



Client	Kinder Morgan	9152-2019101009.1	
Sample Id.	Doe Canyon Da Cluster	Sample Pressure (psig)	N/A
Sample Source	T-316	Sample Temp. (°F)	N/A
Sample Type	Spot	Atm Temp. (°F)	N/A
Meter #	N/A	Sample Date	10/10/2019
Sampled By	KM	Report Date	10/15/2019
Analysis Requested	Sulfur Speciation	Field Data	N/A

	<b>Total Sulfur</b>	<b>Compound</b>
	<b><u>ppm mol</u></b>	<b><u>ppm mol</u></b>
Hydrogen Sulfide	0.71	0.75
Sulfur Dioxide	N.D.	N.D.
Carbonyl Sulfide	N.D.	N.D.
Methyl Mercaptan	N.D.	N.D.
Ethyl Mercaptan	N.D.	N.D.
Dimethyl Sulfide	N.D.	N.D.
Carbon Disulfide	0.06	0.07
Isopropyl Mercaptan	N.D.	N.D.
Tert Butyl Mercaptan	N.D.	N.D.
N-Propyl Mercaptan	N.D.	N.D.
Ethyl Methyl Sulfide	N.D.	N.D.
Sec-Butyl Mercaptan	0.02	0.06
Thiophene	N.D.	N.D.
Isobutyl Mercaptan	N.D.	N.D.
N-Butyl Mercaptan	N.D.	N.D.
Total	0.79	0.88

N.D. Denotes Not Detected



Client	Kinder Morgan	9152-2019101009.2	
Sample Id.	Doe Canyon Da Cluster	Sample Pressure (psig)	N/A
Sample Source	T-340	Sample Temp. (°F)	N/A
Sample Type	Spot	Atm Temp. (°F)	N/A
Meter #	N/A	Sample Date	10/10/2019
Sampled By	KM	Report Date	10/15/2019
Analysis Requested	Sulfur Speciation	Field Data	N/A

	<b>Total Sulfur</b>	<b>Compound</b>
	<b><u>ppm mol</u></b>	<b><u>ppm mol</u></b>
Hydrogen Sulfide	624.39	663.75
Sulfur Dioxide	N.D.	N.D.
Carbonyl Sulfide	N.D.	N.D.
Methyl Mercaptan	N.D.	N.D.
Ethyl Mercaptan	0.96	1.86
Dimethyl Sulfide	N.D.	N.D.
Carbon Disulfide	0.04	0.05
Isopropyl Mercaptan	N.D.	N.D.
Tert Butyl Mercaptan	N.D.	N.D.
N-Propyl Mercaptan	N.D.	N.D.
Ethyl Methyl Sulfide	N.D.	N.D.
Sec-Butyl Mercaptan	N.D.	N.D.
Thiophene	N.D.	N.D.
Isobutyl Mercaptan	N.D.	N.D.
N-Butyl Mercaptan	N.D.	N.D.
Total	625.39	665.65

N.D. Denotes Not Detected



Client	Kinder Morgan	9152-2019101009.3	
Sample Id.	Doe Canyon Da Cluster	Sample Pressure (psig)	N/A
Sample Source	T-341	Sample Temp. (°F)	N/A
Sample Type	Spot	Atm Temp. (°F)	N/A
Meter #	N/A	Sample Date	10/10/2019
Sampled By	KM	Report Date	10/15/2019
Analysis Requested	Sulfur Speciation	Field Data	N/A

	<b>Total Sulfur</b>	<b>Compound</b>
	<b><u>ppm mol</u></b>	<b><u>ppm mol</u></b>
Hydrogen Sulfide	56.14	59.68
Sulfur Dioxide	N.D.	N.D.
Carbonyl Sulfide	N.D.	N.D.
Methyl Mercaptan	N.D.	N.D.
Ethyl Mercaptan	N.D.	N.D.
Dimethyl Sulfide	N.D.	N.D.
Carbon Disulfide	N.D.	N.D.
Isopropyl Mercaptan	N.D.	N.D.
Tert Butyl Mercaptan	N.D.	N.D.
N-Propyl Mercaptan	N.D.	N.D.
Ethyl Methyl Sulfide	N.D.	N.D.
Sec-Butyl Mercaptan	0.02	0.05
Thiophene	N.D.	N.D.
Isobutyl Mercaptan	0.01	0.04
N-Butyl Mercaptan	N.D.	N.D.
Total	56.17	59.77

N.D. Denotes Not Detected



Client	Kinder Morgan	9152-2019101009.4	
Sample Id.	Doe Canyon Da Cluster	Sample Pressure (psig)	N/A
Sample Source	T-342	Sample Temp. (°F)	N/A
Sample Type	Spot	Atm Temp. (°F)	N/A
Meter #	N/A	Sample Date	10/10/2019
Sampled By	KM	Report Date	10/15/2019
Analysis Requested	Sulfur Speciation	Field Data	N/A

	<b>Total Sulfur</b>	<b>Compound</b>
	<b><u>ppm mol</u></b>	<b><u>ppm mol</u></b>
Hydrogen Sulfide	0.15	0.16
Sulfur Dioxide	N.D.	N.D.
Carbonyl Sulfide	N.D.	N.D.
Methyl Mercaptan	N.D.	N.D.
Ethyl Mercaptan	N.D.	N.D.
Dimethyl Sulfide	N.D.	N.D.
Carbon Disulfide	N.D.	N.D.
Isopropyl Mercaptan	N.D.	N.D.
Tert Butyl Mercaptan	N.D.	N.D.
N-Propyl Mercaptan	N.D.	N.D.
Ethyl Methyl Sulfide	N.D.	N.D.
Sec-Butyl Mercaptan	N.D.	N.D.
Thiophene	N.D.	N.D.
Isobutyl Mercaptan	N.D.	N.D.
N-Butyl Mercaptan	0.04	0.12
Total	0.20	0.28

N.D. Denotes Not Detected



Client	Kinder Morgan	9152-2019101009.5	
Sample Id.	Doe Canyon Da Cluster	Sample Pressure (psig)	N/A
Sample Source	T-350	Sample Temp. (°F)	N/A
Sample Type	Spot	Atm Temp. (°F)	N/A
Meter #	N/A	Sample Date	10/10/2019
Sampled By	KM	Report Date	10/15/2019
Analysis Requested	Sulfur Speciation	Field Data	N/A

	<b>Total Sulfur</b>	<b>Compound</b>
	<b><u>ppm mol</u></b>	<b><u>ppm mol</u></b>
Hydrogen Sulfide	127.25	135.27
Sulfur Dioxide	N.D.	N.D.
Carbonyl Sulfide	N.D.	N.D.
Methyl Mercaptan	N.D.	N.D.
Ethyl Mercaptan	N.D.	N.D.
Dimethyl Sulfide	N.D.	N.D.
Carbon Disulfide	N.D.	N.D.
Isopropyl Mercaptan	N.D.	N.D.
Tert Butyl Mercaptan	N.D.	N.D.
N-Propyl Mercaptan	N.D.	N.D.
Ethyl Methyl Sulfide	N.D.	N.D.
Sec-Butyl Mercaptan	N.D.	N.D.
Thiophene	N.D.	N.D.
Isobutyl Mercaptan	N.D.	N.D.
N-Butyl Mercaptan	N.D.	N.D.
Total	127.25	135.27

N.D. Denotes Not Detected



Client	Kinder Morgan	9152-2019101009.6	
Sample Id.	Doe Canyon Da Cluster	Sample Pressure (psig)	N/A
Sample Source	T-351	Sample Temp. (°F)	N/A
Sample Type	Spot	Atm Temp. (°F)	N/A
Meter #	N/A	Sample Date	10/10/2019
Sampled By	KM	Report Date	10/16/2019
Analysis Requested	Sulfur Speciation	Field Data	N/A

	<b>Total Sulfur</b>	<b>Compound</b>
	<b><u>ppm mol</u></b>	<b><u>ppm mol</u></b>
Hydrogen Sulfide	281.43	299.17
Sulfur Dioxide	N.D.	N.D.
Carbonyl Sulfide	N.D.	N.D.
Methyl Mercaptan	0.18	0.27
Ethyl Mercaptan	0.04	0.08
Dimethyl Sulfide	N.D.	N.D.
Carbon Disulfide	N.D.	N.D.
Isopropyl Mercaptan	N.D.	N.D.
Tert Butyl Mercaptan	N.D.	N.D.
N-Propyl Mercaptan	N.D.	N.D.
Ethyl Methyl Sulfide	N.D.	N.D.
Sec-Butyl Mercaptan	N.D.	N.D.
Thiophene	N.D.	N.D.
Isobutyl Mercaptan	N.D.	N.D.
N-Butyl Mercaptan	N.D.	N.D.
Total	281.65	299.53

N.D. Denotes Not Detected