.0248	119	99.2	1	65.9-131			18.5	20
Styrene	0.0250	ND	0.0308	0.0261	123	104	1	66.8-133			16.5	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0302	0.0259	121	104	1	64.0-128			15.1	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.000	0.000786	0.000	3.15	1	56.0-132	F	* F	200	22.2
Tetrachloroethene	0.0250	ND	0.0297	0.0242	119	96.8	1	53.0-139		*	20.5	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L759757-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/21/15 16:07 • (MS) 04/21/15 14:23 • (MSD) 04/21/15 14:40

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Toluene	0.0250	0.000944	0.0308	0.0257	119	99.0	1	61.4-130			18.1	20
1,1,1-Trichloroethane	0.0250	ND	0.0302	0.0264	121	106	1	58.7-134			13.3	20
1,1,2-Trichloroethane	0.0250	ND	0.0291	0.0248	116	99.2	1	66.3-125			15.8	20
Trichloroethene	0.0250	ND	0.0559	0.0474	224	190	1	44.1-149	E	E	16.3	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0299	0.0245	119	98.1	1	57.4-137			19.5	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0287	0.0245	115	97.9	1	63.6-132			15.9	20.5
Vinyl chloride	0.0250	ND	0.0301	0.0260	120	104	1	47.8-137			14.5	20
Xylenes, Total	0.0750	0.000863	0.0882	0.0747	116	98.4	1	63.3-131			16.6	20
o-Xylene	0.0250	0.000342	0.0299	0.0256	118	101	1	63.3-130			15.6	20
m&p-Xylenes	0.0500	0.000521	0.0583	0.0491	116	97.1	1	61.7-133			17.1	20
(S) Toluene-d8					104	103		88.5-111				
(S) Dibromofluoromethane					82.7	84.7		78.3-121				
(S) 4-Bromofluorobenzene					99.8	98.2		71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

[L760039-12,13,14,15,16,17,18,19,20](#)

Method Blank (MB)

(MB) 04/23/15 01:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 04/23/15 01:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	103			88.5-111
(S) Dibromofluoromethane	102			78.3-121
(S) 4-Bromofluorobenzene	108			71.0-126

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 22:55 • (LCSD) 04/23/15 00:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.122	0.0981	97.4	78.5	35.6-163			21.6	23.9
Benzene	0.0250	0.0295	0.0241	118	96.3	74.8-121	*		20.1	20
Bromodichloromethane	0.0250	0.0278	0.0232	111	92.7	75.1-116			18.3	20
Bromoform	0.0250	0.0299	0.0242	119	96.9	67.5-130	*		20.9	20
Bromomethane	0.0250	0.0281	0.0235	113	94.0	49.9-162			18.0	20
n-Butylbenzene	0.0250	0.0272	0.0238	109	95.0	76.2-126			13.4	20
sec-Butylbenzene	0.0250	0.0287	0.0248	115	99.0	74.4-127			14.8	20
Carbon disulfide	0.0250	0.0298	0.0247	119	99.0	64.6-140			18.4	20
Carbon tetrachloride	0.0250	0.0305	0.0258	122	103	70.2-123			16.8	20
Chlorobenzene	0.0250	0.0289	0.0245	116	98.0	78.1-119			16.5	20
Chlorodibromomethane	0.0250	0.0296	0.0240	118	96.0	74.0-121	*		21.0	20
Chloroethane	0.0250	0.0268	0.0233	107	93.4	61.7-135			14.0	20
Chloroform	0.0250	0.0296	0.0246	118	98.2	76.0-121			18.6	20
Chloromethane	0.0250	0.0261	0.0217	104	86.9	61.5-129			18.2	20
1,2-Dibromoethane	0.0250	0.0286	0.0231	114	92.5	76.6-121	*		21.2	20
1,1-Dichloroethane	0.0250	0.0303	0.0251	121	100	70.7-126			18.9	20
1,2-Dichloroethane	0.0250	0.0297	0.0238	119	95.4	68.8-124	*		21.8	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 22:55 • (LCSD) 04/23/15 00:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.0250	0.0310	0.0262	124	105	67.8-129			17.0	20
cis-1,2-Dichloroethene	0.0250	0.0295	0.0242	118	96.6	76.0-119			19.9	20
trans-1,2-Dichloroethene	0.0250	0.0288	0.0238	115	95.1	72.6-121			19.2	20
1,2-Dichloropropane	0.0250	0.0292	0.0252	117	101	76.5-119			14.6	20
cis-1,3-Dichloropropene	0.0250	0.0280	0.0236	112	94.6	78.2-120			16.9	20
trans-1,3-Dichloropropene	0.0250	0.0275	0.0237	110	94.9	74.3-123			14.7	20
Ethylbenzene	0.0250	0.0287	0.0246	115	98.4	78.8-122			15.6	20
2-Hexanone	0.125	0.139	0.113	111	90.1	65.6-144		*	20.6	20
Isopropylbenzene	0.0250	0.0282	0.0241	113	96.3	78.6-132			15.6	20
p-Isopropyltoluene	0.0250	0.0288	0.0250	115	100	74.0-131			13.9	20
2-Butanone (MEK)	0.125	0.138	0.112	110	90.0	55.0-149		*	20.5	20
Methylene Chloride	0.0250	0.0308	0.0249	123	99.4	70.3-120	*	*	21.4	20
4-Methyl-2-pentanone (MIBK)	0.125	0.136	0.112	109	89.9	70.5-133			18.8	20
Methyl tert-butyl ether	0.0250	0.0293	0.0242	117	96.9	71.2-126			19.1	20
Naphthalene	0.0250	0.0257	0.0205	103	81.8	68.4-128		*	22.8	20
n-Propylbenzene	0.0250	0.0284	0.0246	114	98.3	78.2-122			14.5	20
Styrene	0.0250	0.0298	0.0246	119	98.5	80.4-126			18.9	20
1,1,1,2-Tetrachloroethane	0.0250	0.0269	0.0222	107	88.8	74.2-124			19.0	20
1,1,2,2-Tetrachloroethane	0.0250	0.0301	0.0251	120	100	70.7-122			18.0	20
Toluene	0.0250	0.0280	0.0238	112	95.2	79.7-116			16.2	20
1,1,1-Trichloroethane	0.0250	0.0305	0.0259	122	103	73.2-123			16.4	20
1,1,2-Trichloroethane	0.0250	0.0279	0.0229	112	91.5	77.7-118			19.7	20
Trichloroethene	0.0250	0.0292	0.0249	117	99.7	77.7-118			15.7	20
1,2,4-Trimethylbenzene	0.0250	0.0277	0.0236	111	94.3	75.0-123			16.1	20
1,3,5-Trimethylbenzene	0.0250	0.0290	0.0249	116	99.5	75.6-124			15.4	20
Vinyl chloride	0.0250	0.0272	0.0234	109	93.8	65.9-128			14.7	20
Xylenes, Total	0.0750	0.0858	0.0722	114	96.3	78.7-121			17.2	20
o-Xylene	0.0250	0.0287	0.0240	115	95.9	77.6-122			18.0	20
m&p-Xylenes	0.0500	0.0571	0.0482	114	96.5	78.8-121			16.8	20
(S) Toluene-d8				104	103	88.5-111				
(S) Dibromofluoromethane				103	99.1	78.3-121				
(S) 4-Bromofluorobenzene				105	104	71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L760059-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 01:36 • (MS) 04/23/15 00:36 • (MSD) 04/23/15 00:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00423	0.134	0.127	104	98.2	1	10.0-130			5.46	27.9
Benzene	0.0250	ND	0.0259	0.0245	104	98.1	1	54.3-133			5.45	20
Bromodichloromethane	0.0250	ND	0.0254	0.0242	102	96.9	1	63.9-121			4.77	20
Bromoform	0.0250	ND	0.0275	0.0260	110	104	1	59.5-134			5.53	20.5
Bromomethane	0.0250	ND	0.0245	0.0218	97.8	87.2	1	41.7-155			11.5	21.9
n-Butylbenzene	0.0250	ND	0.0241	0.0220	96.5	87.8	1	62.7-140			9.37	20.3
sec-Butylbenzene	0.0250	ND	0.0254	0.0234	102	93.6	1	62.2-136			8.23	20.3
Carbon disulfide	0.0250	ND	0.0261	0.0246	105	98.4	1	43.3-149			6.12	20.3
Carbon tetrachloride	0.0250	ND	0.0271	0.0252	108	101	1	55.7-134			6.91	20
Chlorobenzene	0.0250	ND	0.0257	0.0241	103	96.5	1	67.0-125			6.22	20
Chlorodibromomethane	0.0250	ND	0.0267	0.0255	107	102	1	64.3-125			4.79	20.8
Chloroethane	0.0250	ND	0.0250	0.0232	100	92.7	1	51.5-136			7.48	40
Chloroform	0.0250	ND	0.0267	0.0252	107	101	1	63.0-129			5.70	20
Chloromethane	0.0250	ND	0.0244	0.0220	97.5	88.1	1	42.4-135			10.1	20
1,2-Dibromoethane	0.0250	ND	0.0263	0.0251	105	101	1	67.1-125			4.48	20
1,1-Dichloroethane	0.0250	ND	0.0269	0.0255	108	102	1	58.5-132			5.52	20
1,2-Dichloroethane	0.0250	0.000581	0.0280	0.0273	109	107	1	60.0-126			2.34	20
1,1-Dichloroethene	0.0250	ND	0.0277	0.0255	111	102	1	51.1-140			8.40	20.2
cis-1,2-Dichloroethene	0.0250	ND	0.0265	0.0245	106	98.1	1	59.2-129			7.65	20
trans-1,2-Dichloroethene	0.0250	ND	0.0258	0.0238	103	95.0	1	56.5-129			8.27	20
1,2-Dichloropropane	0.0250	ND	0.0265	0.0254	106	102	1	64.2-123			3.89	20
cis-1,3-Dichloropropene	0.0250	ND	0.0253	0.0242	101	97.0	1	66.4-125			4.19	20
trans-1,3-Dichloropropene	0.0250	ND	0.0265	0.0252	106	101	1	64.1-128			5.19	20
Ethylbenzene	0.0250	ND	0.0255	0.0242	102	96.7	1	61.4-133			5.41	20
2-Hexanone	0.125	0.000569	0.144	0.137	115	109	1	43.3-137			4.84	25.5
Isopropylbenzene	0.0250	ND	0.0246	0.0230	98.4	92.0	1	66.8-141			6.80	20
p-Isopropyltoluene	0.0250	ND	0.0252	0.0235	101	94.1	1	63.2-139			7.05	20.4
2-Butanone (MEK)	0.125	ND	0.143	0.136	114	109	1	22.4-138			5.03	27
Methylene Chloride	0.0250	ND	0.0270	0.0265	108	106	1	58.1-122			2.00	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.138	0.134	110	107	1	60.8-140			3.23	25.1
Methyl tert-butyl ether	0.0250	0.204	0.179	0.178	0.000	0.000	1	57.7-134	4	4	0.480	20
Naphthalene	0.0250	ND	0.0242	0.0226	96.8	90.5	1	58.0-135			6.79	25.5
n-Propylbenzene	0.0250	ND	0.0249	0.0233	99.6	93.4	1	65.9-131			6.43	20
Styrene	0.0250	ND	0.00495	0.00531	19.8	21.2	1	66.8-133	F	F	7.13	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0241	0.0228	96.2	91.1	1	64.0-128			5.42	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0303	0.0294	121	118	1	56.0-132			3.04	22.2

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L760059-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 01:36 • (MS) 04/23/15 00:36 • (MSD) 04/23/15 00:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Toluene	0.0250	ND	0.0249	0.0236	99.8	94.3	1	61.4-130			5.62	20
1,1,1-Trichloroethane	0.0250	ND	0.0269	0.0248	108	99.3	1	58.7-134			7.96	20
1,1,2-Trichloroethane	0.0250	ND	0.0257	0.0249	103	99.5	1	66.3-125			3.50	20
Trichloroethene	0.0250	ND	0.0250	0.0237	100	94.9	1	44.1-149			5.20	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0245	0.0228	98.0	91.1	1	57.4-137			7.23	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0255	0.0239	102	95.7	1	63.6-132			6.24	20.5
Vinyl chloride	0.0250	ND	0.0244	0.0229	97.8	91.7	1	47.8-137			6.39	20
Xylenes, Total	0.0750	ND	0.0749	0.0707	99.8	94.3	1	63.3-131			5.72	20
o-Xylene	0.0250	ND	0.0250	0.0237	100	94.9	1	63.3-130			5.34	20
m&p-Xylenes	0.0500	ND	0.0499	0.0470	99.7	94.0	1	61.7-133			5.91	20
(S) Toluene-d8					103	104		88.5-111				
(S) Dibromofluoromethane					104	105		78.3-121				
(S) 4-Bromofluorobenzene					104	104		71.0-126				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 04/22/15 05:01

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
Carbon disulfide	U		0.000275	0.00100
Ethylbenzene	U		0.000384	0.00100
Methyl tert-butyl ether	U		0.000367	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 04:08 • (LCSD) 04/22/15 06:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0267	0.0283	107	113	74.8-121			6.01	20
Carbon disulfide	0.0250	0.0255	0.0292	102	117	64.6-140			13.3	20
Ethylbenzene	0.0250	0.0252	0.0262	101	105	78.8-122			4.09	20
Methyl tert-butyl ether	0.0250	0.0269	0.0309	108	124	71.2-126			13.9	20

L759725-24 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/22/15 09:37 • (MS) 04/22/15 08:44 • (MSD) 04/22/15 09:02

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	ND	0.0216	0.0243	86.4	97.1	1	54.3-133			11.7	20
Carbon disulfide	0.0250	ND	0.0212	0.0233	85.0	93.3	1	43.3-149			9.30	20.3
Ethylbenzene	0.0250	ND	0.0190	0.0236	75.8	94.5	1	61.4-133		*	22.0	20
Methyl tert-butyl ether	0.0250	ND	0.0229	0.0249	91.7	99.7	1	57.7-134			8.26	20



Method Blank (MB)

(MB) 04/29/15 11:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
Tetrachloroethene	U		0.000372	0.00100

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/29/15 10:03 • (LCSD) 04/29/15 10:23

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0232	0.0219	92.7	87.5	74.8-121			5.76	20
Tetrachloroethene	0.0250	0.0239	0.0251	95.5	100	72.6-126			4.96	20

L760701-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/29/15 14:19 • (MS) 04/29/15 12:03 • (MSD) 04/29/15 12:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	ND	0.0226	0.0224	90.3	89.5	1	54.3-133			0.900	20
Tetrachloroethene	0.0250	0.000334	0.0248	0.0258	97.9	102	1	53.0-139			3.85	20



Method Blank (MB)

(MB) 04/25/15 17:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 04/25/15 17:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	105			88.5-111
(S) Dibromofluoromethane	101			78.3-121
(S) 4-Bromofluorobenzene	105			71.0-126

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/25/15 15:57 • (LCSD) 04/25/15 16:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.104	0.103	83.0	82.2	35.6-163			0.930	23.9
Benzene	0.0250	0.0253	0.0233	101	93.0	74.8-121			8.30	20
Bromodichloromethane	0.0250	0.0244	0.0221	97.8	88.4	75.1-116			10.0	20
Bromoform	0.0250	0.0237	0.0225	94.9	90.0	67.5-130			5.31	20
Bromomethane	0.0250	0.0245	0.0232	97.9	92.9	49.9-162			5.30	20
n-Butylbenzene	0.0250	0.0224	0.0214	89.7	85.6	76.2-126			4.67	20
sec-Butylbenzene	0.0250	0.0234	0.0228	93.7	91.3	74.4-127			2.55	20
Carbon disulfide	0.0250	0.0253	0.0231	101	92.3	64.6-140			9.09	20
Carbon tetrachloride	0.0250	0.0262	0.0246	105	98.3	70.2-123			6.48	20
Chlorobenzene	0.0250	0.0240	0.0227	95.9	91.0	78.1-119			5.27	20
Chlorodibromomethane	0.0250	0.0244	0.0225	97.6	90.2	74.0-121			7.84	20
Chloroethane	0.0250	0.0246	0.0223	98.4	89.2	61.7-135			9.81	20
Chloroform	0.0250	0.0260	0.0241	104	96.3	76.0-121			7.60	20
Chloromethane	0.0250	0.0234	0.0219	93.5	87.7	61.5-129			6.37	20
1,2-Dibromoethane	0.0250	0.0236	0.0213	94.2	85.3	76.6-121			9.91	20
1,1-Dichloroethane	0.0250	0.0260	0.0241	104	96.6	70.7-126			7.27	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/25/15 15:57 • (LCSD) 04/25/15 16:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0260	0.0232	104	92.7	68.8-124			11.6	20
1,1-Dichloroethene	0.0250	0.0267	0.0247	107	98.9	67.8-129			7.56	20
cis-1,2-Dichloroethene	0.0250	0.0254	0.0231	102	92.3	76.0-119			9.67	20
trans-1,2-Dichloroethene	0.0250	0.0250	0.0233	99.9	93.3	72.6-121			6.89	20
1,2-Dichloropropane	0.0250	0.0259	0.0234	104	93.5	76.5-119			10.3	20
cis-1,3-Dichloropropene	0.0250	0.0243	0.0220	97.0	87.8	78.2-120			9.94	20
trans-1,3-Dichloropropene	0.0250	0.0245	0.0228	98.2	91.2	74.3-123			7.34	20
Ethylbenzene	0.0250	0.0241	0.0228	96.2	91.3	78.8-122			5.22	20
2-Hexanone	0.125	0.117	0.108	93.7	86.7	65.6-144			7.75	20
Isopropylbenzene	0.0250	0.0233	0.0224	93.1	89.5	78.6-132			3.88	20
p-Isopropyltoluene	0.0250	0.0239	0.0233	95.6	93.1	74.0-131			2.61	20
2-Butanone (MEK)	0.125	0.119	0.114	95.0	91.3	55.0-149			3.92	20
Methylene Chloride	0.0250	0.0257	0.0241	103	96.5	70.3-120			6.45	20
4-Methyl-2-pentanone (MIBK)	0.125	0.119	0.107	95.3	85.8	70.5-133			10.4	20
Methyl tert-butyl ether	0.0250	0.0258	0.0235	103	93.9	71.2-126			9.40	20
Naphthalene	0.0250	0.0211	0.0194	84.5	77.6	68.4-128			8.47	20
n-Propylbenzene	0.0250	0.0236	0.0226	94.5	90.5	78.2-122			4.37	20
Styrene	0.0250	0.0244	0.0231	97.6	92.5	80.4-126			5.35	20
1,1,1,2-Tetrachloroethane	0.0250	0.0226	0.0205	90.5	82.2	74.2-124			9.62	20
1,1,2,2-Tetrachloroethane	0.0250	0.0248	0.0236	99.1	94.6	70.7-122			4.64	20
Tetrachloroethene	0.0250	0.0244	0.0225	97.7	90.1	72.6-126			8.18	20
Toluene	0.0250	0.0246	0.0224	98.6	89.7	79.7-116			9.45	20
1,1,1-Trichloroethane	0.0250	0.0267	0.0244	107	97.7	73.2-123			8.69	20
1,1,2-Trichloroethane	0.0250	0.0234	0.0214	93.6	85.6	77.7-118			8.93	20
Trichloroethene	0.0250	0.0253	0.0231	101	92.4	77.7-118			8.94	20
1,2,4-Trimethylbenzene	0.0250	0.0232	0.0222	92.6	88.6	75.0-123			4.45	20
1,3,5-Trimethylbenzene	0.0250	0.0240	0.0234	96.0	93.6	75.6-124			2.54	20
Vinyl chloride	0.0250	0.0245	0.0227	98.0	90.9	65.9-128			7.57	20
Xylenes, Total	0.0750	0.0713	0.0671	95.0	89.4	78.7-121			6.07	20
o-Xylene	0.0250	0.0238	0.0226	95.3	90.5	77.6-122			5.20	20
m&p-Xylenes	0.0500	0.0474	0.0444	94.9	88.9	78.8-121			6.50	20
(S) Toluene-d8				105	104	88.5-111				
(S) Dibromofluoromethane				102	101	78.3-121				
(S) 4-Bromofluorobenzene				103	107	71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L760039-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/25/15 21:16 • (MS) 04/25/15 20:16 • (MSD) 04/25/15 20:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0176	0.130	0.131	90.3	90.8	1	10.0-130			0.470	27.9
Benzene	0.0250	0.0248	0.0471	0.0482	89.0	93.5	1	54.3-133			2.40	20
Bromodichloromethane	0.0250	ND	0.0243	0.0251	97.3	100	1	63.9-121			3.08	20
Bromoform	0.0250	ND	0.0255	0.0253	102	101	1	59.5-134			0.910	20.5
Bromomethane	0.0250	ND	0.0227	0.0239	90.7	95.4	1	41.7-155			5.03	21.9
n-Butylbenzene	0.0250	ND	0.0225	0.0233	89.8	93.2	1	62.7-140			3.69	20.3
sec-Butylbenzene	0.0250	0.000636	0.0242	0.0246	94.3	95.7	1	62.2-136			1.41	20.3
Carbon disulfide	0.0250	ND	0.0247	0.0252	98.7	101	1	43.3-149			2.21	20.3
Carbon tetrachloride	0.0250	ND	0.0265	0.0274	106	110	1	55.7-134			3.46	20
Chlorobenzene	0.0250	ND	0.0243	0.0244	97.0	97.7	1	67.0-125			0.740	20
Chlorodibromomethane	0.0250	ND	0.0253	0.0259	101	103	1	64.3-125			2.37	20.8
Chloroethane	0.0250	ND	0.0237	0.0254	94.8	102	1	51.5-136			6.97	40
Chloroform	0.0250	0.000314	0.0265	0.0269	105	106	1	63.0-129			1.26	20
Chloromethane	0.0250	ND	0.0229	0.0239	91.7	95.8	1	42.4-135			4.35	20
1,2-Dibromoethane	0.0250	ND	0.0245	0.0243	97.9	97.0	1	67.1-125			0.870	20
1,1-Dichloroethane	0.0250	ND	0.0262	0.0270	105	108	1	58.5-132			2.88	20
1,2-Dichloroethane	0.0250	ND	0.0268	0.0274	107	110	1	60.0-126			2.34	20
1,1-Dichloroethene	0.0250	ND	0.0268	0.0272	107	109	1	51.1-140			1.73	20.2
cis-1,2-Dichloroethene	0.0250	ND	0.0254	0.0255	102	102	1	59.2-129			0.350	20
trans-1,2-Dichloroethene	0.0250	ND	0.0246	0.0251	98.5	100	1	56.5-129			1.99	20
1,2-Dichloropropane	0.0250	ND	0.0252	0.0266	101	106	1	64.2-123			5.36	20
cis-1,3-Dichloropropene	0.0250	ND	0.0242	0.0249	96.8	99.5	1	66.4-125			2.78	20
trans-1,3-Dichloropropene	0.0250	ND	0.0248	0.0258	99.2	103	1	64.1-128			4.12	20
Ethylbenzene	0.0250	ND	0.0243	0.0242	97.3	97.0	1	61.4-133			0.360	20
2-Hexanone	0.125	0.00153	0.128	0.131	101	104	1	43.3-137			2.47	25.5
Isopropylbenzene	0.0250	ND	0.0234	0.0238	93.6	95.4	1	66.8-141			1.90	20
p-Isopropyltoluene	0.0250	0.000951	0.0245	0.0249	94.0	95.9	1	63.2-139			1.88	20.4
2-Butanone (MEK)	0.125	0.00114	0.134	0.135	106	107	1	22.4-138			0.870	27
Methylene Chloride	0.0250	0.00102	0.0272	0.0281	105	108	1	58.1-122			3.21	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.126	0.130	101	104	1	60.8-140			3.09	25.1
Methyl tert-butyl ether	0.0250	0.00648	0.0338	0.0344	109	112	1	57.7-134			1.71	20
Naphthalene	0.0250	0.0233	0.0460	0.0477	90.8	97.4	1	58.0-135			3.49	25.5
n-Propylbenzene	0.0250	ND	0.0235	0.0239	93.8	95.5	1	65.9-131			1.79	20
Styrene	0.0250	ND	0.00737	0.00589	29.5	23.6	1	66.8-133	F	*F	22.3	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0228	0.0232	91.3	92.9	1	64.0-128			1.74	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0275	0.0282	110	113	1	56.0-132			2.58	22.2

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L760039-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/25/15 21:16 • (MS) 04/25/15 20:16 • (MSD) 04/25/15 20:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0238	0.0242	95.4	96.7	1	53.0-139			1.33	20
Toluene	0.0250	ND	0.0240	0.0248	95.9	99.3	1	61.4-130			3.49	20
1,1,1-Trichloroethane	0.0250	ND	0.0265	0.0268	106	107	1	58.7-134			1.10	20
1,1,2-Trichloroethane	0.0250	ND	0.0249	0.0252	99.5	101	1	66.3-125			1.10	20
Trichloroethene	0.0250	ND	0.0240	0.0250	96.0	100	1	44.1-149			4.15	20
1,2,4-Trimethylbenzene	0.0250	0.0658	0.0838	0.0859	72.1	80.6	1	57.4-137			2.51	20
1,3,5-Trimethylbenzene	0.0250	0.00168	0.0255	0.0260	95.3	97.5	1	63.6-132			2.14	20.5
Vinyl chloride	0.0250	ND	0.0237	0.0240	94.6	96.1	1	47.8-137			1.58	20
Xylenes, Total	0.0750	0.00275	0.0734	0.0750	94.2	96.4	1	63.3-131			2.24	20
o-Xylene	0.0250	0.000869	0.0247	0.0252	95.4	97.4	1	63.3-130			2.05	20
m&p-Xylenes	0.0500	0.00188	0.0487	0.0498	93.6	95.9	1	61.7-133			2.33	20
(S) Toluene-d8					104	104		88.5-111				
(S) Dibromofluoromethane					105	103		78.3-121				
(S) 4-Bromofluorobenzene					105	105		71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/25/15 18:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Carbon disulfide	U		0.000275	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/25/15 17:37 • (LCSD) 04/25/15 17:54

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	0.0250	0.0266	0.0252	106	101	64.6-140			5.22	20

L760925-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/25/15 23:47 • (MS) 04/25/15 22:01 • (MSD) 04/25/15 22:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	0.0250	ND	0.0297	0.0291	119	116	1	43.3-149			2.01	20.3

Method Blank (MB)

(MB) 04/20/15 14:18

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	122			50.0-150

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier Description

4	The sample concentration was greater than 4 times the spike value.
*	LCS/LCSD recovery outside the control limit or RPD value outside the control limit.
F	The MS/MSD recovery outside the control limit.
H	Outside holding time.
J	Estimated value.
X	Surrogate recovery outside the control limit.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

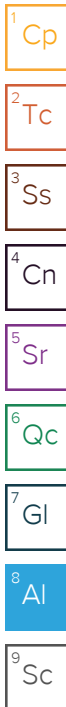
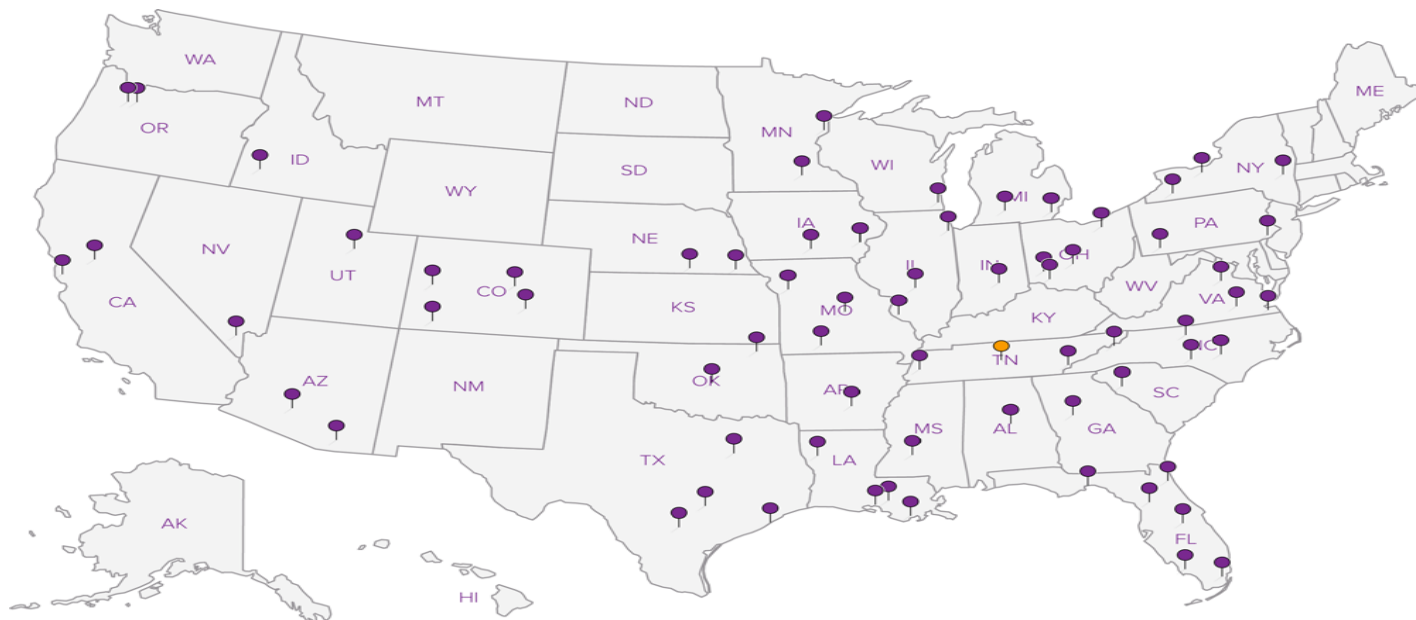
¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA–Crypto	TN00003	USDA	S-67674

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



ARCADIS, Inc. 2929 Briarpark Drive, Suite 300 Houston, TX 77042				Billing Information:				Analysis / Container / Preservative												Chain of Custody Page 10 of 20																							
				Report to: Pam Krueger Email To: pam.krueger@arcadis-us.com; maisha.turner@arcadis-us.com; melissa.nashorn@arcadis-us.com				DRO 8015 GRO 8015 Volatiles 8260 (Extended List) Total Metals: As, Ba, Cr, Fe, Pb, Mn, Se Total Metals: As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V, Hg Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Se Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V Cyanide Anions: Chloride, Fluoride, Sulfate Cations: Ca, K, Na (from Total Metals container) NO2 / NO3 TDS												 L.A.B. S.C.I.E.N.C.E.S. YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 L# L760039 Table # Acctnum: ARCADHTX Template: T101497 Prelogin: TSR: Pam Langford PB: Shipped Via:																							
Project Navajo Refining Company City/State Artesia, NM Collected:				Lab Project # ARCADHTX-NAVAJO FULL REST TX000836.0007.15006 344																L# L760039 Table # Acctnum: ARCADHTX Template: T101497 Prelogin: TSR: Pam Langford PB: Shipped Via:																							
Phone: 713-953-4816 Fax: 713-977-4620				Site/Facility ID # P.O. #																L# L760039 Table # Acctnum: ARCADHTX Template: T101497 Prelogin: TSR: Pam Langford PB: Shipped Via:																							
Collected by (print): Bryan Bayles +HMI				Rush? (Lab MUST Be Notified) Next Day 100% Two Day 50% Three Day 25%				Date Results Needed Email? ___ No ___ Yes FAX? ___ No ___ Yes																L# L760039 Table # Acctnum: ARCADHTX Template: T101497 Prelogin: TSR: Pam Langford PB: Shipped Via:																			
Collected by (signature): [Signature]				Immediately Iced? N ___ Y ☒				No. of Cntr																L# L760039 Table # Acctnum: ARCADHTX Template: T101497 Prelogin: TSR: Pam Langford PB: Shipped Via:																			
Sample ID RA-4146 ~~RA-1227~~ RA-3156 RA-313 KWB-7 MW-135 KWB-11A KWB-11B ~~KWB-3AR~~				Comp/Grab G GW GW GW GW GW GW GW				Matrix * GW GW GW GW GW GW GW				Depth GW GW GW GW GW GW GW				Date 4/15/15 4/15/15 4/15/15 4/15/15 4/15/15 4/15/15 4/15/15 4/15/15				Time 1500 1230 1320 1410 1500 1230 1320 1410				No. of Cntr 0 0 0 0 11 12 13 13				DRO 8015 GRO 8015 Volatiles 8260 (Extended List) Total Metals: As, Ba, Cr, Fe, Pb, Mn, Se Total Metals: As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V, Hg Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Se Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V Cyanide Anions: Chloride, Fluoride, Sulfate Cations: Ca, K, Na (from Total Metals container) NO2 / NO3 TDS												Remarks/Comments Removed from program per Navajo NO ACCESS GRANTED		Sample # (lab only) -08 -09 -10 -11	

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold #

Relinquished by : (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

Condition: (lab use only)

Relinquished by : (Signature)

Date:

Time:

Received by: (Signature)

Temp: 23°C

242

COC Seal Intact: ☒ Y ☐ N ☐ NA

Relinquished by : (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

4/17/15

0900

pH Checked: 22, 212

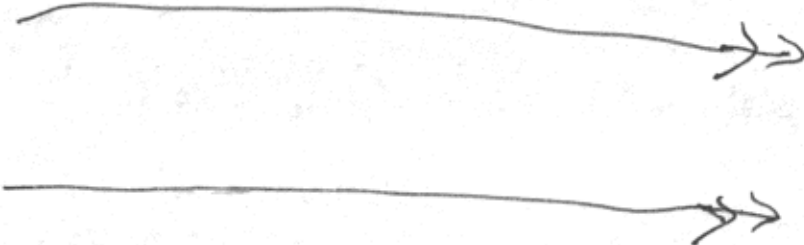
NCF:

ARCADIS, Inc. 2929 Briarpark Drive, Suite 300 Houston, TX 77042				Billing Information: Report to: Pam Krueger Email To: pam.krueger@arcadis-us.com; maisha.turner@arcadis-us.com; melissa.osborne@arcadis-us.com				Analysis / Container / Preservative												Chain of Custody Page 7 of 20 ESC LAB SCIENCES YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 	
Project Navajo Refining Company Phone: 713-953-4816 Fax: 713-977-4620 Collected by (print): Terrance Barry #101 Collected by (signature): <i>Scott Uck</i> Immediately Iced? N <u>Y</u> ☒				City/State Artesia, NM Collected: Lab Project # ARCADHTX-NAVAJO FULL Site/Facility ID # REST TX000836.0007.15006 P.O. # Rush? (Lab MUST Be Notified) Next Day 100% Two Day 50% Three Day 25% Date Results Needed Email? ☐ No ☐ Yes FAX? ☐ No ☐ Yes No. of Cntr				DRO 8015 GRO 8015 Volatiles 8260 (Extended List) Total Metals: As, Ba, Cr, Fe, Pb, Mn, Se Total Metals: As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V, Hg Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Se Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V Cyanide Anions: Chloride, Fluoride, Sulfate Cations: Ca, K, Na (from Total Metals container) NO2/NO3 TDS												L# L760039 Table # Acctnum: ARCADHTX Template: T101476 Prelogin: TSR: Pam Langford PB: Shipped Via:	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntr														Remarks/Comments	Sample # (lab only)
MW-101	G	GW		4/15/15	855	12	✓	✓	✓	✓		✓			✓	✓	✓	✓			-12
MW-105					925	12	✓	✓	✓	✓		✓			✓	✓	✓	✓			-13
RW-2					1120	12	✓	✓	✓	✓		✓			✓	✓	✓	✓			-14
MW-61					1225	12	✓	✓	✓	✓		✓			✓	✓	✓	✓			-15
MW-62					1335	12	✓	✓	✓	✓		✓			✓	✓	✓	✓			-16
MW-93					1535	12	✓	✓	✓	✓		✓			✓	✓	✓	✓			-17
MW-43					1440	13	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓			-18
MW-23					1635	12	✓	✓	✓	✓		✓			✓	✓	✓	✓			-19
~~MW-39~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	su		
MW-98	↓	↓		4/15/15	1735	12	✓	✓	✓	✓		✓			✓	✓	✓	✓			-20

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____				pH _____ Temp _____ Flow _____ Other _____		Hold #	
Remarks:							
Relinquished by: (Signature) <i>Scott Uck</i>	Date: 4/16/15	Time: 0800	Received by: (Signature)	Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ _____		Condition: (lab use only) 	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 23°C 242		COC Seal Intact: ☒ Y ☐ N ☐ NA	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date: 4/17/15 0900		pH Checked: 2.2, 2.12 NCF:	

L 766039

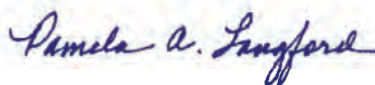
6361	0184	4795
		0333
		4784
		5997
		4810
		4800
		0274
		2943-
		0355
		0344
		2921
		2932
		0594
		5081
		0285
		0243
		3141
		7100
	5767	
5851	4945	
2041		
1585		
6194		



ARCADIS US - TX

Sample Delivery Group: L760059
Samples Received: 04/17/2015
Project Number: TX000836.0007.15007
Description: Navajo Refining Company - Artesia, NM
Site: TMD
Report To: Pam Krueger
2929 Briarpark Dr., Suite 300
Houston, TX 77042

Entire Report Reviewed By:



Pam Langford

Pam Langford

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹Cp: Cover Page	1
²Tc: Table of Contents	2
³Ss: Sample Summary	3
⁴Cn: Case Narrative	5
⁵Sr: Sample Results	6
NP-1 L760059-01	6
NP-6 L760059-02	8
MW-21 L760059-03	9
MW-89 L760059-04	11
MW-16 L760059-05	13
MW-25 L760059-06	15
⁶Qc: Quality Control Summary	17
Gravimetric Analysis by Method 2540 C-2011	17
Wet Chemistry by Method 353.2	18
Wet Chemistry by Method 9056MOD	20
Metals (ICPMS) by Method 6020	22
Volatile Organic Compounds (GC) by Method 8015D/GRO	25
Volatile Organic Compounds (GC/MS) by Method 8260B	26
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	33
⁷Gl: Glossary of Terms	34
⁸Al: Accreditations & Locations	35
⁹Sc: Chain of Custody	36



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



NP-1 L760059-01 GW

			Collected by Bryan Bayles	Collected date/time 04/15/15 11:25	Received date/time 04/17/15 09:00	1 Cp
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst	
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:34	MF	
Metals (ICPMS) by Method 6020	WG783153	10	04/21/15 12:59	04/25/15 01:45	VSS	2 Tc
Metals (ICPMS) by Method 6020	WG783153	5	04/21/15 12:59	04/24/15 02:35	AB	3 Ss
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	1	04/23/15 01:36	04/23/15 01:36	JC	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784350	1	04/25/15 09:45	04/25/15 09:45	MCB	4 Cn
Wet Chemistry by Method 353.2	WG785013	1	04/30/15 12:13	04/30/15 12:13	JAL	
Wet Chemistry by Method 9056MOD	WG783895	1	04/22/15 20:38	04/22/15 20:38	NJM	5 Sr
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 09:14	04/23/15 09:14	NJM	

NP-6 L760059-02 GW

			Collected by Bryan Bayles	Collected date/time 04/15/15 10:25	Received date/time 04/17/15 09:00	6 Qc
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	1	04/23/15 06:38	04/23/15 06:38	JC	7 Gl
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784350	1	04/25/15 10:05	04/25/15 10:05	MCB	8 Al

MW-21 L760059-03 GW

			Collected by Bryan Bayles	Collected date/time 04/15/15 09:35	Received date/time 04/17/15 09:00	9 Sc
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst	
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:34	MF	
Metals (ICPMS) by Method 6020	WG783153	10	04/21/15 12:59	04/25/15 01:50	VSS	
Metals (ICPMS) by Method 6020	WG783153	5	04/21/15 12:59	04/24/15 02:44	AB	
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 13:05	JD	
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG782701	1	04/19/15 22:42	04/20/15 23:23	JNS	
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	1	04/25/15 18:01	04/25/15 18:01	MCB	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	1	04/23/15 06:58	04/23/15 06:58	JC	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784350	1	04/25/15 10:25	04/25/15 10:25	MCB	
Wet Chemistry by Method 353.2	WG785013	5	04/30/15 12:33	04/30/15 12:33	JAL	
Wet Chemistry by Method 9056MOD	WG783895	1	04/22/15 20:52	04/22/15 20:52	NJM	
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 09:29	04/23/15 09:29	NJM	

MW-89 L760059-04 GW

			Collected by Bryan Bayles	Collected date/time 04/15/15 17:40	Received date/time 04/17/15 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst	
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:34	MF	
Metals (ICPMS) by Method 6020	WG783153	10	04/21/15 12:59	04/25/15 01:52	VSS	
Metals (ICPMS) by Method 6020	WG783153	5	04/21/15 12:59	04/24/15 02:46	AB	
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 13:07	JD	
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG782701	1	04/19/15 22:42	04/20/15 23:42	JNS	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	1	04/23/15 07:18	04/23/15 07:18	JC	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	1	04/26/15 01:18	04/26/15 01:18	JC	
Wet Chemistry by Method 353.2	WG785013	1	04/30/15 12:15	04/30/15 12:15	JAL	
Wet Chemistry by Method 9056MOD	WG783895	1	04/22/15 21:07	04/22/15 21:07	NJM	
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 09:43	04/23/15 09:43	NJM	

MW-16 L760059-05 GW

			Collected by Bryan Bayles	Collected date/time 04/15/15 16:45	Received date/time 04/17/15 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst	
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:34	MF	
Metals (ICPMS) by Method 6020	WG783153	10	04/21/15 12:59	04/25/15 01:55	VSS	

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-16 L760059-05 GW

Collected by
Bryan BaylesCollected date/time
04/15/15 16:45Received date/time
04/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICPMS) by Method 6020	WG783153	5	04/21/15 12:59	04/24/15 02:48	AB
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 16:57	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG782701	1	04/19/15 22:42	04/21/15 00:00	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	1	04/23/15 07:38	04/23/15 07:38	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	1	04/26/15 01:38	04/26/15 01:38	JC
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:33	04/28/15 01:33	JAL
Wet Chemistry by Method 9056MOD	WG783895	1	04/22/15 21:21	04/22/15 21:21	NJM
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 09:58	04/23/15 09:58	NJM

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr

MW-25 L760059-06 GW

Collected by
Bryan BaylesCollected date/time
04/15/15 17:00Received date/time
04/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:28	MF
Metals (ICPMS) by Method 6020	WG783153	5	04/21/15 12:59	04/24/15 02:55	AB
Metals (ICPMS) by Method 6020	WG783153	50	04/21/15 12:59	04/25/15 01:57	VSS
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 17:00	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG782701	1	04/19/15 22:42	04/21/15 00:19	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG782999	1	04/23/15 07:58	04/23/15 07:58	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	1	04/26/15 02:18	04/26/15 02:18	JC
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:35	04/28/15 01:35	JAL
Wet Chemistry by Method 9056MOD	WG783895	1	04/22/15 21:36	04/22/15 21:36	NJM
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 10:12	04/23/15 10:12	NJM

⁶ Qc⁷ Gl⁸ Al⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Pam Langford

Pam Langford
Technical Service Representative

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	4450000		2800	10000	1	04/23/2015 09:34	WG783398

Wet Chemistry by Method 353.2

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	8410		20.0	100	1	04/30/2015 12:13	WG785013

Wet Chemistry by Method 9056MOD

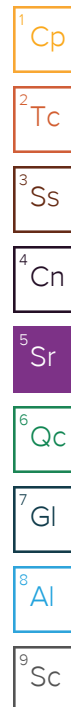
Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	436000		5200	100000	100	04/23/2015 09:14	WG783895
Fluoride	2060		9.90	100	1	04/22/2015 20:38	WG783895
Sulfate	2930000		7700	500000	100	04/23/2015 09:14	WG783895

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Calcium	473000		460	10000	10	04/25/2015 01:45	WG783153
Potassium	3530	<u>J</u>	180	5000	5	04/24/2015 02:35	WG783153
Sodium	451000	<u>V</u>	550	5000	5	04/24/2015 02:35	WG783153

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	04/23/2015 01:36	WG782999
Benzene	U		0.330	1.00	1	04/23/2015 01:36	WG782999
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 01:36	WG782999
Bromoform	U		0.470	1.00	1	04/23/2015 01:36	WG782999
Bromomethane	U		0.870	5.00	1	04/23/2015 01:36	WG782999
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 01:36	WG782999
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 01:36	WG782999
Carbon disulfide	U		0.280	1.00	1	04/23/2015 01:36	WG782999
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 01:36	WG782999
Chlorobenzene	U		0.350	1.00	1	04/23/2015 01:36	WG782999
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 01:36	WG782999
Chloroethane	U		0.450	5.00	1	04/23/2015 01:36	WG782999
Chloroform	U		0.320	5.00	1	04/23/2015 01:36	WG782999
Chloromethane	U		0.280	2.50	1	04/23/2015 01:36	WG782999
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 01:36	WG782999
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 01:36	WG782999
1,2-Dichloroethane	0.581	<u>J</u>	0.360	1.00	1	04/23/2015 01:36	WG782999
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 01:36	WG782999
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 01:36	WG782999
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 01:36	WG782999
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 01:36	WG782999
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 01:36	WG782999
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 01:36	WG782999
Ethylbenzene	U		0.380	1.00	1	04/23/2015 01:36	WG782999
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 01:36	WG782999
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 01:36	WG782999
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 01:36	WG782999
2-Hexanone	U		3.80	10.0	1	04/23/2015 01:36	WG782999
Methylene Chloride	U	<u>J4</u>	1.00	5.00	1	04/23/2015 01:36	WG782999
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 01:36	WG782999





Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	204	<u>V</u>	0.370	1.00	1	04/23/2015 01:36	WG782999
Naphthalene	U		1.00	5.00	1	04/23/2015 01:36	WG782999
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 01:36	WG782999
Styrene	U	<u>J6</u>	0.310	1.00	1	04/23/2015 01:36	WG782999
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 01:36	WG782999
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 01:36	WG782999
Tetrachloroethene	U		0.370	1.00	1	04/25/2015 09:45	WG784350
Toluene	U		0.780	5.00	1	04/23/2015 01:36	WG782999
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 01:36	WG782999
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 01:36	WG782999
Trichloroethene	U		0.400	1.00	1	04/23/2015 01:36	WG782999
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 01:36	WG782999
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 01:36	WG782999
Vinyl chloride	U		0.260	1.00	1	04/23/2015 01:36	WG782999
o-Xylene	U		0.340	1.00	1	04/23/2015 01:36	WG782999
m&p-Xylene	U		0.720	1.00	1	04/23/2015 01:36	WG782999
Xylenes, Total	U		1.10	3.00	1	04/23/2015 01:36	WG782999
(S) Toluene-d8	104			88.5-111		04/23/2015 01:36	WG782999
(S) Dibromofluoromethane	110			78.3-121		04/23/2015 01:36	WG782999
(S) 4-Bromofluorobenzene	104			71.0-126		04/23/2015 01:36	WG782999

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	04/23/2015 06:38	WG782999
Benzene	U		0.330	1.00	1	04/25/2015 10:05	WG784350
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 06:38	WG782999
Bromoform	U	J3	0.470	1.00	1	04/23/2015 06:38	WG782999
Bromomethane	U		0.870	5.00	1	04/23/2015 06:38	WG782999
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 06:38	WG782999
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 06:38	WG782999
Carbon disulfide	3.76		0.280	1.00	1	04/23/2015 06:38	WG782999
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 06:38	WG782999
Chlorobenzene	U		0.350	1.00	1	04/23/2015 06:38	WG782999
Chlorodibromomethane	U	J3	0.330	1.00	1	04/23/2015 06:38	WG782999
Chloroethane	U		0.450	5.00	1	04/23/2015 06:38	WG782999
Chloroform	U		0.320	5.00	1	04/23/2015 06:38	WG782999
Chloromethane	U		0.280	2.50	1	04/23/2015 06:38	WG782999
1,2-Dibromoethane	U	J3	0.380	1.00	1	04/23/2015 06:38	WG782999
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 06:38	WG782999
1,2-Dichloroethane	U	J3	0.360	1.00	1	04/23/2015 06:38	WG782999
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 06:38	WG782999
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 06:38	WG782999
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 06:38	WG782999
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 06:38	WG782999
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 06:38	WG782999
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 06:38	WG782999
Ethylbenzene	U		0.380	1.00	1	04/23/2015 06:38	WG782999
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 06:38	WG782999
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 06:38	WG782999
2-Butanone (MEK)	U	J3	3.90	10.0	1	04/23/2015 06:38	WG782999
2-Hexanone	U	J3	3.80	10.0	1	04/23/2015 06:38	WG782999
Methylene Chloride	U	J3 J4	1.00	5.00	1	04/23/2015 06:38	WG782999
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 06:38	WG782999
Methyl tert-butyl ether	8.78		0.370	1.00	1	04/23/2015 06:38	WG782999
Naphthalene	U	J3	1.00	5.00	1	04/23/2015 06:38	WG782999
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 06:38	WG782999
Styrene	U		0.310	1.00	1	04/23/2015 06:38	WG782999
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 06:38	WG782999
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 06:38	WG782999
Tetrachloroethene	U		0.370	1.00	1	04/25/2015 10:05	WG784350
Toluene	U		0.780	5.00	1	04/23/2015 06:38	WG782999
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 06:38	WG782999
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 06:38	WG782999
Trichloroethene	U		0.400	1.00	1	04/23/2015 06:38	WG782999
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 06:38	WG782999
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 06:38	WG782999
Vinyl chloride	U		0.260	1.00	1	04/23/2015 06:38	WG782999
o-Xylene	U		0.340	1.00	1	04/23/2015 06:38	WG782999
m&p-Xylene	U		0.720	1.00	1	04/23/2015 06:38	WG782999
Xylenes, Total	U		1.10	3.00	1	04/23/2015 06:38	WG782999
(S) Toluene-d8	104			88.5-111		04/23/2015 06:38	WG782999
(S) Dibromofluoromethane	108			78.3-121		04/23/2015 06:38	WG782999
(S) 4-Bromofluorobenzene	103			71.0-126		04/23/2015 06:38	WG782999

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	5210000		2800	10000	1	04/23/2015 09:34	WG783398

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	17000		98.0	500	5	04/30/2015 12:33	WG785013

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	481000		5200	100000	100	04/23/2015 09:29	WG783895
Fluoride	1900		9.90	100	1	04/22/2015 20:52	WG783895
Sulfate	3210000		7700	500000	100	04/23/2015 09:29	WG783895

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	6.56	J	1.20	10.0	5	04/24/2015 02:44	WG783153
Arsenic,Dissolved	6.81	J	1.20	10.0	5	04/23/2015 13:05	WG783437
Barium	10.0	J	1.80	25.0	5	04/24/2015 02:44	WG783153
Barium,Dissolved	8.52	J	1.80	25.0	5	04/23/2015 13:05	WG783437
Calcium	542000		460	10000	10	04/25/2015 01:50	WG783153
Chromium	U		2.70	10.0	5	04/24/2015 02:44	WG783153
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 13:05	WG783437
Iron	U		75.0	500	5	04/24/2015 02:44	WG783153
Iron,Dissolved	U		75.0	500	5	04/23/2015 13:05	WG783437
Lead	U		1.20	10.0	5	04/24/2015 02:44	WG783153
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 13:05	WG783437
Manganese	323		1.20	25.0	5	04/24/2015 02:44	WG783153
Manganese,Dissolved	252		1.20	25.0	5	04/23/2015 13:05	WG783437
Potassium	1810	J	180	5000	5	04/24/2015 02:44	WG783153
Selenium	25.8		1.90	10.0	5	04/24/2015 02:44	WG783153
Selenium,Dissolved	26.9		1.90	10.0	5	04/23/2015 13:05	WG783437
Sodium	468000		550	5000	5	04/24/2015 02:44	WG783153

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/25/2015 18:01	WG783017
(S) a,a,a-Trifluorotoluene(FID)	95.6			62.0-128		04/25/2015 18:01	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 06:58	WG782999
Benzene	U	J3	0.330	1.00	1	04/23/2015 06:58	WG782999
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 06:58	WG782999
Bromoform	U	J3	0.470	1.00	1	04/23/2015 06:58	WG782999
Bromomethane	U		0.870	5.00	1	04/23/2015 06:58	WG782999
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 06:58	WG782999
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 06:58	WG782999
Carbon disulfide	1.10		0.280	1.00	1	04/23/2015 06:58	WG782999
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 06:58	WG782999
Chlorobenzene	U		0.350	1.00	1	04/23/2015 06:58	WG782999



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U	J3	0.330	1.00	1	04/23/2015 06:58	WG782999
Chloroethane	U		0.450	5.00	1	04/23/2015 06:58	WG782999
Chloroform	U		0.320	5.00	1	04/23/2015 06:58	WG782999
Chloromethane	U		0.280	2.50	1	04/23/2015 06:58	WG782999
1,2-Dibromoethane	U	J3	0.380	1.00	1	04/23/2015 06:58	WG782999
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 06:58	WG782999
1,2-Dichloroethane	U	J3	0.360	1.00	1	04/23/2015 06:58	WG782999
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 06:58	WG782999
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 06:58	WG782999
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 06:58	WG782999
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 06:58	WG782999
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 06:58	WG782999
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 06:58	WG782999
Ethylbenzene	U		0.380	1.00	1	04/23/2015 06:58	WG782999
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 06:58	WG782999
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 06:58	WG782999
2-Butanone (MEK)	U	J3	3.90	10.0	1	04/23/2015 06:58	WG782999
2-Hexanone	U	J3	3.80	10.0	1	04/23/2015 06:58	WG782999
Methylene Chloride	U	J3 J4	1.00	5.00	1	04/23/2015 06:58	WG782999
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 06:58	WG782999
Methyl tert-butyl ether	7.29		0.370	1.00	1	04/23/2015 06:58	WG782999
Naphthalene	U	J3	1.00	5.00	1	04/23/2015 06:58	WG782999
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 06:58	WG782999
Styrene	U		0.310	1.00	1	04/23/2015 06:58	WG782999
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 06:58	WG782999
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 06:58	WG782999
Tetrachloroethene	U		0.370	1.00	1	04/25/2015 10:25	WG784350
Toluene	U		0.780	5.00	1	04/23/2015 06:58	WG782999
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 06:58	WG782999
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 06:58	WG782999
Trichloroethene	U		0.400	1.00	1	04/23/2015 06:58	WG782999
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 06:58	WG782999
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 06:58	WG782999
Vinyl chloride	U		0.260	1.00	1	04/23/2015 06:58	WG782999
o-Xylene	U		0.340	1.00	1	04/23/2015 06:58	WG782999
m&p-Xylene	U		0.720	1.00	1	04/23/2015 06:58	WG782999
Xylenes, Total	U		1.10	3.00	1	04/23/2015 06:58	WG782999
(S) Toluene-d8	104			88.5-111		04/23/2015 06:58	WG782999
(S) Dibromofluoromethane	106			78.3-121		04/23/2015 06:58	WG782999
(S) 4-Bromofluorobenzene	105			71.0-126		04/23/2015 06:58	WG782999

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	180		25.0	100	1	04/20/2015 23:23	WG782701
(S) o-Terphenyl	119			50.0-150		04/20/2015 23:23	WG782701



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	3720000		2800	10000	1	04/23/2015 09:34	WG783398

Wet Chemistry by Method 353.2

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	2340		20.0	100	1	04/30/2015 12:15	WG785013

Wet Chemistry by Method 9056MOD

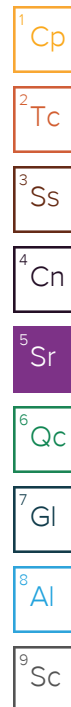
Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	324000		5200	100000	100	04/23/2015 09:43	WG783895
Fluoride	3610		9.90	100	1	04/22/2015 21:07	WG783895
Sulfate	2200000		7700	500000	100	04/23/2015 09:43	WG783895

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic	9.00	J	1.20	10.0	5	04/24/2015 02:46	WG783153
Arsenic,Dissolved	9.28	J	1.20	10.0	5	04/23/2015 13:07	WG783437
Barium	14.4	J	1.80	25.0	5	04/24/2015 02:46	WG783153
Barium,Dissolved	16.7	J	1.80	25.0	5	04/23/2015 13:07	WG783437
Calcium	528000		460	10000	10	04/25/2015 01:52	WG783153
Chromium	U		2.70	10.0	5	04/24/2015 02:46	WG783153
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 13:07	WG783437
Iron	120	J	75.0	500	5	04/24/2015 02:46	WG783153
Iron,Dissolved	U		75.0	500	5	04/23/2015 13:07	WG783437
Lead	U		1.20	10.0	5	04/24/2015 02:46	WG783153
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 13:07	WG783437
Manganese	71.0		1.20	25.0	5	04/24/2015 02:46	WG783153
Manganese,Dissolved	73.2		1.20	25.0	5	04/23/2015 13:07	WG783437
Potassium	13500		180	5000	5	04/24/2015 02:46	WG783153
Selenium	27.5		1.90	10.0	5	04/24/2015 02:46	WG783153
Selenium,Dissolved	29.1		1.90	10.0	5	04/23/2015 13:07	WG783437
Sodium	302000		550	5000	5	04/24/2015 02:46	WG783153

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	04/23/2015 07:18	WG782999
Benzene	U	J3	0.330	1.00	1	04/23/2015 07:18	WG782999
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 07:18	WG782999
Bromoform	U	J3	0.470	1.00	1	04/23/2015 07:18	WG782999
Bromomethane	U		0.870	5.00	1	04/23/2015 07:18	WG782999
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 07:18	WG782999
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 07:18	WG782999
Carbon disulfide	0.752	J	0.280	1.00	1	04/23/2015 07:18	WG782999
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 07:18	WG782999
Chlorobenzene	U		0.350	1.00	1	04/23/2015 07:18	WG782999
Chlorodibromomethane	U	J3	0.330	1.00	1	04/23/2015 07:18	WG782999
Chloroethane	U		0.450	5.00	1	04/23/2015 07:18	WG782999
Chloroform	U		0.320	5.00	1	04/23/2015 07:18	WG782999
Chloromethane	U		0.280	2.50	1	04/23/2015 07:18	WG782999
1,2-Dibromoethane	U	J3	0.380	1.00	1	04/23/2015 07:18	WG782999
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 07:18	WG782999





Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U	J3	0.360	1.00	1	04/23/2015 07:18	WG782999
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 07:18	WG782999
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 07:18	WG782999
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 07:18	WG782999
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 07:18	WG782999
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 07:18	WG782999
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 07:18	WG782999
Ethylbenzene	U		0.380	1.00	1	04/23/2015 07:18	WG782999
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 07:18	WG782999
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 07:18	WG782999
2-Butanone (MEK)	U	J3	3.90	10.0	1	04/23/2015 07:18	WG782999
2-Hexanone	U	J3	3.80	10.0	1	04/23/2015 07:18	WG782999
Methylene Chloride	U	J3 J4	1.00	5.00	1	04/23/2015 07:18	WG782999
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 07:18	WG782999
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 07:18	WG782999
Naphthalene	U	J3	1.00	5.00	1	04/23/2015 07:18	WG782999
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 07:18	WG782999
Styrene	U		0.310	1.00	1	04/23/2015 07:18	WG782999
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 07:18	WG782999
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 07:18	WG782999
Tetrachloroethene	U		0.370	1.00	1	04/26/2015 01:18	WG784352
Toluene	U		0.780	5.00	1	04/23/2015 07:18	WG782999
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 07:18	WG782999
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 07:18	WG782999
Trichloroethene	U		0.400	1.00	1	04/23/2015 07:18	WG782999
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 07:18	WG782999
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 07:18	WG782999
Vinyl chloride	U		0.260	1.00	1	04/23/2015 07:18	WG782999
o-Xylene	0.538	J	0.340	1.00	1	04/23/2015 07:18	WG782999
m&p-Xylene	U		0.720	1.00	1	04/23/2015 07:18	WG782999
Xylenes, Total	U		1.10	3.00	1	04/23/2015 07:18	WG782999
(S) Toluene-d8	103			88.5-111		04/23/2015 07:18	WG782999
(S) Dibromofluoromethane	105			78.3-121		04/23/2015 07:18	WG782999
(S) 4-Bromofluorobenzene	103			71.0-126		04/23/2015 07:18	WG782999

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	2400		25.0	100	1	04/20/2015 23:42	WG782701
(S) o-Terphenyl	116			50.0-150		04/20/2015 23:42	WG782701



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	4890000		2800	10000	1	04/23/2015 09:34	WG783398

Wet Chemistry by Method 353.2

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	461		20.0	100	1	04/28/2015 01:33	WG785017

Wet Chemistry by Method 9056MOD

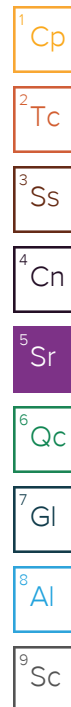
Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	660000		5200	100000	100	04/23/2015 09:58	WG783895
Fluoride	2320		9.90	100	1	04/22/2015 21:21	WG783895
Sulfate	2670000		7700	500000	100	04/23/2015 09:58	WG783895

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic	5.00	J	1.20	10.0	5	04/24/2015 02:48	WG783153
Arsenic,Dissolved	4.65	J	1.20	10.0	5	04/23/2015 16:57	WG783437
Barium	17.4	J	1.80	25.0	5	04/24/2015 02:48	WG783153
Barium,Dissolved	15.1	J	1.80	25.0	5	04/23/2015 16:57	WG783437
Calcium	666000		460	10000	10	04/25/2015 01:55	WG783153
Chromium	U		2.70	10.0	5	04/24/2015 02:48	WG783153
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 16:57	WG783437
Iron	U		75.0	500	5	04/24/2015 02:48	WG783153
Iron,Dissolved	U		75.0	500	5	04/23/2015 16:57	WG783437
Lead	U		1.20	10.0	5	04/24/2015 02:48	WG783153
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 16:57	WG783437
Manganese	95.0		1.20	25.0	5	04/24/2015 02:48	WG783153
Manganese,Dissolved	51.3		1.20	25.0	5	04/23/2015 16:57	WG783437
Potassium	10200		180	5000	5	04/24/2015 02:48	WG783153
Selenium	2.13	J	1.90	10.0	5	04/24/2015 02:48	WG783153
Selenium,Dissolved	2.13	J	1.90	10.0	5	04/23/2015 16:57	WG783437
Sodium	545000		1100	10000	10	04/25/2015 01:55	WG783153

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	04/23/2015 07:38	WG782999
Benzene	U	J3	0.330	1.00	1	04/23/2015 07:38	WG782999
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 07:38	WG782999
Bromoform	U	J3	0.470	1.00	1	04/23/2015 07:38	WG782999
Bromomethane	U		0.870	5.00	1	04/23/2015 07:38	WG782999
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 07:38	WG782999
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 07:38	WG782999
Carbon disulfide	0.446	J	0.280	1.00	1	04/23/2015 07:38	WG782999
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 07:38	WG782999
Chlorobenzene	U		0.350	1.00	1	04/23/2015 07:38	WG782999
Chlorodibromomethane	U	J3	0.330	1.00	1	04/23/2015 07:38	WG782999
Chloroethane	U		0.450	5.00	1	04/23/2015 07:38	WG782999
Chloroform	U		0.320	5.00	1	04/23/2015 07:38	WG782999
Chloromethane	U		0.280	2.50	1	04/23/2015 07:38	WG782999
1,2-Dibromoethane	U	J3	0.380	1.00	1	04/23/2015 07:38	WG782999
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 07:38	WG782999





Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U	J3	0.360	1.00	1	04/23/2015 07:38	WG782999
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 07:38	WG782999
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 07:38	WG782999
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 07:38	WG782999
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 07:38	WG782999
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 07:38	WG782999
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 07:38	WG782999
Ethylbenzene	U		0.380	1.00	1	04/23/2015 07:38	WG782999
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 07:38	WG782999
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 07:38	WG782999
2-Butanone (MEK)	U	J3	3.90	10.0	1	04/23/2015 07:38	WG782999
2-Hexanone	U	J3	3.80	10.0	1	04/23/2015 07:38	WG782999
Methylene Chloride	U	J3 J4	1.00	5.00	1	04/23/2015 07:38	WG782999
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 07:38	WG782999
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 07:38	WG782999
Naphthalene	U	J3	1.00	5.00	1	04/23/2015 07:38	WG782999
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 07:38	WG782999
Styrene	U		0.310	1.00	1	04/23/2015 07:38	WG782999
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 07:38	WG782999
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 07:38	WG782999
Tetrachloroethene	U		0.370	1.00	1	04/26/2015 01:38	WG784352
Toluene	U		0.780	5.00	1	04/23/2015 07:38	WG782999
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 07:38	WG782999
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 07:38	WG782999
Trichloroethene	U		0.400	1.00	1	04/23/2015 07:38	WG782999
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 07:38	WG782999
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 07:38	WG782999
Vinyl chloride	U		0.260	1.00	1	04/23/2015 07:38	WG782999
o-Xylene	U		0.340	1.00	1	04/23/2015 07:38	WG782999
m&p-Xylene	U		0.720	1.00	1	04/23/2015 07:38	WG782999
Xylenes, Total	U		1.10	3.00	1	04/23/2015 07:38	WG782999
(S) Toluene-d8	104			88.5-111		04/23/2015 07:38	WG782999
(S) Dibromofluoromethane	104			78.3-121		04/23/2015 07:38	WG782999
(S) 4-Bromofluorobenzene	106			71.0-126		04/23/2015 07:38	WG782999

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	340		25.0	100	1	04/21/2015 00:00	WG782701
(S) o-Terphenyl	117			50.0-150		04/21/2015 00:00	WG782701



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dissolved Solids	17000000		2800	10000	1	04/23/2015 09:28	WG783398

Wet Chemistry by Method 353.2

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	97.4	J J5	20.0	100	1	04/28/2015 01:35	WG785017

Wet Chemistry by Method 9056MOD

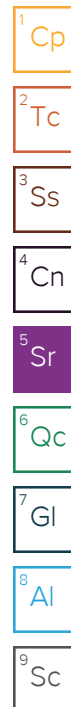
Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	6780000		5200	100000	100	04/23/2015 10:12	WG783895
Fluoride	1030		9.90	100	1	04/22/2015 21:36	WG783895
Sulfate	5740000		7700	500000	100	04/23/2015 10:12	WG783895

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic	9.84	J	1.20	10.0	5	04/24/2015 02:55	WG783153
Arsenic,Dissolved	10.4		1.20	10.0	5	04/23/2015 17:00	WG783437
Barium	18.7	J	1.80	25.0	5	04/24/2015 02:55	WG783153
Barium,Dissolved	19.6	J	1.80	25.0	5	04/23/2015 17:00	WG783437
Calcium	896000		2300	50000	50	04/25/2015 01:57	WG783153
Chromium	U		2.70	10.0	5	04/24/2015 02:55	WG783153
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 17:00	WG783437
Iron	U		75.0	500	5	04/24/2015 02:55	WG783153
Iron,Dissolved	U		75.0	500	5	04/23/2015 17:00	WG783437
Lead	U		1.20	10.0	5	04/24/2015 02:55	WG783153
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 17:00	WG783437
Manganese	582		1.20	25.0	5	04/24/2015 02:55	WG783153
Manganese,Dissolved	218		1.20	25.0	5	04/23/2015 17:00	WG783437
Potassium	8340		180	5000	5	04/24/2015 02:55	WG783153
Selenium	20.4		1.90	10.0	5	04/24/2015 02:55	WG783153
Selenium,Dissolved	20.4		1.90	10.0	5	04/23/2015 17:00	WG783437
Sodium	3710000		5500	50000	50	04/25/2015 01:57	WG783153

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		10.0	50.0	1	04/23/2015 07:58	WG782999
Benzene	U	J3	0.330	1.00	1	04/23/2015 07:58	WG782999
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 07:58	WG782999
Bromoform	U	J3	0.470	1.00	1	04/23/2015 07:58	WG782999
Bromomethane	U		0.870	5.00	1	04/23/2015 07:58	WG782999
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 07:58	WG782999
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 07:58	WG782999
Carbon disulfide	0.423	J	0.280	1.00	1	04/23/2015 07:58	WG782999
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 07:58	WG782999
Chlorobenzene	U		0.350	1.00	1	04/23/2015 07:58	WG782999
Chlorodibromomethane	U	J3	0.330	1.00	1	04/23/2015 07:58	WG782999
Chloroethane	U		0.450	5.00	1	04/23/2015 07:58	WG782999
Chloroform	U		0.320	5.00	1	04/23/2015 07:58	WG782999
Chloromethane	U		0.280	2.50	1	04/23/2015 07:58	WG782999
1,2-Dibromoethane	U	J3	0.380	1.00	1	04/23/2015 07:58	WG782999
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 07:58	WG782999





Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U	J3	0.360	1.00	1	04/23/2015 07:58	WG782999
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 07:58	WG782999
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 07:58	WG782999
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 07:58	WG782999
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 07:58	WG782999
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 07:58	WG782999
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 07:58	WG782999
Ethylbenzene	U		0.380	1.00	1	04/23/2015 07:58	WG782999
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 07:58	WG782999
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 07:58	WG782999
2-Butanone (MEK)	U	J3	3.90	10.0	1	04/23/2015 07:58	WG782999
2-Hexanone	U	J3	3.80	10.0	1	04/23/2015 07:58	WG782999
Methylene Chloride	U	J3 J4	1.00	5.00	1	04/23/2015 07:58	WG782999
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 07:58	WG782999
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 07:58	WG782999
Naphthalene	U	J3	1.00	5.00	1	04/23/2015 07:58	WG782999
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 07:58	WG782999
Styrene	U		0.310	1.00	1	04/23/2015 07:58	WG782999
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 07:58	WG782999
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 07:58	WG782999
Tetrachloroethene	U		0.370	1.00	1	04/26/2015 02:18	WG784352
Toluene	U		0.780	5.00	1	04/23/2015 07:58	WG782999
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 07:58	WG782999
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 07:58	WG782999
Trichloroethene	U		0.400	1.00	1	04/23/2015 07:58	WG782999
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 07:58	WG782999
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 07:58	WG782999
Vinyl chloride	U		0.260	1.00	1	04/23/2015 07:58	WG782999
o-Xylene	U		0.340	1.00	1	04/23/2015 07:58	WG782999
m&p-Xylene	U		0.720	1.00	1	04/23/2015 07:58	WG782999
Xylenes, Total	U		1.10	3.00	1	04/23/2015 07:58	WG782999
(S) Toluene-d8	104			88.5-111		04/23/2015 07:58	WG782999
(S) Dibromofluoromethane	105			78.3-121		04/23/2015 07:58	WG782999
(S) 4-Bromofluorobenzene	103			71.0-126		04/23/2015 07:58	WG782999

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	690		25.0	100	1	04/21/2015 00:19	WG782701
(S) o-Terphenyl	121			50.0-150		04/21/2015 00:19	WG782701



Method Blank (MB)

(MB) 04/23/15 09:33

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L760039-20 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 09:37 • (DUP) 04/23/15 09:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	3040	3010	1	0.993		5

L760074-10 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 09:37 • (DUP) 04/23/15 09:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	5650	5670	1	0.353		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 09:29 • (LCSD) 04/23/15 09:29

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8500	8570	96.6	97.4	85.0-115			0.820	5

Method Blank (MB)

(MB) 04/30/15 11:47

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0197	0.100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L759253-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/30/15 11:55 • (DUP) 04/30/15 11:56

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/30/15 11:50 • (LCSD) 04/30/15 11:51

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.10	4.58	102	91.6	90.0-110			10.7	20

L759253-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/30/15 12:30 • (MS) 04/30/15 12:31 • (MSD) 04/30/15 12:32

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	5.00	0.0135	3.92	3.92	78.4	78.4	1	90.0-110	<u>J6</u>	<u>J6</u>	0.000	20



Method Blank (MB)

(MB) 04/28/15 01:26

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0197	0.100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L760074-07 Original Sample (OS) • Duplicate (DUP)

(OS) 04/28/15 01:55 • (DUP) 04/28/15 01:56

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	1.5	1.5	1	0.00		20

L760059-05 Original Sample (OS) • Duplicate (DUP)

(OS) 04/28/15 01:33 • (DUP) 04/28/15 01:34

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	0.46	0.45	1	2.2		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/28/15 01:30 • (LCSD) 04/28/15 01:31

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.25	4.96	105	99.2	90.0-110			5.68	20

L760059-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/28/15 01:35 • (MS) 04/28/15 01:37 • (MSD) 04/28/15 01:38

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	5.00	0.0974	5.76	5.72	113	112	1	90.0-110	J5	J5	0.697	20

Method Blank (MB)

(MB) 04/22/15 19:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L759346-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/22/15 22:04 • (DUP) 04/22/15 22:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	7.70	7.85	1	2		20
Fluoride	0.720	0.688	1	5		20
Sulfate	9.51	9.95	1	5		20

L759492-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 02:24 • (DUP) 04/23/15 02:38

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	16.8	16.8	1	0		20
Fluoride	0.983	0.970	1	1		20
Sulfate	10.9	11.0	1	1		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 19:40 • (LCSD) 04/22/15 19:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	40.7	40.3	102	101	90-110			1	20
Fluoride	8.00	8.19	8.13	102	102	90-110			1	20
Sulfate	40.0	40.9	40.5	102	101	90-110			1	20

L760026-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 12:07 • (MS) 04/23/15 12:22 • (MSD) 04/23/15 12:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	0.500	1140	5830	6120	94	100	100	80-120			5	20



L760026-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 12:07 • (MS) 04/23/15 12:22 • (MSD) 04/23/15 12:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	0.0500	ND	467	498	93	100	100	80-120			6	20
Sulfate	0.500	4040	8610	8850	91	96	100	80-120			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/24/15 02:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	0.0464		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	0.000326		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/24/15 02:30 • (LCSD) 04/24/15 02:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0556	0.0534	111	107	80-120			4	20
Barium	0.0500	0.0517	0.0527	103	105	80-120			2	20
Calcium	5.00	5.06	5.29	101	106	80-120			4	20
Chromium	0.0500	0.0505	0.0499	101	100	80-120			1	20
Iron	5.00	4.83	4.77	97	95	80-120			1	20
Lead	0.0500	0.0535	0.0542	107	108	80-120			1	20
Manganese	0.0500	0.0485	0.0488	97	98	80-120			1	20
Potassium	5.00	5.16	5.21	103	104	80-120			1	20
Selenium	0.0500	0.0496	0.0480	99	96	80-120			3	20
Sodium	5.00	5.41	5.46	108	109	80-120			1	20

L760059-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/24/15 02:35 • (MS) 04/24/15 02:39 • (MSD) 04/24/15 02:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0100	0.00711	0.0661	0.0687	118	123	5	75-125			4	20
Barium	0.0100	0.00891	0.0617	0.0671	106	116	5	75-125			8	20
Chromium	0.0100	ND	0.0504	0.0559	101	112	5	75-125			10	20
Potassium	1.00	3.53	8.65	9.08	102	111	5	75-125			5	20
Iron	1.00	0.146	4.91	5.31	95	103	5	75-125			8	20
Lead	0.0100	0.000363	0.0559	0.0577	111	115	5	75-125			3	20



L760059-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/24/15 02:35 • (MS) 04/24/15 02:39 • (MSD) 04/24/15 02:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Manganese	0.0100	0.150	0.187	0.205	74	110	5	75-125	J6		9	20
Selenium	0.0100	0.0317	0.0888	0.0944	114	125	5	75-125			6	20
Sodium	1.00	451	427	452	0	24	5	75-125	V	V	6	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/23/15 12:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000705		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 12:49 • (LCSD) 04/23/15 12:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0500	0.0548	0.0532	110	106	80-120			3	20
Barium,Dissolved	0.0500	0.0479	0.0499	96	100	80-120			4	20
Chromium,Dissolved	0.0500	0.0494	0.0484	99	97	80-120			2	20
Iron,Dissolved	5.00	4.81	4.68	96	94	80-120			3	20
Lead,Dissolved	0.0500	0.0503	0.0505	101	101	80-120			0	20
Manganese,Dissolved	0.0500	0.0493	0.0488	99	98	80-120			1	20
Selenium,Dissolved	0.0500	0.0513	0.0536	103	107	80-120			4	20

L759281-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 13:38 • (MS) 04/23/15 12:58 • (MSD) 04/23/15 13:00

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0100	0.00104	0.0603	0.0628	119	124	5	75-125			4	20
Barium,Dissolved	0.0100	0.0696	0.125	0.121	111	102	5	75-125			4	20
Chromium,Dissolved	0.0100	ND	0.0516	0.0540	103	108	5	75-125			5	20
Iron,Dissolved	1.00	0.0581	5.34	5.54	106	110	5	75-125			4	20
Lead,Dissolved	0.0100	0.000124	0.0538	0.0545	107	109	5	75-125			1	20
Manganese,Dissolved	0.0100	0.00244	0.0541	0.0579	103	111	5	75-125			7	20
Selenium,Dissolved	0.0100	0.00808	0.0630	0.0661	110	116	5	75-125			5	20



Method Blank (MB)

(MB) 04/25/15 14:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.7			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/25/15 12:20 • (LCSD) 04/25/15 12:44

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.74	5.83	104	106	67.0-132			1.65	20
(S) a,a,a-Trifluorotoluene(FID)				104	105	62.0-128				



Method Blank (MB)

(MB) 04/23/15 01:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 04/23/15 01:16

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00200
(S) Toluene-d8	103			88.5-111
(S) Dibromofluoromethane	102			78.3-121
(S) 4-Bromofluorobenzene	108			71.0-126

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 22:55 • (LCSD) 04/23/15 00:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.122	0.0981	97.4	78.5	35.6-163			21.6	23.9
Benzene	0.0250	0.0295	0.0241	118	96.3	74.8-121		J3	20.1	20
Bromodichloromethane	0.0250	0.0278	0.0232	111	92.7	75.1-116			18.3	20
Bromoform	0.0250	0.0299	0.0242	119	96.9	67.5-130		J3	20.9	20
Bromomethane	0.0250	0.0281	0.0235	113	94.0	49.9-162			18.0	20
n-Butylbenzene	0.0250	0.0272	0.0238	109	95.0	76.2-126			13.4	20
sec-Butylbenzene	0.0250	0.0287	0.0248	115	99.0	74.4-127			14.8	20
Carbon disulfide	0.0250	0.0298	0.0247	119	99.0	64.6-140			18.4	20
Carbon tetrachloride	0.0250	0.0305	0.0258	122	103	70.2-123			16.8	20
Chlorobenzene	0.0250	0.0289	0.0245	116	98.0	78.1-119			16.5	20
Chlorodibromomethane	0.0250	0.0296	0.0240	118	96.0	74.0-121		J3	21.0	20
Chloroethane	0.0250	0.0268	0.0233	107	93.4	61.7-135			14.0	20
Chloroform	0.0250	0.0296	0.0246	118	98.2	76.0-121			18.6	20
Chloromethane	0.0250	0.0261	0.0217	104	86.9	61.5-129			18.2	20
1,2-Dibromoethane	0.0250	0.0286	0.0231	114	92.5	76.6-121		J3	21.2	20
1,1-Dichloroethane	0.0250	0.0303	0.0251	121	100	70.7-126			18.9	20
1,2-Dichloroethane	0.0250	0.0297	0.0238	119	95.4	68.8-124		J3	21.8	20
1,1-Dichloroethene	0.0250	0.0310	0.0262	124	105	67.8-129			17.0	20
cis-1,2-Dichloroethene	0.0250	0.0295	0.0242	118	96.6	76.0-119			19.9	20
trans-1,2-Dichloroethene	0.0250	0.0288	0.0238	115	95.1	72.6-121			19.2	20
1,2-Dichloropropane	0.0250	0.0292	0.0252	117	101	76.5-119			14.6	20
cis-1,3-Dichloropropene	0.0250	0.0280	0.0236	112	94.6	78.2-120			16.9	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 22:55 • (LCSD) 04/23/15 00:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	0.0275	0.0237	110	94.9	74.3-123			14.7	20
Ethylbenzene	0.0250	0.0287	0.0246	115	98.4	78.8-122			15.6	20
2-Hexanone	0.125	0.139	0.113	111	90.1	65.6-144		J3	20.6	20
Isopropylbenzene	0.0250	0.0282	0.0241	113	96.3	78.6-132			15.6	20
p-Isopropyltoluene	0.0250	0.0288	0.0250	115	100	74.0-131			13.9	20
2-Butanone (MEK)	0.125	0.138	0.112	110	90.0	55.0-149		J3	20.5	20
Methylene Chloride	0.0250	0.0308	0.0249	123	99.4	70.3-120	J4	J3	21.4	20
4-Methyl-2-pentanone (MIBK)	0.125	0.136	0.112	109	89.9	70.5-133			18.8	20
Methyl tert-butyl ether	0.0250	0.0293	0.0242	117	96.9	71.2-126			19.1	20
Naphthalene	0.0250	0.0257	0.0205	103	81.8	68.4-128		J3	22.8	20
n-Propylbenzene	0.0250	0.0284	0.0246	114	98.3	78.2-122			14.5	20
Styrene	0.0250	0.0298	0.0246	119	98.5	80.4-126			18.9	20
1,1,1,2-Tetrachloroethane	0.0250	0.0269	0.0222	107	88.8	74.2-124			19.0	20
1,1,2,2-Tetrachloroethane	0.0250	0.0301	0.0251	120	100	70.7-122			18.0	20
Toluene	0.0250	0.0280	0.0238	112	95.2	79.7-116			16.2	20
1,1,1-Trichloroethane	0.0250	0.0305	0.0259	122	103	73.2-123			16.4	20
1,1,2-Trichloroethane	0.0250	0.0279	0.0229	112	91.5	77.7-118			19.7	20
Trichloroethene	0.0250	0.0292	0.0249	117	99.7	77.7-118			15.7	20
1,2,4-Trimethylbenzene	0.0250	0.0277	0.0236	111	94.3	75.0-123			16.1	20
1,3,5-Trimethylbenzene	0.0250	0.0290	0.0249	116	99.5	75.6-124			15.4	20
Vinyl chloride	0.0250	0.0272	0.0234	109	93.8	65.9-128			14.7	20
Xylenes, Total	0.0750	0.0858	0.0722	114	96.3	78.7-121			17.2	20
o-Xylene	0.0250	0.0287	0.0240	115	95.9	77.6-122			18.0	20
m&p-Xylenes	0.0500	0.0571	0.0482	114	96.5	78.8-121			16.8	20
(S) Toluene-d8				104	103	88.5-111				
(S) Dibromofluoromethane				103	99.1	78.3-121				
(S) 4-Bromofluorobenzene				105	104	71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L760059-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 01:36 • (MS) 04/23/15 00:36 • (MSD) 04/23/15 00:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00423	0.134	0.127	104	98.2	1	10.0-130			5.46	27.9
Benzene	0.0250	ND	0.0259	0.0245	104	98.1	1	54.3-133			5.45	20
Bromodichloromethane	0.0250	ND	0.0254	0.0242	102	96.9	1	63.9-121			4.77	20
Bromoform	0.0250	ND	0.0275	0.0260	110	104	1	59.5-134			5.53	20.5
Bromomethane	0.0250	ND	0.0245	0.0218	97.8	87.2	1	41.7-155			11.5	21.9

L760059-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 01:36 • (MS) 04/23/15 00:36 • (MSD) 04/23/15 00:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
n-Butylbenzene	0.0250	ND	0.0241	0.0220	96.5	87.8	1	62.7-140			9.37	20.3
sec-Butylbenzene	0.0250	ND	0.0254	0.0234	102	93.6	1	62.2-136			8.23	20.3
Carbon disulfide	0.0250	ND	0.0261	0.0246	105	98.4	1	43.3-149			6.12	20.3
Carbon tetrachloride	0.0250	ND	0.0271	0.0252	108	101	1	55.7-134			6.91	20
Chlorobenzene	0.0250	ND	0.0257	0.0241	103	96.5	1	67.0-125			6.22	20
Chlorodibromomethane	0.0250	ND	0.0267	0.0255	107	102	1	64.3-125			4.79	20.8
Chloroethane	0.0250	ND	0.0250	0.0232	100	92.7	1	51.5-136			7.48	40
Chloroform	0.0250	ND	0.0267	0.0252	107	101	1	63.0-129			5.70	20
Chloromethane	0.0250	ND	0.0244	0.0220	97.5	88.1	1	42.4-135			10.1	20
1,2-Dibromoethane	0.0250	ND	0.0263	0.0251	105	101	1	67.1-125			4.48	20
1,1-Dichloroethane	0.0250	ND	0.0269	0.0255	108	102	1	58.5-132			5.52	20
1,2-Dichloroethane	0.0250	0.000581	0.0280	0.0273	109	107	1	60.0-126			2.34	20
1,1-Dichloroethene	0.0250	ND	0.0277	0.0255	111	102	1	51.1-140			8.40	20.2
cis-1,2-Dichloroethene	0.0250	ND	0.0265	0.0245	106	98.1	1	59.2-129			7.65	20
trans-1,2-Dichloroethene	0.0250	ND	0.0258	0.0238	103	95.0	1	56.5-129			8.27	20
1,2-Dichloropropane	0.0250	ND	0.0265	0.0254	106	102	1	64.2-123			3.89	20
cis-1,3-Dichloropropene	0.0250	ND	0.0253	0.0242	101	97.0	1	66.4-125			4.19	20
trans-1,3-Dichloropropene	0.0250	ND	0.0265	0.0252	106	101	1	64.1-128			5.19	20
Ethylbenzene	0.0250	ND	0.0255	0.0242	102	96.7	1	61.4-133			5.41	20
2-Hexanone	0.125	0.000569	0.144	0.137	115	109	1	43.3-137			4.84	25.5
Isopropylbenzene	0.0250	ND	0.0246	0.0230	98.4	92.0	1	66.8-141			6.80	20
p-Isopropyltoluene	0.0250	ND	0.0252	0.0235	101	94.1	1	63.2-139			7.05	20.4
2-Butanone (MEK)	0.125	ND	0.143	0.136	114	109	1	22.4-138			5.03	27
Methylene Chloride	0.0250	ND	0.0270	0.0265	108	106	1	58.1-122			2.00	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.138	0.134	110	107	1	60.8-140			3.23	25.1
Methyl tert-butyl ether	0.0250	0.204	0.179	0.178	0.000	0.000	1	57.7-134	V	V	0.480	20
Naphthalene	0.0250	ND	0.0242	0.0226	96.8	90.5	1	58.0-135			6.79	25.5
n-Propylbenzene	0.0250	ND	0.0249	0.0233	99.6	93.4	1	65.9-131			6.43	20
Styrene	0.0250	ND	0.00495	0.00531	19.8	21.2	1	66.8-133	J6	J6	7.13	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0241	0.0228	96.2	91.1	1	64.0-128			5.42	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0303	0.0294	121	118	1	56.0-132			3.04	22.2
Toluene	0.0250	ND	0.0249	0.0236	99.8	94.3	1	61.4-130			5.62	20
1,1,1-Trichloroethane	0.0250	ND	0.0269	0.0248	108	99.3	1	58.7-134			7.96	20
1,1,2-Trichloroethane	0.0250	ND	0.0257	0.0249	103	99.5	1	66.3-125			3.50	20
Trichloroethene	0.0250	ND	0.0250	0.0237	100	94.9	1	44.1-149			5.20	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0245	0.0228	98.0	91.1	1	57.4-137			7.23	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0255	0.0239	102	95.7	1	63.6-132			6.24	20.5
Vinyl chloride	0.0250	ND	0.0244	0.0229	97.8	91.7	1	47.8-137			6.39	20
Xylenes, Total	0.0750	ND	0.0749	0.0707	99.8	94.3	1	63.3-131			5.72	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



L760059-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 01:36 • (MS) 04/23/15 00:36 • (MSD) 04/23/15 00:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
o-Xylene	0.0250	ND	0.0250	0.0237	100	94.9	1	63.3-130			5.34	20
m&p-Xylenes	0.0500	ND	0.0499	0.0470	99.7	94.0	1	61.7-133			5.91	20
(S) Toluene-d8					103	104		88.5-111				
(S) Dibromofluoromethane					104	105		78.3-121				
(S) 4-Bromofluorobenzene					104	104		71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/25/15 06:09

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
Tetrachloroethene	U		0.000372	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/25/15 05:08 • (LCSD) 04/25/15 05:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0245	0.0235	97.9	94.0	74.8-121			4.04	20
Tetrachloroethene	0.0250	0.0261	0.0249	104	99.6	72.6-126			4.59	20

L760056-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/25/15 08:23 • (MS) 04/25/15 08:43 • (MSD) 04/25/15 09:04

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.00185	0.0253	0.0260	93.7	96.6	1	54.3-133			2.83	20
Tetrachloroethene	0.0250	0.000864	0.0252	0.0263	97.3	102	1	53.0-139			4.16	20



Method Blank (MB)

(MB) 04/25/15 17:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/25/15 15:57 • (LCSD) 04/25/15 16:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	0.0244	0.0225	97.7	90.1	72.6-126			8.18	20

L760039-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/25/15 21:16 • (MS) 04/25/15 20:16 • (MSD) 04/25/15 20:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0238	0.0242	95.4	96.7	1	53.0-139			1.33	20

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 04/20/15 16:11

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	120			50.0-150

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/20/15 16:30 • (LCSD) 04/20/15 16:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	1.67	1.57	112	105	50.0-150			6.33	20
(S) o-Terphenyl				121	116	50.0-150				

L759715-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/21/15 15:13 • (MS) 04/21/15 15:32 • (MSD) 04/21/15 15:51

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	0.600	2.25	2.29	110	112	1	50.0-150			1.55	20
(S) o-Terphenyl					119	119		50.0-150				



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

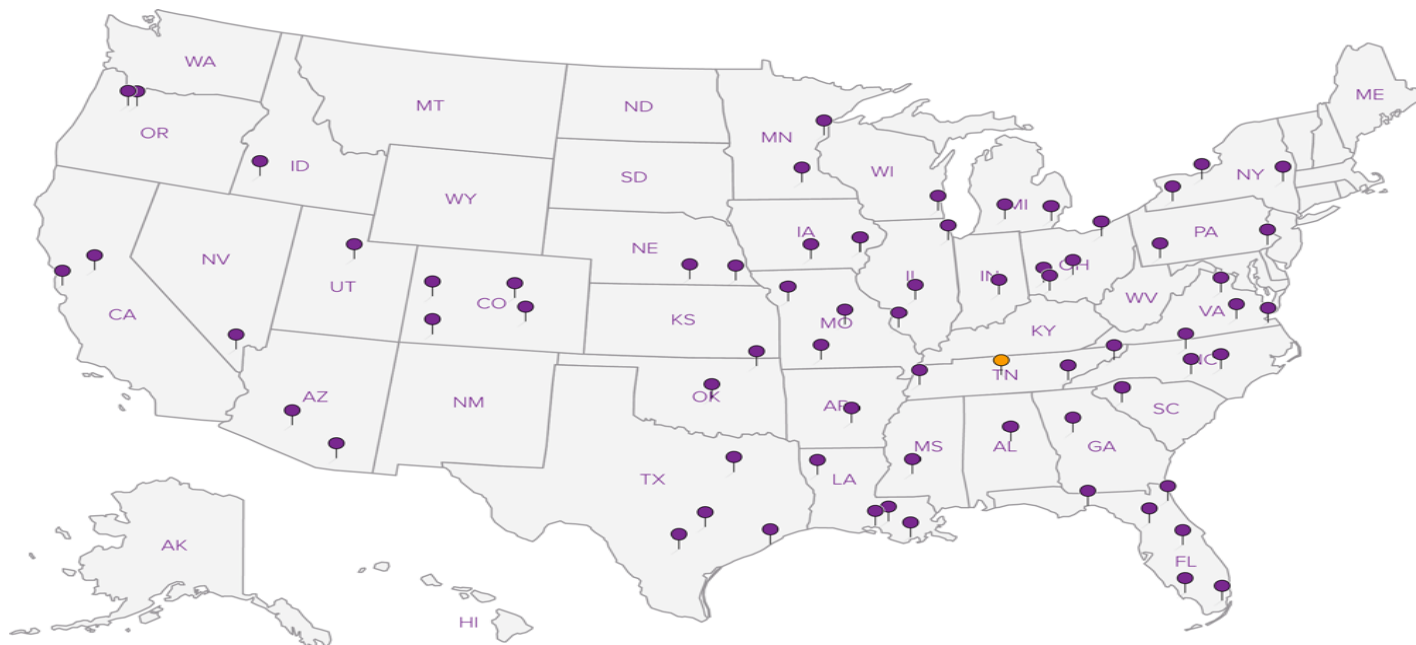
¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA–Crypto	TN00003	USDA	S-67674

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



ARCADIS, Inc.
2929 Briarpark Drive,
Suite 300
Houston, TX 77042

Billing Information:

Report to: Pam Krueger

Email To: pam.krueger@arcadis-us.com;
maisha.turner@arcadis-us.com;
melissa.osborne@arcadis-us.com

Project Navajo Refining Company

City/State Artesia, NM
Collected:

Phone: 713-953-4816
Fax: 713-977-4620

TMD TX000836.0007.15006
34

Lab Project # ARCADHTX-
NAVAJO FULL

Collected by (print):
Bryan Bayles + HMI

Site/Facility ID #

P.O. #

Collected by (signature):
Sant Ude

Rush? (Lab MUST Be
Notified)

Date Results Needed

Immediately Iced?
N ☐ Y ☒

Next Day 100%
Two Day 50%
Three Day 25%

Email? ☐ No ☐ Yes
FAX? ☐ No ☐ Yes

No.
of
Cntr

Sample ID	Comp/ Grab	Matrix *	Depth	Date	Time	Cntr	DRO	GR	Volat	Total	Total	Dis	Dis	Se	Cya	Ani	Ca	NO	TD	Remarks/Comments	Sample # (lab only)
~~MW-20~~	G	GW					✓		✓	✓		✓				✓	✓	✓	✓	54	
NP-1	↓	↓		4/15/15	1125	6			✓							✓	✓	✓	✓		-01
NP-6	↓	↓		4/15/15	1025	2			✓												-02
~~MW-8~~							✓	✓	✓	✓		✓				✓	✓	✓	✓	54	
MW-21				4/15/15	935	12	✓	✓	✓	✓		✓				✓	✓	✓	✓		-03
~~MW-71~~							✓		✓		✓		✓	✓	✓	✓	✓	✓	✓	50	
~~MW-68~~							✓		✓	✓		✓				✓	✓	✓	✓	50	
~~MW-27~~							✓		✓	✓		✓				✓	✓	✓	✓	50	
MW-89	↓	↓		4/15/15	1740	10	✓		✓	✓		✓				✓	✓	✓	✓		-04
MW-16	↓	↓		4/15/15	1645	10	✓		✓	✓		✓				✓	✓	✓	✓		-05
MW-25				4/15/15	1700	10	✓	✓	✓	✓		✓				✓	✓	✓	✓		-06

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

pH _____ Temp _____
Flow _____ Other _____

Hold #

Remarks:

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

☒ FedEx ☐ Courier ☐ _____

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: 23.2 °C

40 52

COC Seal Intact: ☒ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

4/17/15

0900

pH Checked: 5.2, 7.2

NCF: X

Jason Romer

ESC Lab Sciences
Non-Conformance Form

Login #: L760059	Client: ARCADHTX	Date: 4/17/15	Evaluated by: Nikki Sloan

Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	If Broken Container:
Parameter(s) past holding time	Login Clarification Needed	
Improper temperature	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
Improper preservation	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
Broken container	Client did not "X" analysis.	Received by:
Broken container:	Chain of Custody is missing	Date/Time:
Sufficient sample remains		Temp./Cont. Rec./pH:
		Carrier:
		Tracking#

Login Comments:

Received MW-25 collected @ 1700 on 4/15/15 not on COC.

Client informed by:	Call	Email	Voice Mail	Date: 4/17/15	Time: 1400
TSR Initials: jcr/PL	Client Contact: Scott Ude				

Login Instructions:

Add to COC and analyze per Scott Ude. (jcr)

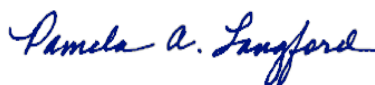
This E-mail and any attached files are confidential, and may be copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. If you have received this message in error, please contact the sender immediately and delete/destroy all information received.

April 30, 2015

ARCADIS US - TX

Sample Delivery Group: L760071
Samples Received: 04/17/2015
Project Number: TX000836.0007.15004
Description: Navajo Refining Company - Artesia, NM
Site: EP
Report To: Pam Krueger
2929 Briarpark Dr., Suite 300
Houston, TX 77042

Entire Report Reviewed By:



Pam Langford

Pam Langford

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹Cp: Cover Page	1
²Tc: Table of Contents	2
³Ss: Sample Summary	3
⁴Cn: Case Narrative	5
⁵Sr: Sample Results	6
MW-88 L760071-01	6
MW-22A L760071-02	8
MW-22B L760071-03	10
MW-10 L760071-04	12
⁶Qc: Quality Control Summary	14
Gravimetric Analysis by Method 2540 C-2011	14
Wet Chemistry by Method 353.2	15
Wet Chemistry by Method 9056MOD	16
Metals (ICPMS) by Method 6020	18
Volatile Organic Compounds (GC) by Method 8015D/GRO	21
Volatile Organic Compounds (GC/MS) by Method 8260B	22
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	30
⁷Gl: Glossary of Terms	31
⁸Al: Accreditations & Locations	32
⁹Sc: Chain of Custody	33



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-88 L760071-01 GW

Collected by
Scott Duncan

Collected date/time
04/15/15 09:55

Received date/time
04/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:28	MF
Metals (ICPMS) by Method 6020	WG783153	5	04/21/15 12:59	04/24/15 02:57	AB
Metals (ICPMS) by Method 6020	WG783153	50	04/21/15 12:59	04/25/15 01:59	VSS
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 17:02	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783174	1	04/20/15 12:06	04/22/15 18:05	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	1	04/25/15 18:50	04/25/15 18:50	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG784352	1	04/26/15 02:38	04/26/15 02:38	JC
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:39	04/28/15 01:39	JAL
Wet Chemistry by Method 9056MOD	WG783895	1	04/23/15 00:14	04/23/15 00:14	NJM
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 10:26	04/23/15 10:26	NJM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

MW-22A L760071-02 GW

Collected by
Scott Duncan

Collected date/time
04/15/15 12:40

Received date/time
04/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:29	MF
Metals (ICPMS) by Method 6020	WG783153	20	04/21/15 12:59	04/25/15 02:02	VSS
Metals (ICPMS) by Method 6020	WG783153	5	04/21/15 12:59	04/24/15 03:00	AB
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 17:04	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783174	1	04/20/15 12:06	04/22/15 18:23	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	5	04/25/15 22:27	04/25/15 22:27	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG785640	1	04/29/15 19:00	04/29/15 19:00	JC
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:40	04/28/15 01:40	JAL
Wet Chemistry by Method 9056MOD	WG783895	1	04/23/15 00:29	04/23/15 00:29	NJM
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 10:41	04/23/15 10:41	NJM

⁷ Gl

⁸ Al

⁹ Sc

MW-22B L760071-03 GW

Collected by
Scott Duncan

Collected date/time
04/15/15 13:50

Received date/time
04/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:38	MF
Metals (ICPMS) by Method 6020	WG783153	20	04/21/15 12:59	04/25/15 02:04	VSS
Metals (ICPMS) by Method 6020	WG783153	5	04/21/15 12:59	04/24/15 03:02	AB
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 17:06	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783174	1	04/20/15 12:06	04/22/15 18:41	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	5	04/25/15 22:52	04/25/15 22:52	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG785640	1	04/29/15 19:21	04/29/15 19:21	JC
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:41	04/28/15 01:41	JAL
Wet Chemistry by Method 9056MOD	WG783895	1	04/23/15 00:43	04/23/15 00:43	NJM
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 11:24	04/23/15 11:24	NJM

Collected by
Scott Duncan

Collected date/time
04/15/15 10:50

Received date/time
04/17/15 09:00

MW-10 L760071-04 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:38	MF
Metals (ICPMS) by Method 6020	WG783153	20	04/21/15 12:59	04/25/15 02:06	VSS
Metals (ICPMS) by Method 6020	WG783153	5	04/21/15 12:59	04/24/15 03:04	AB
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 17:09	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783174	1	04/20/15 12:06	04/22/15 18:58	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	5	04/25/15 23:17	04/25/15 23:17	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG785640	1	04/29/15 20:30	04/29/15 20:30	JC
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:43	04/28/15 01:43	JAL
Wet Chemistry by Method 9056MOD	WG783895	1	04/23/15 00:57	04/23/15 00:57	NJM

MW-10 L760071-04 GW

Collected by
Scott Duncan

Collected date/time
04/15/15 10:50

Received date/time
04/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 11:38	04/23/15 11:38	NJM

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Pam Langford

Pam Langford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	11000000		2800	10000	1	04/23/2015 09:28	WG783398

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 01:39	WG785017

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	3000000		5200	100000	100	04/23/2015 10:26	WG783895
Fluoride	1800		9.90	100	1	04/23/2015 00:14	WG783895
Sulfate	4970000		7700	500000	100	04/23/2015 10:26	WG783895

Metals (ICPMS) by Method 6020

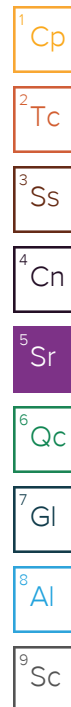
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	23.1		1.20	10.0	5	04/24/2015 02:57	WG783153
Arsenic,Dissolved	10.6		1.20	10.0	5	04/23/2015 17:02	WG783437
Barium	13.2	U	1.80	25.0	5	04/24/2015 02:57	WG783153
Barium,Dissolved	13.9	U	1.80	25.0	5	04/23/2015 17:02	WG783437
Calcium	519000		2300	50000	50	04/25/2015 01:59	WG783153
Chromium	U		2.70	10.0	5	04/24/2015 02:57	WG783153
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 17:02	WG783437
Iron	2110		75.0	500	5	04/24/2015 02:57	WG783153
Iron,Dissolved	75.3	U	75.0	500	5	04/23/2015 17:02	WG783437
Lead	U		1.20	10.0	5	04/24/2015 02:57	WG783153
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 17:02	WG783437
Manganese	1420		1.20	25.0	5	04/24/2015 02:57	WG783153
Manganese,Dissolved	1310		1.20	25.0	5	04/23/2015 17:02	WG783437
Potassium	2660	U	180	5000	5	04/24/2015 02:57	WG783153
Selenium	U		1.90	10.0	5	04/24/2015 02:57	WG783153
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 17:02	WG783437
Sodium	2250000		5500	50000	50	04/25/2015 01:59	WG783153

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/25/2015 18:50	WG783017
(S) a,a,a-Trifluorotoluene(FID)	95.8			62.0-128		04/25/2015 18:50	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/26/2015 02:38	WG784352
Benzene	U		0.330	1.00	1	04/26/2015 02:38	WG784352
Bromodichloromethane	U		0.380	1.00	1	04/26/2015 02:38	WG784352
Bromoform	U		0.470	1.00	1	04/26/2015 02:38	WG784352
Bromomethane	U		0.870	5.00	1	04/26/2015 02:38	WG784352
n-Butylbenzene	U		0.360	1.00	1	04/26/2015 02:38	WG784352
sec-Butylbenzene	U		0.360	1.00	1	04/26/2015 02:38	WG784352
Carbon disulfide	U		0.280	1.00	1	04/26/2015 02:38	WG784352
Carbon tetrachloride	U		0.380	1.00	1	04/26/2015 02:38	WG784352
Chlorobenzene	U		0.350	1.00	1	04/26/2015 02:38	WG784352





Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U		0.330	1.00	1	04/26/2015 02:38	WG784352
Chloroethane	U		0.450	5.00	1	04/26/2015 02:38	WG784352
Chloroform	U		0.320	5.00	1	04/26/2015 02:38	WG784352
Chloromethane	U		0.280	2.50	1	04/26/2015 02:38	WG784352
1,2-Dibromoethane	U		0.380	1.00	1	04/26/2015 02:38	WG784352
1,1-Dichloroethane	U		0.260	1.00	1	04/26/2015 02:38	WG784352
1,2-Dichloroethane	U		0.360	1.00	1	04/26/2015 02:38	WG784352
1,1-Dichloroethene	U		0.400	1.00	1	04/26/2015 02:38	WG784352
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/26/2015 02:38	WG784352
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/26/2015 02:38	WG784352
1,2-Dichloropropane	U		0.310	1.00	1	04/26/2015 02:38	WG784352
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/26/2015 02:38	WG784352
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/26/2015 02:38	WG784352
Ethylbenzene	U		0.380	1.00	1	04/26/2015 02:38	WG784352
Isopropylbenzene	U		0.330	1.00	1	04/26/2015 02:38	WG784352
p-Isopropyltoluene	U		0.350	1.00	1	04/26/2015 02:38	WG784352
2-Butanone (MEK)	U		3.90	10.0	1	04/26/2015 02:38	WG784352
2-Hexanone	U		3.80	10.0	1	04/26/2015 02:38	WG784352
Methylene Chloride	U		1.00	5.00	1	04/26/2015 02:38	WG784352
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/26/2015 02:38	WG784352
Methyl tert-butyl ether	U		0.370	1.00	1	04/26/2015 02:38	WG784352
Naphthalene	U		1.00	5.00	1	04/26/2015 02:38	WG784352
n-Propylbenzene	U		0.350	1.00	1	04/26/2015 02:38	WG784352
Styrene	U		0.310	1.00	1	04/26/2015 02:38	WG784352
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/26/2015 02:38	WG784352
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/26/2015 02:38	WG784352
Tetrachloroethene	U		0.370	1.00	1	04/26/2015 02:38	WG784352
Toluene	U		0.780	5.00	1	04/26/2015 02:38	WG784352
1,1,1-Trichloroethane	U		0.319	1.00	1	04/26/2015 02:38	WG784352
1,1,2-Trichloroethane	U		0.380	1.00	1	04/26/2015 02:38	WG784352
Trichloroethene	U		0.400	1.00	1	04/26/2015 02:38	WG784352
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/26/2015 02:38	WG784352
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/26/2015 02:38	WG784352
Vinyl chloride	U		0.260	1.00	1	04/26/2015 02:38	WG784352
o-Xylene	U		0.340	1.00	1	04/26/2015 02:38	WG784352
m&p-Xylene	U		0.720	1.00	1	04/26/2015 02:38	WG784352
Xylenes, Total	U		1.10	3.00	1	04/26/2015 02:38	WG784352
(S) Toluene-d8	105			88.5-111		04/26/2015 02:38	WG784352
(S) Dibromofluoromethane	107			78.3-121		04/26/2015 02:38	WG784352
(S) 4-Bromofluorobenzene	107			71.0-126		04/26/2015 02:38	WG784352

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	610		25.0	100	1	04/22/2015 18:05	WG783174
(S) o-Terphenyl	106			50.0-150		04/22/2015 18:05	WG783174



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	7270000		2800	10000	1	04/23/2015 09:29	WG783398

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 01:40	WG785017

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	2150000		5200	100000	100	04/23/2015 10:41	WG783895
Fluoride	758		9.90	100	1	04/23/2015 00:29	WG783895
Sulfate	2500000		7700	500000	100	04/23/2015 10:41	WG783895

Metals (ICPMS) by Method 6020

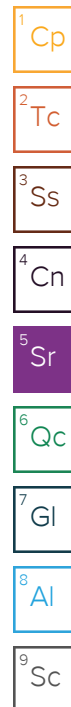
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	54.5		1.20	10.0	5	04/24/2015 03:00	WG783153
Arsenic,Dissolved	37.6		1.20	10.0	5	04/23/2015 17:04	WG783437
Barium	17.9	J	1.80	25.0	5	04/24/2015 03:00	WG783153
Barium,Dissolved	16.2	J	1.80	25.0	5	04/23/2015 17:04	WG783437
Calcium	549000		920	20000	20	04/25/2015 02:02	WG783153
Chromium	U		2.70	10.0	5	04/24/2015 03:00	WG783153
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 17:04	WG783437
Iron	2340		75.0	500	5	04/24/2015 03:00	WG783153
Iron,Dissolved	537		75.0	500	5	04/23/2015 17:04	WG783437
Lead	U		1.20	10.0	5	04/24/2015 03:00	WG783153
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 17:04	WG783437
Manganese	5180		1.20	25.0	5	04/24/2015 03:00	WG783153
Manganese,Dissolved	5370		1.20	25.0	5	04/23/2015 17:04	WG783437
Potassium	3790	J	180	5000	5	04/24/2015 03:00	WG783153
Selenium	U		1.90	10.0	5	04/24/2015 03:00	WG783153
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 17:04	WG783437
Sodium	1450000		2200	20000	20	04/25/2015 02:02	WG783153

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	2570		160	500	5	04/25/2015 22:27	WG783017
(S) a,a,a-Trifluorotoluene(FID)	97.2			62.0-128		04/25/2015 22:27	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/29/2015 19:00	WG785640
Benzene	U		0.330	1.00	1	04/29/2015 19:00	WG785640
Bromodichloromethane	U		0.380	1.00	1	04/29/2015 19:00	WG785640
Bromoform	U		0.470	1.00	1	04/29/2015 19:00	WG785640
Bromomethane	U		0.870	5.00	1	04/29/2015 19:00	WG785640
n-Butylbenzene	U		0.360	1.00	1	04/29/2015 19:00	WG785640
sec-Butylbenzene	U		0.360	1.00	1	04/29/2015 19:00	WG785640
Carbon disulfide	U		0.280	1.00	1	04/29/2015 19:00	WG785640
Carbon tetrachloride	U		0.380	1.00	1	04/29/2015 19:00	WG785640
Chlorobenzene	U		0.350	1.00	1	04/29/2015 19:00	WG785640





Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U		0.330	1.00	1	04/29/2015 19:00	WG785640
Chloroethane	U		0.450	5.00	1	04/29/2015 19:00	WG785640
Chloroform	U	<u>J4</u>	0.320	5.00	1	04/29/2015 19:00	WG785640
Chloromethane	U		0.280	2.50	1	04/29/2015 19:00	WG785640
1,2-Dibromoethane	U		0.380	1.00	1	04/29/2015 19:00	WG785640
1,1-Dichloroethane	U		0.260	1.00	1	04/29/2015 19:00	WG785640
1,2-Dichloroethane	U		0.360	1.00	1	04/29/2015 19:00	WG785640
1,1-Dichloroethene	U		0.400	1.00	1	04/29/2015 19:00	WG785640
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/29/2015 19:00	WG785640
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/29/2015 19:00	WG785640
1,2-Dichloropropane	U		0.310	1.00	1	04/29/2015 19:00	WG785640
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/29/2015 19:00	WG785640
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/29/2015 19:00	WG785640
Ethylbenzene	U		0.380	1.00	1	04/29/2015 19:00	WG785640
Isopropylbenzene	U		0.330	1.00	1	04/29/2015 19:00	WG785640
p-Isopropyltoluene	U		0.350	1.00	1	04/29/2015 19:00	WG785640
2-Butanone (MEK)	U		3.90	10.0	1	04/29/2015 19:00	WG785640
2-Hexanone	U		3.80	10.0	1	04/29/2015 19:00	WG785640
Methylene Chloride	U		1.00	5.00	1	04/29/2015 19:00	WG785640
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/29/2015 19:00	WG785640
Methyl tert-butyl ether	5.57		0.370	1.00	1	04/29/2015 19:00	WG785640
Naphthalene	U		1.00	5.00	1	04/29/2015 19:00	WG785640
n-Propylbenzene	U		0.350	1.00	1	04/29/2015 19:00	WG785640
Styrene	U	<u>J4</u>	0.310	1.00	1	04/29/2015 19:00	WG785640
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/29/2015 19:00	WG785640
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/29/2015 19:00	WG785640
Tetrachloroethene	U		0.370	1.00	1	04/29/2015 19:00	WG785640
Toluene	U	<u>J3</u>	0.780	5.00	1	04/29/2015 19:00	WG785640
1,1,1-Trichloroethane	U		0.319	1.00	1	04/29/2015 19:00	WG785640
1,1,2-Trichloroethane	U		0.380	1.00	1	04/29/2015 19:00	WG785640
Trichloroethene	U		0.400	1.00	1	04/29/2015 19:00	WG785640
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/29/2015 19:00	WG785640
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/29/2015 19:00	WG785640
Vinyl chloride	U		0.260	1.00	1	04/29/2015 19:00	WG785640
o-Xylene	U		0.340	1.00	1	04/29/2015 19:00	WG785640
m&p-Xylene	U		0.720	1.00	1	04/29/2015 19:00	WG785640
Xylenes, Total	U		1.10	3.00	1	04/29/2015 19:00	WG785640
(S) Toluene-d8	97.5			88.5-111		04/29/2015 19:00	WG785640
(S) Dibromofluoromethane	91.5			78.3-121		04/29/2015 19:00	WG785640
(S) 4-Bromofluorobenzene	98.5			71.0-126		04/29/2015 19:00	WG785640

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5800		25.0	100	1	04/22/2015 18:23	WG783174
(S) o-Terphenyl	107			50.0-150		04/22/2015 18:23	WG783174



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	5590000		2800	10000	1	04/23/2015 09:38	WG783398

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 01:41	WG785017

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1400000		5200	100000	100	04/23/2015 11:24	WG783895
Fluoride	823		9.90	100	1	04/23/2015 00:43	WG783895
Sulfate	2170000		7700	500000	100	04/23/2015 11:24	WG783895

Metals (ICPMS) by Method 6020

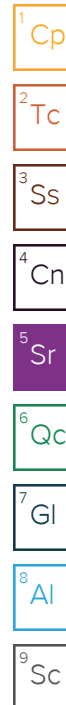
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	38.9		1.20	10.0	5	04/24/2015 03:02	WG783153
Arsenic,Dissolved	38.3		1.20	10.0	5	04/23/2015 17:06	WG783437
Barium	16.0	U	1.80	25.0	5	04/24/2015 03:02	WG783153
Barium,Dissolved	15.4	U	1.80	25.0	5	04/23/2015 17:06	WG783437
Calcium	477000		920	20000	20	04/25/2015 02:04	WG783153
Chromium	U		2.70	10.0	5	04/24/2015 03:02	WG783153
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 17:06	WG783437
Iron	2320		75.0	500	5	04/24/2015 03:02	WG783153
Iron,Dissolved	2200		75.0	500	5	04/23/2015 17:06	WG783437
Lead	1.34	U	1.20	10.0	5	04/24/2015 03:02	WG783153
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 17:06	WG783437
Manganese	4320		1.20	25.0	5	04/24/2015 03:02	WG783153
Manganese,Dissolved	4640		1.20	25.0	5	04/23/2015 17:06	WG783437
Potassium	4020	U	180	5000	5	04/24/2015 03:02	WG783153
Selenium	U		1.90	10.0	5	04/24/2015 03:02	WG783153
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 17:06	WG783437
Sodium	1150000		2200	20000	20	04/25/2015 02:04	WG783153

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	2340		160	500	5	04/25/2015 22:52	WG783017
(S) a,a,a-Trifluorotoluene(FID)	97.5			62.0-128		04/25/2015 22:52	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/29/2015 19:21	WG785640
Benzene	U		0.330	1.00	1	04/29/2015 19:21	WG785640
Bromodichloromethane	U		0.380	1.00	1	04/29/2015 19:21	WG785640
Bromoform	U		0.470	1.00	1	04/29/2015 19:21	WG785640
Bromomethane	U		0.870	5.00	1	04/29/2015 19:21	WG785640
n-Butylbenzene	U		0.360	1.00	1	04/29/2015 19:21	WG785640
sec-Butylbenzene	0.381	U	0.360	1.00	1	04/29/2015 19:21	WG785640
Carbon disulfide	U		0.280	1.00	1	04/29/2015 19:21	WG785640
Carbon tetrachloride	U		0.380	1.00	1	04/29/2015 19:21	WG785640
Chlorobenzene	U		0.350	1.00	1	04/29/2015 19:21	WG785640





Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U		0.330	1.00	1	04/29/2015 19:21	WG785640
Chloroethane	U		0.450	5.00	1	04/29/2015 19:21	WG785640
Chloroform	U	<u>J4</u>	0.320	5.00	1	04/29/2015 19:21	WG785640
Chloromethane	U		0.280	2.50	1	04/29/2015 19:21	WG785640
1,2-Dibromoethane	U		0.380	1.00	1	04/29/2015 19:21	WG785640
1,1-Dichloroethane	U		0.260	1.00	1	04/29/2015 19:21	WG785640
1,2-Dichloroethane	U		0.360	1.00	1	04/29/2015 19:21	WG785640
1,1-Dichloroethene	U		0.400	1.00	1	04/29/2015 19:21	WG785640
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/29/2015 19:21	WG785640
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/29/2015 19:21	WG785640
1,2-Dichloropropane	U		0.310	1.00	1	04/29/2015 19:21	WG785640
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/29/2015 19:21	WG785640
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/29/2015 19:21	WG785640
Ethylbenzene	U		0.380	1.00	1	04/29/2015 19:21	WG785640
Isopropylbenzene	U		0.330	1.00	1	04/29/2015 19:21	WG785640
p-Isopropyltoluene	U		0.350	1.00	1	04/29/2015 19:21	WG785640
2-Butanone (MEK)	U		3.90	10.0	1	04/29/2015 19:21	WG785640
2-Hexanone	U		3.80	10.0	1	04/29/2015 19:21	WG785640
Methylene Chloride	U		1.00	5.00	1	04/29/2015 19:21	WG785640
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/29/2015 19:21	WG785640
Methyl tert-butyl ether	6.34		0.370	1.00	1	04/29/2015 19:21	WG785640
Naphthalene	U		1.00	5.00	1	04/29/2015 19:21	WG785640
n-Propylbenzene	U		0.350	1.00	1	04/29/2015 19:21	WG785640
Styrene	U	<u>J4</u>	0.310	1.00	1	04/29/2015 19:21	WG785640
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/29/2015 19:21	WG785640
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/29/2015 19:21	WG785640
Tetrachloroethene	U		0.370	1.00	1	04/29/2015 19:21	WG785640
Toluene	U	<u>J3</u>	0.780	5.00	1	04/29/2015 19:21	WG785640
1,1,1-Trichloroethane	U		0.319	1.00	1	04/29/2015 19:21	WG785640
1,1,2-Trichloroethane	U		0.380	1.00	1	04/29/2015 19:21	WG785640
Trichloroethene	U		0.400	1.00	1	04/29/2015 19:21	WG785640
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/29/2015 19:21	WG785640
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/29/2015 19:21	WG785640
Vinyl chloride	U		0.260	1.00	1	04/29/2015 19:21	WG785640
o-Xylene	U		0.340	1.00	1	04/29/2015 19:21	WG785640
m&p-Xylene	U		0.720	1.00	1	04/29/2015 19:21	WG785640
Xylenes, Total	U		1.10	3.00	1	04/29/2015 19:21	WG785640
(S) Toluene-d8	97.6			88.5-111		04/29/2015 19:21	WG785640
(S) Dibromofluoromethane	91.4			78.3-121		04/29/2015 19:21	WG785640
(S) 4-Bromofluorobenzene	97.6			71.0-126		04/29/2015 19:21	WG785640

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	5600		25.0	100	1	04/22/2015 18:41	WG783174
(S) o-Terphenyl	102			50.0-150		04/22/2015 18:41	WG783174



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	5030000		2800	10000	1	04/23/2015 09:38	WG783398

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 01:43	WG785017

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1380000		5200	100000	100	04/23/2015 11:38	WG783895
Fluoride	919		9.90	100	1	04/23/2015 00:57	WG783895
Sulfate	2110000		7700	500000	100	04/23/2015 11:38	WG783895

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	20.0		1.20	10.0	5	04/24/2015 03:04	WG783153
Arsenic,Dissolved	19.1		1.20	10.0	5	04/23/2015 17:09	WG783437
Barium	12.8	J	1.80	25.0	5	04/24/2015 03:04	WG783153
Barium,Dissolved	13.0	J	1.80	25.0	5	04/23/2015 17:09	WG783437
Calcium	466000		920	20000	20	04/25/2015 02:06	WG783153
Chromium	U		2.70	10.0	5	04/24/2015 03:04	WG783153
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 17:09	WG783437
Iron	U		75.0	500	5	04/24/2015 03:04	WG783153
Iron,Dissolved	U		75.0	500	5	04/23/2015 17:09	WG783437
Lead	U		1.20	10.0	5	04/24/2015 03:04	WG783153
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 17:09	WG783437
Manganese	2430		1.20	25.0	5	04/24/2015 03:04	WG783153
Manganese,Dissolved	2530		1.20	25.0	5	04/23/2015 17:09	WG783437
Potassium	3540	J	180	5000	5	04/24/2015 03:04	WG783153
Selenium	U		1.90	10.0	5	04/24/2015 03:04	WG783153
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 17:09	WG783437
Sodium	941000		2200	20000	20	04/25/2015 02:06	WG783153

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	410	J	160	500	5	04/25/2015 23:17	WG783017
(S) a,a,a-Trifluorotoluene(FID)	97.0			62.0-128		04/25/2015 23:17	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/29/2015 20:30	WG785640
Benzene	U		0.330	1.00	1	04/29/2015 20:30	WG785640
Bromodichloromethane	U		0.380	1.00	1	04/29/2015 20:30	WG785640
Bromoform	U		0.470	1.00	1	04/29/2015 20:30	WG785640
Bromomethane	U		0.870	5.00	1	04/29/2015 20:30	WG785640
n-Butylbenzene	U		0.360	1.00	1	04/29/2015 20:30	WG785640
sec-Butylbenzene	U		0.360	1.00	1	04/29/2015 20:30	WG785640
Carbon disulfide	U		0.280	1.00	1	04/29/2015 20:30	WG785640
Carbon tetrachloride	U		0.380	1.00	1	04/29/2015 20:30	WG785640
Chlorobenzene	U		0.350	1.00	1	04/29/2015 20:30	WG785640



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorodibromomethane	U		0.330	1.00	1	04/29/2015 20:30	WG785640
Chloroethane	U		0.450	5.00	1	04/29/2015 20:30	WG785640
Chloroform	U	J4	0.320	5.00	1	04/29/2015 20:30	WG785640
Chloromethane	U		0.280	2.50	1	04/29/2015 20:30	WG785640
1,2-Dibromoethane	U		0.380	1.00	1	04/29/2015 20:30	WG785640
1,1-Dichloroethane	U		0.260	1.00	1	04/29/2015 20:30	WG785640
1,2-Dichloroethane	U		0.360	1.00	1	04/29/2015 20:30	WG785640
1,1-Dichloroethene	U		0.400	1.00	1	04/29/2015 20:30	WG785640
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/29/2015 20:30	WG785640
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/29/2015 20:30	WG785640
1,2-Dichloropropane	U		0.310	1.00	1	04/29/2015 20:30	WG785640
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/29/2015 20:30	WG785640
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/29/2015 20:30	WG785640
Ethylbenzene	U		0.380	1.00	1	04/29/2015 20:30	WG785640
Isopropylbenzene	U		0.330	1.00	1	04/29/2015 20:30	WG785640
p-Isopropyltoluene	U		0.350	1.00	1	04/29/2015 20:30	WG785640
2-Butanone (MEK)	U		3.90	10.0	1	04/29/2015 20:30	WG785640
2-Hexanone	U		3.80	10.0	1	04/29/2015 20:30	WG785640
Methylene Chloride	U		1.00	5.00	1	04/29/2015 20:30	WG785640
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/29/2015 20:30	WG785640
Methyl tert-butyl ether	1.95		0.370	1.00	1	04/29/2015 20:30	WG785640
Naphthalene	U		1.00	5.00	1	04/29/2015 20:30	WG785640
n-Propylbenzene	U		0.350	1.00	1	04/29/2015 20:30	WG785640
Styrene	U	J4	0.310	1.00	1	04/29/2015 20:30	WG785640
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/29/2015 20:30	WG785640
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/29/2015 20:30	WG785640
Tetrachloroethene	U		0.370	1.00	1	04/29/2015 20:30	WG785640
Toluene	U	J3	0.780	5.00	1	04/29/2015 20:30	WG785640
1,1,1-Trichloroethane	U		0.319	1.00	1	04/29/2015 20:30	WG785640
1,1,2-Trichloroethane	U		0.380	1.00	1	04/29/2015 20:30	WG785640
Trichloroethene	U		0.400	1.00	1	04/29/2015 20:30	WG785640
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/29/2015 20:30	WG785640
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/29/2015 20:30	WG785640
Vinyl chloride	U		0.260	1.00	1	04/29/2015 20:30	WG785640
o-Xylene	U		0.340	1.00	1	04/29/2015 20:30	WG785640
m&p-Xylene	U		0.720	1.00	1	04/29/2015 20:30	WG785640
Xylenes, Total	U		1.10	3.00	1	04/29/2015 20:30	WG785640
(S) Toluene-d8	97.3			88.5-111		04/29/2015 20:30	WG785640
(S) Dibromofluoromethane	92.4			78.3-121		04/29/2015 20:30	WG785640
(S) 4-Bromofluorobenzene	95.3			71.0-126		04/29/2015 20:30	WG785640

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	2600		25.0	100	1	04/22/2015 18:58	WG783174
(S) o-Terphenyl	108			50.0-150		04/22/2015 18:58	WG783174



Method Blank (MB)

(MB) 04/23/15 09:33

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L760039-20 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 09:37 • (DUP) 04/23/15 09:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	3040	3010	1	0.993		5

L760074-10 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 09:37 • (DUP) 04/23/15 09:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	5650	5670	1	0.353		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 09:29 • (LCSD) 04/23/15 09:29

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8500	8570	96.6	97.4	85.0-115			0.820	5



Method Blank (MB)

(MB) 04/28/15 01:26

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0197	0.100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L760074-07 Original Sample (OS) • Duplicate (DUP)

(OS) 04/28/15 01:55 • (DUP) 04/28/15 01:56

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	1.5	1.5	1	0.00		20

L760059-05 Original Sample (OS) • Duplicate (DUP)

(OS) 04/28/15 01:33 • (DUP) 04/28/15 01:34

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	0.46	0.45	1	2.2		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/28/15 01:30 • (LCSD) 04/28/15 01:31

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.25	4.96	105	99.2	90.0-110			5.68	20

L760059-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/28/15 01:35 • (MS) 04/28/15 01:37 • (MSD) 04/28/15 01:38

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	5.00	0.0974	5.76	5.72	113	112	1	90.0-110	J5	J5	0.697	20

Method Blank (MB)

(MB) 04/22/15 19:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L759346-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/22/15 22:04 • (DUP) 04/22/15 22:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	7.70	7.85	1	2		20
Fluoride	0.720	0.688	1	5		20
Sulfate	9.51	9.95	1	5		20

L759492-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 02:24 • (DUP) 04/23/15 02:38

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	16.8	16.8	1	0		20
Fluoride	0.983	0.970	1	1		20
Sulfate	10.9	11.0	1	1		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 19:40 • (LCSD) 04/22/15 19:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	40.7	40.3	102	101	90-110			1	20
Fluoride	8.00	8.19	8.13	102	102	90-110			1	20
Sulfate	40.0	40.9	40.5	102	101	90-110			1	20

L760026-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 12:07 • (MS) 04/23/15 12:22 • (MSD) 04/23/15 12:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	0.500	1140	5830	6120	94	100	100	80-120			5	20



L760026-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 12:07 • (MS) 04/23/15 12:22 • (MSD) 04/23/15 12:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Fluoride	0.0500	ND	467	498	93	100	100	80-120			6	20
Sulfate	0.500	4040	8610	8850	91	96	100	80-120			3	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 04/24/15 02:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	0.0464		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	0.000326		0.00025	0.00500
Potassium	U		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/24/15 02:30 • (LCSD) 04/24/15 02:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0556	0.0534	111	107	80-120			4	20
Barium	0.0500	0.0517	0.0527	103	105	80-120			2	20
Calcium	5.00	5.06	5.29	101	106	80-120			4	20
Chromium	0.0500	0.0505	0.0499	101	100	80-120			1	20
Iron	5.00	4.83	4.77	97	95	80-120			1	20
Lead	0.0500	0.0535	0.0542	107	108	80-120			1	20
Manganese	0.0500	0.0485	0.0488	97	98	80-120			1	20
Potassium	5.00	5.16	5.21	103	104	80-120			1	20
Selenium	0.0500	0.0496	0.0480	99	96	80-120			3	20
Sodium	5.00	5.41	5.46	108	109	80-120			1	20

L760059-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/24/15 02:35 • (MS) 04/24/15 02:39 • (MSD) 04/24/15 02:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0100	0.00711	0.0661	0.0687	118	123	5	75-125			4	20
Barium	0.0100	0.00891	0.0617	0.0671	106	116	5	75-125			8	20
Chromium	0.0100	ND	0.0504	0.0559	101	112	5	75-125			10	20
Potassium	1.00	3.53	8.65	9.08	102	111	5	75-125			5	20
Iron	1.00	0.146	4.91	5.31	95	103	5	75-125			8	20
Lead	0.0100	0.000363	0.0559	0.0577	111	115	5	75-125			3	20



L760059-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/24/15 02:35 • (MS) 04/24/15 02:39 • (MSD) 04/24/15 02:42

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Manganese	0.0100	0.150	0.187	0.205	74	110	5	75-125	J6		9	20
Selenium	0.0100	0.0317	0.0888	0.0944	114	125	5	75-125			6	20
Sodium	1.00	451	427	452	0	24	5	75-125	V	V	6	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 04/23/15 12:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000705		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 12:49 • (LCSD) 04/23/15 12:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0500	0.0548	0.0532	110	106	80-120			3	20
Barium,Dissolved	0.0500	0.0479	0.0499	96	100	80-120			4	20
Chromium,Dissolved	0.0500	0.0494	0.0484	99	97	80-120			2	20
Iron,Dissolved	5.00	4.81	4.68	96	94	80-120			3	20
Lead,Dissolved	0.0500	0.0503	0.0505	101	101	80-120			0	20
Manganese,Dissolved	0.0500	0.0493	0.0488	99	98	80-120			1	20
Selenium,Dissolved	0.0500	0.0513	0.0536	103	107	80-120			4	20

L759281-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 13:38 • (MS) 04/23/15 12:58 • (MSD) 04/23/15 13:00

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0100	0.00104	0.0603	0.0628	119	124	5	75-125			4	20
Barium,Dissolved	0.0100	0.0696	0.125	0.121	111	102	5	75-125			4	20
Chromium,Dissolved	0.0100	ND	0.0516	0.0540	103	108	5	75-125			5	20
Iron,Dissolved	1.00	0.0581	5.34	5.54	106	110	5	75-125			4	20
Lead,Dissolved	0.0100	0.000124	0.0538	0.0545	107	109	5	75-125			1	20
Manganese,Dissolved	0.0100	0.00244	0.0541	0.0579	103	111	5	75-125			7	20
Selenium,Dissolved	0.0100	0.00808	0.0630	0.0661	110	116	5	75-125			5	20



Method Blank (MB)

(MB) 04/25/15 14:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.7			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/25/15 12:20 • (LCSD) 04/25/15 12:44

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.74	5.83	104	106	67.0-132			1.65	20
(S) a,a,a-Trifluorotoluene(FID)				104	105	62.0-128				



Method Blank (MB)

(MB) 04/25/15 17:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) 04/25/15 17:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00200
(S) Toluene-d8	105			88.5-111
(S) Dibromofluoromethane	101			78.3-121
(S) 4-Bromofluorobenzene	105			71.0-126

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/25/15 15:57 • (LCSD) 04/25/15 16:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.104	0.103	83.0	82.2	35.6-163			0.930	23.9
Benzene	0.0250	0.0253	0.0233	101	93.0	74.8-121			8.30	20
Bromodichloromethane	0.0250	0.0244	0.0221	97.8	88.4	75.1-116			10.0	20
Bromoform	0.0250	0.0237	0.0225	94.9	90.0	67.5-130			5.31	20
Bromomethane	0.0250	0.0245	0.0232	97.9	92.9	49.9-162			5.30	20
n-Butylbenzene	0.0250	0.0224	0.0214	89.7	85.6	76.2-126			4.67	20
sec-Butylbenzene	0.0250	0.0234	0.0228	93.7	91.3	74.4-127			2.55	20
Carbon disulfide	0.0250	0.0253	0.0231	101	92.3	64.6-140			9.09	20
Carbon tetrachloride	0.0250	0.0262	0.0246	105	98.3	70.2-123			6.48	20
Chlorobenzene	0.0250	0.0240	0.0227	95.9	91.0	78.1-119			5.27	20
Chlorodibromomethane	0.0250	0.0244	0.0225	97.6	90.2	74.0-121			7.84	20
Chloroethane	0.0250	0.0246	0.0223	98.4	89.2	61.7-135			9.81	20
Chloroform	0.0250	0.0260	0.0241	104	96.3	76.0-121			7.60	20
Chloromethane	0.0250	0.0234	0.0219	93.5	87.7	61.5-129			6.37	20
1,2-Dibromoethane	0.0250	0.0236	0.0213	94.2	85.3	76.6-121			9.91	20
1,1-Dichloroethane	0.0250	0.0260	0.0241	104	96.6	70.7-126			7.27	20
1,2-Dichloroethane	0.0250	0.0260	0.0232	104	92.7	68.8-124			11.6	20
1,1-Dichloroethene	0.0250	0.0267	0.0247	107	98.9	67.8-129			7.56	20
cis-1,2-Dichloroethene	0.0250	0.0254	0.0231	102	92.3	76.0-119			9.67	20
trans-1,2-Dichloroethene	0.0250	0.0250	0.0233	99.9	93.3	72.6-121			6.89	20
1,2-Dichloropropane	0.0250	0.0259	0.0234	104	93.5	76.5-119			10.3	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/25/15 15:57 • (LCSD) 04/25/15 16:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	0.0250	0.0243	0.0220	97.0	87.8	78.2-120			9.94	20
trans-1,3-Dichloropropene	0.0250	0.0245	0.0228	98.2	91.2	74.3-123			7.34	20
Ethylbenzene	0.0250	0.0241	0.0228	96.2	91.3	78.8-122			5.22	20
2-Hexanone	0.125	0.117	0.108	93.7	86.7	65.6-144			7.75	20
Isopropylbenzene	0.0250	0.0233	0.0224	93.1	89.5	78.6-132			3.88	20
p-Isopropyltoluene	0.0250	0.0239	0.0233	95.6	93.1	74.0-131			2.61	20
2-Butanone (MEK)	0.125	0.119	0.114	95.0	91.3	55.0-149			3.92	20
Methylene Chloride	0.0250	0.0257	0.0241	103	96.5	70.3-120			6.45	20
4-Methyl-2-pentanone (MIBK)	0.125	0.119	0.107	95.3	85.8	70.5-133			10.4	20
Methyl tert-butyl ether	0.0250	0.0258	0.0235	103	93.9	71.2-126			9.40	20
Naphthalene	0.0250	0.0211	0.0194	84.5	77.6	68.4-128			8.47	20
n-Propylbenzene	0.0250	0.0236	0.0226	94.5	90.5	78.2-122			4.37	20
Styrene	0.0250	0.0244	0.0231	97.6	92.5	80.4-126			5.35	20
1,1,1,2-Tetrachloroethane	0.0250	0.0226	0.0205	90.5	82.2	74.2-124			9.62	20
1,1,2,2-Tetrachloroethane	0.0250	0.0248	0.0236	99.1	94.6	70.7-122			4.64	20
Tetrachloroethene	0.0250	0.0244	0.0225	97.7	90.1	72.6-126			8.18	20
Toluene	0.0250	0.0246	0.0224	98.6	89.7	79.7-116			9.45	20
1,1,1-Trichloroethane	0.0250	0.0267	0.0244	107	97.7	73.2-123			8.69	20
1,1,2-Trichloroethane	0.0250	0.0234	0.0214	93.6	85.6	77.7-118			8.93	20
Trichloroethene	0.0250	0.0253	0.0231	101	92.4	77.7-118			8.94	20
1,2,4-Trimethylbenzene	0.0250	0.0232	0.0222	92.6	88.6	75.0-123			4.45	20
1,3,5-Trimethylbenzene	0.0250	0.0240	0.0234	96.0	93.6	75.6-124			2.54	20
Vinyl chloride	0.0250	0.0245	0.0227	98.0	90.9	65.9-128			7.57	20
Xylenes, Total	0.0750	0.0713	0.0671	95.0	89.4	78.7-121			6.07	20
o-Xylene	0.0250	0.0238	0.0226	95.3	90.5	77.6-122			5.20	20
m&p-Xylenes	0.0500	0.0474	0.0444	94.9	88.9	78.8-121			6.50	20
(S) Toluene-d8				105	104	88.5-111				
(S) Dibromofluoromethane				102	101	78.3-121				
(S) 4-Bromofluorobenzene				103	107	71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L760039-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/25/15 21:16 • (MS) 04/25/15 20:16 • (MSD) 04/25/15 20:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0176	0.130	0.131	90.3	90.8	1	10.0-130			0.470	27.9
Benzene	0.0250	0.0248	0.0471	0.0482	89.0	93.5	1	54.3-133			2.40	20
Bromodichloromethane	0.0250	ND	0.0243	0.0251	97.3	100	1	63.9-121			3.08	20

L760039-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/25/15 21:16 • (MS) 04/25/15 20:16 • (MSD) 04/25/15 20:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromoform	0.0250	ND	0.0255	0.0253	102	101	1	59.5-134			0.910	20.5
Bromomethane	0.0250	ND	0.0227	0.0239	90.7	95.4	1	41.7-155			5.03	21.9
n-Butylbenzene	0.0250	ND	0.0225	0.0233	89.8	93.2	1	62.7-140			3.69	20.3
sec-Butylbenzene	0.0250	0.000636	0.0242	0.0246	94.3	95.7	1	62.2-136			1.41	20.3
Carbon disulfide	0.0250	ND	0.0247	0.0252	98.7	101	1	43.3-149			2.21	20.3
Carbon tetrachloride	0.0250	ND	0.0265	0.0274	106	110	1	55.7-134			3.46	20
Chlorobenzene	0.0250	ND	0.0243	0.0244	97.0	97.7	1	67.0-125			0.740	20
Chlorodibromomethane	0.0250	ND	0.0253	0.0259	101	103	1	64.3-125			2.37	20.8
Chloroethane	0.0250	ND	0.0237	0.0254	94.8	102	1	51.5-136			6.97	40
Chloroform	0.0250	0.000314	0.0265	0.0269	105	106	1	63.0-129			1.26	20
Chloromethane	0.0250	ND	0.0229	0.0239	91.7	95.8	1	42.4-135			4.35	20
1,2-Dibromoethane	0.0250	ND	0.0245	0.0243	97.9	97.0	1	67.1-125			0.870	20
1,1-Dichloroethane	0.0250	ND	0.0262	0.0270	105	108	1	58.5-132			2.88	20
1,2-Dichloroethane	0.0250	ND	0.0268	0.0274	107	110	1	60.0-126			2.34	20
1,1-Dichloroethene	0.0250	ND	0.0268	0.0272	107	109	1	51.1-140			1.73	20.2
cis-1,2-Dichloroethene	0.0250	ND	0.0254	0.0255	102	102	1	59.2-129			0.350	20
trans-1,2-Dichloroethene	0.0250	ND	0.0246	0.0251	98.5	100	1	56.5-129			1.99	20
1,2-Dichloropropane	0.0250	ND	0.0252	0.0266	101	106	1	64.2-123			5.36	20
cis-1,3-Dichloropropene	0.0250	ND	0.0242	0.0249	96.8	99.5	1	66.4-125			2.78	20
trans-1,3-Dichloropropene	0.0250	ND	0.0248	0.0258	99.2	103	1	64.1-128			4.12	20
Ethylbenzene	0.0250	ND	0.0243	0.0242	97.3	97.0	1	61.4-133			0.360	20
2-Hexanone	0.125	0.00153	0.128	0.131	101	104	1	43.3-137			2.47	25.5
Isopropylbenzene	0.0250	ND	0.0234	0.0238	93.6	95.4	1	66.8-141			1.90	20
p-Isopropyltoluene	0.0250	0.000951	0.0245	0.0249	94.0	95.9	1	63.2-139			1.88	20.4
2-Butanone (MEK)	0.125	0.00114	0.134	0.135	106	107	1	22.4-138			0.870	27
Methylene Chloride	0.0250	0.00102	0.0272	0.0281	105	108	1	58.1-122			3.21	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.126	0.130	101	104	1	60.8-140			3.09	25.1
Methyl tert-butyl ether	0.0250	0.00648	0.0338	0.0344	109	112	1	57.7-134			1.71	20
Naphthalene	0.0250	0.0233	0.0460	0.0477	90.8	97.4	1	58.0-135			3.49	25.5
n-Propylbenzene	0.0250	ND	0.0235	0.0239	93.8	95.5	1	65.9-131			1.79	20
Styrene	0.0250	ND	0.00737	0.00589	29.5	23.6	1	66.8-133	J6	J3 J6	22.3	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0228	0.0232	91.3	92.9	1	64.0-128			1.74	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0275	0.0282	110	113	1	56.0-132			2.58	22.2
Tetrachloroethene	0.0250	ND	0.0238	0.0242	95.4	96.7	1	53.0-139			1.33	20
Toluene	0.0250	ND	0.0240	0.0248	95.9	99.3	1	61.4-130			3.49	20
1,1,1-Trichloroethane	0.0250	ND	0.0265	0.0268	106	107	1	58.7-134			1.10	20
1,1,2-Trichloroethane	0.0250	ND	0.0249	0.0252	99.5	101	1	66.3-125			1.10	20
Trichloroethene	0.0250	ND	0.0240	0.0250	96.0	100	1	44.1-149			4.15	20
1,2,4-Trimethylbenzene	0.0250	0.0658	0.0838	0.0859	72.1	80.6	1	57.4-137			2.51	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



L760039-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/25/15 21:16 • (MS) 04/25/15 20:16 • (MSD) 04/25/15 20:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,3,5-Trimethylbenzene	0.0250	0.00168	0.0255	0.0260	95.3	97.5	1	63.6-132			2.14	20.5
Vinyl chloride	0.0250	ND	0.0237	0.0240	94.6	96.1	1	47.8-137			1.58	20
Xylenes, Total	0.0750	0.00275	0.0734	0.0750	94.2	96.4	1	63.3-131			2.24	20
o-Xylene	0.0250	0.000869	0.0247	0.0252	95.4	97.4	1	63.3-130			2.05	20
m&p-Xylenes	0.0500	0.00188	0.0487	0.0498	93.6	95.9	1	61.7-133			2.33	20
(S) Toluene-d8					104	104		88.5-111				
(S) Dibromofluoromethane					105	103		78.3-121				
(S) 4-Bromofluorobenzene					105	105		71.0-126				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) 04/29/15 17:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) 04/29/15 17:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00200
(S) Toluene-d8	98.7			88.5-111
(S) Dibromofluoromethane	91.0			78.3-121
(S) 4-Bromofluorobenzene	97.6			71.0-126

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/29/15 16:13 • (LCSD) 04/29/15 16:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.144	0.121	115	96.8	35.6-163			17.4	23.9
Benzene	0.0250	0.0225	0.0195	89.9	78.0	74.8-121			14.1	20
Bromodichloromethane	0.0250	0.0250	0.0213	99.9	85.4	75.1-116			15.7	20
Bromoform	0.0250	0.0286	0.0246	115	98.3	67.5-130			15.2	20
Bromomethane	0.0250	0.0251	0.0213	100	85.0	49.9-162			16.4	20
n-Butylbenzene	0.0250	0.0251	0.0214	100	85.7	76.2-126			15.9	20
sec-Butylbenzene	0.0250	0.0244	0.0215	97.6	85.8	74.4-127			12.8	20
Carbon disulfide	0.0250	0.0248	0.0210	99.0	84.1	64.6-140			16.3	20
Carbon tetrachloride	0.0250	0.0252	0.0222	101	89.0	70.2-123			12.5	20
Chlorobenzene	0.0250	0.0257	0.0220	103	88.1	78.1-119			15.4	20
Chlorodibromomethane	0.0250	0.0269	0.0239	107	95.8	74.0-121			11.4	20
Chloroethane	0.0250	0.0231	0.0198	92.3	79.2	61.7-135			15.3	20
Chloroform	0.0250	0.0227	0.0189	90.8	75.8	76.0-121		J4	18.0	20
Chloromethane	0.0250	0.0196	0.0171	78.3	68.2	61.5-129			13.7	20
1,2-Dibromoethane	0.0250	0.0251	0.0216	100	86.2	76.6-121			15.1	20
1,1-Dichloroethane	0.0250	0.0234	0.0197	93.5	78.8	70.7-126			17.0	20
1,2-Dichloroethane	0.0250	0.0238	0.0204	95.2	81.7	68.8-124			15.3	20
1,1-Dichloroethene	0.0250	0.0247	0.0209	98.9	83.7	67.8-129			16.7	20
cis-1,2-Dichloroethene	0.0250	0.0231	0.0197	92.5	78.8	76.0-119			16.1	20
trans-1,2-Dichloroethene	0.0250	0.0236	0.0202	94.6	80.7	72.6-121			15.8	20
1,2-Dichloropropane	0.0250	0.0243	0.0210	97.3	83.9	76.5-119			14.8	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/29/15 16:13 • (LCSD) 04/29/15 16:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	0.0250	0.0250	0.0216	99.9	86.6	78.2-120			14.3	20
trans-1,3-Dichloropropene	0.0250	0.0239	0.0214	95.6	85.6	74.3-123			11.1	20
Ethylbenzene	0.0250	0.0258	0.0218	103	87.4	78.8-122			16.8	20
2-Hexanone	0.125	0.138	0.116	110	92.8	65.6-144			17.3	20
Isopropylbenzene	0.0250	0.0253	0.0218	101	87.2	78.6-132			14.7	20
p-Isopropyltoluene	0.0250	0.0255	0.0219	102	87.8	74.0-131			15.0	20
2-Butanone (MEK)	0.125	0.136	0.118	109	94.5	55.0-149			13.9	20
Methylene Chloride	0.0250	0.0222	0.0193	88.9	77.1	70.3-120			14.3	20
4-Methyl-2-pentanone (MIBK)	0.125	0.126	0.111	101	88.8	70.5-133			12.8	20
Methyl tert-butyl ether	0.0250	0.0224	0.0199	89.4	79.5	71.2-126			11.8	20
Naphthalene	0.0250	0.0224	0.0196	89.7	78.5	68.4-128			13.3	20
n-Propylbenzene	0.0250	0.0249	0.0214	99.8	85.7	78.2-122			15.2	20
Styrene	0.0250	0.0215	0.0199	86.0	79.5	80.4-126		J4	7.92	20
1,1,1,2-Tetrachloroethane	0.0250	0.0273	0.0238	109	95.2	74.2-124			13.7	20
1,1,2,2-Tetrachloroethane	0.0250	0.0240	0.0212	96.2	84.8	70.7-122			12.6	20
Tetrachloroethene	0.0250	0.0276	0.0239	111	95.7	72.6-126			14.4	20
Toluene	0.0250	0.0249	0.0203	99.5	81.2	79.7-116		J3	20.3	20
1,1,1-Trichloroethane	0.0250	0.0247	0.0213	98.6	85.4	73.2-123			14.4	20
1,1,2-Trichloroethane	0.0250	0.0245	0.0219	98.0	87.4	77.7-118			11.4	20
Trichloroethene	0.0250	0.0244	0.0211	97.4	84.5	77.7-118			14.2	20
1,2,4-Trimethylbenzene	0.0250	0.0246	0.0209	98.5	83.4	75.0-123			16.6	20
1,3,5-Trimethylbenzene	0.0250	0.0245	0.0209	97.8	83.4	75.6-124			15.9	20
Vinyl chloride	0.0250	0.0221	0.0190	88.5	76.1	65.9-128			15.1	20
Xylenes, Total	0.0750	0.0758	0.0656	101	87.4	78.7-121			14.6	20
o-Xylene	0.0250	0.0251	0.0216	101	86.2	77.6-122			15.4	20
m&p-Xylenes	0.0500	0.0507	0.0440	101	88.0	78.8-121			14.2	20
(S) Toluene-d8				98.2	97.9	88.5-111				
(S) Dibromofluoromethane				93.5	93.0	78.3-121				
(S) 4-Bromofluorobenzene				97.8	96.4	71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/22/15 17:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	103			50.0-150

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 17:29 • (LCSD) 04/22/15 17:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	1.50	1.56	1.58	104	105	50.0-150			1.12	20
(S) o-Terphenyl				104	104	50.0-150				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

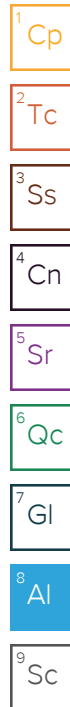
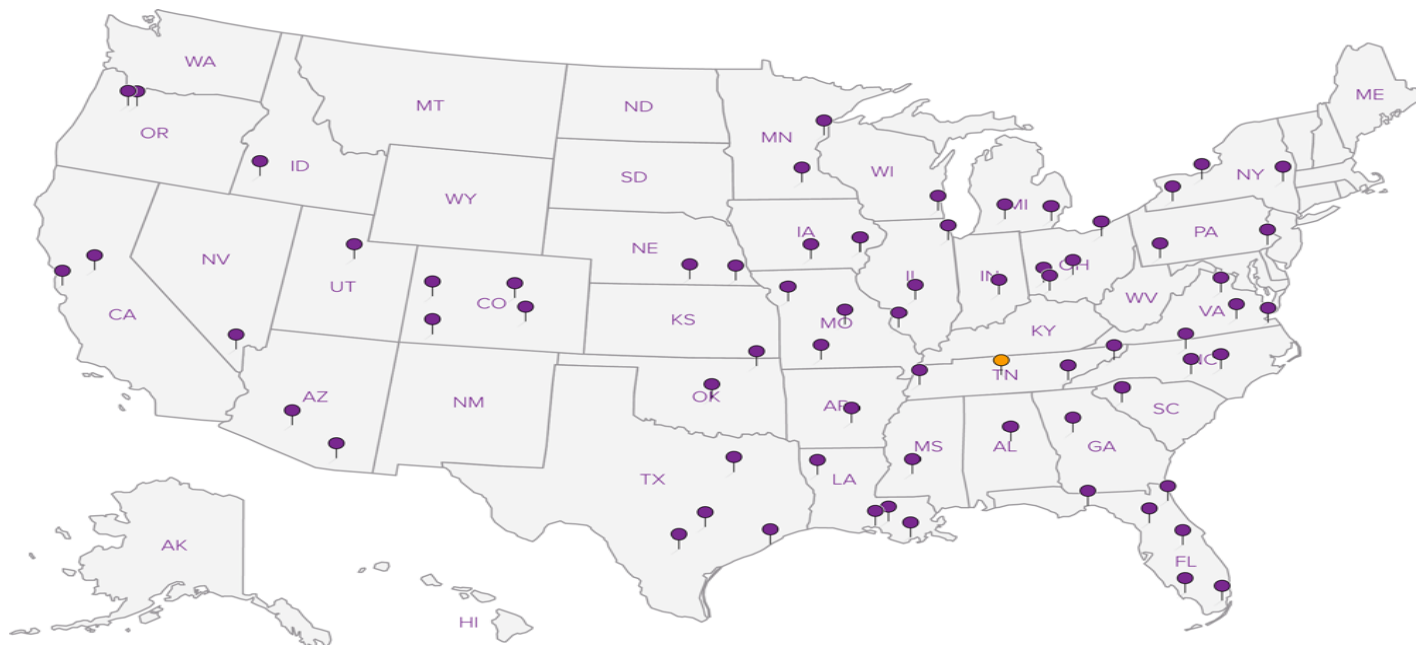
¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA–Crypto	TN00003	USDA	S-67674

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



ARCADIS, Inc. 2929 Briarpark Drive, Suite 300 Houston, TX 77042				Billing Information: 				Analysis / Container / Preservative DRO 8015 GRO 8015 Volatiles 8260 (Extended List) Total Metals: As, Ba, Cr, Fe, Pb, Mn, Se Total Metals: As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V, Hg Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Se Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V Cyanide Anions: Chloride, Fluoride, Sulfate Cations: Ca, K, Na (from Total Metals container) NO2 / NO3 TDS												Chain of Custody Page 15 of 20 L.A.B S.C.I.E.N.C.E.S YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 L# L760671 Ta D171 Acctnum: ARCADHTX Template: T101410 Prelogin: TSR: Pam Langford PB: 3-31-15 mo Shipped Via:					
Report to: Pam Krueger Email To: pam.krueger@arcadis-us.com; maisha.turner@arcadis-us.com; melissa.osborne@arcadis-us.com				City/State Artesia, NM Collected:																					
Project Navajo Refining Company Phone: 713-953-4816 Fax: 713-977-4620				EP TX000836.0007.15004 ✓ Lab Project # ARCADHTX-NAVAJO FULL																					
Collected by (print): Scott Duncan + HMI				Site/Facility ID #				P.O. #																	
Collected by (signature): Scott Ude				Rush? (Lab MUST Be Notified) Next Day 100% Two Day 50% Three Day 25%				Date Results Needed																	
Immediately Iced? N ___ Y ☒								Email? ___ No ___ Yes FAX? ___ No ___ Yes				No. of Cntr													
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntr	DRO 8015	GRO 8015	Volatiles 8260 (Extended List)	Total Metals: As, Ba, Cr, Fe, Pb, Mn, Se	Total Metals: As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V, Hg	Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Se	Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V	Cyanide	Anions: Chloride, Fluoride, Sulfate	Cations: Ca, K, Na (from Total Metals container)	NO2 / NO3	TDS	Remarks/Comments	Sample # (lab only)					
~~MW-76~~	~~6~~	~~GW~~					✓	✓	✓	✓		✓			✓	✓	✓	✓	✓	SV					
~~MW-77~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	✓	SV					
~~MW-78~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	✓	SV					
~~MW-75~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	✓	SV					
~~MW-83~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	✓	SV					
~~MW-3~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	✓	SV					
MW-88				4/15/15	955	10	✓	✓	✓	✓		✓			✓	✓	✓	✓	✓		-01				
MW-22A					1240	12	✓	✓	✓	✓		✓			✓	✓	✓	✓	✓		-02				
MW-22B					1350	12	✓	✓	✓	✓		✓			✓	✓	✓	✓	✓		-03				
MW-10	✓	✓		✓	1050	12	✓	✓	✓	✓		✓			✓	✓	✓	✓	✓		-04				

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold #

Relinquished by : (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

Condition:

(lab use only)

Relinquished by : (Signature)

Date:

Time:

Received by: (Signature)

Temp: 2.3°C

COC Seal Intact: ☒ Y ☐ N ☐ NA

Relinquished by : (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

pH Checked: <2

NCF: X

Jason Romer

ESC Lab Sciences
Non-Conformance Form

Login #: L760071	Client: ARCADHTX	Date: 4/17/15	Evaluated by: Nikki Sloan

Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	If Broken Container:
Parameter(s) past holding time	Login Clarification Needed	
Improper temperature	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
Improper preservation	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
		X
Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.	Trip Blank not received.	
Broken container	Client did not "X" analysis.	If no Chain of Custody:
	Chain of Custody is missing	Received by:
X Broken container:		Date/Time:
		Temp./Cont. Rec./pH:
Sufficient sample remains		Carrier:
		Tracking#

Login Comments:

Received two broken HCl vials for MW-88. We have sufficient sample to still complete all analyses.

Client informed by:	Call	Email	Voice Mail	Date:	Time:
TSR Initials:	Client Contact:				

Login Instructions:

This E-mail and any attached files are confidential, and may be copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. If you have received this message in error, please contact the sender immediately and delete/destroy all information received.

ARCADIS US - TX

Sample Delivery Group: L760074
Samples Received: 04/17/2015
Project Number: TX000836.0007.15004
Description: Navajo Refining Company - Artesia, NM
Site: EP
Report To: Pam Krueger
2929 Briarpark Dr., Suite 300
Houston, TX 77042

Entire Report Reviewed By:



Pam Langford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹Cp: Cover Page	1
²Tc: Table of Contents	2
³Ss: Sample Summary	3
⁴Cn: Case Narrative	8
⁵Sr: Sample Results	9
MW-1R L760074-01	9
MW-15 L760074-02	11
OCD-1R L760074-03	13
OCD-2A L760074-04	15
OCD-3 L760074-05	17
OCD-4 L760074-06	19
MW-11A L760074-07	21
MW-11B L760074-08	23
OCD-5 L760074-09	25
MW-123 L760074-10	27
MW-4B L760074-11	29
DUP-EP-02 L760074-12	31
MW-6A L760074-13	33
MW-6B L760074-14	35
MW-120 L760074-15	37
MW-121 L760074-16	39
MW-122 L760074-17	41
MW-2A L760074-18	43
OCD-7AR L760074-19	45
TRIP BLANK-EP-01 L760074-20	47
⁶Qc: Quality Control Summary	48
Gravimetric Analysis by Method 2540 C-2011	48
Wet Chemistry by Method 353.2	51
Wet Chemistry by Method 9056MOD	53
Metals (ICPMS) by Method 6020	57
Volatile Organic Compounds (GC) by Method 8015D/GRO	61
Volatile Organic Compounds (GC/MS) by Method 8260B	63
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	74
⁷Gl: Glossary of Terms	75
⁸Al: Accreditations & Locations	76
⁹Sc: Chain of Custody	77



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-1R L760074-01 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 16:10	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:33	MF
Metals (ICPMS) by Method 6020	WG783152	5	04/20/15 13:14	04/24/15 01:36	LAT
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 17:11	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 03:05	JNS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783000	1	04/23/15 16:59	04/23/15 16:59	JHH
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:44	04/28/15 01:44	JAL
Wet Chemistry by Method 9056MOD	WG783895	1	04/23/15 01:12	04/23/15 01:12	NJM
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 11:53	04/23/15 11:53	NJM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

MW-15 L760074-02 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 15:10	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:27	MF
Metals (ICPMS) by Method 6020	WG783152	5	04/20/15 13:14	04/24/15 01:46	LAT
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 17:13	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 03:24	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	5	04/25/15 23:42	04/25/15 23:42	HJF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783000	1	04/23/15 17:20	04/23/15 17:20	JHH
Wet Chemistry by Method 353.2	WG785017	5	04/28/15 02:09	04/28/15 02:09	JAL
Wet Chemistry by Method 9056MOD	WG783895	1	04/23/15 08:31	04/23/15 08:31	NJM
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 01:26	04/23/15 01:26	NJM

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

OCD-1R L760074-03 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 08:55	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:38	MF
Metals (ICPMS) by Method 6020	WG783152	10	04/20/15 13:14	04/24/15 01:48	LAT
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 17:15	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 03:43	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	1	04/26/15 00:36	04/26/15 00:36	HJF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 15:48	04/23/15 15:48	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:46	04/28/15 01:46	JAL
Wet Chemistry by Method 9056MOD	WG783895	1	04/23/15 08:46	04/23/15 08:46	NJM
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 01:40	04/23/15 01:40	NJM

OCD-2A L760074-04 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 09:45	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:31	MF
Metals (ICPMS) by Method 6020	WG783152	5	04/20/15 13:14	04/24/15 01:51	LAT
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 17:18	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 04:01	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	1	04/26/15 01:01	04/26/15 01:01	HJF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG785640	1	04/29/15 20:50	04/29/15 20:50	JAH
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:47	04/28/15 01:47	JAL
Wet Chemistry by Method 9056MOD	WG783895	1	04/23/15 09:00	04/23/15 09:00	NJM
Wet Chemistry by Method 9056MOD	WG783895	100	04/23/15 01:55	04/23/15 01:55	NJM



OCD-3 L760074-05 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 10:35	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:29	MF
Metals (ICPMS) by Method 6020	WG783152	5	04/20/15 13:14	04/24/15 01:59	LAT
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 18:32	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 04:20	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	1	04/26/15 01:26	04/26/15 01:26	HJF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 17:06	04/23/15 17:06	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:52	04/28/15 01:52	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/22/15 21:35	04/22/15 21:35	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 12:21	04/23/15 12:21	NJM

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc

OCD-4 L760074-06 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 11:30	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:36	MF
Metals (ICPMS) by Method 6020	WG783152	10	04/20/15 13:14	04/24/15 02:01	LAT
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 18:34	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 04:39	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	1	04/26/15 01:51	04/26/15 01:51	HJF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 17:26	04/23/15 17:26	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:53	04/28/15 01:53	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/22/15 22:05	04/22/15 22:05	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 12:50	04/23/15 12:50	NJM

⁷ Gl⁸ Al⁹ Sc

MW-11A L760074-07 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 12:20	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG784225	1	04/23/15 16:17	04/23/15 16:19	MF
Metals (ICPMS) by Method 6020	WG783152	20	04/20/15 13:14	04/24/15 02:04	LAT
Metals (ICPMS) by Method 6020	WG783437	10	04/21/15 20:13	04/23/15 18:37	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 07:14	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	1	04/26/15 02:16	04/26/15 02:16	HJF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 17:45	04/23/15 17:45	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:55	04/28/15 01:55	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/22/15 22:20	04/22/15 22:20	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 13:05	04/23/15 13:05	NJM
Wet Chemistry by Method 9056MOD	WG783898	1000	04/23/15 17:34	04/23/15 17:34	NJM

MW-11B L760074-08 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 13:10	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:31	MF
Metals (ICPMS) by Method 6020	WG783152	10	04/20/15 13:14	04/24/15 02:07	LAT
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 18:39	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 15:26	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783017	1	04/26/15 02:41	04/26/15 02:41	HJF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 18:05	04/23/15 18:05	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:57	04/28/15 01:57	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/22/15 22:35	04/22/15 22:35	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 13:20	04/23/15 13:20	NJM



OCD-5 L760074-09 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 14:05	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:29	MF
Metals (ICPMS) by Method 6020	WG783152	10	04/20/15 13:14	04/24/15 02:09	LAT
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 18:41	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 15:45	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 18:07	04/24/15 18:07	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 18:24	04/23/15 18:24	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:58	04/28/15 01:58	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/22/15 22:50	04/22/15 22:50	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 13:35	04/23/15 13:35	NJM

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

MW-123 L760074-10 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 11:45	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783398	1	04/21/15 14:20	04/23/15 09:37	MF
Metals (ICPMS) by Method 6020	WG783152	5	04/20/15 13:14	04/24/15 02:12	LAT
Metals (ICPMS) by Method 6020	WG783437	5	04/21/15 20:13	04/23/15 18:43	VSS
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 16:04	BJF
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 17:46	04/24/15 17:46	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 18:44	04/23/15 18:44	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 01:59	04/28/15 01:59	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/22/15 23:04	04/22/15 23:04	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 13:50	04/23/15 13:50	NJM

MW-4B L760074-11 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 14:45	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG784225	1	04/23/15 16:17	04/24/15 17:12	MF
Metals (ICPMS) by Method 6020	WG783152	2	04/20/15 13:14	04/24/15 02:14	LAT
Metals (ICPMS) by Method 6020	WG783439	1	04/29/15 09:10	04/30/15 01:36	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 16:23	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 18:28	04/24/15 18:28	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 19:04	04/23/15 19:04	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 02:01	04/28/15 02:01	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/22/15 23:19	04/22/15 23:19	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 14:05	04/23/15 14:05	NJM

DUP-EP-02 L760074-12 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 11:00	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783399	1	04/21/15 14:20	04/23/15 10:34	JG
Metals (ICPMS) by Method 6020	WG783152	5	04/20/15 13:14	04/24/15 02:17	LAT
Metals (ICPMS) by Method 6020	WG783439	1	04/29/15 09:10	04/30/15 01:52	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 16:43	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 18:49	04/24/15 18:49	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 19:23	04/23/15 19:23	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 02:02	04/28/15 02:02	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/22/15 23:34	04/22/15 23:34	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 14:20	04/23/15 14:20	NJM

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-6A L760074-13 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 10:55	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783399	1	04/21/15 14:20	04/23/15 10:34	JG
Metals (ICPMS) by Method 6020	WG783152	5	04/20/15 13:14	04/24/15 02:19	LAT
Metals (ICPMS) by Method 6020	WG783439	1	04/29/15 09:10	04/30/15 01:54	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 17:02	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 19:10	04/24/15 19:10	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 19:43	04/23/15 19:43	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 02:03	04/28/15 02:03	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/22/15 23:49	04/22/15 23:49	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 14:35	04/23/15 14:35	NJM

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

MW-6B L760074-14 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 10:05	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783399	1	04/21/15 14:20	04/23/15 10:31	JG
Metals (ICPMS) by Method 6020	WG783152	2	04/20/15 13:14	04/24/15 02:22	LAT
Metals (ICPMS) by Method 6020	WG783439	1	04/29/15 09:10	04/30/15 01:57	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 17:21	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 19:31	04/24/15 19:31	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 20:02	04/23/15 20:02	BMB
Wet Chemistry by Method 353.2	WG785017	1	04/28/15 02:04	04/28/15 02:04	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/23/15 00:04	04/23/15 00:04	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 14:50	04/23/15 14:50	NJM

⁷ Gl

⁸ Al

⁹ Sc

MW-120 L760074-15 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 11:55	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783399	1	04/21/15 14:20	04/23/15 10:32	JG
Metals (ICPMS) by Method 6020	WG783152	5	04/20/15 13:14	04/24/15 02:30	LAT
Metals (ICPMS) by Method 6020	WG783439	1	04/29/15 09:10	04/30/15 02:00	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 17:41	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 19:52	04/24/15 19:52	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 20:22	04/23/15 20:22	BMB
Wet Chemistry by Method 353.2	WG785019	1	04/30/15 12:50	04/30/15 12:50	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/23/15 01:19	04/23/15 01:19	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 16:04	04/23/15 16:04	NJM

MW-121 L760074-16 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 12:55	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783399	1	04/21/15 14:20	04/23/15 10:39	JG
Metals (ICPMS) by Method 6020	WG783152	2	04/20/15 13:14	04/24/15 02:32	LAT
Metals (ICPMS) by Method 6020	WG783439	1	04/29/15 09:10	04/30/15 02:02	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 18:00	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 20:13	04/24/15 20:13	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 20:41	04/23/15 20:41	BMB
Wet Chemistry by Method 353.2	WG785019	1	04/30/15 12:53	04/30/15 12:53	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/23/15 01:34	04/23/15 01:34	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 16:19	04/23/15 16:19	NJM



MW-122 L760074-17 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 14:35	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783399	1	04/21/15 14:20	04/23/15 10:32	JG
Metals (ICPMS) by Method 6020	WG783152	10	04/20/15 13:14	04/24/15 02:35	LAT
Metals (ICPMS) by Method 6020	WG783439	1	04/29/15 09:10	04/30/15 02:05	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 18:20	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 20:34	04/24/15 20:34	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 21:01	04/23/15 21:01	BMB
Wet Chemistry by Method 353.2	WG785019	1	04/30/15 12:56	04/30/15 12:56	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/23/15 01:49	04/23/15 01:49	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 16:34	04/23/15 16:34	NJM

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc

MW-2A L760074-18 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 15:55	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783399	1	04/21/15 14:20	04/23/15 10:32	JG
Metals (ICPMS) by Method 6020	WG783152	10	04/20/15 13:14	04/24/15 02:38	LAT
Metals (ICPMS) by Method 6020	WG783439	1	04/29/15 09:10	04/30/15 02:08	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 18:40	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 20:55	04/24/15 20:55	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 21:20	04/23/15 21:20	BMB
Wet Chemistry by Method 353.2	WG785019	1	04/30/15 12:57	04/30/15 12:57	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/23/15 02:03	04/23/15 02:03	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 16:49	04/23/15 16:49	NJM

7
Gl8
Al9
Sc

OCD-7AR L760074-19 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 17:25	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Gravimetric Analysis by Method 2540 C-2011	WG783399	1	04/21/15 14:20	04/23/15 10:35	JG
Metals (ICPMS) by Method 6020	WG783152	5	04/20/15 13:14	04/24/15 02:40	LAT
Metals (ICPMS) by Method 6020	WG783439	1	04/29/15 09:10	04/30/15 02:10	AB
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG783173	1	04/19/15 22:44	04/22/15 18:59	JNS
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG783018	1	04/24/15 22:50	04/24/15 22:50	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 21:40	04/23/15 21:40	BMB
Wet Chemistry by Method 353.2	WG785019	1	04/30/15 12:59	04/30/15 12:59	JAL
Wet Chemistry by Method 9056MOD	WG783898	1	04/23/15 02:18	04/23/15 02:18	NJM
Wet Chemistry by Method 9056MOD	WG783898	100	04/23/15 17:04	04/23/15 17:04	NJM

TRIP BLANK-EP-01 L760074-20 GW

			Collected by BH/SD/MB	Collected date/time 04/15/15 00:00	Received date/time 04/17/15 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG783003	1	04/23/15 15:29	04/23/15 15:29	BMB



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Pam Langford
Technical Service Representative

Project Narrative

L760074-11 for TDS was performed within the method specified holding time, but the recovered residue exceeded limits and reanalysis was required. Reanalysis for this sample was performed outside the prescribed holding time for the method.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	5020000		2800	10000	1	04/23/2015 09:33	WG783398

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 01:44	WG785017

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1970000		5200	100000	100	04/23/2015 11:53	WG783895
Fluoride	821		9.90	100	1	04/23/2015 01:12	WG783895
Sulfate	2400000		7700	500000	100	04/23/2015 11:53	WG783895

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	3.66	J	1.20	10.0	5	04/24/2015 01:36	WG783152
Arsenic,Dissolved	2.64	J	1.20	10.0	5	04/23/2015 17:11	WG783437
Barium	24.0	J	1.80	25.0	5	04/24/2015 01:36	WG783152
Barium,Dissolved	22.9	J	1.80	25.0	5	04/23/2015 17:11	WG783437
Calcium	765000	4 O1	230	5000	5	04/24/2015 01:36	WG783152
Chromium	U		2.70	10.0	5	04/24/2015 01:36	WG783152
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 17:11	WG783437
Iron	3490		75.0	500	5	04/24/2015 01:36	WG783152
Iron,Dissolved	2580		75.0	500	5	04/23/2015 17:11	WG783437
Lead	U		1.20	10.0	5	04/24/2015 01:36	WG783152
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 17:11	WG783437
Manganese	2140	4 O1	1.20	25.0	5	04/24/2015 01:36	WG783152
Manganese,Dissolved	2140		1.20	25.0	5	04/23/2015 17:11	WG783437
Potassium	4520	J	180	5000	5	04/24/2015 01:36	WG783152
Selenium	U		1.90	10.0	5	04/24/2015 01:36	WG783152
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 17:11	WG783437
Sodium	1080000	4 O1	550	5000	5	04/24/2015 01:36	WG783152

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 16:59	WG783000
Benzene	U		0.330	1.00	1	04/23/2015 16:59	WG783000
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 16:59	WG783000
Bromoform	U		0.470	1.00	1	04/23/2015 16:59	WG783000
Bromomethane	U		0.870	5.00	1	04/23/2015 16:59	WG783000
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 16:59	WG783000
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 16:59	WG783000
Carbon disulfide	U		0.280	1.00	1	04/23/2015 16:59	WG783000
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 16:59	WG783000
Chlorobenzene	U		0.350	1.00	1	04/23/2015 16:59	WG783000
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 16:59	WG783000
Chloroethane	U		0.450	5.00	1	04/23/2015 16:59	WG783000
Chloroform	U		0.320	5.00	1	04/23/2015 16:59	WG783000
Chloromethane	U		0.280	2.50	1	04/23/2015 16:59	WG783000
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 16:59	WG783000
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 16:59	WG783000



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 16:59	WG783000
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 16:59	WG783000
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 16:59	WG783000
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 16:59	WG783000
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 16:59	WG783000
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 16:59	WG783000
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 16:59	WG783000
Ethylbenzene	U		0.380	1.00	1	04/23/2015 16:59	WG783000
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 16:59	WG783000
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 16:59	WG783000
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 16:59	WG783000
2-Hexanone	U		3.80	10.0	1	04/23/2015 16:59	WG783000
Methylene Chloride	U		1.00	5.00	1	04/23/2015 16:59	WG783000
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 16:59	WG783000
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 16:59	WG783000
Naphthalene	U		1.00	5.00	1	04/23/2015 16:59	WG783000
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 16:59	WG783000
Styrene	U		0.310	1.00	1	04/23/2015 16:59	WG783000
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 16:59	WG783000
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 16:59	WG783000
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 16:59	WG783000
Toluene	U		0.780	5.00	1	04/23/2015 16:59	WG783000
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 16:59	WG783000
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 16:59	WG783000
Trichloroethene	U		0.400	1.00	1	04/23/2015 16:59	WG783000
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 16:59	WG783000
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 16:59	WG783000
Vinyl chloride	U		0.260	1.00	1	04/23/2015 16:59	WG783000
o-Xylene	U		0.340	1.00	1	04/23/2015 16:59	WG783000
m&p-Xylene	U		0.720	1.00	1	04/23/2015 16:59	WG783000
Xylenes, Total	U		1.10	3.00	1	04/23/2015 16:59	WG783000
(S) Toluene-d8	108			88.5-111		04/23/2015 16:59	WG783000
(S) Dibromofluoromethane	107			78.3-121		04/23/2015 16:59	WG783000
(S) 4-Bromofluorobenzene	102			71.0-126		04/23/2015 16:59	WG783000

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	124		25.0	100	1	04/22/2015 03:05	WG783173
(S) o-Terphenyl	114			50.0-150		04/22/2015 03:05	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	5470000		2800	10000	1	04/23/2015 09:27	WG783398

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	16000		98.0	500	5	04/28/2015 02:09	WG785017

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	2150000		5200	100000	100	04/23/2015 01:26	WG783895
Fluoride	2120		9.90	100	1	04/23/2015 08:31	WG783895
Sulfate	2000000		7700	500000	100	04/23/2015 01:26	WG783895

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	27.9		1.20	10.0	5	04/24/2015 01:46	WG783152
Arsenic,Dissolved	26.8		1.20	10.0	5	04/23/2015 17:13	WG783437
Barium	23.6	J	1.80	25.0	5	04/24/2015 01:46	WG783152
Barium,Dissolved	21.9	J	1.80	25.0	5	04/23/2015 17:13	WG783437
Calcium	565000		230	5000	5	04/24/2015 01:46	WG783152
Chromium	U		2.70	10.0	5	04/24/2015 01:46	WG783152
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 17:13	WG783437
Iron	U		75.0	500	5	04/24/2015 01:46	WG783152
Iron,Dissolved	76.2	J	75.0	500	5	04/23/2015 17:13	WG783437
Lead	U		1.20	10.0	5	04/24/2015 01:46	WG783152
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 17:13	WG783437
Manganese	861		1.20	25.0	5	04/24/2015 01:46	WG783152
Manganese,Dissolved	814		1.20	25.0	5	04/23/2015 17:13	WG783437
Potassium	5010		180	5000	5	04/24/2015 01:46	WG783152
Selenium	19.5		1.90	10.0	5	04/24/2015 01:46	WG783152
Selenium,Dissolved	21.1		1.90	10.0	5	04/23/2015 17:13	WG783437
Sodium	1300000		550	5000	5	04/24/2015 01:46	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		160	500	5	04/25/2015 23:42	WG783017
(S) a,a,q-Trifluorotoluene(FID) 96.8				62.0-128		04/25/2015 23:42	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 17:20	WG783000
Benzene	U		0.330	1.00	1	04/23/2015 17:20	WG783000
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 17:20	WG783000
Bromoform	U		0.470	1.00	1	04/23/2015 17:20	WG783000
Bromomethane	U		0.870	5.00	1	04/23/2015 17:20	WG783000
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 17:20	WG783000
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 17:20	WG783000
Carbon disulfide	U		0.280	1.00	1	04/23/2015 17:20	WG783000
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 17:20	WG783000



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 17:20	WG783000
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 17:20	WG783000
Chloroethane	U		0.450	5.00	1	04/23/2015 17:20	WG783000
Chloroform	U		0.320	5.00	1	04/23/2015 17:20	WG783000
Chloromethane	U		0.280	2.50	1	04/23/2015 17:20	WG783000
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 17:20	WG783000
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 17:20	WG783000
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 17:20	WG783000
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 17:20	WG783000
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 17:20	WG783000
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 17:20	WG783000
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 17:20	WG783000
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 17:20	WG783000
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 17:20	WG783000
Ethylbenzene	U		0.380	1.00	1	04/23/2015 17:20	WG783000
Isopropylbenzene	0.387	U	0.330	1.00	1	04/23/2015 17:20	WG783000
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 17:20	WG783000
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 17:20	WG783000
2-Hexanone	U		3.80	10.0	1	04/23/2015 17:20	WG783000
Methylene Chloride	U		1.00	5.00	1	04/23/2015 17:20	WG783000
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 17:20	WG783000
Methyl tert-butyl ether	0.809	U	0.370	1.00	1	04/23/2015 17:20	WG783000
Naphthalene	U		1.00	5.00	1	04/23/2015 17:20	WG783000
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 17:20	WG783000
Styrene	U		0.310	1.00	1	04/23/2015 17:20	WG783000
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 17:20	WG783000
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 17:20	WG783000
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 17:20	WG783000
Toluene	U		0.780	5.00	1	04/23/2015 17:20	WG783000
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 17:20	WG783000
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 17:20	WG783000
Trichloroethene	U		0.400	1.00	1	04/23/2015 17:20	WG783000
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 17:20	WG783000
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 17:20	WG783000
Vinyl chloride	U		0.260	1.00	1	04/23/2015 17:20	WG783000
o-Xylene	U		0.340	1.00	1	04/23/2015 17:20	WG783000
m&p-Xylene	U		0.720	1.00	1	04/23/2015 17:20	WG783000
Xylenes, Total	U		1.10	3.00	1	04/23/2015 17:20	WG783000
(S) Toluene-d8	108			88.5-111		04/23/2015 17:20	WG783000
(S) Dibromofluoromethane	109			78.3-121		04/23/2015 17:20	WG783000
(S) 4-Bromofluorobenzene	103			71.0-126		04/23/2015 17:20	WG783000

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1010		25.0	100	1	04/22/2015 03:24	WG783173
(S) o-Terphenyl	119			50.0-150		04/22/2015 03:24	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	14900000		2800	10000	1	04/23/2015 09:38	WG783398

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	1290		20.0	100	1	04/28/2015 01:46	WG785017

⁶ Qc⁷ Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	5290000		5200	100000	100	04/23/2015 01:40	WG783895
Fluoride	2500		9.90	100	1	04/23/2015 08:46	WG783895
Sulfate	4860000		7700	500000	100	04/23/2015 01:40	WG783895

⁸ Al

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	6.62	J	2.50	20.0	10	04/24/2015 01:48	WG783152
Arsenic,Dissolved	6.69	J	1.20	10.0	5	04/23/2015 17:15	WG783437
Barium	17.6	J	3.60	50.0	10	04/24/2015 01:48	WG783152
Barium,Dissolved	18.4	J	1.80	25.0	5	04/23/2015 17:15	WG783437
Calcium	837000		460	10000	10	04/24/2015 01:48	WG783152
Chromium	U		5.40	20.0	10	04/24/2015 01:48	WG783152
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 17:15	WG783437
Iron	238	J	150	1000	10	04/24/2015 01:48	WG783152
Iron,Dissolved	U		75.0	500	5	04/23/2015 17:15	WG783437
Lead	U		2.40	20.0	10	04/24/2015 01:48	WG783152
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 17:15	WG783437
Manganese	773		2.50	50.0	10	04/24/2015 01:48	WG783152
Manganese,Dissolved	690		1.20	25.0	5	04/23/2015 17:15	WG783437
Potassium	4950	J	370	10000	10	04/24/2015 01:48	WG783152
Selenium	21.7		3.80	20.0	10	04/24/2015 01:48	WG783152
Selenium,Dissolved	20.4		1.90	10.0	5	04/23/2015 17:15	WG783437
Sodium	4050000		1100	10000	10	04/24/2015 01:48	WG783152

⁹ Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/26/2015 00:36	WG783017
(S) a,a,a-Trifluorotoluene(FID) 95.1				62.0-128		04/26/2015 00:36	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 15:48	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 15:48	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 15:48	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 15:48	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 15:48	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 15:48	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 15:48	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 15:48	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 15:48	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 15:48	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 15:48	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 15:48	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 15:48	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 15:48	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 15:48	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 15:48	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 15:48	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 15:48	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 15:48	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 15:48	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 15:48	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 15:48	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 15:48	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 15:48	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 15:48	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 15:48	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 15:48	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 15:48	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 15:48	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 15:48	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 15:48	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 15:48	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 15:48	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 15:48	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 15:48	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 15:48	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 15:48	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 15:48	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 15:48	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 15:48	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 15:48	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 15:48	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 15:48	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 15:48	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 15:48	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 15:48	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 15:48	WG783003
(S) Toluene-d8	105			88.5-111		04/23/2015 15:48	WG783003
(S) Dibromofluoromethane	106			78.3-121		04/23/2015 15:48	WG783003
(S) 4-Bromofluorobenzene	105			71.0-126		04/23/2015 15:48	WG783003

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	242		25.0	100	1	04/22/2015 03:43	WG783173
(S) o-Terphenyl	115			50.0-150		04/22/2015 03:43	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	8340000		2800	10000	1	04/23/2015 09:31	WG783398

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	264		20.0	100	1	04/28/2015 01:47	WG785017

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	2960000		5200	100000	100	04/23/2015 01:55	WG783895
Fluoride	969		9.90	100	1	04/23/2015 09:00	WG783895
Sulfate	2740000		7700	500000	100	04/23/2015 01:55	WG783895

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	1.97	J	1.20	10.0	5	04/24/2015 01:51	WG783152
Arsenic,Dissolved	1.38	J	1.20	10.0	5	04/23/2015 17:18	WG783437
Barium	19.3	J	1.80	25.0	5	04/24/2015 01:51	WG783152
Barium,Dissolved	18.8	J	1.80	25.0	5	04/23/2015 17:18	WG783437
Calcium	788000		230	5000	5	04/24/2015 01:51	WG783152
Chromium	U		2.70	10.0	5	04/24/2015 01:51	WG783152
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 17:18	WG783437
Iron	965		75.0	500	5	04/24/2015 01:51	WG783152
Iron,Dissolved	U		75.0	500	5	04/23/2015 17:18	WG783437
Lead	U		1.20	10.0	5	04/24/2015 01:51	WG783152
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 17:18	WG783437
Manganese	313		1.20	25.0	5	04/24/2015 01:51	WG783152
Manganese,Dissolved	296		1.20	25.0	5	04/23/2015 17:18	WG783437
Potassium	5050		180	5000	5	04/24/2015 01:51	WG783152
Selenium	U		1.90	10.0	5	04/24/2015 01:51	WG783152
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 17:18	WG783437
Sodium	1600000		550	5000	5	04/24/2015 01:51	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/26/2015 01:01	WG783017
(S) a,a,a-Trifluorotoluene(FID) 95.6				62.0-128		04/26/2015 01:01	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/29/2015 20:50	WG785640
Benzene	U		0.330	1.00	1	04/29/2015 20:50	WG785640
Bromodichloromethane	U		0.380	1.00	1	04/29/2015 20:50	WG785640
Bromoform	U		0.470	1.00	1	04/29/2015 20:50	WG785640
Bromomethane	U		0.870	5.00	1	04/29/2015 20:50	WG785640
n-Butylbenzene	U		0.360	1.00	1	04/29/2015 20:50	WG785640
sec-Butylbenzene	U		0.360	1.00	1	04/29/2015 20:50	WG785640
Carbon disulfide	U		0.280	1.00	1	04/29/2015 20:50	WG785640
Carbon tetrachloride	U		0.380	1.00	1	04/29/2015 20:50	WG785640



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/29/2015 20:50	WG785640
Chlorodibromomethane	U		0.330	1.00	1	04/29/2015 20:50	WG785640
Chloroethane	U		0.450	5.00	1	04/29/2015 20:50	WG785640
Chloroform	U	*	0.320	5.00	1	04/29/2015 20:50	WG785640
Chloromethane	U		0.280	2.50	1	04/29/2015 20:50	WG785640
1,2-Dibromoethane	U		0.380	1.00	1	04/29/2015 20:50	WG785640
1,1-Dichloroethane	U		0.260	1.00	1	04/29/2015 20:50	WG785640
1,2-Dichloroethane	U		0.360	1.00	1	04/29/2015 20:50	WG785640
1,1-Dichloroethene	U		0.400	1.00	1	04/29/2015 20:50	WG785640
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/29/2015 20:50	WG785640
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/29/2015 20:50	WG785640
1,2-Dichloropropane	U		0.310	1.00	1	04/29/2015 20:50	WG785640
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/29/2015 20:50	WG785640
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/29/2015 20:50	WG785640
Ethylbenzene	U		0.380	1.00	1	04/29/2015 20:50	WG785640
Isopropylbenzene	U		0.330	1.00	1	04/29/2015 20:50	WG785640
p-Isopropyltoluene	U		0.350	1.00	1	04/29/2015 20:50	WG785640
2-Butanone (MEK)	U		3.90	10.0	1	04/29/2015 20:50	WG785640
2-Hexanone	U		3.80	10.0	1	04/29/2015 20:50	WG785640
Methylene Chloride	U		1.00	5.00	1	04/29/2015 20:50	WG785640
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/29/2015 20:50	WG785640
Methyl tert-butyl ether	U		0.370	1.00	1	04/29/2015 20:50	WG785640
Naphthalene	U		1.00	5.00	1	04/29/2015 20:50	WG785640
n-Propylbenzene	U		0.350	1.00	1	04/29/2015 20:50	WG785640
Styrene	U	*	0.310	1.00	1	04/29/2015 20:50	WG785640
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/29/2015 20:50	WG785640
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/29/2015 20:50	WG785640
Tetrachloroethene	U		0.370	1.00	1	04/29/2015 20:50	WG785640
Toluene	U	*	0.780	5.00	1	04/29/2015 20:50	WG785640
1,1,1-Trichloroethane	U		0.319	1.00	1	04/29/2015 20:50	WG785640
1,1,2-Trichloroethane	U		0.380	1.00	1	04/29/2015 20:50	WG785640
Trichloroethene	U		0.400	1.00	1	04/29/2015 20:50	WG785640
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/29/2015 20:50	WG785640
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/29/2015 20:50	WG785640
Vinyl chloride	U		0.260	1.00	1	04/29/2015 20:50	WG785640
o-Xylene	U		0.340	1.00	1	04/29/2015 20:50	WG785640
m&p-Xylene	U		0.720	1.00	1	04/29/2015 20:50	WG785640
Xylenes, Total	U		1.10	3.00	1	04/29/2015 20:50	WG785640
(S) Toluene-d8	98.6			88.5-111		04/29/2015 20:50	WG785640
(S) Dibromofluoromethane	94.4			78.3-121		04/29/2015 20:50	WG785640
(S) 4-Bromofluorobenzene	97.0			71.0-126		04/29/2015 20:50	WG785640

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	104		25.0	100	1	04/22/2015 04:01	WG783173
(S) o-Terphenyl	115			50.0-150		04/22/2015 04:01	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	6070000		2800	10000	1	04/23/2015 09:29	WG783398

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	87.8	J	20.0	100	1	04/28/2015 01:52	WG785017

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1610000		5200	100000	100	04/23/2015 12:21	WG783898
Fluoride	1020		9.90	100	1	04/22/2015 21:35	WG783898
Sulfate	2240000		7700	500000	100	04/23/2015 12:21	WG783898

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	4.21	J	1.20	10.0	5	04/24/2015 01:59	WG783152
Arsenic,Dissolved	U		1.20	10.0	5	04/23/2015 18:32	WG783437
Barium	19.8	J	1.80	25.0	5	04/24/2015 01:59	WG783152
Barium,Dissolved	18.0	J	1.80	25.0	5	04/23/2015 18:32	WG783437
Calcium	659000		230	5000	5	04/24/2015 01:59	WG783152
Chromium	U		2.70	10.0	5	04/24/2015 01:59	WG783152
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 18:32	WG783437
Iron	1690		75.0	500	5	04/24/2015 01:59	WG783152
Iron,Dissolved	341	J	75.0	500	5	04/23/2015 18:32	WG783437
Lead	U		1.20	10.0	5	04/24/2015 01:59	WG783152
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 18:32	WG783437
Manganese	165		1.20	25.0	5	04/24/2015 01:59	WG783152
Manganese,Dissolved	105		1.20	25.0	5	04/23/2015 18:32	WG783437
Potassium	12600		180	5000	5	04/24/2015 01:59	WG783152
Selenium	U		1.90	10.0	5	04/24/2015 01:59	WG783152
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 18:32	WG783437
Sodium	1060000		550	5000	5	04/24/2015 01:59	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/26/2015 01:26	WG783017
(S) a,a,a-Trifluorotoluene(FID) 95.4				62.0-128		04/26/2015 01:26	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 17:06	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 17:06	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 17:06	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 17:06	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 17:06	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 17:06	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 17:06	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 17:06	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 17:06	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 17:06	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 17:06	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 17:06	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 17:06	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 17:06	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 17:06	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 17:06	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 17:06	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 17:06	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 17:06	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 17:06	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 17:06	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 17:06	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 17:06	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 17:06	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 17:06	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 17:06	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 17:06	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 17:06	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 17:06	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 17:06	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 17:06	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 17:06	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 17:06	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 17:06	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 17:06	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 17:06	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 17:06	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 17:06	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 17:06	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 17:06	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 17:06	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 17:06	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 17:06	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 17:06	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 17:06	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 17:06	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 17:06	WG783003
(S) Toluene-d8	106			88.5-111		04/23/2015 17:06	WG783003
(S) Dibromofluoromethane	105			78.3-121		04/23/2015 17:06	WG783003
(S) 4-Bromofluorobenzene	103			71.0-126		04/23/2015 17:06	WG783003

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	48.4	J	25.0	100	1	04/22/2015 04:20	WG783173
(S) o-Terphenyl	115			50.0-150		04/22/2015 04:20	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	12900000		2800	10000	1	04/23/2015 09:36	WG783398

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 01:53	WG785017

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	5850000		5200	100000	100	04/23/2015 12:50	WG783898
Fluoride	506		9.90	100	1	04/22/2015 22:05	WG783898
Sulfate	4550000		7700	500000	100	04/23/2015 12:50	WG783898

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	3.51	J	2.50	20.0	10	04/24/2015 02:01	WG783152
Arsenic,Dissolved	2.46	J	1.20	10.0	5	04/23/2015 18:34	WG783437
Barium	26.3	J	3.60	50.0	10	04/24/2015 02:01	WG783152
Barium,Dissolved	22.8	J	1.80	25.0	5	04/23/2015 18:34	WG783437
Calcium	1010000		460	10000	10	04/24/2015 02:01	WG783152
Chromium	U		5.40	20.0	10	04/24/2015 02:01	WG783152
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 18:34	WG783437
Iron	4060		150	1000	10	04/24/2015 02:01	WG783152
Iron,Dissolved	1890		75.0	500	5	04/23/2015 18:34	WG783437
Lead	U		2.40	20.0	10	04/24/2015 02:01	WG783152
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 18:34	WG783437
Manganese	311		2.50	50.0	10	04/24/2015 02:01	WG783152
Manganese,Dissolved	290		1.20	25.0	5	04/23/2015 18:34	WG783437
Potassium	36500		370	10000	10	04/24/2015 02:01	WG783152
Selenium	U		3.80	20.0	10	04/24/2015 02:01	WG783152
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 18:34	WG783437
Sodium	3590000		1100	10000	10	04/24/2015 02:01	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/26/2015 01:51	WG783017
(S) a,a,a-Trifluorotoluene(FID) 95.1				62.0-128		04/26/2015 01:51	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 17:26	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 17:26	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 17:26	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 17:26	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 17:26	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 17:26	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 17:26	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 17:26	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 17:26	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 17:26	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 17:26	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 17:26	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 17:26	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 17:26	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 17:26	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 17:26	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 17:26	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 17:26	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 17:26	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 17:26	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 17:26	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 17:26	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 17:26	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 17:26	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 17:26	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 17:26	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 17:26	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 17:26	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 17:26	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 17:26	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 17:26	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 17:26	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 17:26	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 17:26	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 17:26	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 17:26	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 17:26	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 17:26	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 17:26	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 17:26	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 17:26	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 17:26	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 17:26	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 17:26	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 17:26	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 17:26	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 17:26	WG783003
(S) Toluene-d8	106			88.5-111		04/23/2015 17:26	WG783003
(S) Dibromofluoromethane	108			78.3-121		04/23/2015 17:26	WG783003
(S) 4-Bromofluorobenzene	106			71.0-126		04/23/2015 17:26	WG783003

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	46.4	J	25.0	100	1	04/22/2015 04:39	WG783173
(S) o-Terphenyl	111			50.0-150		04/22/2015 04:39	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	24900000		2800	10000	1	04/23/2015 16:19	WG784225

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	1470		20.0	100	1	04/28/2015 01:55	WG785017

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	11800000		52000	1000000	1000	04/23/2015 17:34	WG783898
Fluoride	63.9	J	9.90	100	1	04/22/2015 22:20	WG783898
Sulfate	2910000		7700	500000	100	04/23/2015 13:05	WG783898

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	U		5.00	40.0	20	04/24/2015 02:04	WG783152
Arsenic,Dissolved	U		2.50	20.0	10	04/23/2015 18:37	WG783437
Barium	41.0	J	7.20	100	20	04/24/2015 02:04	WG783152
Barium,Dissolved	33.8	J	3.60	50.0	10	04/23/2015 18:37	WG783437
Calcium	1630000		920	20000	20	04/24/2015 02:04	WG783152
Chromium	U		11.0	40.0	20	04/24/2015 02:04	WG783152
Chromium,Dissolved	U		5.40	20.0	10	04/23/2015 18:37	WG783437
Iron	U		300	2000	20	04/24/2015 02:04	WG783152
Iron,Dissolved	U		150	1000	10	04/23/2015 18:37	WG783437
Lead	U		4.80	40.0	20	04/24/2015 02:04	WG783152
Lead,Dissolved	U		2.40	20.0	10	04/23/2015 18:37	WG783437
Manganese	912		5.00	100	20	04/24/2015 02:04	WG783152
Manganese,Dissolved	846		2.50	50.0	10	04/23/2015 18:37	WG783437
Potassium	19000	J	740	20000	20	04/24/2015 02:04	WG783152
Selenium	U		7.60	40.0	20	04/24/2015 02:04	WG783152
Selenium,Dissolved	U		3.80	20.0	10	04/23/2015 18:37	WG783437
Sodium	6090000		2200	20000	20	04/24/2015 02:04	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/26/2015 02:16	WG783017
(S) a,a,a-Trifluorotoluene(FID) 94.9				62.0-128		04/26/2015 02:16	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 17:45	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 17:45	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 17:45	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 17:45	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 17:45	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 17:45	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 17:45	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 17:45	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 17:45	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 17:45	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 17:45	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 17:45	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 17:45	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 17:45	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 17:45	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 17:45	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 17:45	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 17:45	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 17:45	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 17:45	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 17:45	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 17:45	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 17:45	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 17:45	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 17:45	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 17:45	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 17:45	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 17:45	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 17:45	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 17:45	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 17:45	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 17:45	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 17:45	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 17:45	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 17:45	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 17:45	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 17:45	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 17:45	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 17:45	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 17:45	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 17:45	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 17:45	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 17:45	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 17:45	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 17:45	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 17:45	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 17:45	WG783003
(S) Toluene-d8	106			88.5-111		04/23/2015 17:45	WG783003
(S) Dibromofluoromethane	105			78.3-121		04/23/2015 17:45	WG783003
(S) 4-Bromofluorobenzene	102			71.0-126		04/23/2015 17:45	WG783003

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	55.8	J	25.0	100	1	04/22/2015 07:14	WG783173
(S) o-Terphenyl	115			50.0-150		04/22/2015 07:14	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	12700000		2800	10000	1	04/23/2015 09:31	WG783398

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 01:57	WG785017

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	6000000		5200	100000	100	04/23/2015 13:20	WG783898
Fluoride	562		9.90	100	1	04/22/2015 22:35	WG783898
Sulfate	3860000		7700	500000	100	04/23/2015 13:20	WG783898

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	4.53	J	2.50	20.0	10	04/24/2015 02:07	WG783152
Arsenic,Dissolved	4.58	J	1.20	10.0	5	04/23/2015 18:39	WG783437
Barium	18.9	J	3.60	50.0	10	04/24/2015 02:07	WG783152
Barium,Dissolved	18.7	J	1.80	25.0	5	04/23/2015 18:39	WG783437
Calcium	1070000		460	10000	10	04/24/2015 02:07	WG783152
Chromium	U		5.40	20.0	10	04/24/2015 02:07	WG783152
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 18:39	WG783437
Iron	4380		150	1000	10	04/24/2015 02:07	WG783152
Iron,Dissolved	3590		75.0	500	5	04/23/2015 18:39	WG783437
Lead	U		2.40	20.0	10	04/24/2015 02:07	WG783152
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 18:39	WG783437
Manganese	427		2.50	50.0	10	04/24/2015 02:07	WG783152
Manganese,Dissolved	376		1.20	25.0	5	04/23/2015 18:39	WG783437
Potassium	36600		370	10000	10	04/24/2015 02:07	WG783152
Selenium	U		3.80	20.0	10	04/24/2015 02:07	WG783152
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 18:39	WG783437
Sodium	4040000		1100	10000	10	04/24/2015 02:07	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/26/2015 02:41	WG783017
(S) a,a,a-Trifluorotoluene(FID) 95.1				62.0-128		04/26/2015 02:41	WG783017

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 18:05	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 18:05	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 18:05	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 18:05	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 18:05	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 18:05	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 18:05	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 18:05	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 18:05	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 18:05	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 18:05	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 18:05	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 18:05	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 18:05	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 18:05	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 18:05	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 18:05	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 18:05	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 18:05	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 18:05	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 18:05	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 18:05	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 18:05	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 18:05	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 18:05	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 18:05	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 18:05	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 18:05	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 18:05	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 18:05	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 18:05	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 18:05	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 18:05	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 18:05	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 18:05	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 18:05	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 18:05	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 18:05	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 18:05	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 18:05	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 18:05	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 18:05	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 18:05	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 18:05	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 18:05	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 18:05	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 18:05	WG783003
(S) Toluene-d8	106			88.5-111		04/23/2015 18:05	WG783003
(S) Dibromofluoromethane	104			78.3-121		04/23/2015 18:05	WG783003
(S) 4-Bromofluorobenzene	102			71.0-126		04/23/2015 18:05	WG783003

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	U		25.0	100	1	04/22/2015 15:26	WG783173
(S) o-Terphenyl	111			50.0-150		04/22/2015 15:26	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	10800000		2800	10000	1	04/23/2015 09:29	WG783398

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	43.4	J	20.0	100	1	04/28/2015 01:58	WG785017

⁶ Qc⁷ Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	4490000		5200	100000	100	04/23/2015 13:35	WG783898
Fluoride	691		9.90	100	1	04/22/2015 22:50	WG783898
Sulfate	3090000		7700	500000	100	04/23/2015 13:35	WG783898

⁸ Al

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	8.05	J	2.50	20.0	10	04/24/2015 02:09	WG783152
Arsenic,Dissolved	7.21	J	1.20	10.0	5	04/23/2015 18:41	WG783437
Barium	28.4	J	3.60	50.0	10	04/24/2015 02:09	WG783152
Barium,Dissolved	26.5		1.80	25.0	5	04/23/2015 18:41	WG783437
Calcium	901000		460	10000	10	04/24/2015 02:09	WG783152
Chromium	U		5.40	20.0	10	04/24/2015 02:09	WG783152
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 18:41	WG783437
Iron	5340		150	1000	10	04/24/2015 02:09	WG783152
Iron,Dissolved	3410		75.0	500	5	04/23/2015 18:41	WG783437
Lead	U		2.40	20.0	10	04/24/2015 02:09	WG783152
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 18:41	WG783437
Manganese	328		2.50	50.0	10	04/24/2015 02:09	WG783152
Manganese,Dissolved	312		1.20	25.0	5	04/23/2015 18:41	WG783437
Potassium	39600		370	10000	10	04/24/2015 02:09	WG783152
Selenium	U		3.80	20.0	10	04/24/2015 02:09	WG783152
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 18:41	WG783437
Sodium	2930000		1100	10000	10	04/24/2015 02:09	WG783152

⁹ Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/24/2015 18:07	WG783018
(S) a,a,a-Trifluorotoluene(FID) 101				62.0-128		04/24/2015 18:07	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 18:24	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 18:24	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 18:24	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 18:24	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 18:24	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 18:24	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 18:24	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 18:24	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 18:24	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 18:24	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 18:24	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 18:24	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 18:24	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 18:24	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 18:24	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 18:24	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 18:24	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 18:24	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 18:24	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 18:24	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 18:24	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 18:24	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 18:24	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 18:24	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 18:24	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 18:24	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 18:24	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 18:24	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 18:24	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 18:24	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 18:24	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 18:24	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 18:24	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 18:24	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 18:24	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 18:24	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 18:24	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 18:24	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 18:24	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 18:24	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 18:24	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 18:24	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 18:24	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 18:24	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 18:24	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 18:24	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 18:24	WG783003
(S) Toluene-d8	106			88.5-111		04/23/2015 18:24	WG783003
(S) Dibromofluoromethane	107			78.3-121		04/23/2015 18:24	WG783003
(S) 4-Bromofluorobenzene	104			71.0-126		04/23/2015 18:24	WG783003

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	218		25.0	100	1	04/22/2015 15:45	WG783173
(S) o-Terphenyl	119			50.0-150		04/22/2015 15:45	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	5650000		2800	10000	1	04/23/2015 09:37	WG783398

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 01:59	WG785017

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1560000		5200	100000	100	04/23/2015 13:50	WG783898
Fluoride	1160		9.90	100	1	04/22/2015 23:04	WG783898
Sulfate	2220000		7700	500000	100	04/23/2015 13:50	WG783898

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	25.8		1.20	10.0	5	04/24/2015 02:12	WG783152
Arsenic,Dissolved	27.4		1.20	10.0	5	04/23/2015 18:43	WG783437
Barium	20.0	J	1.80	25.0	5	04/24/2015 02:12	WG783152
Barium,Dissolved	21.0	J	1.80	25.0	5	04/23/2015 18:43	WG783437
Calcium	532000		230	5000	5	04/24/2015 02:12	WG783152
Chromium	U		2.70	10.0	5	04/24/2015 02:12	WG783152
Chromium,Dissolved	U		2.70	10.0	5	04/23/2015 18:43	WG783437
Iron	U		75.0	500	5	04/24/2015 02:12	WG783152
Iron,Dissolved	U		75.0	500	5	04/23/2015 18:43	WG783437
Lead	U		1.20	10.0	5	04/24/2015 02:12	WG783152
Lead,Dissolved	U		1.20	10.0	5	04/23/2015 18:43	WG783437
Manganese	2590		1.20	25.0	5	04/24/2015 02:12	WG783152
Manganese,Dissolved	2670		1.20	25.0	5	04/23/2015 18:43	WG783437
Potassium	3840	J	180	5000	5	04/24/2015 02:12	WG783152
Selenium	U		1.90	10.0	5	04/24/2015 02:12	WG783152
Selenium,Dissolved	U		1.90	10.0	5	04/23/2015 18:43	WG783437
Sodium	1120000		550	5000	5	04/24/2015 02:12	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	1900		31.0	100	1	04/24/2015 17:46	WG783018
(S) a,a,a-Trifluorotoluene(FID) 101				62.0-128		04/24/2015 17:46	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 18:44	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 18:44	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 18:44	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 18:44	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 18:44	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 18:44	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 18:44	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 18:44	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 18:44	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 18:44	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 18:44	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 18:44	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 18:44	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 18:44	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 18:44	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 18:44	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 18:44	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 18:44	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 18:44	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 18:44	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 18:44	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 18:44	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 18:44	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 18:44	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 18:44	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 18:44	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 18:44	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 18:44	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 18:44	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 18:44	WG783003
Methyl tert-butyl ether	1.24		0.370	1.00	1	04/23/2015 18:44	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 18:44	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 18:44	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 18:44	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 18:44	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 18:44	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 18:44	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 18:44	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 18:44	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 18:44	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 18:44	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 18:44	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 18:44	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 18:44	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 18:44	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 18:44	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 18:44	WG783003
(S) Toluene-d8	106			88.5-111		04/23/2015 18:44	WG783003
(S) Dibromofluoromethane	103			78.3-121		04/23/2015 18:44	WG783003
(S) 4-Bromofluorobenzene	101			71.0-126		04/23/2015 18:44	WG783003

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3600		25.0	100	1	04/22/2015 16:04	WG783173
(S) o-Terphenyl	121			50.0-150		04/22/2015 16:04	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	3410000	H	2800	10000	1	04/24/2015 17:12	WG784225

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 02:01	WG785017

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1110000		5200	100000	100	04/23/2015 14:05	WG783898
Fluoride	963		9.90	100	1	04/22/2015 23:19	WG783898
Sulfate	1340000		7700	500000	100	04/23/2015 14:05	WG783898

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	101		0.500	4.00	2	04/24/2015 02:14	WG783152
Arsenic,Dissolved	93.0		0.250	2.00	1	04/30/2015 01:36	WG783439
Barium	34.9		0.720	10.0	2	04/24/2015 02:14	WG783152
Barium,Dissolved	20.2		0.360	5.00	1	04/30/2015 01:36	WG783439
Calcium	367000		92.0	2000	2	04/24/2015 02:14	WG783152
Chromium	U		1.10	4.00	2	04/24/2015 02:14	WG783152
Chromium,Dissolved	U		0.540	2.00	1	04/30/2015 01:36	WG783439
Iron	3600		30.0	200	2	04/24/2015 02:14	WG783152
Iron,Dissolved	2050		15.0	100	1	04/30/2015 01:36	WG783439
Lead	1.89	J	0.480	4.00	2	04/24/2015 02:14	WG783152
Lead,Dissolved	U		0.240	2.00	1	04/30/2015 01:36	WG783439
Manganese	8680		0.500	10.0	2	04/24/2015 02:14	WG783152
Manganese,Dissolved	8490	4 O1	0.250	5.00	1	04/30/2015 01:36	WG783439
Potassium	2320		74.0	2000	2	04/24/2015 02:14	WG783152
Selenium	U		0.760	4.00	2	04/24/2015 02:14	WG783152
Selenium,Dissolved	0.414	J	0.380	2.00	1	04/30/2015 01:36	WG783439
Sodium	696000		220	2000	2	04/24/2015 02:14	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	119		31.0	100	1	04/24/2015 18:28	WG783018
(S) a,a,a-Trifluorotoluene(FID) 101				62.0-128		04/24/2015 18:28	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 19:04	WG783003
Benzene	1.83		0.330	1.00	1	04/23/2015 19:04	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 19:04	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 19:04	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 19:04	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 19:04	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 19:04	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 19:04	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 19:04	WG783003



Collected date/time: 04/15/15 14:45

L760074

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	1 Cp
Chlorobenzene	U		0.350	1.00	1	04/23/2015 19:04	WG783003	2 Tc
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 19:04	WG783003	3 Ss
Chloroethane	U		0.450	5.00	1	04/23/2015 19:04	WG783003	4 Cn
Chloroform	U		0.320	5.00	1	04/23/2015 19:04	WG783003	5 Sr
Chloromethane	U		0.280	2.50	1	04/23/2015 19:04	WG783003	6 Qc
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 19:04	WG783003	7 Gl
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 19:04	WG783003	8 Al
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 19:04	WG783003	9 Sc
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 19:04	WG783003	
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 19:04	WG783003	
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 19:04	WG783003	
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 19:04	WG783003	
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 19:04	WG783003	
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 19:04	WG783003	
Ethylbenzene	0.462	L	0.380	1.00	1	04/23/2015 19:04	WG783003	
Isopropylbenzene	0.845	L	0.330	1.00	1	04/23/2015 19:04	WG783003	
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 19:04	WG783003	
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 19:04	WG783003	
2-Hexanone	U		3.80	10.0	1	04/23/2015 19:04	WG783003	
Methylene Chloride	U		1.00	5.00	1	04/23/2015 19:04	WG783003	
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 19:04	WG783003	
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 19:04	WG783003	
Naphthalene	U		1.00	5.00	1	04/23/2015 19:04	WG783003	
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 19:04	WG783003	
Styrene	U		0.310	1.00	1	04/23/2015 19:04	WG783003	
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 19:04	WG783003	
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 19:04	WG783003	
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 19:04	WG783003	
Toluene	U		0.780	5.00	1	04/23/2015 19:04	WG783003	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 19:04	WG783003	
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 19:04	WG783003	
Trichloroethene	U		0.400	1.00	1	04/23/2015 19:04	WG783003	
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 19:04	WG783003	
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 19:04	WG783003	
Vinyl chloride	U		0.260	1.00	1	04/23/2015 19:04	WG783003	
o-Xylene	U		0.340	1.00	1	04/23/2015 19:04	WG783003	
m&p-Xylene	U		0.720	1.00	1	04/23/2015 19:04	WG783003	
Xylenes, Total	U		1.10	3.00	1	04/23/2015 19:04	WG783003	
(S) Toluene-d8	105			88.5-111		04/23/2015 19:04	WG783003	
(S) Dibromofluoromethane	106			78.3-121		04/23/2015 19:04	WG783003	
(S) 4-Bromofluorobenzene	106			71.0-126		04/23/2015 19:04	WG783003	

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	1310		25.0	100	1	04/22/2015 16:23	WG783173
(S) o-Terphenyl	119			50.0-150		04/22/2015 16:23	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	6630000		2800	10000	1	04/23/2015 10:34	WG783399

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 02:02	WG785017

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	2020000		5200	100000	100	04/23/2015 14:20	WG783898
Fluoride	682		9.90	100	1	04/22/2015 23:34	WG783898
Sulfate	2590000		7700	500000	100	04/23/2015 14:20	WG783898

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	36.2		1.20	10.0	5	04/24/2015 02:17	WG783152
Arsenic,Dissolved	36.9		0.250	2.00	1	04/30/2015 01:52	WG783439
Barium	14.7	J	1.80	25.0	5	04/24/2015 02:17	WG783152
Barium,Dissolved	17.1		0.360	5.00	1	04/30/2015 01:52	WG783439
Calcium	494000		230	5000	5	04/24/2015 02:17	WG783152
Chromium	U		2.70	10.0	5	04/24/2015 02:17	WG783152
Chromium,Dissolved	U		0.540	2.00	1	04/30/2015 01:52	WG783439
Iron	2890		75.0	500	5	04/24/2015 02:17	WG783152
Iron,Dissolved	901		15.0	100	1	04/30/2015 01:52	WG783439
Lead	U		1.20	10.0	5	04/24/2015 02:17	WG783152
Lead,Dissolved	U		0.240	2.00	1	04/30/2015 01:52	WG783439
Manganese	4360		1.20	25.0	5	04/24/2015 02:17	WG783152
Manganese,Dissolved	5080		0.250	5.00	1	04/30/2015 01:52	WG783439
Potassium	3160	J	180	5000	5	04/24/2015 02:17	WG783152
Selenium	U		1.90	10.0	5	04/24/2015 02:17	WG783152
Selenium,Dissolved	1.05	J	0.380	2.00	1	04/30/2015 01:52	WG783439
Sodium	1240000		550	5000	5	04/24/2015 02:17	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	3800		31.0	100	1	04/24/2015 18:49	WG783018
(S) a,a,a-Trifluorotoluene(FID) 101				62.0-128		04/24/2015 18:49	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 19:23	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 19:23	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 19:23	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 19:23	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 19:23	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 19:23	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 19:23	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 19:23	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 19:23	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	¹ Cp
Chlorobenzene	U		0.350	1.00	1	04/23/2015 19:23	WG783003	² Tc
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 19:23	WG783003	³ Ss
Chloroethane	U		0.450	5.00	1	04/23/2015 19:23	WG783003	⁴ Cn
Chloroform	U		0.320	5.00	1	04/23/2015 19:23	WG783003	⁵ Sr
Chloromethane	U		0.280	2.50	1	04/23/2015 19:23	WG783003	⁶ Qc
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 19:23	WG783003	⁷ Gl
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 19:23	WG783003	⁸ Al
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 19:23	WG783003	⁹ Sc
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 19:23	WG783003	
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 19:23	WG783003	
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 19:23	WG783003	
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 19:23	WG783003	
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 19:23	WG783003	
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 19:23	WG783003	
Ethylbenzene	U		0.380	1.00	1	04/23/2015 19:23	WG783003	
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 19:23	WG783003	
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 19:23	WG783003	
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 19:23	WG783003	
2-Hexanone	U		3.80	10.0	1	04/23/2015 19:23	WG783003	
Methylene Chloride	U		1.00	5.00	1	04/23/2015 19:23	WG783003	
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 19:23	WG783003	
Methyl tert-butyl ether	7.33		0.370	1.00	1	04/23/2015 19:23	WG783003	
Naphthalene	U		1.00	5.00	1	04/23/2015 19:23	WG783003	
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 19:23	WG783003	
Styrene	U		0.310	1.00	1	04/23/2015 19:23	WG783003	
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 19:23	WG783003	
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 19:23	WG783003	
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 19:23	WG783003	
Toluene	U		0.780	5.00	1	04/23/2015 19:23	WG783003	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 19:23	WG783003	
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 19:23	WG783003	
Trichloroethene	U		0.400	1.00	1	04/23/2015 19:23	WG783003	
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 19:23	WG783003	
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 19:23	WG783003	
Vinyl chloride	U		0.260	1.00	1	04/23/2015 19:23	WG783003	
o-Xylene	U		0.340	1.00	1	04/23/2015 19:23	WG783003	
m&p-Xylene	U		0.720	1.00	1	04/23/2015 19:23	WG783003	
Xylenes, Total	U		1.10	3.00	1	04/23/2015 19:23	WG783003	
(S) Toluene-d8	107			88.5-111		04/23/2015 19:23	WG783003	
(S) Dibromofluoromethane	105			78.3-121		04/23/2015 19:23	WG783003	
(S) 4-Bromofluorobenzene	103			71.0-126		04/23/2015 19:23	WG783003	

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	6390		25.0	100	1	04/22/2015 16:43	WG783173
(S) o-Terphenyl	116			50.0-150		04/22/2015 16:43	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	6500000		2800	10000	1	04/23/2015 10:34	WG783399

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	875		20.0	100	1	04/28/2015 02:03	WG785017

⁶ Qc⁷ Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	2010000		5200	100000	100	04/23/2015 14:35	WG783898
Fluoride	1850		9.90	100	1	04/22/2015 23:49	WG783898
Sulfate	2240000		7700	500000	100	04/23/2015 14:35	WG783898

⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	12.9		1.20	10.0	5	04/24/2015 02:19	WG783152
Arsenic,Dissolved	11.4		0.250	2.00	1	04/30/2015 01:54	WG783439
Barium	30.8		1.80	25.0	5	04/24/2015 02:19	WG783152
Barium,Dissolved	33.1		0.360	5.00	1	04/30/2015 01:54	WG783439
Calcium	809000		230	5000	5	04/24/2015 02:19	WG783152
Chromium	U		2.70	10.0	5	04/24/2015 02:19	WG783152
Chromium,Dissolved	U		0.540	2.00	1	04/30/2015 01:54	WG783439
Iron	155	J	75.0	500	5	04/24/2015 02:19	WG783152
Iron,Dissolved	52.7	J	15.0	100	1	04/30/2015 01:54	WG783439
Lead	U		1.20	10.0	5	04/24/2015 02:19	WG783152
Lead,Dissolved	0.400	J	0.240	2.00	1	04/30/2015 01:54	WG783439
Manganese	1400		1.20	25.0	5	04/24/2015 02:19	WG783152
Manganese,Dissolved	1400		0.250	5.00	1	04/30/2015 01:54	WG783439
Potassium	2140	J	180	5000	5	04/24/2015 02:19	WG783152
Selenium	30.8		1.90	10.0	5	04/24/2015 02:19	WG783152
Selenium,Dissolved	31.8		0.380	2.00	1	04/30/2015 01:54	WG783439
Sodium	1090000		550	5000	5	04/24/2015 02:19	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/24/2015 19:10	WG783018
(S) a,a,a-Trifluorotoluene(FID) 101				62.0-128		04/24/2015 19:10	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 19:43	WG783003
Benzene	0.715	J	0.330	1.00	1	04/23/2015 19:43	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 19:43	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 19:43	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 19:43	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 19:43	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 19:43	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 19:43	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 19:43	WG783003



Collected date/time: 04/15/15 10:55

L760074

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	1 Cp
Chlorobenzene	U		0.350	1.00	1	04/23/2015 19:43	WG783003	2 Tc
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 19:43	WG783003	3 Ss
Chloroethane	U		0.450	5.00	1	04/23/2015 19:43	WG783003	4 Cn
Chloroform	U		0.320	5.00	1	04/23/2015 19:43	WG783003	5 Sr
Chloromethane	U		0.280	2.50	1	04/23/2015 19:43	WG783003	6 Qc
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 19:43	WG783003	7 Gl
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 19:43	WG783003	8 Al
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 19:43	WG783003	9 Sc
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 19:43	WG783003	
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 19:43	WG783003	
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 19:43	WG783003	
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 19:43	WG783003	
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 19:43	WG783003	
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 19:43	WG783003	
Ethylbenzene	U		0.380	1.00	1	04/23/2015 19:43	WG783003	
Isopropylbenzene	0.440	J	0.330	1.00	1	04/23/2015 19:43	WG783003	
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 19:43	WG783003	
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 19:43	WG783003	
2-Hexanone	U		3.80	10.0	1	04/23/2015 19:43	WG783003	
Methylene Chloride	U		1.00	5.00	1	04/23/2015 19:43	WG783003	
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 19:43	WG783003	
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 19:43	WG783003	
Naphthalene	U		1.00	5.00	1	04/23/2015 19:43	WG783003	
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 19:43	WG783003	
Styrene	U		0.310	1.00	1	04/23/2015 19:43	WG783003	
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 19:43	WG783003	
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 19:43	WG783003	
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 19:43	WG783003	
Toluene	U		0.780	5.00	1	04/23/2015 19:43	WG783003	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 19:43	WG783003	
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 19:43	WG783003	
Trichloroethene	U		0.400	1.00	1	04/23/2015 19:43	WG783003	
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 19:43	WG783003	
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 19:43	WG783003	
Vinyl chloride	U		0.260	1.00	1	04/23/2015 19:43	WG783003	
o-Xylene	0.920	J	0.340	1.00	1	04/23/2015 19:43	WG783003	
m&p-Xylene	U		0.720	1.00	1	04/23/2015 19:43	WG783003	
Xylenes, Total	U		1.10	3.00	1	04/23/2015 19:43	WG783003	
(S) Toluene-d8	106			88.5-111		04/23/2015 19:43	WG783003	
(S) Dibromofluoromethane	103			78.3-121		04/23/2015 19:43	WG783003	
(S) 4-Bromofluorobenzene	103			71.0-126		04/23/2015 19:43	WG783003	

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4500		25.0	100	1	04/22/2015 17:02	WG783173
(S) o-Terphenyl	122			50.0-150		04/22/2015 17:02	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	4760000		2800	10000	1	04/23/2015 10:31	WG783399

1 Cp

2 Tc

3 Ss

4 Cn

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	U		20.0	100	1	04/28/2015 02:04	WG785017

5 Sr

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1740000		5200	100000	100	04/23/2015 14:50	WG783898
Fluoride	669	F	9.90	100	1	04/23/2015 00:04	WG783898
Sulfate	2280000		7700	500000	100	04/23/2015 14:50	WG783898

6 Qc

7 Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	33.3		0.500	4.00	2	04/24/2015 02:22	WG783152
Arsenic,Dissolved	31.9		0.250	2.00	1	04/30/2015 01:57	WG783439
Barium	16.4		0.720	10.0	2	04/24/2015 02:22	WG783152
Barium,Dissolved	18.6		0.360	5.00	1	04/30/2015 01:57	WG783439
Calcium	568000		92.0	2000	2	04/24/2015 02:22	WG783152
Chromium	U		1.10	4.00	2	04/24/2015 02:22	WG783152
Chromium,Dissolved	U		0.540	2.00	1	04/30/2015 01:57	WG783439
Iron	1370		30.0	200	2	04/24/2015 02:22	WG783152
Iron,Dissolved	1210		15.0	100	1	04/30/2015 01:57	WG783439
Lead	U		0.480	4.00	2	04/24/2015 02:22	WG783152
Lead,Dissolved	U		0.240	2.00	1	04/30/2015 01:57	WG783439
Manganese	3450		0.500	10.0	2	04/24/2015 02:22	WG783152
Manganese,Dissolved	3520		0.250	5.00	1	04/30/2015 01:57	WG783439
Potassium	5090		74.0	2000	2	04/24/2015 02:22	WG783152
Selenium	U		0.760	4.00	2	04/24/2015 02:22	WG783152
Selenium,Dissolved	U		0.380	2.00	1	04/30/2015 01:57	WG783439
Sodium	873000		220	2000	2	04/24/2015 02:22	WG783152

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/24/2015 19:31	WG783018
(S) a,a,a-Trifluorotoluene(FID) 101				62.0-128		04/24/2015 19:31	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 20:02	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 20:02	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 20:02	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 20:02	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 20:02	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 20:02	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 20:02	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 20:02	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 20:02	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 20:02	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 20:02	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 20:02	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 20:02	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 20:02	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 20:02	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 20:02	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 20:02	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 20:02	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 20:02	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 20:02	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 20:02	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 20:02	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 20:02	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 20:02	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 20:02	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 20:02	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 20:02	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 20:02	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 20:02	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 20:02	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 20:02	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 20:02	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 20:02	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 20:02	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 20:02	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 20:02	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 20:02	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 20:02	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 20:02	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 20:02	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 20:02	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 20:02	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 20:02	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 20:02	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 20:02	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 20:02	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 20:02	WG783003
(S) Toluene-d8	105			88.5-111		04/23/2015 20:02	WG783003
(S) Dibromofluoromethane	103			78.3-121		04/23/2015 20:02	WG783003
(S) 4-Bromofluorobenzene	103			71.0-126		04/23/2015 20:02	WG783003

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	386		25.0	100	1	04/22/2015 17:21	WG783173
(S) o-Terphenyl	120			50.0-150		04/22/2015 17:21	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	7660000		2800	10000	1	04/23/2015 10:32	WG783399

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	2490		20.0	100	1	04/30/2015 12:50	WG785019

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	2480000		5200	100000	100	04/23/2015 16:04	WG783898
Fluoride	2490		9.90	100	1	04/23/2015 01:19	WG783898
Sulfate	3080000		7700	500000	100	04/23/2015 16:04	WG783898

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	9.74	J	1.20	10.0	5	04/24/2015 02:30	WG783152
Arsenic,Dissolved	7.04		0.250	2.00	1	04/30/2015 02:00	WG783439
Barium	10.8	J	1.80	25.0	5	04/24/2015 02:30	WG783152
Barium,Dissolved	11.3		0.360	5.00	1	04/30/2015 02:00	WG783439
Calcium	677000		230	5000	5	04/24/2015 02:30	WG783152
Chromium	U		2.70	10.0	5	04/24/2015 02:30	WG783152
Chromium,Dissolved	U		0.540	2.00	1	04/30/2015 02:00	WG783439
Iron	2630		75.0	500	5	04/24/2015 02:30	WG783152
Iron,Dissolved	1350		15.0	100	1	04/30/2015 02:00	WG783439
Lead	U		1.20	10.0	5	04/24/2015 02:30	WG783152
Lead,Dissolved	U		0.240	2.00	1	04/30/2015 02:00	WG783439
Manganese	1330		1.20	25.0	5	04/24/2015 02:30	WG783152
Manganese,Dissolved	1280		0.250	5.00	1	04/30/2015 02:00	WG783439
Potassium	3920	J	180	5000	5	04/24/2015 02:30	WG783152
Selenium	33.5		1.90	10.0	5	04/24/2015 02:30	WG783152
Selenium,Dissolved	32.4		0.380	2.00	1	04/30/2015 02:00	WG783439
Sodium	1620000		550	5000	5	04/24/2015 02:30	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/24/2015 19:52	WG783018
(S) a,a,a-Trifluorotoluene(FID) 101				62.0-128		04/24/2015 19:52	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	15.8	J	10.0	50.0	1	04/23/2015 20:22	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 20:22	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 20:22	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 20:22	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 20:22	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 20:22	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 20:22	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 20:22	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 20:22	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 20:22	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 20:22	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 20:22	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 20:22	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 20:22	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 20:22	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 20:22	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 20:22	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 20:22	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 20:22	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 20:22	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 20:22	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 20:22	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 20:22	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 20:22	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 20:22	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 20:22	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 20:22	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 20:22	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 20:22	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 20:22	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 20:22	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 20:22	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 20:22	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 20:22	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 20:22	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 20:22	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 20:22	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 20:22	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 20:22	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 20:22	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 20:22	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 20:22	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 20:22	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 20:22	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 20:22	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 20:22	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 20:22	WG783003
(S) Toluene-d8	106			88.5-111		04/23/2015 20:22	WG783003
(S) Dibromofluoromethane	105			78.3-121		04/23/2015 20:22	WG783003
(S) 4-Bromofluorobenzene	105			71.0-126		04/23/2015 20:22	WG783003

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	3090		25.0	100	1	04/22/2015 17:41	WG783173
(S) o-Terphenyl	117			50.0-150		04/22/2015 17:41	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	6040000		2800	10000	1	04/23/2015 10:39	WG783399

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	2080		20.0	100	1	04/30/2015 12:53	WG785019

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1370000		5200	100000	100	04/23/2015 16:19	WG783898
Fluoride	3690		9.90	100	1	04/23/2015 01:34	WG783898
Sulfate	2740000		7700	500000	100	04/23/2015 16:19	WG783898

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	36.6		0.500	4.00	2	04/24/2015 02:32	WG783152
Arsenic,Dissolved	33.7		0.250	2.00	1	04/30/2015 02:02	WG783439
Barium	14.2		0.720	10.0	2	04/24/2015 02:32	WG783152
Barium,Dissolved	13.8		0.360	5.00	1	04/30/2015 02:02	WG783439
Calcium	642000		92.0	2000	2	04/24/2015 02:32	WG783152
Chromium	U		1.10	4.00	2	04/24/2015 02:32	WG783152
Chromium,Dissolved	U		0.540	2.00	1	04/30/2015 02:02	WG783439
Iron	700		30.0	200	2	04/24/2015 02:32	WG783152
Iron,Dissolved	567		15.0	100	1	04/30/2015 02:02	WG783439
Lead	U		0.480	4.00	2	04/24/2015 02:32	WG783152
Lead,Dissolved	U		0.240	2.00	1	04/30/2015 02:02	WG783439
Manganese	3850		0.500	10.0	2	04/24/2015 02:32	WG783152
Manganese,Dissolved	3860		0.250	5.00	1	04/30/2015 02:02	WG783439
Potassium	2670		74.0	2000	2	04/24/2015 02:32	WG783152
Selenium	7.92		0.760	4.00	2	04/24/2015 02:32	WG783152
Selenium,Dissolved	7.64		0.380	2.00	1	04/30/2015 02:02	WG783439
Sodium	854000		220	2000	2	04/24/2015 02:32	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/24/2015 20:13	WG783018
(S) a,a,a-Trifluorotoluene(FID) 101				62.0-128		04/24/2015 20:13	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 20:41	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 20:41	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 20:41	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 20:41	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 20:41	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 20:41	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 20:41	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 20:41	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 20:41	WG783003



Collected date/time: 04/15/15 12:55

L760074

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 20:41	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 20:41	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 20:41	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 20:41	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 20:41	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 20:41	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 20:41	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 20:41	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 20:41	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 20:41	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 20:41	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 20:41	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 20:41	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 20:41	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 20:41	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 20:41	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 20:41	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 20:41	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 20:41	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 20:41	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 20:41	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 20:41	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 20:41	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 20:41	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 20:41	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 20:41	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 20:41	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 20:41	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 20:41	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 20:41	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 20:41	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 20:41	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 20:41	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 20:41	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 20:41	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 20:41	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 20:41	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 20:41	WG783003
(S) Toluene-d8	106			88.5-111		04/23/2015 20:41	WG783003
(S) Dibromofluoromethane	104			78.3-121		04/23/2015 20:41	WG783003
(S) 4-Bromofluorobenzene	105			71.0-126		04/23/2015 20:41	WG783003

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	565		25.0	100	1	04/22/2015 18:00	WG783173
(S) o-Terphenyl	115			50.0-150		04/22/2015 18:00	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	10700000		2800	10000	1	04/23/2015 10:32	WG783399

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	229		20.0	100	1	04/30/2015 12:56	WG785019

⁶ Qc⁷ Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	2970000		5200	100000	100	04/23/2015 16:34	WG783898
Fluoride	3380		9.90	100	1	04/23/2015 01:49	WG783898
Sulfate	4380000		7700	500000	100	04/23/2015 16:34	WG783898

⁸ Al

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	11.6	J	2.50	20.0	10	04/24/2015 02:35	WG783152
Arsenic,Dissolved	10.8		0.250	2.00	1	04/30/2015 02:05	WG783439
Barium	27.3	J	3.60	50.0	10	04/24/2015 02:35	WG783152
Barium,Dissolved	25.0		0.360	5.00	1	04/30/2015 02:05	WG783439
Calcium	658000		460	10000	10	04/24/2015 02:35	WG783152
Chromium	U		5.40	20.0	10	04/24/2015 02:35	WG783152
Chromium,Dissolved	U		0.540	2.00	1	04/30/2015 02:05	WG783439
Iron	606	J	150	1000	10	04/24/2015 02:35	WG783152
Iron,Dissolved	224		15.0	100	1	04/30/2015 02:05	WG783439
Lead	U		2.40	20.0	10	04/24/2015 02:35	WG783152
Lead,Dissolved	U		0.240	2.00	1	04/30/2015 02:05	WG783439
Manganese	1920		2.50	50.0	10	04/24/2015 02:35	WG783152
Manganese,Dissolved	1850		0.250	5.00	1	04/30/2015 02:05	WG783439
Potassium	5510	J	370	10000	10	04/24/2015 02:35	WG783152
Selenium	9.88	J	3.80	20.0	10	04/24/2015 02:35	WG783152
Selenium,Dissolved	9.14		0.380	2.00	1	04/30/2015 02:05	WG783439
Sodium	2660000		1100	10000	10	04/24/2015 02:35	WG783152

⁹ Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/24/2015 20:34	WG783018
(S) a,a,a-Trifluorotoluene(FID) 101				62.0-128		04/24/2015 20:34	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	11.5	J	10.0	50.0	1	04/23/2015 21:01	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 21:01	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 21:01	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 21:01	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 21:01	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 21:01	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 21:01	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 21:01	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 21:01	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 21:01	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 21:01	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 21:01	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 21:01	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 21:01	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 21:01	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 21:01	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 21:01	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 21:01	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 21:01	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 21:01	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 21:01	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 21:01	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 21:01	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 21:01	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 21:01	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 21:01	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 21:01	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 21:01	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 21:01	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 21:01	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 21:01	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 21:01	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 21:01	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 21:01	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 21:01	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 21:01	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 21:01	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 21:01	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 21:01	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 21:01	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 21:01	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 21:01	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 21:01	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 21:01	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 21:01	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 21:01	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 21:01	WG783003
(S) Toluene-d8	105			88.5-111		04/23/2015 21:01	WG783003
(S) Dibromofluoromethane	104			78.3-121		04/23/2015 21:01	WG783003
(S) 4-Bromofluorobenzene	103			71.0-126		04/23/2015 21:01	WG783003

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4790		25.0	100	1	04/22/2015 18:20	WG783173
(S) o-Terphenyl	113			50.0-150		04/22/2015 18:20	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	14200000		2800	10000	1	04/23/2015 10:32	WG783399

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	40.4	J	20.0	100	1	04/30/2015 12:57	WG785019

6 Qc

7 Gl

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	6730000		5200	100000	100	04/23/2015 16:49	WG783898
Fluoride	1060		9.90	100	1	04/23/2015 02:03	WG783898
Sulfate	4830000		7700	500000	100	04/23/2015 16:49	WG783898

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	15.5	J	2.50	20.0	10	04/24/2015 02:38	WG783152
Arsenic,Dissolved	11.6		0.250	2.00	1	04/30/2015 02:08	WG783439
Barium	25.5	J	3.60	50.0	10	04/24/2015 02:38	WG783152
Barium,Dissolved	21.6		0.360	5.00	1	04/30/2015 02:08	WG783439
Calcium	944000		460	10000	10	04/24/2015 02:38	WG783152
Chromium	U		5.40	20.0	10	04/24/2015 02:38	WG783152
Chromium,Dissolved	U		0.540	2.00	1	04/30/2015 02:08	WG783439
Iron	571	J	150	1000	10	04/24/2015 02:38	WG783152
Iron,Dissolved	201		15.0	100	1	04/30/2015 02:08	WG783439
Lead	U		2.40	20.0	10	04/24/2015 02:38	WG783152
Lead,Dissolved	U		0.240	2.00	1	04/30/2015 02:08	WG783439
Manganese	1980		2.50	50.0	10	04/24/2015 02:38	WG783152
Manganese,Dissolved	1830		0.250	5.00	1	04/30/2015 02:08	WG783439
Potassium	7710	J	370	10000	10	04/24/2015 02:38	WG783152
Selenium	U		3.80	20.0	10	04/24/2015 02:38	WG783152
Selenium,Dissolved	1.86	J	0.380	2.00	1	04/30/2015 02:08	WG783439
Sodium	4780000		1100	10000	10	04/24/2015 02:38	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	U		31.0	100	1	04/24/2015 20:55	WG783018
(S) a,a,a-Trifluorotoluene(FID) 100				62.0-128		04/24/2015 20:55	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 21:20	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 21:20	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 21:20	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 21:20	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 21:20	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 21:20	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 21:20	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 21:20	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 21:20	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	1 Cp
Chlorobenzene	U		0.350	1.00	1	04/23/2015 21:20	WG783003	2 Tc
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 21:20	WG783003	3 Ss
Chloroethane	U		0.450	5.00	1	04/23/2015 21:20	WG783003	4 Cn
Chloroform	U		0.320	5.00	1	04/23/2015 21:20	WG783003	5 Sr
Chloromethane	U		0.280	2.50	1	04/23/2015 21:20	WG783003	6 Qc
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 21:20	WG783003	7 Gl
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 21:20	WG783003	8 Al
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 21:20	WG783003	9 Sc
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 21:20	WG783003	
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 21:20	WG783003	
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 21:20	WG783003	
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 21:20	WG783003	
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 21:20	WG783003	
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 21:20	WG783003	
Ethylbenzene	U		0.380	1.00	1	04/23/2015 21:20	WG783003	
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 21:20	WG783003	
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 21:20	WG783003	
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 21:20	WG783003	
2-Hexanone	U		3.80	10.0	1	04/23/2015 21:20	WG783003	
Methylene Chloride	U		1.00	5.00	1	04/23/2015 21:20	WG783003	
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 21:20	WG783003	
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 21:20	WG783003	
Naphthalene	U		1.00	5.00	1	04/23/2015 21:20	WG783003	
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 21:20	WG783003	
Styrene	U		0.310	1.00	1	04/23/2015 21:20	WG783003	
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 21:20	WG783003	
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 21:20	WG783003	
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 21:20	WG783003	
Toluene	U		0.780	5.00	1	04/23/2015 21:20	WG783003	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 21:20	WG783003	
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 21:20	WG783003	
Trichloroethene	U		0.400	1.00	1	04/23/2015 21:20	WG783003	
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 21:20	WG783003	
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 21:20	WG783003	
Vinyl chloride	U		0.260	1.00	1	04/23/2015 21:20	WG783003	
o-Xylene	U		0.340	1.00	1	04/23/2015 21:20	WG783003	
m&p-Xylene	U		0.720	1.00	1	04/23/2015 21:20	WG783003	
Xylenes, Total	U		1.10	3.00	1	04/23/2015 21:20	WG783003	
(S) Toluene-d8	106			88.5-111		04/23/2015 21:20	WG783003	
(S) Dibromofluoromethane	103			78.3-121		04/23/2015 21:20	WG783003	
(S) 4-Bromofluorobenzene	105			71.0-126		04/23/2015 21:20	WG783003	

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	295		25.0	100	1	04/22/2015 18:40	WG783173
(S) o-Terphenyl	114			50.0-150		04/22/2015 18:40	WG783173



Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dissolved Solids	8260000		2800	10000	1	04/23/2015 10:35	WG783399

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate-Nitrite	260		20.0	100	1	04/30/2015 12:59	WG785019

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	2110000		5200	100000	100	04/23/2015 17:04	WG783898
Fluoride	2910		9.90	100	1	04/23/2015 02:18	WG783898
Sulfate	3650000		7700	500000	100	04/23/2015 17:04	WG783898

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic	84.0		1.20	10.0	5	04/24/2015 02:40	WG783152
Arsenic,Dissolved	73.2		0.250	2.00	1	04/30/2015 02:10	WG783439
Barium	11.1	J	1.80	25.0	5	04/24/2015 02:40	WG783152
Barium,Dissolved	12.2		0.360	5.00	1	04/30/2015 02:10	WG783439
Calcium	609000		230	5000	5	04/24/2015 02:40	WG783152
Chromium	U		2.70	10.0	5	04/24/2015 02:40	WG783152
Chromium,Dissolved	U		0.540	2.00	1	04/30/2015 02:10	WG783439
Iron	1660		75.0	500	5	04/24/2015 02:40	WG783152
Iron,Dissolved	237		15.0	100	1	04/30/2015 02:10	WG783439
Lead	U		1.20	10.0	5	04/24/2015 02:40	WG783152
Lead,Dissolved	0.300	J	0.240	2.00	1	04/30/2015 02:10	WG783439
Manganese	2560		1.20	25.0	5	04/24/2015 02:40	WG783152
Manganese,Dissolved	2700		0.250	5.00	1	04/30/2015 02:10	WG783439
Potassium	5520		180	5000	5	04/24/2015 02:40	WG783152
Selenium	U		1.90	10.0	5	04/24/2015 02:40	WG783152
Selenium,Dissolved	1.79	J	0.380	2.00	1	04/30/2015 02:10	WG783439
Sodium	2050000		550	5000	5	04/24/2015 02:40	WG783152

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPH (GC/FID) Low Fraction	715		31.0	100	1	04/24/2015 22:50	WG783018
(S) a,a,a-Trifluorotoluene(FID) 101				62.0-128		04/24/2015 22:50	WG783018

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 21:40	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 21:40	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 21:40	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 21:40	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 21:40	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 21:40	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 21:40	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 21:40	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 21:40	WG783003



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.350	1.00	1	04/23/2015 21:40	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 21:40	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 21:40	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 21:40	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 21:40	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 21:40	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 21:40	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 21:40	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 21:40	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 21:40	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 21:40	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 21:40	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 21:40	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 21:40	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 21:40	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 21:40	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 21:40	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 21:40	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 21:40	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 21:40	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 21:40	WG783003
Methyl tert-butyl ether	1.96		0.370	1.00	1	04/23/2015 21:40	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 21:40	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 21:40	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 21:40	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 21:40	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 21:40	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 21:40	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 21:40	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 21:40	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 21:40	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 21:40	WG783003
1,2,4-Trimethylbenzene	0.760	J	0.370	1.00	1	04/23/2015 21:40	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 21:40	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 21:40	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 21:40	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 21:40	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 21:40	WG783003
(S) Toluene-d8	106			88.5-111		04/23/2015 21:40	WG783003
(S) Dibromofluoromethane	105			78.3-121		04/23/2015 21:40	WG783003
(S) 4-Bromofluorobenzene	104			71.0-126		04/23/2015 21:40	WG783003

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	4290		25.0	100	1	04/22/2015 18:59	WG783173
(S) o-Terphenyl	122			50.0-150		04/22/2015 18:59	WG783173



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/23/2015 15:29	WG783003
Benzene	U		0.330	1.00	1	04/23/2015 15:29	WG783003
Bromodichloromethane	U		0.380	1.00	1	04/23/2015 15:29	WG783003
Bromoform	U		0.470	1.00	1	04/23/2015 15:29	WG783003
Bromomethane	U		0.870	5.00	1	04/23/2015 15:29	WG783003
n-Butylbenzene	U		0.360	1.00	1	04/23/2015 15:29	WG783003
sec-Butylbenzene	U		0.360	1.00	1	04/23/2015 15:29	WG783003
Carbon disulfide	U		0.280	1.00	1	04/23/2015 15:29	WG783003
Carbon tetrachloride	U		0.380	1.00	1	04/23/2015 15:29	WG783003
Chlorobenzene	U		0.350	1.00	1	04/23/2015 15:29	WG783003
Chlorodibromomethane	U		0.330	1.00	1	04/23/2015 15:29	WG783003
Chloroethane	U		0.450	5.00	1	04/23/2015 15:29	WG783003
Chloroform	U		0.320	5.00	1	04/23/2015 15:29	WG783003
Chloromethane	U		0.280	2.50	1	04/23/2015 15:29	WG783003
1,2-Dibromoethane	U		0.380	1.00	1	04/23/2015 15:29	WG783003
1,1-Dichloroethane	U		0.260	1.00	1	04/23/2015 15:29	WG783003
1,2-Dichloroethane	U		0.360	1.00	1	04/23/2015 15:29	WG783003
1,1-Dichloroethene	U		0.400	1.00	1	04/23/2015 15:29	WG783003
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/23/2015 15:29	WG783003
trans-1,2-Dichloroethene	U		0.400	1.00	1	04/23/2015 15:29	WG783003
1,2-Dichloropropane	U		0.310	1.00	1	04/23/2015 15:29	WG783003
cis-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 15:29	WG783003
trans-1,3-Dichloropropene	U		0.420	1.00	1	04/23/2015 15:29	WG783003
Ethylbenzene	U		0.380	1.00	1	04/23/2015 15:29	WG783003
Isopropylbenzene	U		0.330	1.00	1	04/23/2015 15:29	WG783003
p-Isopropyltoluene	U		0.350	1.00	1	04/23/2015 15:29	WG783003
2-Butanone (MEK)	U		3.90	10.0	1	04/23/2015 15:29	WG783003
2-Hexanone	U		3.80	10.0	1	04/23/2015 15:29	WG783003
Methylene Chloride	U		1.00	5.00	1	04/23/2015 15:29	WG783003
4-Methyl-2-pentanone (MIBK)	U		2.10	10.0	1	04/23/2015 15:29	WG783003
Methyl tert-butyl ether	U		0.370	1.00	1	04/23/2015 15:29	WG783003
Naphthalene	U		1.00	5.00	1	04/23/2015 15:29	WG783003
n-Propylbenzene	U		0.350	1.00	1	04/23/2015 15:29	WG783003
Styrene	U		0.310	1.00	1	04/23/2015 15:29	WG783003
1,1,1,2-Tetrachloroethane	U		0.380	1.00	1	04/23/2015 15:29	WG783003
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/23/2015 15:29	WG783003
Tetrachloroethene	U		0.370	1.00	1	04/23/2015 15:29	WG783003
Toluene	U		0.780	5.00	1	04/23/2015 15:29	WG783003
1,1,1-Trichloroethane	U		0.319	1.00	1	04/23/2015 15:29	WG783003
1,1,2-Trichloroethane	U		0.380	1.00	1	04/23/2015 15:29	WG783003
Trichloroethene	U		0.400	1.00	1	04/23/2015 15:29	WG783003
1,2,4-Trimethylbenzene	U		0.370	1.00	1	04/23/2015 15:29	WG783003
1,3,5-Trimethylbenzene	U		0.390	1.00	1	04/23/2015 15:29	WG783003
Vinyl chloride	U		0.260	1.00	1	04/23/2015 15:29	WG783003
o-Xylene	U		0.340	1.00	1	04/23/2015 15:29	WG783003
m&p-Xylene	U		0.720	1.00	1	04/23/2015 15:29	WG783003
Xylenes, Total	U		1.10	3.00	1	04/23/2015 15:29	WG783003
(S) Toluene-d8	104			88.5-111		04/23/2015 15:29	WG783003
(S) Dibromofluoromethane	105			78.3-121		04/23/2015 15:29	WG783003
(S) 4-Bromofluorobenzene	105			71.0-126		04/23/2015 15:29	WG783003

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) 04/23/15 09:33

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L760039-20 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 09:37 • (DUP) 04/23/15 09:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	3040	3010	1	0.993		5

L760074-10 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 09:37 • (DUP) 04/23/15 09:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	5650	5670	1	0.353		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 09:29 • (LCSD) 04/23/15 09:29

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8500	8570	96.6	97.4	85.0-115			0.820	5



Method Blank (MB)

(MB) 04/23/15 10:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L760094-06 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 10:30 • (DUP) 04/23/15 10:50

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1710	1570	1	8.38	*	5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 10:33 • (LCSD) 04/23/15 10:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dissolved Solids	8800	7830	7890	89.0	89.7	85.0-115			0.763	5



Method Blank (MB)

(MB) 04/24/15 17:13

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		2.82	10.0

L760074-07 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 16:19 • (DUP) 04/24/15 17:13

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	24900	24700	1	0.968		5

L760074-11 Original Sample (OS) • Duplicate (DUP)

(OS) 04/24/15 17:12 • (DUP) 04/24/15 17:12

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	3410	3390	1	0.588		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/24/15 17:11 • (LCSD) 04/24/15 17:12

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Dissolved Solids	8800	8440	8490	95.9	96.5	85.0-115			0.591	5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/28/15 01:26

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0197	0.100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L760074-07 Original Sample (OS) • Duplicate (DUP)

(OS) 04/28/15 01:55 • (DUP) 04/28/15 01:56

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	1.5	1.5	1	0.00		20

L760059-05 Original Sample (OS) • Duplicate (DUP)

(OS) 04/28/15 01:33 • (DUP) 04/28/15 01:34

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	0.46	0.45	1	2.2		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/28/15 01:30 • (LCSD) 04/28/15 01:31

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.25	4.96	105	99.2	90.0-110			5.68	20

L760059-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/28/15 01:35 • (MS) 04/28/15 01:37 • (MSD) 04/28/15 01:38

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	5.00	0.0974	5.76	5.72	113	112	1	90.0-110	F	F	0.697	20

Method Blank (MB)

(MB) 04/30/15 12:43

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0197	0.100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L760094-03 Original Sample (OS) • Duplicate (DUP)

(OS) 04/30/15 01:12 • (DUP) 04/30/15 01:13

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	ND	ND	1	200		20

L760074-15 Original Sample (OS) • Duplicate (DUP)

(OS) 04/30/15 12:50 • (DUP) 04/30/15 12:51

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	2.5	2.5	1	0.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/30/15 12:47 • (LCSD) 04/30/15 12:48

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate-Nitrite	5.00	5.03	4.62	101	92.4	90.0-110			8.50	20

L760074-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/30/15 12:53 • (MS) 04/30/15 12:54 • (MSD) 04/30/15 12:55

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	5.00	2.08	6.81	6.82	94.2	94.4	1	90.0-110			0.147	20



Method Blank (MB)

(MB) 04/22/15 19:26

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L759346-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/22/15 22:04 • (DUP) 04/22/15 22:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	7.70	7.85	1	2		20
Fluoride	0.720	0.688	1	5		20
Sulfate	9.51	9.95	1	5		20

L759492-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 02:24 • (DUP) 04/23/15 02:38

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	16.8	16.8	1	0		20
Fluoride	0.983	0.970	1	1		20
Sulfate	10.9	11.0	1	1		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 19:40 • (LCSD) 04/22/15 19:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	40.0	40.7	40.3	102	101	90-110			1	20
Fluoride	8.00	8.19	8.13	102	102	90-110			1	20
Sulfate	40.0	40.9	40.5	102	101	90-110			1	20



L760026-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 12:07 • (MS) 04/23/15 12:22 • (MSD) 04/23/15 12:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	0.500	1140	5830	6120	94	100	100	80-120			5	20
Fluoride	0.0500	ND	467	498	93	100	100	80-120			6	20
Sulfate	0.500	4040	8610	8850	91	96	100	80-120			3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 04/22/15 20:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Chloride	U		0.0519	1.00
Fluoride	U		0.0099	0.100
Sulfate	U		0.0774	5.00

L760074-05 Original Sample (OS) • Duplicate (DUP)

(OS) 04/22/15 21:35 • (DUP) 04/22/15 21:50

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Fluoride	1.02	1.02	1	1		20

L760076-01 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 02:33 • (DUP) 04/23/15 02:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	0.121	0.103	1	0		20
Fluoride	0.108	0.110	1	2		20
Sulfate	0.359	0.119	1	0		20

L760074-05 Original Sample (OS) • Duplicate (DUP)

(OS) 04/23/15 12:21 • (DUP) 04/23/15 12:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Chloride	1610	1370	100	16		20
Sulfate	2240	2170	100	3		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 20:35 • (LCSD) 04/22/15 20:50

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Chloride	40.0	40.4	40.4	101	101	90-110			0	20
Fluoride	8.00	8.10	8.09	101	101	90-110			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/22/15 20:35 • (LCSD) 04/22/15 20:50

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	%	%	%			%	%
Sulfate	40.0	40.9	40.8	102	102	90-110			0	20

L760074-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 00:04 • (MS) 04/23/15 00:34 • (MSD) 04/23/15 00:19

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	5.00	0.669	5.18	4.58	90	78	1	80-120		F	12	20

L760074-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 14:50 • (MS) 04/23/15 15:20 • (MSD) 04/23/15 15:05

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Chloride	0.500	1740	6630	6610	98	97	100	80-120			0	20
Sulfate	0.500	2280	6820	6870	91	92	100	80-120			1	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/24/15 01:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00025	0.00200
Barium	U		0.00036	0.00500
Calcium	U		0.046	1.00
Chromium	U		0.00054	0.00200
Iron	U		0.015	0.100
Lead	U		0.00024	0.00200
Manganese	U		0.00025	0.00500
Potassium	0.0378		0.037	1.00
Selenium	U		0.00038	0.00200
Sodium	U		0.11	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/24/15 01:30 • (LCSD) 04/24/15 01:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0500	0.0498	0.0476	100	95	80-120			5	20
Barium	0.0500	0.0486	0.0494	97	99	80-120			2	20
Calcium	5.00	4.96	5.07	99	101	80-120			2	20
Chromium	0.0500	0.0480	0.0489	96	98	80-120			2	20
Iron	5.00	4.66	4.67	93	93	80-120			0	20
Lead	0.0500	0.0485	0.0483	97	97	80-120			0	20
Manganese	0.0500	0.0491	0.0494	98	99	80-120			0	20
Potassium	5.00	4.67	4.77	93	95	80-120			2	20
Selenium	0.0500	0.0477	0.0479	95	96	80-120			0	20
Sodium	5.00	4.79	4.84	96	97	80-120			1	20

L760074-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/24/15 01:36 • (MS) 04/24/15 01:41 • (MSD) 04/24/15 01:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	0.0100	0.00366	0.0615	0.0631	116	119	5	75-125			2	20
Barium	0.0100	0.0240	0.0823	0.0807	117	113	5	75-125			2	20
Calcium	1.00	765	762	783	0	363	5	75-125	4	4	3	20



L760074-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/24/15 01:36 • (MS) 04/24/15 01:41 • (MSD) 04/24/15 01:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium	0.0100	ND	0.0533	0.0559	107	112	5	75-125			5	20
Potassium	1.00	4.52	9.86	10.2	107	114	5	75-125			4	20
Iron	1.00	3.49	8.66	9.07	103	112	5	75-125			5	20
Lead	0.0100	0.000248	0.0565	0.0580	113	115	5	75-125			2	20
Manganese	0.0100	2.14	2.16	2.24	33	194	5	75-125	4	4	4	20
Selenium	0.0100	0.000115	0.0572	0.0606	114	121	5	75-125			6	20
Sodium	1.00	1080	1080	1110	3	571	5	75-125	4	4	3	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/23/15 12:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	0.000705		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 12:49 • (LCSD) 04/23/15 12:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0500	0.0548	0.0532	110	106	80-120			3	20
Barium,Dissolved	0.0500	0.0479	0.0499	96	100	80-120			4	20
Chromium,Dissolved	0.0500	0.0494	0.0484	99	97	80-120			2	20
Iron,Dissolved	5.00	4.81	4.68	96	94	80-120			3	20
Lead,Dissolved	0.0500	0.0503	0.0505	101	101	80-120			0	20
Manganese,Dissolved	0.0500	0.0493	0.0488	99	98	80-120			1	20
Selenium,Dissolved	0.0500	0.0513	0.0536	103	107	80-120			4	20

L759281-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 13:38 • (MS) 04/23/15 12:58 • (MSD) 04/23/15 13:00

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0100	0.00104	0.0603	0.0628	119	124	5	75-125			4	20
Barium,Dissolved	0.0100	0.0696	0.125	0.121	111	102	5	75-125			4	20
Chromium,Dissolved	0.0100	ND	0.0516	0.0540	103	108	5	75-125			5	20
Iron,Dissolved	1.00	0.0581	5.34	5.54	106	110	5	75-125			4	20
Lead,Dissolved	0.0100	0.000124	0.0538	0.0545	107	109	5	75-125			1	20
Manganese,Dissolved	0.0100	0.00244	0.0541	0.0579	103	111	5	75-125			7	20
Selenium,Dissolved	0.0100	0.00808	0.0630	0.0661	110	116	5	75-125			5	20



Method Blank (MB)

(MB) 04/30/15 01:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.00025	0.00200
Barium,Dissolved	U		0.00036	0.00500
Chromium,Dissolved	U		0.00054	0.00200
Iron,Dissolved	U		0.015	0.100
Lead,Dissolved	U		0.00024	0.00200
Manganese,Dissolved	U		0.00025	0.00500
Selenium,Dissolved	U		0.00038	0.00200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/30/15 01:31 • (LCSD) 04/30/15 01:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0500	0.0484	0.0485	97	97	80-120			0	20
Barium,Dissolved	0.0500	0.0537	0.0534	107	107	80-120			0	20
Chromium,Dissolved	0.0500	0.0506	0.0499	101	100	80-120			1	20
Iron,Dissolved	5.00	4.71	4.64	94	93	80-120			1	20
Lead,Dissolved	0.0500	0.0515	0.0525	103	105	80-120			2	20
Manganese,Dissolved	0.0500	0.0513	0.0517	103	103	80-120			1	20
Selenium,Dissolved	0.0500	0.0504	0.0499	101	100	80-120			1	20

L760074-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/30/15 01:36 • (MS) 04/30/15 01:41 • (MSD) 04/30/15 01:44

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0500	0.0930	0.144	0.143	102	100	1	75-125			1	20
Barium,Dissolved	0.0500	0.0202	0.0766	0.0780	113	116	1	75-125			2	20
Chromium,Dissolved	0.0500	ND	0.0479	0.0492	96	98	1	75-125			3	20
Iron,Dissolved	5.00	2.05	6.54	6.56	90	90	1	75-125			0	20
Lead,Dissolved	0.0500	0.0000778	0.0519	0.0527	104	105	1	75-125			2	20
Manganese,Dissolved	0.0500	8.49	8.51	8.51	31	41	1	75-125	<u>4</u>	<u>4</u>	0	20
Selenium,Dissolved	0.0500	0.000414	0.0540	0.0533	107	106	1	75-125			1	20



Method Blank (MB)

(MB) 04/25/15 14:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	95.7			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/25/15 12:20 • (LCSD) 04/25/15 12:44

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.74	5.83	104	106	67.0-132			1.65	20
(S) a,a,a-Trifluorotoluene(FID)				104	105	62.0-128				



Method Blank (MB)

(MB) 04/24/15 17:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TPH (GC/FID) Low Fraction	U		0.0314	0.100
(S) a,a,a-Trifluorotoluene(FID)	101			62.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/24/15 15:39 • (LCSD) 04/24/15 16:00

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.90	6.14	107	112	67.0-132			3.93	20
(S) a,a,a-Trifluorotoluene(FID)				98.7	98.8	62.0-128				

L760074-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/24/15 17:46 • (MS) 04/24/15 16:22 • (MSD) 04/24/15 16:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	1.90	7.60	7.49	104	102	1	50.0-143			1.39	20
(S) a,a,a-Trifluorotoluene(FID)					98.1	97.0		62.0-128				

Method Blank (MB)

(MB) 04/23/15 08:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) 04/23/15 08:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	109			88.5-111
(S) Dibromofluoromethane	104			78.3-121
(S) 4-Bromofluorobenzene	105			71.0-126

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 07:28 • (LCSD) 04/23/15 07:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.151	0.146	121	117	35.6-163			3.31	23.9
Benzene	0.0250	0.0254	0.0244	101	97.8	74.8-121			3.66	20
Bromodichloromethane	0.0250	0.0255	0.0241	102	96.5	75.1-116			5.63	20
Bromoform	0.0250	0.0263	0.0247	105	98.9	67.5-130			6.10	20
Bromomethane	0.0250	0.0213	0.0211	85.3	84.3	49.9-162			1.18	20
n-Butylbenzene	0.0250	0.0243	0.0233	97.1	93.2	76.2-126			4.14	20
sec-Butylbenzene	0.0250	0.0250	0.0242	99.9	96.8	74.4-127			3.23	20
Carbon disulfide	0.0250	0.0236	0.0226	94.3	90.5	64.6-140			4.14	20
Carbon tetrachloride	0.0250	0.0245	0.0238	98.1	95.1	70.2-123			3.11	20
Chlorobenzene	0.0250	0.0247	0.0236	99.0	94.4	78.1-119			4.77	20
Chlorodibromomethane	0.0250	0.0267	0.0247	107	98.8	74.0-121			7.86	20
Chloroethane	0.0250	0.0201	0.0199	80.5	79.6	61.7-135			1.15	20
Chloroform	0.0250	0.0244	0.0235	97.8	94.2	76.0-121			3.72	20
Chloromethane	0.0250	0.0211	0.0206	84.3	82.6	61.5-129			2.12	20
1,2-Dibromoethane	0.0250	0.0254	0.0240	102	95.8	76.6-121			5.91	20
1,1-Dichloroethane	0.0250	0.0255	0.0246	102	98.5	70.7-126			3.53	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 07:28 • (LCSD) 04/23/15 07:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0229	0.0222	91.7	88.9	68.8-124			3.11	20
1,1-Dichloroethene	0.0250	0.0223	0.0214	89.0	85.7	67.8-129			3.87	20
cis-1,2-Dichloroethene	0.0250	0.0265	0.0249	106	99.5	76.0-119			6.42	20
trans-1,2-Dichloroethene	0.0250	0.0257	0.0248	103	99.2	72.6-121			3.55	20
1,2-Dichloropropane	0.0250	0.0269	0.0257	108	103	76.5-119			4.56	20
cis-1,3-Dichloropropene	0.0250	0.0275	0.0260	110	104	78.2-120			5.49	20
trans-1,3-Dichloropropene	0.0250	0.0266	0.0250	106	100	74.3-123			6.12	20
Ethylbenzene	0.0250	0.0249	0.0239	99.6	95.5	78.8-122			4.20	20
2-Hexanone	0.125	0.145	0.137	116	110	65.6-144			5.82	20
Isopropylbenzene	0.0250	0.0252	0.0239	101	95.7	78.6-132			5.14	20
p-Isopropyltoluene	0.0250	0.0253	0.0241	101	96.6	74.0-131			4.61	20
2-Butanone (MEK)	0.125	0.157	0.151	126	121	55.0-149			4.20	20
Methylene Chloride	0.0250	0.0261	0.0249	104	99.6	70.3-120			4.47	20
4-Methyl-2-pentanone (MIBK)	0.125	0.147	0.139	117	111	70.5-133			5.67	20
Methyl tert-butyl ether	0.0250	0.0255	0.0247	102	98.6	71.2-126			3.55	20
Naphthalene	0.0250	0.0259	0.0249	104	99.7	68.4-128			3.76	20
n-Propylbenzene	0.0250	0.0244	0.0234	97.5	93.7	78.2-122			4.06	20
Styrene	0.0250	0.0241	0.0230	96.3	91.9	80.4-126			4.69	20
1,1,1,2-Tetrachloroethane	0.0250	0.0257	0.0242	103	96.9	74.2-124			5.73	20
1,1,2,2-Tetrachloroethane	0.0250	0.0252	0.0240	101	96.1	70.7-122			5.00	20
Tetrachloroethene	0.0250	0.0248	0.0237	99.1	94.7	72.6-126			4.56	20
Toluene	0.0250	0.0248	0.0238	99.4	95.2	79.7-116			4.29	20
1,1,1-Trichloroethane	0.0250	0.0248	0.0237	99.2	94.9	73.2-123			4.52	20
1,1,2-Trichloroethane	0.0250	0.0255	0.0238	102	95.2	77.7-118			6.80	20
Trichloroethene	0.0250	0.0259	0.0248	104	99.4	77.7-118			4.29	20
1,2,4-Trimethylbenzene	0.0250	0.0248	0.0237	99.2	94.8	75.0-123			4.54	20
1,3,5-Trimethylbenzene	0.0250	0.0245	0.0234	98.1	93.6	75.6-124			4.66	20
Vinyl chloride	0.0250	0.0210	0.0204	84.0	81.4	65.9-128			3.10	20
Xylenes, Total	0.0750	0.0745	0.0712	99.3	94.9	78.7-121			4.54	20
o-Xylene	0.0250	0.0250	0.0240	99.8	96.0	77.6-122			3.86	20
m&p-Xylenes	0.0500	0.0495	0.0472	99.1	94.4	78.8-121			4.88	20
(S) Toluene-d8				109	109	88.5-111				
(S) Dibromofluoromethane				102	101	78.3-121				
(S) 4-Bromofluorobenzene				104	104	71.0-126				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) 04/23/15 14:53

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/23/15 14:53

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	106			88.5-111
(S) Dibromofluoromethane	101			78.3-121
(S) 4-Bromofluorobenzene	104			71.0-126

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 12:53 • (LCSD) 04/23/15 13:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.145	0.157	116	125	35.6-163			7.93	23.9
Benzene	0.0250	0.0228	0.0229	91.3	91.4	74.8-121			0.130	20
Bromodichloromethane	0.0250	0.0223	0.0230	89.4	92.0	75.1-116			2.90	20
Bromoform	0.0250	0.0236	0.0256	94.6	102	67.5-130			7.85	20
Bromomethane	0.0250	0.0202	0.0215	81.0	85.9	49.9-162			5.85	20
n-Butylbenzene	0.0250	0.0225	0.0226	90.0	90.3	76.2-126			0.320	20
sec-Butylbenzene	0.0250	0.0234	0.0236	93.7	94.4	74.4-127			0.810	20
Carbon disulfide	0.0250	0.0203	0.0203	81.3	81.4	64.6-140			0.120	20
Carbon tetrachloride	0.0250	0.0245	0.0248	97.9	99.3	70.2-123			1.44	20
Chlorobenzene	0.0250	0.0231	0.0235	92.5	93.9	78.1-119			1.45	20
Chlorodibromomethane	0.0250	0.0236	0.0238	94.3	95.1	74.0-121			0.930	20
Chloroethane	0.0250	0.0226	0.0217	90.5	86.7	61.7-135			4.22	20
Chloroform	0.0250	0.0228	0.0231	91.2	92.4	76.0-121			1.25	20
Chloromethane	0.0250	0.0193	0.0190	77.3	76.0	61.5-129			1.69	20
1,2-Dibromoethane	0.0250	0.0237	0.0240	94.6	96.1	76.6-121			1.56	20
1,1-Dichloroethane	0.0250	0.0238	0.0238	95.3	95.4	70.7-126			0.0800	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/23/15 12:53 • (LCSD) 04/23/15 13:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0240	0.0239	95.9	95.8	68.8-124			0.140	20
1,1-Dichloroethene	0.0250	0.0223	0.0226	89.2	90.5	67.8-129			1.42	20
cis-1,2-Dichloroethene	0.0250	0.0236	0.0242	94.3	96.7	76.0-119			2.58	20
trans-1,2-Dichloroethene	0.0250	0.0226	0.0226	90.5	90.6	72.6-121			0.160	20
1,2-Dichloropropane	0.0250	0.0237	0.0245	94.7	98.0	76.5-119			3.45	20
cis-1,3-Dichloropropene	0.0250	0.0239	0.0245	95.6	98.0	78.2-120			2.46	20
trans-1,3-Dichloropropene	0.0250	0.0234	0.0243	93.6	97.3	74.3-123			3.91	20
Ethylbenzene	0.0250	0.0228	0.0231	91.3	92.5	78.8-122			1.31	20
2-Hexanone	0.125	0.124	0.134	99.4	107	65.6-144			7.26	20
Isopropylbenzene	0.0250	0.0234	0.0233	93.8	93.2	78.6-132			0.600	20
p-Isopropyltoluene	0.0250	0.0229	0.0230	91.8	92.0	74.0-131			0.280	20
2-Butanone (MEK)	0.125	0.132	0.144	105	115	55.0-149			8.67	20
Methylene Chloride	0.0250	0.0221	0.0223	88.3	89.3	70.3-120			1.17	20
4-Methyl-2-pentanone (MIBK)	0.125	0.118	0.126	94.7	101	70.5-133			5.91	20
Methyl tert-butyl ether	0.0250	0.0249	0.0257	99.7	103	71.2-126			2.87	20
Naphthalene	0.0250	0.0225	0.0237	90.0	94.9	68.4-128			5.31	20
n-Propylbenzene	0.0250	0.0229	0.0226	91.6	90.4	78.2-122			1.39	20
Styrene	0.0250	0.0239	0.0242	95.7	96.8	80.4-126			1.14	20
1,1,1,2-Tetrachloroethane	0.0250	0.0240	0.0247	96.1	98.9	74.2-124			2.95	20
1,1,2,2-Tetrachloroethane	0.0250	0.0231	0.0241	92.3	96.3	70.7-122			4.26	20
Tetrachloroethene	0.0250	0.0219	0.0228	87.5	91.1	72.6-126			4.03	20
Toluene	0.0250	0.0223	0.0226	89.1	90.3	79.7-116			1.31	20
1,1,1-Trichloroethane	0.0250	0.0242	0.0239	96.6	95.7	73.2-123			0.960	20
1,1,2-Trichloroethane	0.0250	0.0230	0.0234	92.2	93.6	77.7-118			1.55	20
Trichloroethene	0.0250	0.0234	0.0238	93.7	95.1	77.7-118			1.49	20
1,2,4-Trimethylbenzene	0.0250	0.0229	0.0228	91.8	91.1	75.0-123			0.760	20
1,3,5-Trimethylbenzene	0.0250	0.0227	0.0227	90.9	90.7	75.6-124			0.250	20
Vinyl chloride	0.0250	0.0213	0.0213	85.3	85.1	65.9-128			0.240	20
Xylenes, Total	0.0750	0.0696	0.0691	92.8	92.1	78.7-121			0.660	20
o-Xylene	0.0250	0.0230	0.0230	92.2	92.1	77.6-122			0.110	20
m&p-Xylenes	0.0500	0.0465	0.0461	93.0	92.2	78.8-121			0.940	20
(S) Toluene-d8				106	105	88.5-111				
(S) Dibromofluoromethane				101	102	78.3-121				
(S) 4-Bromofluorobenzene				103	102	71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L760074-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 15:48 • (MS) 04/23/15 13:55 • (MSD) 04/23/15 14:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00199	0.104	0.105	81.3	82.8	1	10.0-130			1.75	27.9
Benzene	0.0250	ND	0.0217	0.0215	86.7	85.9	1	54.3-133			1.00	20
Bromodichloromethane	0.0250	ND	0.0218	0.0221	87.1	88.3	1	63.9-121			1.42	20
Bromoform	0.0250	ND	0.0243	0.0247	97.0	98.7	1	59.5-134			1.70	20.5
Bromomethane	0.0250	ND	0.0195	0.0194	77.8	77.4	1	41.7-155			0.480	21.9
n-Butylbenzene	0.0250	ND	0.0223	0.0227	89.3	90.6	1	62.7-140			1.46	20.3
sec-Butylbenzene	0.0250	ND	0.0228	0.0229	91.0	91.7	1	62.2-136			0.720	20.3
Carbon disulfide	0.0250	ND	0.0181	0.0177	72.4	71.0	1	43.3-149			1.94	20.3
Carbon tetrachloride	0.0250	ND	0.0244	0.0232	97.4	92.6	1	55.7-134			5.08	20
Chlorobenzene	0.0250	ND	0.0224	0.0223	89.5	89.2	1	67.0-125			0.370	20
Chlorodibromomethane	0.0250	ND	0.0228	0.0236	91.1	94.5	1	64.3-125			3.65	20.8
Chloroethane	0.0250	ND	0.0211	0.0205	84.5	82.1	1	51.5-136			2.93	40
Chloroform	0.0250	ND	0.0222	0.0218	88.6	87.0	1	63.0-129			1.79	20
Chloromethane	0.0250	ND	0.0184	0.0183	73.4	73.1	1	42.4-135			0.470	20
1,2-Dibromoethane	0.0250	ND	0.0233	0.0236	93.4	94.5	1	67.1-125			1.24	20
1,1-Dichloroethane	0.0250	ND	0.0227	0.0226	90.9	90.6	1	58.5-132			0.350	20
1,2-Dichloroethane	0.0250	ND	0.0232	0.0235	92.8	94.1	1	60.0-126			1.37	20
1,1-Dichloroethene	0.0250	ND	0.0212	0.0210	84.9	84.1	1	51.1-140			0.880	20.2
cis-1,2-Dichloroethene	0.0250	ND	0.0223	0.0227	89.3	90.9	1	59.2-129			1.77	20
trans-1,2-Dichloroethene	0.0250	ND	0.0215	0.0211	86.0	84.3	1	56.5-129			2.07	20
1,2-Dichloropropane	0.0250	ND	0.0235	0.0231	94.0	92.4	1	64.2-123			1.75	20
cis-1,3-Dichloropropene	0.0250	ND	0.0237	0.0238	95.0	95.1	1	66.4-125			0.150	20
trans-1,3-Dichloropropene	0.0250	ND	0.0241	0.0244	96.3	97.7	1	64.1-128			1.43	20
Ethylbenzene	0.0250	ND	0.0219	0.0221	87.6	88.5	1	61.4-133			1.09	20
2-Hexanone	0.125	ND	0.127	0.131	101	105	1	43.3-137			3.59	25.5
Isopropylbenzene	0.0250	ND	0.0224	0.0225	89.6	90.1	1	66.8-141			0.630	20
p-Isopropyltoluene	0.0250	ND	0.0229	0.0228	91.7	91.3	1	63.2-139			0.460	20.4
2-Butanone (MEK)	0.125	ND	0.120	0.124	95.7	99.2	1	22.4-138			3.59	27
Methylene Chloride	0.0250	0.000475	0.0223	0.0221	87.3	86.5	1	58.1-122			0.940	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.125	0.128	100	103	1	60.8-140			2.40	25.1
Methyl tert-butyl ether	0.0250	ND	0.0251	0.0258	100	103	1	57.7-134			2.61	20
Naphthalene	0.0250	0.000355	0.0230	0.0244	90.4	96.3	1	58.0-135			6.19	25.5
n-Propylbenzene	0.0250	ND	0.0225	0.0223	90.1	89.2	1	65.9-131			1.02	20
Styrene	0.0250	ND	0.0232	0.0232	92.6	92.8	1	66.8-133			0.170	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0234	0.0237	93.7	94.7	1	64.0-128			1.03	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0242	0.0251	96.9	100	1	56.0-132			3.65	22.2

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



L760074-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 04/23/15 15:48 • (MS) 04/23/15 13:55 • (MSD) 04/23/15 14:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0212	0.0211	84.9	84.5	1	53.0-139			0.470	20
Toluene	0.0250	ND	0.0215	0.0214	86.0	85.7	1	61.4-130			0.350	20
1,1,1-Trichloroethane	0.0250	ND	0.0229	0.0226	91.6	90.4	1	58.7-134			1.36	20
1,1,2-Trichloroethane	0.0250	ND	0.0226	0.0229	90.5	91.8	1	66.3-125			1.42	20
Trichloroethene	0.0250	ND	0.0222	0.0221	88.6	88.3	1	44.1-149			0.320	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0226	0.0227	90.5	90.8	1	57.4-137			0.280	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0222	0.0222	88.8	88.9	1	63.6-132			0.0700	20.5
Vinyl chloride	0.0250	ND	0.0202	0.0196	80.7	78.5	1	47.8-137			2.75	20
Xylenes, Total	0.0750	ND	0.0676	0.0672	90.2	89.7	1	63.3-131			0.610	20
o-Xylene	0.0250	ND	0.0227	0.0226	90.6	90.5	1	63.3-130			0.180	20
m&p-Xylenes	0.0500	ND	0.0450	0.0446	90.0	89.2	1	61.7-133			0.830	20
(S) Toluene-d8					105	105		88.5-111				
(S) Dibromofluoromethane					105	104		78.3-121				
(S) 4-Bromofluorobenzene					103	104		71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) 04/29/15 17:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Acetone	U		0.0100	0.0500
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromoethane	U		0.000381	0.00100
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) 04/29/15 17:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
o-Xylene	U		0.000341	0.00100
m&p-Xylenes	U		0.000719	0.00100
(S) Toluene-d8	98.7			88.5-111
(S) Dibromofluoromethane	91.0			78.3-121
(S) 4-Bromofluorobenzene	97.6			71.0-126

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/29/15 16:13 • (LCSD) 04/29/15 16:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.144	0.121	115	96.8	35.6-163			17.4	23.9
Benzene	0.0250	0.0225	0.0195	89.9	78.0	74.8-121			14.1	20
Bromodichloromethane	0.0250	0.0250	0.0213	99.9	85.4	75.1-116			15.7	20
Bromoform	0.0250	0.0286	0.0246	115	98.3	67.5-130			15.2	20
Bromomethane	0.0250	0.0251	0.0213	100	85.0	49.9-162			16.4	20
n-Butylbenzene	0.0250	0.0251	0.0214	100	85.7	76.2-126			15.9	20
sec-Butylbenzene	0.0250	0.0244	0.0215	97.6	85.8	74.4-127			12.8	20
Carbon disulfide	0.0250	0.0248	0.0210	99.0	84.1	64.6-140			16.3	20
Carbon tetrachloride	0.0250	0.0252	0.0222	101	89.0	70.2-123			12.5	20
Chlorobenzene	0.0250	0.0257	0.0220	103	88.1	78.1-119			15.4	20
Chlorodibromomethane	0.0250	0.0269	0.0239	107	95.8	74.0-121			11.4	20
Chloroethane	0.0250	0.0231	0.0198	92.3	79.2	61.7-135			15.3	20
Chloroform	0.0250	0.0227	0.0189	90.8	75.8	76.0-121		*	18.0	20
Chloromethane	0.0250	0.0196	0.0171	78.3	68.2	61.5-129		-	13.7	20
1,2-Dibromoethane	0.0250	0.0251	0.0216	100	86.2	76.6-121			15.1	20
1,1-Dichloroethane	0.0250	0.0234	0.0197	93.5	78.8	70.7-126			17.0	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/29/15 16:13 • (LCSD) 04/29/15 16:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichloroethane	0.0250	0.0238	0.0204	95.2	81.7	68.8-124			15.3	20
1,1-Dichloroethene	0.0250	0.0247	0.0209	98.9	83.7	67.8-129			16.7	20
cis-1,2-Dichloroethene	0.0250	0.0231	0.0197	92.5	78.8	76.0-119			16.1	20
trans-1,2-Dichloroethene	0.0250	0.0236	0.0202	94.6	80.7	72.6-121			15.8	20
1,2-Dichloropropane	0.0250	0.0243	0.0210	97.3	83.9	76.5-119			14.8	20
cis-1,3-Dichloropropene	0.0250	0.0250	0.0216	99.9	86.6	78.2-120			14.3	20
trans-1,3-Dichloropropene	0.0250	0.0239	0.0214	95.6	85.6	74.3-123			11.1	20
Ethylbenzene	0.0250	0.0258	0.0218	103	87.4	78.8-122			16.8	20
2-Hexanone	0.125	0.138	0.116	110	92.8	65.6-144			17.3	20
Isopropylbenzene	0.0250	0.0253	0.0218	101	87.2	78.6-132			14.7	20
p-Isopropyltoluene	0.0250	0.0255	0.0219	102	87.8	74.0-131			15.0	20
2-Butanone (MEK)	0.125	0.136	0.118	109	94.5	55.0-149			13.9	20
Methylene Chloride	0.0250	0.0222	0.0193	88.9	77.1	70.3-120			14.3	20
4-Methyl-2-pentanone (MIBK)	0.125	0.126	0.111	101	88.8	70.5-133			12.8	20
Methyl tert-butyl ether	0.0250	0.0224	0.0199	89.4	79.5	71.2-126			11.8	20
Naphthalene	0.0250	0.0224	0.0196	89.7	78.5	68.4-128			13.3	20
n-Propylbenzene	0.0250	0.0249	0.0214	99.8	85.7	78.2-122			15.2	20
Styrene	0.0250	0.0215	0.0199	86.0	79.5	80.4-126		*	7.92	20
1,1,1,2-Tetrachloroethane	0.0250	0.0273	0.0238	109	95.2	74.2-124			13.7	20
1,1,2,2-Tetrachloroethane	0.0250	0.0240	0.0212	96.2	84.8	70.7-122			12.6	20
Tetrachloroethene	0.0250	0.0276	0.0239	111	95.7	72.6-126			14.4	20
Toluene	0.0250	0.0249	0.0203	99.5	81.2	79.7-116		*	20.3	20
1,1,1-Trichloroethane	0.0250	0.0247	0.0213	98.6	85.4	73.2-123			14.4	20
1,1,2-Trichloroethane	0.0250	0.0245	0.0219	98.0	87.4	77.7-118			11.4	20
Trichloroethene	0.0250	0.0244	0.0211	97.4	84.5	77.7-118			14.2	20
1,2,4-Trimethylbenzene	0.0250	0.0246	0.0209	98.5	83.4	75.0-123			16.6	20
1,3,5-Trimethylbenzene	0.0250	0.0245	0.0209	97.8	83.4	75.6-124			15.9	20
Vinyl chloride	0.0250	0.0221	0.0190	88.5	76.1	65.9-128			15.1	20
Xylenes, Total	0.0750	0.0758	0.0656	101	87.4	78.7-121			14.6	20
o-Xylene	0.0250	0.0251	0.0216	101	86.2	77.6-122			15.4	20
m&p-Xylenes	0.0500	0.0507	0.0440	101	88.0	78.8-121			14.2	20
(S) Toluene-d8				98.2	97.9	88.5-111				
(S) Dibromofluoromethane				93.5	93.0	78.3-121				
(S) 4-Bromofluorobenzene				97.8	96.4	71.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) 04/20/15 15:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TPH (GC/FID) High Fraction	U		0.0247	0.100
(S) o-Terphenyl	119			50.0-150

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 04/20/15 15:34 • (LCSD) 04/20/15 15:52

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TPH (GC/FID) High Fraction	1.50	1.74	1.62	116	108	50.0-150			7.01	20
(S) o-Terphenyl				124	118	50.0-150				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
4	The sample concentration was greater than 4 times the spike value.
*	LCS/LCSD recovery outside the control limit or RPD value outside the control limit.
F	The MS/MSD recovery outside the control limit.
H	Outside holding time.
J	Estimated value.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

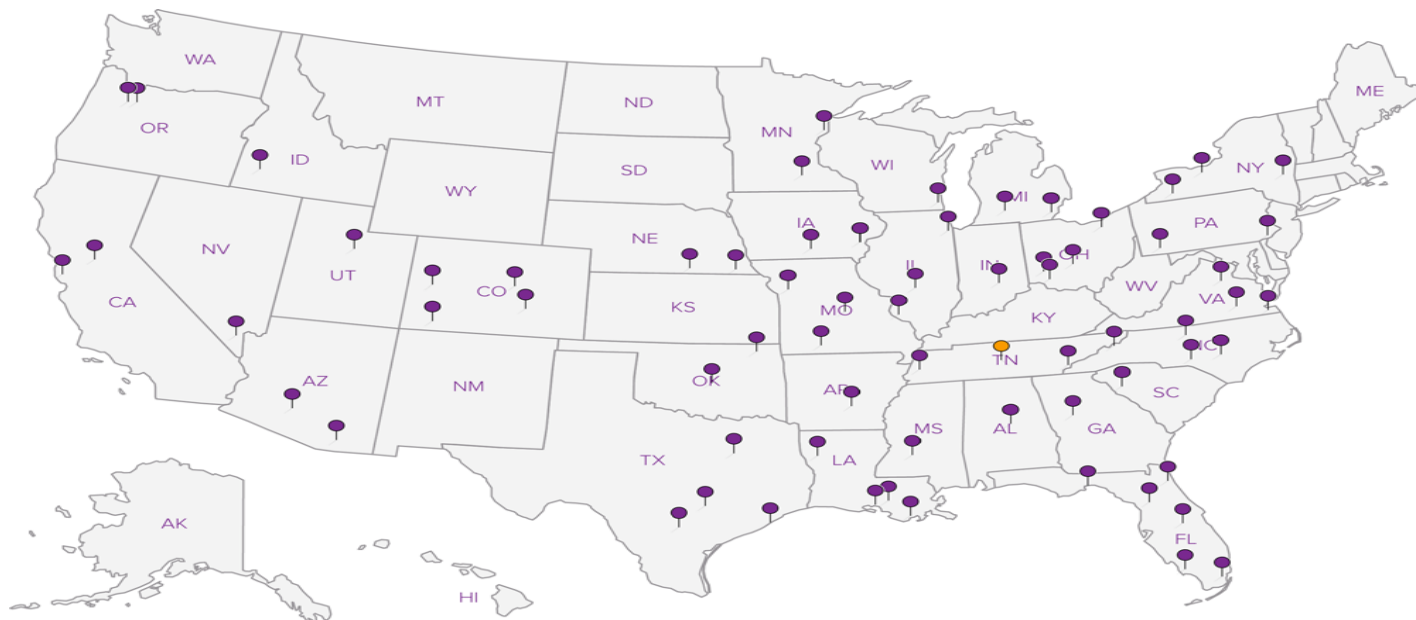
¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA–Crypto	TN00003	USDA	S-67674

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



ARCADIS, Inc.
2929 Briarpark Drive,
Suite 300
Houston, TX 77042

Billing Information:

Report to: Pam Krueger

Email To: pam.krueger@arcadis-us.com;
maisha.turner@arcadis-us.com;
melissa.osborne@arcadis-us.com

Project Navajo Refining Company

City/State Artesia, NM
Collected:

Phone: 713-953-4816
Fax: 713-977-4620

EP TX000836.0007.15004 ✓

Lab Project # ARCADHTX-
NAVAJO FULL

Collected by (print):
Brian Hilling + HMI

Site/Facility ID #

P.O. #

Collected by (signature):
Swa Ude

Rush? (Lab MUST Be
Notified)

Date Results Needed

Immediately Iced?
N ___ Y ✓

Next Day 100%
Two Day 50%
Three Day 25%

Email? ___ No ___ Yes
FAX? ___ No ___ Yes

No.
of
Cntr

Sample ID	Comp/ Grab	Matrix *	Depth	Date	Time	Cntr	DRC	GRC	Volat	Total	Total	Dis M	Dis M Se,V	Cyan	Anion	Cation	NO2	TDS	Shipped Via:	
																			Remarks/Comments	Sample # (lab only)
~~KWB P4~~	~~G~~	~~GW~~					✓		✓										54	
mw-1R				4/15/15	1610	10	✓		✓	✓		✓			✓	✓	✓	✓		-01
mw-1S					1510	12	✓	✓	✓	✓		✓			✓	✓	✓	✓		-02
OCD-1R					855	1	✓	✓	✓	✓		✓			✓	✓	✓	✓		-03
OCD-2A					945		✓	✓	✓	✓		✓			✓	✓	✓	✓		-04
OCD-3					1035		✓	✓	✓	✓		✓			✓	✓	✓	✓		-05
OCD-4					1130		✓	✓	✓	✓		✓			✓	✓	✓	✓		-06
mw-11A					1220		✓	✓	✓	✓		✓			✓	✓	✓	✓		-07
mw-11B					1310		✓	✓	✓	✓		✓			✓	✓	✓	✓		-08
OCD-5	↓	↓		↓	1405	1	✓	✓	✓	✓		✓			✓	✓	✓	✓		-09

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Hold #

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Samples returned via: ☐ UPS

☒ FedEx ☐ Courier ☐ _____

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: 23.0 °C

227

COC Seal Intact: ☒ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

4/17/15

0900

pH Checked: <2

NCF:

Chain of Custody Page 14 of 20

ESC
LAB SCIENCES

YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# 1760074

Tal J151

Acctnum: ARCADHTX

Template: T101458

Prelogin:

TSR: Pam Langford

PB: 3.31

Shipped Via:

Remarks/Comments

Sample # (lab only)

NCF:	

ARCADIS, Inc. 2929 Briarpark Drive, Suite 300 Houston, TX 77042				Billing Information: Report to: Pam Krueger Email To: pam.krueger@arcadis-us.com; maisha.turner@arcadis-us.com; melissa.osborne@arcadis-us.com				Analysis / Container / Preservative												Chain of Custody Page 18 of 20 L.A.B S.C.I.E.N.C.E.S YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 													
Project Navajo Refining Company Phone: 713-953-4816 Fax: 713-977-4620				City/State Artesia, NM Collected: Lab Project # ARCADHTX- NAVAJO FULL				<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">DRO 8015</td> <td style="width: 5%;">GRO 8015</td> <td style="width: 10%;">Volatiles 8260 (Extended List)</td> <td style="width: 10%;">Total Metals: As, Ba, Cr, Fe, Pb, Mn, Se</td> <td style="width: 10%;">Total Metals: As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V, Hg</td> <td style="width: 10%;">Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Se</td> <td style="width: 10%;">Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V</td> <td style="width: 5%;">Cyanide</td> <td style="width: 10%;">Anions: Chloride, Fluoride, Sulfate</td> <td style="width: 10%;">Cations: Ca, K, Na (from Total Metals container)</td> <td style="width: 5%;">NO2 / NO3</td> <td style="width: 5%;">TDS</td> </tr> </table>												DRO 8015	GRO 8015	Volatiles 8260 (Extended List)	Total Metals: As, Ba, Cr, Fe, Pb, Mn, Se	Total Metals: As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V, Hg	Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Se	Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V	Cyanide	Anions: Chloride, Fluoride, Sulfate	Cations: Ca, K, Na (from Total Metals container)	NO2 / NO3	TDS	L# L760074 Table # Acctnum: ARCADHTX Template: T101410 Prelogin: TSR: Pam Langford PB: 3-31-15 mro Shipped Via:	
DRO 8015	GRO 8015	Volatiles 8260 (Extended List)	Total Metals: As, Ba, Cr, Fe, Pb, Mn, Se	Total Metals: As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V, Hg	Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Se	Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V	Cyanide	Anions: Chloride, Fluoride, Sulfate	Cations: Ca, K, Na (from Total Metals container)	NO2 / NO3	TDS																						
Collected by (print): Mason Bond + HM				Site/Facility ID # EP TX000836.0007.15004				P.O. # Date Results Needed				Email? ☐ No ☐ Yes FAX? ☐ No ☐ Yes No. of Cntr				Rush? (Lab MUST Be Notified) Next Day 100% Two Day 50% Three Day 25%		Immediately Iced? N ☐ Y ☒															
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntr	DRO 8015	GRO 8015	Volatiles 8260 (Extended List)	Total Metals: As, Ba, Cr, Fe, Pb, Mn, Se	Total Metals: As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V, Hg	Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Se	Dis Metals: (FFiltered) As, Ba, Cr, Fe, Pb, Mn, Ni, Se, V	Cyanide	Anions: Chloride, Fluoride, Sulfate	Cations: Ca, K, Na (from Total Metals container)	NO2 / NO3	TDS	Remarks/Comments	Sample # (lab only)													
MW-6A	G	GW		4/15/15	1055	12	✓	✓	✓	✓		✓			✓	✓	✓	✓		-13													
MW-6B				4/15/15	1005	12	✓	✓	✓	✓		✓			✓	✓	✓	✓		-14													
~~MW-85~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	NO SAMPLE (LNAPL)														
~~MW-86~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	NO SAMPLE (LNAPL)														
MW-120				4/15/15	1155	12	✓	✓	✓	✓		✓			✓	✓	✓	✓		-15													
MW-121				4/15/15	1255	12	✓	✓	✓	✓		✓			✓	✓	✓	✓		-16													
~~MW-84~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	SH														
MW-122				4/15/15	1435	12	✓	✓	✓	✓		✓			✓	✓	✓	✓		-17													
~~MW-81~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	SH														
~~MW-80~~							✓	✓	✓	✓		✓			✓	✓	✓	✓	SH														

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____				pH _____ Temp _____ Flow _____ Other _____				Hold #	
Remarks:				Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ _____				Condition: (lab use only)	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.3°C	227	COC Seal Intact: ☒ Y ☐ N ☐ NA			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	4/7/15	0900	pH Checked: 4.2 NCF:			
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)			(Signature)			