

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

2018 MAR 16 PM 2:49

IN THE MATTER OF: )  
)  
Williams Four Corners LLC/Ignacio Gas )  
Plant, Durango, Colorado )  
)  
Proceeding Pursuant to )  
the Clean Air Act, )  
42 U.S.C. §§ 7401 et seq. )  
)

FILED  
EPA REGION VIII  
HEARING CLERK

NOTICE OF VIOLATION  
EPA-CAA-08-2018-0004

**NOTICE OF VIOLATION**

The U.S. Environmental Protection Agency alleges that Williams Four Corners LLC (Four Corners) violated and continues to violate sections 111 and 112 of the Clean Air Act (CAA), 42 U.S.C. §§ 7411 and 7412, and regulations approved thereunder, at the Ignacio Gas Plant (Ignacio Plant). Specifically, Four Corners violated and continues to violate the Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011, 40 C.F.R. §§ 60.630 – 60.636 (subpart KKK); the Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015, 40 C.F.R. §§ 60.5360 – 60.5430 (subpart OOOO); and the National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities, 40 C.F.R. §§ 63.760 – 63.779 (subpart HH). The EPA also alleges that Four Corners violated and continues to violate the Prevention of Significant Deterioration of Air Quality (PSD) permitting provisions of the CAA at 42 U.S.C. §§ 7471 – 7479; the Title V permitting provisions of the CAA at 42 U.S.C. §§ 7661 – 7661f; and the regulations implementing Title V at 40 C.F.R. part 71 at the Ignacio Plant.

The issuance of this Notice of Violation does not in any way limit or preclude the EPA from pursuing additional enforcement options concerning the inspections or review referenced in this Notice of Violation. Moreover, this Notice of Violation does not preclude enforcement action for violations not specifically addressed in this Notice of Violation.

**Statutory and Regulatory Authority**

**Standards of Performance - General**

1. Section 111 of the CAA, 42 U.S.C. § 7411, authorizes the EPA to promulgate regulations establishing New Source Performance Standards (NSPS).
2. Section 111(e) of the CAA, 42 U.S.C. § 7411(e), states that after the effective date of standards of performance promulgated under section 111, it shall be unlawful for any

owner or operator of any new source to operate such source in violation of any standard of performance applicable to such source.

3. Section 111(a)(2) of the CAA, 42 U.S.C. § 7411(a)(2), defines “new source” as any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance which will be applicable to such source.

4. Section 111(a)(3) of the CAA, 42 U.S.C. § 7411(a)(3), defines “stationary source” as any building, structure, facility, or installation which emits or may emit an air pollutant.

5. A “modification” is “any physical change in . . . a stationary source which increases the amount of any air pollutant emitted by such source.” 42 U.S.C. § 7411(a)(4).

### **Standards of Performance – Subpart A**

6. Subpart A, at 40 C.F.R. § 60.1(a), specifies that the provisions of subpart A apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

7. Subpart A, at 40 C.F.R. § 60.14(a), provides that any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the CAA. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

8. Subpart A, at 40 C.F.R. § 60.2, defines “capital expenditure” as an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable “annual asset guideline repair allowance percentage” specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any “excluded additions” as defined in IRS Publication 534, as would be done for tax purposes.

9. Subpart A, at 40 C.F.R. § 60.18, contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61.

10. Subpart A, at 40 C.F.R. § 60.18(c)(4)(ii), indicates that steam-assisted and non-assisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of section 60.18, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

11. Subpart A, at 40 C.F.R. § 60.18(d), indicates that owners or operators of flares used to comply with the provisions of subpart A shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

### **Standards of Performance - Subparts KKK and VV**

12. On June 24, 1985, the EPA promulgated subpart KKK, which sets forth standards of performance for equipment leaks of VOC from onshore natural gas processing plants for which construction, reconstruction, or modification commenced after January 20, 1984, and on or before August 23, 2011. 50 F.R. 26,124 (June 24, 1985).

13. Subpart KKK, at 40 C.F.R. § 60.630(a)(3), applies to the group of all equipment except compressors within a process unit at onshore natural gas processing plants.

14. Subpart KKK, at 40 C.F.R. § 60.631, states that as used in subpart KKK, all terms not defined therein shall have the meaning given them in the CAA, subpart A or subpart VV of 40 C.F.R. part 60.

15. Subpart KKK, at 40 C.F.R. § 60.631, defines “process unit” as equipment assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.

16. Subpart KKK, at 40 C.F.R. § 60.631, defines “equipment” as each pump, pressure relief device, open-ended valve or line, valve, compressor and flange or other connector that is in VOC service or in wet gas service, and any device or system required by subpart KKK.

17. Subpart KKK, at 40 C.F.R. § 60.631, defines “onshore” as all facilities except those that are located in the territorial seas or on the outer continental shelf.

18. Subpart KKK, at 40 C.F.R. § 60.631, defines “natural gas processing plant” as any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both.

19. Subpart KKK, at 40 C.F.R. § 60.631, defines “in wet gas service” as a piece of equipment containing or contacting the field gas before the extraction step in a gas processing plant.

20. Subpart KKK, at 40 C.F.R. § 60.631, defines “in light liquid service” as a piece of equipment containing a liquid that meets the conditions specified in 40 C.F.R. §§ 60.485(e) or 60.633(h)(2).

21. Subpart KKK, at 40 C.F.R. § 60.631, defines “field gas” as feedstock gas entering the natural gas processing plant.

22. Subpart KKK, at 40 C.F.R. § 60.632(a), (d), and (e), specifies the provisions of the Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals

Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 (subpart VV) that apply to owners and operators of affected facilities.

23. Subpart VV, at 40 C.F.R. § 60.481, defines “in gas/vapor service” as a piece of equipment containing process fluid that is in the gaseous state at operating conditions.

24. Subpart VV, at 40 C.F.R. § 60.481, defines “in VOC service” as a piece of equipment containing or contacting a process fluid that is at least 10 percent VOC by weight.

25. Subpart VV, at 40 C.F.R. § 60.481, defines “volatile organic compounds or VOC” to mean any reactive organic compounds as defined in 40 C.F.R. § 60.2.

26. Subpart VV, at 40 C.F.R. § 60.481, defines “repaired” to mean that equipment is adjusted, or otherwise altered, in order to eliminate a leak as defined in the applicable sections of this subpart and, except for leaks identified in accordance with 40 C.F.R. §§ 60.482-2(b)(2)(ii) and (d)(6)(ii) and (iii), 60.482-3(f), and 60.482-10(f)(1)(ii), is re-monitored as specified in 40 C.F.R. § 60.485(b) to verify that emissions from the equipment are below the applicable leak definition.

27. Subpart VV, at 40 C.F.R. § 60.482-2, sets forth standards for pumps in light liquid service.

28. Subpart VV, at 40 C.F.R. § 60.482-2(a)(1), specifies that each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 60.485(b).

29. Subpart VV, at 40 C.F.R. § 60.482-2(b)(1), specifies that if an instrument reading of 10,000 ppm or greater is measured at a pump in light liquid service, a leak is detected.

30. Subpart VV, at 40 C.F.R. § 60.482-2(c)(1), specifies that when a leak is detected at a pump in light liquid service, it shall be repaired as soon as practicable, but no later than 15 days after it is detected unless the leaking equipment is placed on delay of repair pursuant to 40 C.F.R. § 60.482-9.

31. Subpart VV, at 40 C.F.R. § 60.482-7, sets forth standards for valves in gas/vapor and in light liquid service.

32. Subpart VV, at 40 C.F.R. § 60.482-7(a)(1), specifies that each valve shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 60.485(b) and shall comply with paragraphs (b) through (e) of 40 C.F.R. § 60.482-7.

33. Subpart VV, at 40 C.F.R. § 60.482-7(a)(2)(i), specifies that each valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period.

34. Subpart VV, at 40 C.F.R. § 60.482-7(b), specifies that if an instrument reading of 10,000 ppm or greater is measured at a valve in gas/vapor or light liquid service, a leak is detected.

35. Subpart VV, at 40 C.F.R. § 60.482-7(c)(1)(i), specifies that any valve in gas/vapor or light liquid service for which a leak is not detected for two successive months may be monitored quarterly until a leak is detected.

36. Subpart VV, at 40 C.F.R. § 60.482-7(c)(2), specifies that any valve in gas/vapor or light liquid service being monitored quarterly that is found to be leaking must be monitored monthly until a leak is not detected for two successive months.

37. Subpart VV, at 40 C.F.R. § 60.482-10(d), specifies that flares used to comply with subpart VV shall also comply with the requirements of 40 C.F.R. § 60.18.

### **Standards of Performance - Subparts OOOO and VVa**

38. Subpart OOOO establishes emission standards and compliance schedules for the control of VOC and sulfur dioxide (SO<sub>2</sub>) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011 and on or before September 18, 2015. 40 C.F.R. § 60.5360.

39. Subpart OOOO, at 40 C.F.R. § 60.5370, specifies that affected facilities must be in compliance with the standards of subpart OOOO no later than October 15, 2012, or upon startup, whichever is later.

40. Subpart OOOO, at 40 C.F.R. § 60.5365(f), states that subpart OOOO applies to the group of all equipment except compressors within a process unit at onshore natural gas processing plants.

41. Subpart OOOO, at 40 C.F.R. § 60.5365(f)(1), specifies that the addition or replacement of equipment for the purpose of process improvement during the August 23, 2011, to September 18, 2015, time-period is not a “modification” that triggers the applicability of subpart OOOO unless it constitutes a “capital expenditure,” as these terms are defined in the CAA and in 40 C.F.R. part 60. 42 U.S.C. § 7411(a)(4); 40 C.F.R. §§ 60.2, 60.480a, and 60.481.

42. Subpart OOOO, at 40 C.F.R. § 60.5430, specifies that all terms not defined therein shall have the meaning given them in the CAA, in subpart A or subpart VVa of 40 C.F.R. part 60.

43. Subpart OOOO, at 40 C.F.R. § 60.5430, defines “process unit” as components assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.

44. Subpart OOOO, at 40 C.F.R. § 60.5430, defines “equipment” as used in the standards and requirements in subpart OOOO relative to the equipment leaks of VOC from

onshore natural gas processing plants, as each pump, pressure relief device, open-ended valve or line, valve, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by those same standards and requirements in subpart OOOO.

45. Subpart OOOO, at 40 C.F.R. § 60.5430, defines “onshore” as all facilities except those that are located in the territorial seas or on the outer continental shelf.

46. Subpart OOOO, at 40 C.F.R. § 60.5430, defines “natural gas processing plant” as any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both.

47. Subpart OOOO, at 40 C.F.R. § 60.5430, defines “in wet gas service” as a compressor or piece of equipment containing or contacting the field gas before the extraction step in a gas processing plant.

48. Subpart OOOO, at 40 C.F.R. § 60.5430, defines “in light liquid service” as a piece of equipment containing a liquid that meets the conditions specified in 40 C.F.R. §§ 60.485a(e) or 60.5401(g)(2).

49. Subpart OOOO, at 40 C.F.R. § 60.5430, defines “field gas” as feedstock gas entering the natural gas processing plant.

50. Subpart OOOO, at 40 C.F.R. § 60.5400(a), (d), and (e), specifies the provisions of the Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006 (subpart VVa) that apply to owners and operators of subpart OOOO affected facilities.

51. Subpart VVa, at 40 C.F.R. § 60.481a, defines “connector” as flanged, screwed, or other joined fittings used to connect two pipe lines or a pipe line and a piece of process equipment or that close an opening in a pipe that could be connected to another pipe. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purpose of this regulation.

52. Subpart VVa, at 40 C.F.R. § 60.481a, defines “in gas/vapor service” as a piece of equipment containing process fluid that is in the gaseous state at operating conditions.

53. Subpart VVa, at 40 C.F.R. § 60.481a, defines “in VOC service” as a piece of equipment containing or contacting a process fluid that is a least 10 percent VOC by weight.

54. Subpart VVa, at 40 C.F.R. § 60.481a, defines “repaired” to mean that equipment is adjusted, or otherwise altered, in order to eliminate a leak as defined in the applicable sections of this subpart and, except for leaks identified in accordance with 40 C.F.R. §§ 60.482-2a(b)(2)(ii) and (d)(6)(ii) and (d)(6)(iii), 60.482-3a(f), and 60.482-10a(f)(1)(ii), is re-monitored as specified in 40 C.F.R. § 60.485a(b) to verify that emissions from the equipment are below the applicable leak definition.

55. Subpart VVa, at 40 C.F.R. § 60.481a, defines “first attempt at repair” to mean to take action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

56. Subpart VVa, at 40 C.F.R. § 60.482-2a, sets forth standards for pumps in light liquid service.

57. Subpart VVa, at 40 C.F.R. § 60.482-2a(a)(1), specifies that each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 60.485a(b).

58. Subpart VVa, at 40 C.F.R. § 60.482-7a, sets forth standards for valves in gas/vapor and in light liquid service.

59. Subpart VVa, at 40 C.F.R. § 60.482-7a(a)(1), specifies that each valve be monitored monthly to detect leaks by the methods specified in § 60.485a(b) and that each valve shall comply with paragraphs (b) through (e) of 40 C.F.R. § 60.482-7a.

60. Subpart VVa, at 40 C.F.R. § 60.482-7a(b), specifies that if an instrument reading of 500 ppm or greater is measured at a valve in gas/vapor service or in light liquid service, a leak is detected.

61. Subpart VVa, at 40 C.F.R. § 60.482-7a(c)(1)(i), specifies that any valve for which a leak is not detected for two successive months may be monitored quarterly until a leak is detected.

62. Subpart VVa, at 40 C.F.R. § 60.482-7a(c)(2), specifies that any valve being monitored quarterly that is found to be leaking must be monitored monthly until a leak is not detected for two successive months.

63. Subpart VVa, at 40 C.F.R. § 60.482-7a(d)(1), specifies that when a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except if the valve is placed on delay of repair.

64. Subpart VVa, at 40 C.F.R. § 60.482-7a(d)(2), specifies that when a leak is detected, a first attempt at repair shall be made no later than five calendar days after each leak is detected.

65. Subpart VVa, at 40 C.F.R. § 60.482-11a, sets forth standards for connectors in gas/vapor service and in light liquid service.

66. Subpart VVa, at 40 C.F.R. § 60.482-11a(a), requires initial monitoring of all connectors in the process unit for leaks by the later of either 12 months after the compliance date or 12 months after initial startup.

67. Subpart VVa, at 40 C.F.R. § 60.482-11a(b)(1) and (2), indicates that connectors shall be monitored by the method specified in 40 C.F.R. § 60.485a(b) and that if an instrument reading greater than or equal to 500 ppm is measured, a leak is detected.

68. Subpart VVa, at 40 C.F.R. § 60.482-11a(d), specifies that when a leak is detected it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected unless the connector is placed on delay of repair. A first attempt at repair shall be made no later than five calendar days after the leak is detected.

69. Subpart VVa, at 40 C.F.R. § 60.485a(b), requires owners and operators to determine compliance with applicable standards using Method 21 of Appendix A-7 of 40 C.F.R. part 60.

70. Subpart OOOO, at 40 C.F.R. § 60.5421, sets forth recordkeeping requirements for affected facilities subject to the VOC requirements for onshore natural gas processing plants and indicates affected facilities must comply with the requirements of 40 C.F.R. § 60.486a along with other requirements for pressure relief devices.

71. Subpart VVa, at 40 C.F.R. § 60.486a(b), sets forth requirements for identification of leaking components.

72. Subpart VVa, at 40 C.F.R. § 60.486a(e)(1), sets forth the recordkeeping requirements for identifying all equipment subject to the standards in 40 C.F.R. §§ 60.482-1a to 60.482-11a.

73. Subpart OOOO, at 40 C.F.R. § 60.5422, sets forth reporting requirements for affected facilities subject to the VOC requirements for onshore natural gas processing plants and indicates affected facilities must comply with the requirements in 40 C.F.R. § 60.487a along with other requirements for pressure relief devices.

74. Subpart VVa, at 40 C.F.R. § 60.482-10a(d), specifies that flares used to comply with subpart VVa shall also comply with the requirements of 40 C.F.R. § 60.18.

### **National Emission Standards - General**

75. Section 112 of the CAA, 42 U.S.C. § 7412, authorizes the EPA to promulgate regulations establishing National Emission Standards for Hazardous Air Pollutants (NESHAP).

76. Section 112(f)(4) of the CAA, 42 U.S.C. § 7412(f)(4), states that no air pollutant to which a standard under this subsection applies may be emitted from any stationary source in violation of such standard.

77. Section 112(a)(3) of the CAA, 42 U.S.C. § 7412(a)(3), defines “stationary source” as having the same meaning as such term has under section 111(a) of the CAA, 42 U.S.C. § 7411(a).

### **National Emission Standards – Subpart A**

78. Subpart A, at 40 C.F.R. § 63.1(c)(1), indicates that if a relevant standard has been established under part 63, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of section 63.1.

79. Subpart A, at 40 C.F.R. § 63.11(b)(1), specifies that owners and operators using flares to comply with the provisions of part 63 shall monitor the control devices to assure that they are operated and maintained in conformance with their designs.

80. Subpart A, at 40 C.F.R. § 63.11(b)(7)(ii), indicates that steam-assisted and non-assisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of section 63.11, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

### **National Emission Standards - Subparts HH and V**

81. Subpart HH, at 40 C.F.R. § 63.760(b)(1)(iii), applies to the group of all ancillary equipment, except compressors, intended to operate in volatile hazardous air pollutant (VHAP) service (as defined in 40 C.F.R. § 63.761), which are located at natural gas processing plants at a major source.

82. Subpart HH, at 40 C.F.R. § 63.760(f)(1), specifies that sources which commenced construction or reconstruction before February 6, 1998, shall achieve compliance with the applicable provisions of subpart HH no later than June 17, 2002.

83. Subpart HH, at 40 C.F.R. § 63.760(f)(2), specifies that sources which commenced construction or reconstruction on or after February 6, 1998, shall achieve compliance with the applicable provisions of subpart HH immediately upon startup or June 17, 1999, whichever date is later.

84. Subpart HH includes requirements for monitoring equipment such as pumps and valves for leaks of air pollutants, repairing leaks, recordkeeping, and reporting to regulators. 40 C.F.R. §§ 63.764, 63.769, 63.773, 63.774, and 63.775. Subpart HH also incorporates certain other regulations in 40 C.F.R. part 61 by reference, including certain provisions of the National Emission Standard for Equipment Leaks (subpart V), 40 C.F.R. §§ 61.240 – 247.

85. Subpart HH, at 40 C.F.R. § 63.765(b)(1)(iii), specifies the glycol dehydration unit process vent standards for small glycol dehydration units.

86. Subpart HH, at 40 C.F.R. § 63.771(f)(1), specifies that a flare may be used as a control device for small glycol dehydration units.

87. Subpart HH, at 40 C.F.R. § 63.771(f)(1)(iii), specifies that the flare must be designed and operated in accordance with the requirements of 40 C.F.R. § 63.11(b).

88. Subpart V, at 40 C.F.R. § 61.242-11(d), specifies that flares used to comply with subpart V shall also comply with the requirements of 40 C.F.R. § 60.18.

### **Permitting – General**

89. Part C of subchapter I of the CAA, sections 161-169, 42 U.S.C. §§ 7471 – 7479, sets forth requirements for the prevention of significant deterioration of air quality in those areas

designated as attainment or unclassifiable. These provisions are referred to herein as the “PSD program.” The PSD permitting regulations for Indian country are found at 40 C.F.R. § 52.21.

90. Title V of the CAA, 42 U.S.C. §§ 7661 – 7661f, and its implementing regulations at 40 C.F.R. part 71 establish an operating permit program for certain sources.

91. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 71.7(b) provide that, after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate except in compliance with a Title V permit.

### **Findings of Fact**

92. Four Corners is a “person” within the meaning of section 302(e) of the CAA, 42 U.S.C. § 7602(e).

93. Four Corners owns and operates the Ignacio Plant located at 3746 County Road 307 in Durango, Colorado.

94. The Ignacio Plant is a major source under subpart HH.

95. The Ignacio Plant is a “natural gas processing plant” as defined in 40 C.F.R. §§ 60.631 60.5430, and 63.761.

96. The Ignacio Plant contains affected facilities as described in 40 C.F.R. §§ 60.630 60.5365(f), and 63.760(b)(1)(iii).

97. The Ignacio Plant is subject to the LDAR requirements in subparts V, VV, VVa, KKK, OOOO, and HH.

98. The EPA conducted onsite inspections at the Ignacio Plant on June 13, 2013, and July 17, 2014. The EPA prepared inspection reports following the inspections on December 16, 2013, and February 2, 2015, respectively.

99. On August 25, 2014, Four Corners notified the EPA that certain equipment subject to subpart HH at the Ignacio Plant may not have been properly included in the Plant’s LDAR program.

100. The EPA issued CAA section 114 requests for information to Four Corners on December 1, 2015, and January 19, 2017. Four Corners responded to the December 1, 2015, request for information on February 2, 2016, and March 4, 2016, and to the January 19, 2017, request for information on March 24, 2017.

101. In its March 4, 2016, response to the CAA section 114 request for information, Four Corners identified the following process units at the Ignacio Plant: Inlet, Amine Treatment, West Dehydration/Mol Sieve, TXP (Cryo), Fractionation, Storage & Loading, and Flare. Four Corners indicated that all process units, except the TXP (Cryo), at the Ignacio Plant were constructed in 1956, and that the TXP (Cryo) was constructed in 1984. Four Corners also

indicated that modifications in 2015 at the Inlet, Flare and Amine Treatment process units resulted in these process units becoming subject to subpart OOOO.

102. Four Corners submitted semiannual reports to the EPA required by subparts HH, KKK, and OOOO in January and July from July 2011 through July 2017.

103. Four Corners' July 21, 2017, semiannual report identified the Storage and Loading and TXP process units as being subject to subpart KKK.

104. Based on its review of the LDAR information described in Paragraphs 98 through 103 above, the EPA makes the following factual findings:

- a. Four Corners failed to perform a first attempt at repair no later than five days after each leak was detected at two subpart OOOO valves in the Inlet process unit following leaks identified in August 2015.
- b. Four Corners failed to repair leaks as soon as practicable, but no later than 15 calendar days after the leak was detected, or to place the equipment on delay of repair at:
  - i. two subpart OOOO valves in the Inlet process unit following leaks identified in August 2015;
  - ii. one subpart OOOO connector in the Inlet process unit following a leak identified in October 2015; and
  - iii. one subpart KKK pump in the Storage and Loading process unit following a leak identified in August 2015.
- c. Four Corners failed to monitor valves monthly after identification of a leak until no leak was detected for two successive months at:
  - i. three subpart KKK valves in the TXP process unit following leaks identified in February and March 2014, and
  - ii. two subpart OOOO valves in the Inlet process unit following leaks identified in August 2015.
- d. Four Corners failed to monitor valves within 30 days after installation at 187 subpart KKK valves in the Inlet process unit after adding the valves in October 2013 and April 2014.
- e. Four Corners failed to monitor valves monthly after installation until no leak was detected for two successive months at 39 valves in the TXP and Inlet process units after adding the valves between June 2013 and March 2014.
- f. Four Corners failed to monitor:

- i. 19 subpart KKK pumps monthly in the Inlet, TXP and Storage and Loading process units in the second quarter of 2014, and
  - ii. 3 subpart KKK valves quarterly in the Inlet process unit between the fourth quarter of 2013 and the first quarter of 2014.
- g. Four Corners added equipment, including connectors, pressure relief valves, pumps, and valves to the Storage and Loading process unit and to the TXP process unit. Specifically, Four Corners added 75 pieces of equipment to the Storage and Loading process unit in the first quarter of 2012, 118 pieces of equipment to the Storage and Loading process unit in the fourth quarter of 2014, and 659 pieces of equipment to the Storage and Loading process unit in April 2015; eight pieces of equipment to the TXP process unit in August 2012; and 194 pieces of equipment to the TXP process unit in April 2015. These equipment additions constitute a modification of the Storage and Loading and TXP process units under subpart OOOO.
  - h. Four Corners failed to identify applicability of subpart OOOO to equipment at the TXP and Storage and Loading process units, described above in Paragraph 104.g above, resulting in missed monitoring, missed repairs, missed recordkeeping, and missed reporting. In the event that the equipment was not newly added but instead was missed in the LDAR program, Four Corners failed to identify applicability of subpart KKK to the equipment at the TXP and Storage and Loading process units, resulting in missed monitoring, missed repairs, missed recordkeeping, and missed reporting.
  - i. Four Corners failed to identify applicability of MACT HH to 567 pieces of equipment at the Ignacio Plant, resulting in missed repairs, missed recordkeeping, and missed reporting.

105. On December 22, 2010, the EPA issued a PSD permit to Williams Four Corners, LLC, for the Ignacio Plant (Permit Number, PSD-SU-00027-01.00).

106. Section III.G.1. of the December 22, 2010, PSD permit contains VOC emission limits of 1.16 lbs per hour and 5.1 tons per year for the thermal oxidizer.

107. On November 19, 2003, the EPA issued the initial Title V operating permit for the Ignacio Plant (Permit Number V-SU-0027-00.0). On January 28, 2013, the EPA issued the First Renewal Title V Operating Permit for the Ignacio Plant (Permit Number V-SU-000027-2008.00).

108. Section VIII.F.1(a) of the January 28, 2013, Title V permit contains VOC emission limits of 1.16 lbs per hour and 5.1 tons per year for the thermal oxidizer.

109. Four Corners submitted a thermal oxidizer test report to the EPA on October 20, 2015, for the testing conducted on August 20 and 21, 2015. The test report indicates that the thermal oxidizer was emitting at 1.18 lbs per hour of VOC and 5.2 tons per year of VOC.

110. Section III.F. of the December 22, 2010, PSD permit establishes that Best Available Control Technology (BACT) for VOC emissions from the West Dehydrator is a Flare. Section III.F.6 requires that at all times including periods of startup, shutdown, and equipment malfunction, the Permittee shall maintain and operate the West Dehydrator in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator, which may include, but not be limited to, monitoring results, review of operating and maintenance procedures, and inspection of the permitted facility.

111. Section VIII.E.6 of the January 28, 2013, Title V permit requires that at all times including periods of startup, shutdown, and equipment malfunction, the Permittee shall maintain and operate the West Dehydrator in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator, which may include, but not be limited to, monitoring results, review of operating and maintenance procedures, and inspection of the permitted facility.

112. Section VI.D.1. of the January 28, 2013, Title V permit requires that the permittee comply with the requirements of 40 C.F.R. §§ 60.482-1(a), (b) and (d) and 60.482-2 through 60.482-10, except as provided in 40 C.F.R. § 60.633, as soon as practicable, but no later than 180 days after initial startup.

113. In its October 9, 2013, Initial Notification for small dehydrators located at a HAP major source, Four Corners reported that the West Dehydrator was considered a small glycol dehydration unit.

114. In its January 1, 2016, Notification of Compliance Status for the subpart HH glycol dehydration unit process vent standards, Four Corners reported that the West Dehydrator uses a flare to meet the emission limits in subpart HH.

115. The EPA inspected the Ignacio Plant on June 22, 2016, and observed, with an optical gas imaging camera, un-combusted hydrocarbons being emitted from the flare, an indication that Four Corners was not operating the flare with good air pollution control practices for minimizing emissions.

116. In its March 24, 2017, response to the CAA section 114 request for information, Four Corners provided steam flow rates and steam-to-vent gas ratios recommended by the flare manufacturer. Four Corners also provided the monitored or estimated amount of flare gas and steam sent to the flare, as well as the steam-to-vent gas ratio, on an hourly basis between January 1, 2012, and January 1, 2017. Based on the EPA's review of this information, the EPA identified several instances in which the actual steam-to-vent gas ratio exceeded the manufacturer's recommendation.

117. In its March 24, 2017, response to the CAA section 114 request for information, Four Corners provided the net heating value (NHV) of the flare gas in BTU/scf. Based on the EPA's review of this information, the EPA identified several instances in which the NHV is below 1,000 BTU/scf.

## **Alleged Violations**

118. Four Corners failed to perform a first attempt at repair no later than five days after each leak was detected at two subpart OOOO valves in the Inlet process unit in violation of 40 C.F.R. §§ 60.5400 and 60.482-7a(d)(2). See Attachment A Table 1.

119. Four Corners failed to repair leaks as soon as practicable, but no later than 15 calendar days after the leak was detected, or to place the equipment on delay of repair at two subpart OOOO valves in the Inlet process unit in violation of 40 C.F.R. §§ 60.5400 and 60.482-7a(d)(1). See Attachment A Table 2.

120. Four Corners failed to repair leaks as soon as practicable, but no later than 15 calendar days after the leak was detected, or to place the equipment on delay of repair at one subpart OOOO connector in the Inlet process unit in violation of 40 C.F.R. §§ 60.5400 and 60.482-11a(d). See Attachment A Table 2.

121. Four Corners failed to repair leaks as soon as practicable, but no later than 15 calendar days after the leak was detected, or to place the equipment on delay of repair at one subpart KKK pump in the Storage and Loading process unit in violation of 40 C.F.R. §§ 60.632(a) and 60.482-2(c)(1). See Attachment A Table 2.

122. Four Corners failed to monitor valves monthly after identification of a leak until the valves did not leak for two successive months at three subpart KKK valves in the TXP process unit in violation of 40 C.F.R. §§ 60.632(a) and 60.482-7(c)(2). See Attachment A Table 3.

123. Four Corners failed to monitor valves monthly after identification of a leak until no leak was detected for two successive months at two subpart OOOO valves in the Inlet process unit in violation of 40 C.F.R. §§ 60.5400 and 60.482-7a(c)(2). See Attachment A Table 3.

124. Four Corners failed to monitor valves within 30 days after installation at 187 subpart KKK valves in the Inlet process unit in violation of 40 C.F.R. §§ 60.632(a) and 60.482-7(a)(2)(i). See Attachment A Table 4.

125. Four Corners failed to monitor valves monthly after installation until no leak was detected for two successive months at 39 subpart KKK valves in the TXP and Inlet process units in violation of 40 C.F.R. §§ 60.632(a), 60.482-7(a)(1) and 60.482-7(c)(1)(i). See Attachment A Table 5.

126. Four Corners failed to monitor 19 subpart KKK pumps monthly in violation of 40 C.F.R. § 60.482-2(a)(1). See Attachment A Table 6.

127. Four Corners failed to monitor three subpart KKK valves quarterly in the Inlet process unit, in violation of 40 C.F.R. §60.482-7(a)(1), and 60.482-7(c)(1)(i). See Attachment A Table 6.

128. Four Corners failed to identify applicability of subpart OOOO to equipment at the TXP and Storage and Loading process units, resulting in missed monitoring, missed repairs,

missed recordkeeping, and missed reporting, in violation of 40 C.F.R. §§ 60.5400, 60.5421, and 60.5422. See Attachment A Table 7. In the event that the equipment described above was not newly added but instead was missed in the LDAR program, the EPA alleges in the alternative, that Four Corners failed to identify applicability of subpart KKK to 994 pieces of equipment at the TXP and Storage and Loading process units, resulting in missed monitoring, missed repairs, missed recordkeeping, and missed reporting, in violation of 40 C.F.R. §§ 60.632, 60.635, and 60.636. See Attachment A Table 8.

129. Four Corners failed to identify applicability of subpart HH to 567 pieces of equipment at the Ignacio Plant, resulting in missed repairs, missed recordkeeping, and missed reporting, in violation of 40 C.F.R. §§ 63.764, 63.769, 63.774, and 63.775. See Attachment A Table 9.

130. Four Corners failed to meet the thermal oxidizer PSD VOC emission limits, in violation of Section III.G.1. of the December 22, 2010, PSD permit and Section VIII.F.1(a) of the January 28, 2013, Title V permit.

131. Four Corners failed to maintain and operate the West Dehydrator and its control device (the flare) in a manner consistent with good air pollution control practice for minimizing emissions in violation of Section III.F.6 of the December 22, 2010, PSD Permit Number PSD-SU-00027-01.00, and Section VIII.E.6 of the January 28, 2013, Title V Permit Number V-SU-000027-2008.00.

132. Four Corners failed to operate and maintain its flare in accordance with its design in violation of 40 C.F.R. §§ 60.18(d), 60.482-10(d), 60.482-10a(d), 61.242-11(d), 63.11(b)(1) and 63.771(f)(1)(iii). See Attachment A Table 10.

133. Four Corners failed to operate and maintain its flare in accordance with its minimum net heating value requirements in violation of 40 C.F.R. §§ 60.18(c)(4)(ii), 60.482-10(d), 60.482-10a(d), 61.242-11(d), 63.11(b)(7)(ii) and 63.771(f)(1)(iii). See Attachment A Table 11.

### **Enforcement Authority**

134. Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3), provides that whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any requirement or prohibition of, *inter alia*, any rule promulgated under the NSPS requirements of section 111(e) of the CAA, 42 U.S.C. § 7411(e), the NESHAP requirements of section 112(d), 42 U.S.C. § 7412(d), the PSD requirements of sections 161-169 of the CAA, 42 U.S.C. §§ 7471-7479, and Title V requirements of sections 501-507, of the CAA, 42 U.S.C. §§ 7661-7661f, or any rule or permit issued thereunder, the Administrator may issue an administrative penalty order under section 113(d), issue an order requiring compliance with such requirement or prohibition, or bring a civil action pursuant to section 113(b) for injunctive relief and/or civil penalties.

3/16/18

Date



Suzanne J. Bohan  
Assistant Regional Administrator  
Office of Enforcement, Compliance  
and Environmental Justice

Attachment A - Table 1						
Response	Component Class	Leak Date	Leak Reading	Unit Description	Component ID	Component Tag
Four Corners indicated that the Inlet process unit was modified in June 2015 making it subject to subpart OOOO but that this component was regulated under subpart KKK through 9/30/15. Subpart OOOO, at 40 C.F.R. § 60.5370(a), indicates that companies must be in compliance with the standards of this subpart no later than October 15, 2012, or upon startup, whichever is later.	VALVE	8/25/2015	1075	Ignacio - INLET	113533	121835
Four Corners indicated that the Inlet process unit was modified in June 2015 making it subject to subpart OOOO but that this component was regulated under subpart KKK through 9/30/15. Subpart OOOO, at 40 C.F.R. § 60.5370(a), indicates that companies must be in compliance with the standards of this subpart no later than October 15, 2012, or upon startup, whichever is later.	VALVE	8/27/2015	1113	Ignacio - INLET	115332	123507

Attachment A - Table 2

Response	Component Class	Leak Date	Leak Reading	Unit Description	Component ID	Component Tag
Corners indicated that the Inlet process unit was modified in June making it subject to subpart OOOO but that this component was not repaired under subpart KKK through 9/30/15. Subpart OOOO, at 40 § 60.5370(a), indicates that companies must be in compliance with the standards of this subpart no later than October 15, 2012, or upon startup, whichever is later.	VALVE	8/25/2015	1075	Ignacio - INLET	113533	121835
Corners indicated that the Inlet process unit was modified in June making it subject to subpart OOOO but that this component was not repaired under subpart KKK through 9/30/15. Subpart OOOO, at 40 § 60.5370(a), indicates that companies must be in compliance with the standards of this subpart no later than October 15, 2012, or upon startup, whichever is later.	VALVE	8/27/2015	1113	Ignacio - INLET	115332	123507
Corners indicated that the Inlet process unit was modified in June making it subject to subpart OOOO but that this component was not repaired under subpart KKK through 9/30/15. Subpart OOOO, at 40 § 60.60.5370(a), indicates that companies must be in compliance with the standards of this subpart no later than October 15, 2012, or upon startup, whichever is later.	CONNECTOR	10/5/2015	100000	Ignacio - INLET	118864	GHG12210
Definition of "repaired" includes remonitoring. Remonitoring not done until 9/21/15. Therefore, not repaired within 15 days.	PUMP	8/28/2015	19900	Ignacio - Storage and Loading	112207	124821

Attachment A - Table 3

Response	Class Description	Leak Date	Leak Reading	Unit Description	Component ID	Component Tag	2nd Month Following
New Leak 2/19/2014, repaired 2/21/2014. New leak 3/25/2014, repaired 3/28/2014. No monitoring information found for April 2014.	VALVE	2/19/2014	100000	Ignacio - TXP	111795	123772	
New leak 3/25/2014, repaired 3/28/2014. No monitoring information found for April 2014. New leak 5/29/2014, put on DOR 6/9/2014.	VALVE	3/25/2014	100000	Ignacio - TXP	111795	123772	5/29/2014 - 99999 ppm
Four Corners indicated that the Inlet process unit was modified in June 2015 making it subject to subpart OOOO but that this component was regulated under subpart KKK through 9/30/15. Subpart OOOO, at 40 C.F.R. § 60.5370(a), indicates that companies must be in compliance with the standards of this subpart no later than October 15, 2012, or upon startup, whichever is later.	VALVE	8/25/2015	1075	Ignacio - INLET	113533	121835	
Four Corners indicated that the Inlet process unit was modified in June 2015 making it subject to subpart OOOO but that this component was regulated under subpart KKK through 9/30/15. Subpart OOOO, at 40 C.F.R. § 60.5370(a), indicates that companies must be in compliance with the standards of this subpart no later than October 15, 2012, or upon startup, whichever is later.	VALVE	8/27/2015	1113	Ignacio - INLET	115332	123507	
Repaired 2/21/2014. Monitored 3/25/2014. No information found in April 2014. Passing readings recorded on 5/29/2014 and 6/5/2014.	VALVE	2/19/2014	32627	Ignacio - TXP	115891	123602	

Attachment A Table 4

Response	Regulation Description	Date Added	First Inspection Date	Unit Description	Component ID	Component Tag	Component Class
Four Corners indicated these components were temporarily out of service (TOOS). However, other components in the Inlet Process Unit were inspected between 11/20/13 and 11/22/13.	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	112866	122529	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	116303	122295	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	112971	122323	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	114269	122324	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	115711	122296	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	116213	122325	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	114484	122530	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	111427	122326	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	115808	122329	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	114806	122334	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	114191	122330	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	114317	122331	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	111504	121920	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	111793	122337	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	112004	122339	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	115673	122532	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	113891	122533	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	114164	122534	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	112071	122535	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	114058	122327	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	115667	122333	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	112296	122332	VALVE
	EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	113865	121919	VALVE
EPA60-O000	25-Oct-13	14-Dec-13	Ignacio - INLET	115497	122338	VALVE	
EPA60-O000	23-Oct-13	15-Dec-13	Ignacio - INLET	115897	122293	VALVE	
EPA60-O000	23-Oct-13	15-Dec-13	Ignacio - INLET	116379	122291	VALVE	
EPA60-O000	23-Oct-13	15-Dec-13	Ignacio - INLET	113500	122292	VALVE	
Per Four Corners, no information found for these components between April - May 2014.	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	115360	122516	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	112285	122517	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	112897	122518	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	113743	122541	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	115274	122544	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	114805	122556	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	113665	122559	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	115050	122561	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	112006	122564	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	114023	122567	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	115082	122569	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	113305	122575	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	115641	122579	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	116148	122576	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	114537	122578	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	114111	122571	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	111723	122582	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	112540	122585	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	115070	123459	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	114623	123451	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	113277	123452	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	111772	123416	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	112700	123414	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	111881	123461	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	116164	123389	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114941	123388	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112947	123387	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	111995	123398	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112311	123392	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	116113	123393	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	116051	123394	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	115550	123395	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	115835	123402	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112508	123404	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	116281	123372	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114337	123378	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	111998	123379	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114596	123380	VALVE
	EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	111618	123408	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115649	123409	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114409	123419	VALVE
	EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113510	123421	VALVE
EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	112425	123429	VALVE	
EPA60-O000	28-Apr-14	30-May-14	Ignacio - INLET	113087	123430	VALVE	
EPA60-O000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112266	123425	VALVE	

Attachment A Table 4

Response	Regulation Description	Date Added	First Inspection Date	Unit Description	Component ID	Component Tag	Component Class
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115044	123424	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112018	123435	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115372	123431	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	116018	123433	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112145	123432	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115724	123437	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	111583	123426	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	116172	123448	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113443	123446	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114252	123445	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114398	123444	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114524	123443	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	111810	123442	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113136	123441	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	116475	123440	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	111822	123463	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112546	123464	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112831	123473	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113795	123474	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112237	123469	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115991	123471	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113874	123480	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112172	123488	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112733	123486	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	115951	123496	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113782	123495	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114752	123492	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115708	123493	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115968	123497	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	116526	123484	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113635	123477	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114400	123498	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115105	123499	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114681	123501	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112782	123503	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113035	123504	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112896	123505	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	115332	123507	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112821	123508	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114291	123509	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114429	123511	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114898	123512	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	115204	123412	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112568	123369	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114080	123367	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113075	122515	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113640	122519	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	115985	122520	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113329	122539	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114710	122548	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113596	122543	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114774	122550	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114350	122551	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114345	122555	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113008	122557	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113843	122558	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114457	122560	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	116217	122562	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	116534	122563	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112915	122565	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	116510	122566	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113731	122568	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	111573	122580	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113359	122577	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112515	122574	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114100	122572	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113254	123396	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	114200	122584	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	111394	122586	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	115494	123453	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112819	123454	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113108	123458	VALVE

Attachment A Table 4

Response	Regulation Description	Date Added	First Inspection Date	Unit Description	Component ID	Component Tag	Component Class
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113651	123415	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112723	123403	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113191	123460	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	115549	123390	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	116143	123386	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115664	123397	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112307	123391	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	116016	123400	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114764	123401	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114808	123374	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112779	123373	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112812	123382	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112254	123410	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	115785	123411	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113459	123420	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	116334	123422	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	116134	123427	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115704	123428	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	115419	123436	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	115640	123434	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112238	123447	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	111959	123465	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113880	123462	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113816	123467	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115325	123468	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113145	123470	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	112561	123472	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	116350	123491	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114333	123489	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113939	123490	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113848	123487	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	113503	123485	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114495	123494	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	111589	123476	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115725	123475	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	115033	123500	VALVE
	EPA60-0000/63-HH	28-Apr-14	30-May-14	Ignacio - INLET	114945	123502	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	111385	123506	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	116036	123413	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113433	123405	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112008	123406	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	113232	123370	VALVE
	EPA60-0000	28-Apr-14	30-May-14	Ignacio - INLET	112548	123368	VALVE

Attachment A Table 5

Response	Date Added	Added Month Monitored	Next Month Monitored	2nd Month Monitored	Unit Description	Component ID	Component Tag	Component Class	Location Description
Per Four Corners, no information found for these components between July 2013 and September 2013.	29-Jun-13	6/29/2013 - 3 ppm			Ignacio - INLET	116252	121740	VALVE	W SIDE OF SLUG CATCHER ABOVE FINGERS 00/10
	29-Jun-13	6/29/2013 - 3 ppm			Ignacio - INLET	116196	121726	VALVE	W SIDE OF SLUG CATCHER AT S/G 00/011
	30-Jun-13	6/30/2013 - 8 ppm			Ignacio - INLET	115442	122235	VALVE	S OF INLET COMPRESSOR BUILDING 10FT SW OF VS6051 SUCTION SCRUBBER 00/15
	30-Jun-13	6/30/2013 - 2982 ppm			Ignacio - INLET	114646	122237	VALVE	S OF INLET COMPRESSOR BUILDING 10FT SW OF AC6054 TURBINE GAS COOLER 00/15
	30-Jun-13	6/30/2013 - 412 ppm			Ignacio - INLET	114864	122238	VALVE	S OF INLET COMPRESSOR BUILDING 10FT SW OF AC6054 TURBINE GAS COOLER 00/15
	30-Jun-13	6/30/2013 - 5 ppm			Ignacio - INLET	112955	122221	VALVE	S OF INLET COMPRESSOR BUILDING E SIDE OF VS6051 SUCTION SCRUBBER 01/07
	29-Jun-13	6/29/2013 - 3 ppm			Ignacio - INLET	113688	121727	VALVE	W SIDE OF SLUG CATCHER AT S/G 00/011
	30-Jun-13	6/30/2013 - 9 ppm			Ignacio - INLET	114045	122236	VALVE	S OF INLET COMPRESSOR BUILDING 10FT S OF AC6054 TURBINE GAS COOLER 00/15
	25-Mar-14	3/28/2014 - 3 ppm		5/29/2014 - 2.15 ppm	Ignacio - TXP	113378	123663	VALVE	E SIDE OF INLET GAS CHILLER HE8116 00/06
	25-Mar-14	3/28/2014 - 3 ppm		5/29/2014 - 7.58 ppm	Ignacio - TXP	113641	123664	VALVE	E SIDE OF INLET GAS CHILLER HE8116 00/06
25-Mar-14	3/28/2014 - 3 ppm		5/29/2014 - 4.23 ppm	Ignacio - TXP	116375	123662	VALVE	E SIDE OF INLET GAS CHILLER HE8116 00/06	
This component was monitored in 11/2013, was TOOS 12/2014 through 3/2014, and monitored in 5/2014. It should have been monitored in 4/2014.	25-Oct-13		11/21/2013 - 53 ppm		Ignacio - INLET	115395	121909	VALVE	INLET COMPRESSOR BUILDING ON N SIDE OF INLET TURBINE C69301 01/04
Four Corners indicated these components were TOOS. However, other components in the Inlet Process Unit were inspected between 11/20/13 and 11/22/13.	23-Oct-13			12/15/2013 - 2 ppm	Ignacio - INLET	115897	122293	VALVE	30 YRDS NW OF INLET COMPRESSOR BUILDING UP LADDER ON PLATFORM 01/03
	25-Oct-13			12/14/2013 - 3 ppm	Ignacio - INLET	112866	122529	VALVE	20 YRDS N OF C-TRUNK INLET SCRUBBER IN P/R 00/04
	25-Oct-13			12/14/2013 - 20 ppm	Ignacio - INLET	116303	122295	VALVE	80 YRDS NW OF INLET COMPRESSOR BUILDING ON SOUTH SIDE OF BRIDGE 00/03
	25-Oct-13			12/14/2013 - 3 ppm	Ignacio - INLET	112971	122323	VALVE	N SIDE OF PLANT 5 YRDS NW OF B PLANT INLET SCRUBBER 00/04
	25-Oct-13			12/14/2013 - 5 ppm	Ignacio - INLET	114269	122324	VALVE	N SIDE OF PLANT 5 YRDS NW OF B PLANT INLET SCRUBBER 00/04
	25-Oct-13			12/14/2013 - 2 ppm	Ignacio - INLET	115673	122532	VALVE	30YRDS N OF INLET GAS COOLERS IN P/R 00/04
	25-Oct-13			12/14/2013 - 2 ppm	Ignacio - INLET	113891	122533	VALVE	30YRDS N OF INLET GAS COOLERS IN P/R 00/04
	25-Oct-13			12/14/2013 - 2 ppm	Ignacio - INLET	114164	122534	VALVE	30YRDS N OF INLET GAS COOLERS IN P/R 00/04
	25-Oct-13			12/14/2013 - 2 ppm	Ignacio - INLET	112071	122535	VALVE	30YRDS N OF INLET GAS COOLERS IN P/R 00/04
	25-Oct-13			12/14/2013 - 895 ppm	Ignacio - INLET	114058	122327	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING 00/04
	25-Oct-13			12/14/2013 - 5 ppm	Ignacio - INLET	115667	122333	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING AND DANIELS METER 00/04
	25-Oct-13			12/14/2013 - 4 ppm	Ignacio - INLET	112296	122332	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING AND DANIELS METER 00/04
	25-Oct-13			12/14/2013 - 3 ppm	Ignacio - INLET	113865	121919	VALVE	INLET COMPRESSOR BUILDING ON N SIDE OF INLET TURBINE C69301 01/04
	25-Oct-13			12/14/2013 - 3 ppm	Ignacio - INLET	115497	122338	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING AND DANIELS METER 00/04
	25-Oct-13			12/14/2013 - 10 ppm	Ignacio - INLET	115711	122296	VALVE	80 YRDS NW OF INLET COMPRESSOR BUILDING ON SOUTH SIDE OF BRIDGE 00/03
	25-Oct-13			12/14/2013 - 3 ppm	Ignacio - INLET	116213	122325	VALVE	N SIDE OF PLANT 5 YRDS NW OF B PLANT INLET SCRUBBER 00/04
	23-Oct-13			12/15/2013 - 2 ppm	Ignacio - INLET	116379	122291	VALVE	30 YRDS NW OF INLET COMPRESSOR BUILDING UP LADDER ON PLATFORM 01/03
	23-Oct-13			12/15/2013 - 2 ppm	Ignacio - INLET	113500	122292	VALVE	30 YRDS NW OF INLET COMPRESSOR BUILDING UP LADDER ON PLATFORM 01/03
	25-Oct-13			12/14/2013 - 3 ppm	Ignacio - INLET	114484	122530	VALVE	10 YRDS N OF EAST GLYCOL CONTACTOR IN P/R BY RACK BRIDGE 00/03
	25-Oct-13			12/14/2013 - 2 ppm	Ignacio - INLET	111427	122326	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING 00/06
	25-Oct-13			12/14/2013 - 57 ppm	Ignacio - INLET	115808	122329	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING 00/04
	25-Oct-13			12/14/2013 - 6 ppm	Ignacio - INLET	114806	122334	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING AND DANIELS METER 00/04
	25-Oct-13			12/14/2013 - 3 ppm	Ignacio - INLET	114191	122330	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING AND DANIELS METER 00/04
	25-Oct-13			12/14/2013 - 4 ppm	Ignacio - INLET	114317	122331	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING AND DANIELS METER 00/04
	25-Oct-13			12/14/2013 - 12 ppm	Ignacio - INLET	111504	121920	VALVE	INLET COMPRESSOR BUILDING ON N SIDE OF INLET TURBINE C69301 01/04
	25-Oct-13			12/14/2013 - 2 ppm	Ignacio - INLET	111793	122337	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING AND DANIELS METER 00/04
	25-Oct-13			12/14/2013 - 10 ppm	Ignacio - INLET	112004	122339	VALVE	5 YRD S OF C-TRUNK DEHY ON INLET PIPING AND DANIELS METER 00/04

Attachment A - Table 6

Response	Class Description	Process Unit ID	Unit Description	2013 4	2014 1	2014 2
Information found for missed events in 2014Q2.	PUMP	10186	Ignacio - Storage and Loading			10 missed
Information found for missed events in 2014Q2. Tag 7 was a valve before the April 2015 re-inventory.	PUMP	10190	Ignacio - INLET			3 missed
124067 was a valve before the April 2015 re-inventory. No information found for missed events in Q2.	PUMP	10191	Ignacio - TXP			6 missed
Information was found for tags 121740 and 122221.	VALVE	10190	Ignacio - INLET	3 missed		

Attachment A - Table 7

**Storage and Loading**

Per database from 3/2017

		Counts added in 1st qtr 2012	Counts added in 10/2014	Counts added in 4/2015
<b>Connectors/Flanges</b>		0	6	31
<b>PRV's</b>		2	3	32
<b>Pumps</b>		2	2	3
<b>Valves</b>	≤1"	38	62	372
	1.5-2"	18	10	111
	3"	1	10	34
	4"	6	18	20
	6"	6	7	52
	8"	2	0	4
	10"	0	0	0
<b>Total</b>		75	118	659

**TXP**

Per database from 3/2017

		Counts added in 8/2012	Counts added on 4/1/15
<b>Connectors/Flanges</b>			23
<b>PRV's</b>			3
<b>Pumps</b>		1	2
<b>Valves</b>	≤1"	4	122
	1.5-2"		20
	3"		8
	4"	2	4
	6"	1	6
	8"		2
	10"		4
<b>Total</b>		8	194

Attachment A - Table 8			
Storage and Loading			
Per database from 3/2017			
	Counts added to database in 1st qtr 2012	Counts added to database in 4th qtr 2014	Counts added to database in 4/2015
<b>PRVs</b>	2	3	32
<b>Pumps</b>	2	2	3
<b>Valves</b>	71	107	593
<b>Total</b>	75	112	628

TXP		
Per database from 3/2017		
	Counts added to database in 8/2012	Counts added to database in 4/2015
	0	0
<b>PRV</b>	0	3
<b>Pumps</b>	1	2
<b>Valves</b>	7	166
<b>Total</b>	8	171

Attachment A - Table 9

On 8/25/14 Four Corners reported that they had a potential non-compliance because it missed MACT HH LDAR requirements at the Ignacio Gas Plant. Based on the January 21, 2015 semiannual report, Four Corners added, and changed the classification, of the following components to MACT HH

Process Unit	Component Type	Added	From KKK to HH	Total
INGAS	Valve	49	292	341
YSTRG	Valve	141	78	219
	Pump	3	4	7
Total Components		193	374	567

Attachment A - Table 10

Tag Name	FI82030.PV	FI82030A.PV	FIC8197.PV	
Units	LB/HR		LB/HR*	LB/LB*
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	FLARE STEAM FLOW	FLARE STM/HC RATIO
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	FIC8197.PV - Average	
1/16/2012 21:00	173.99	25.93	500.0	2.874
1/16/2012	172.67	26.36	500.0	2.896
4/3/2012 2:00	145.78	48.92	500.0	3.430
4/3/2012 3:00	172.04	52.3	500.0	2.906
4/3/2012 4:00	155.06	52.29	500.0	3.225
4/3/2012 5:00	174.49	52.1	500.0	2.865
4/3/2012 6:00	173.25	52.14	500.0	2.886
4/3/2012	21.36	18.02	500.0	23.408
4/4/2012 5:00	9.67	33.72	500.0	51.706
4/4/2012 6:00	74.47	36.36	500.0	6.714
4/4/2012 8:00	152.68	25.95	500.0	3.275
4/4/2012 13:00	172.5	20.77	500.0	2.899
4/4/2012 14:00	122.85	22.88	500.0	4.070
4/4/2012 15:00	149.5	24.35	500.0	3.344
4/4/2012 16:00	18.68	19.86	500.0	26.767
4/4/2012 18:00	39.78	18.71	500.0	12.569
4/4/2012 21:00	77.26	34.72	500.0	6.472
4/4/2012	93.28	32.44	500.0	5.360
4/4/2012 23:00	52.99	31.23	500.0	9.436
4/5/2012 8:00	177.6	21.67	500.0	2.815
5/19/2012 11:00	123.8	28.24	500.0	4.039
5/19/2012 12:00	28.47	38.21	500.0	17.562
5/19/2012 14:00	177.91	34.73	500.0	2.810
5/19/2012 16:00	102.73	33.25	500.0	4.867
5/19/2012 18:00	148.04	23.45	500.0	3.377
1/3/2013 17:00	169.41	20.72	500.0	2.951
1/3/2013 18:00	148.96	20.79	500.0	3.357
1/3/2013 19:00	165.31	20.82	500.0	3.025
1/3/2013 20:00	163.6	20.82	500.0	3.056
1/3/2013 21:00	147.15	20.96	500.0	3.398
1/3/2013	142.7	21.05	500.0	3.504
1/3/2013 23:00	142.91	21.31	500.0	3.499
1/5/2013 3:00	158	21.89	500.0	3.165
1/5/2013 4:00	149.85	22.85	500.0	3.337
1/5/2013 5:00	150.67	21.94	500.0	3.319
1/5/2013 15:00	174.49	22.24	500.0	2.865
1/5/2013 17:00	140.79	22.03	500.0	3.551
1/5/2013 18:00	134.92	21.61	500.0	3.706
1/5/2013 19:00	137.21	21.64	500.0	3.644
1/5/2013 20:00	137.28	21.62	500.0	3.642
1/5/2013 21:00	139.13	21.53	500.0	3.594
1/5/2013	133.03	21.47	500.0	3.759
1/5/2013 23:00	148.02	21.24	500.0	3.378
1/6/2013 0:00	141.03	21.2	500.0	3.545
1/6/2013 1:00	148.62	21.44	500.0	3.364
1/6/2013 2:00	141.82	21.45	500.0	3.526
1/6/2013 3:00	137.95	21.53	500.0	3.625
1/6/2013 4:00	147.3	21.34	500.0	3.394
1/6/2013 5:00	142.49	21.52	500.0	3.509
1/6/2013 6:00	133.16	21.51	500.0	3.755
1/6/2013 7:00	149.32	21.39	500.0	3.349
1/6/2013 8:00	139.99	21.46	500.0	3.572

Attachment A - Table 10				
Tag Name	FI82030.PV	FI82030A.PV	FIC8197.PV	
Units	LB/HR		LB/HR*	LB/LB*
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	FLARE STEAM FLOW	FLARE STM/HC RATIO
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	FIC8197.PV - Average	
1/6/2013 9:00	159.02	22.02	500.0	3.144
1/6/2013 10:00	178.83	22.02	500.0	2.796
1/6/2013 13:00	104.67	18.8	500.0	4.777
1/6/2013 14:00	129.36	21.62	500.0	3.865
1/6/2013 17:00	172.45	22.92	500.0	2.899
1/6/2013 18:00	151.63	21.87	500.0	3.298
1/6/2013 19:00	155.32	21.42	500.0	3.219
1/6/2013 20:00	149.35	21.3	500.0	3.348
1/6/2013 21:00	155.41	21.16	500.0	3.217
1/6/2013	158.1	21.19	500.0	3.163
1/6/2013 23:00	172.04	21.74	500.0	2.906
1/7/2013 1:00	161.63	20.96	500.0	3.093
1/7/2013 2:00	168.99	21.07	500.0	2.959
1/7/2013 3:00	175.21	21.17	500.0	2.854
1/7/2013 4:00	177.23	21.25	500.0	2.821
1/7/2013 14:00	153.01	21.76	500.0	3.268
1/7/2013 15:00	148.13	21.85	500.0	3.375
1/7/2013 17:00	165.88	21.64	500.0	3.014
1/7/2013 21:00	171.45	21.38	500.0	2.916
1/7/2013	169.29	21.17	500.0	2.954
1/7/2013 23:00	170.72	21.02	500.0	2.929
1/8/2013 0:00	149.11	20.68	500.0	3.353
1/8/2013 3:00	173.02	21.61	500.0	2.890
1/8/2013 4:00	162.51	21.11	500.0	3.077
1/8/2013 5:00	165.82	21.09	500.0	3.015
1/8/2013 7:00	162.48	21.38	500.0	3.077
1/8/2013 8:00	168.37	21.17	500.0	2.970
1/8/2013 9:00	176.42	21.1	500.0	2.834
1/8/2013 13:00	141.24	20.82	500.0	3.540
1/9/2013 17:00	178.69	22.96	500.0	2.798
1/9/2013 18:00	174.96	22.66	500.0	2.858
1/10/2013 14:00	173.06	23.14	500.0	2.889
1/11/2013 21:00	169.29	26.57	500.0	2.954
1/11/2013	144.37	24.53	500.0	3.463
1/12/2013 0:00	132.52	22.68	500.0	3.773
1/12/2013 1:00	129.83	22.66	500.0	3.851
1/12/2013 2:00	128.8	22.42	500.0	3.882
1/12/2013 3:00	113.89	22.28	500.0	4.390
1/12/2013 4:00	109.32	22.7	500.0	4.574
1/12/2013 5:00	126.34	23.02	500.0	3.958
1/12/2013 6:00	147.72	23.93	500.0	3.385
1/12/2013 7:00	138.56	26.81	500.0	3.609
1/12/2013 8:00	126.36	26.67	500.0	3.957
1/12/2013 9:00	98.01	25.84	500.0	5.102
1/12/2013 10:00	94.67	25.47	500.0	5.282
1/12/2013 12:00	147.05	26.09	500.0	3.400
1/12/2013 13:00	172.2	26.1	500.0	2.904
1/12/2013 14:00	157.98	25.73	500.0	3.165
1/12/2013 15:00	157.88	25.65	500.0	3.167
1/12/2013 16:00	119.17	25.25	500.0	4.196
1/12/2013 17:00	91.08	25.03	500.0	5.490
1/12/2013 18:00	88.25	25.02	500.0	5.666

Attachment A - Table 10

Tag Name	FI82030.PV	FI82030A.PV	FIC8197.PV	
Units	LB/HR		LB/HR*	LB/LB*
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	FLARE STEAM FLOW	FLARE STM/HC RATIO
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	FIC8197.PV - Average	
1/12/2013 19:00	99.01	24.26	500.0	5.050
1/12/2013 20:00	89.18	24.12	500.0	5.607
1/12/2013 21:00	86.09	23.89	500.0	5.808
1/12/2013	91.26	24.04	500.0	5.479
1/12/2013 23:00	94.69	23.73	500.0	5.280
1/13/2013 0:00	94.16	23.23	500.0	5.310
1/13/2013 2:00	105.58	22.58	500.0	4.736
1/13/2013 3:00	131.57	22.93	500.0	3.800
1/13/2013 4:00	116.02	22.86	500.0	4.310
1/13/2013 5:00	109.63	22.38	500.0	4.561
1/13/2013 7:00	153.01	23.05	500.0	3.268
1/13/2013 8:00	119.54	22.56	500.0	4.183
1/13/2013 9:00	122.33	22.73	500.0	4.087
1/13/2013 10:00	122.81	22.61	500.0	4.071
1/13/2013 11:00	139.29	22.88	500.0	3.590
1/13/2013 12:00	148.38	23.83	500.0	3.370
1/13/2013 13:00	128.84	24.69	500.0	3.881
1/13/2013 14:00	152.33	24.54	500.0	3.282
1/13/2013 15:00	156.05	24.83	500.0	3.204
1/13/2013 16:00	168.29	24.4	500.0	2.971
1/13/2013 17:00	156.43	23.54	500.0	3.196
1/13/2013 19:00	172.16	24.32	500.0	2.904
1/13/2013 20:00	150.34	23.55	500.0	3.326
1/13/2013 23:00	167.53	22.94	500.0	2.985
1/14/2013 0:00	168.83	22.58	500.0	2.962
1/14/2013 1:00	172.55	22.39	500.0	2.898
1/14/2013 10:00	174.74	24.47	500.0	2.861
1/14/2013 11:00	153.58	24.44	500.0	3.256
1/15/2013 3:00	173.8	20.89	500.0	2.877
1/15/2013 4:00	165.42	21.29	500.0	3.023
1/15/2013 5:00	172.21	21.4	500.0	2.903
1/15/2013 6:00	163.57	21.39	500.0	3.057
1/15/2013 11:00	174.11	22.74	500.0	2.872
1/15/2013 17:00	166.47	23.65	500.0	3.004
1/15/2013 18:00	135.11	22.91	500.0	3.701
1/15/2013 19:00	130.95	22.94	500.0	3.818
1/15/2013 20:00	132.6	23.14	500.0	3.771
1/15/2013 21:00	133.57	22.91	500.0	3.743
1/15/2013	135.26	22.6	500.0	3.697
1/15/2013 23:00	140.21	22.38	500.0	3.566
1/16/2013 0:00	138.96	22.41	500.0	3.598
1/16/2013 1:00	137.72	22.49	500.0	3.631
1/16/2013 2:00	125.76	21.97	500.0	3.976
1/16/2013 3:00	134.41	21.8	500.0	3.720
1/16/2013 4:00	137.84	21.79	500.0	3.627
1/16/2013 5:00	137.75	21.77	500.0	3.630
1/16/2013 7:00	177.55	21.12	500.0	2.816
1/17/2013 0:00	176.88	22.63	500.0	2.827
1/17/2013 13:00	160.68	23.13	500.0	3.112
1/17/2013 15:00	177.42	23.64	500.0	2.818
5/20/2013 21:00	0.28	53.19	500.0	1785.714
5/21/2013 2:00	47.17	48.27	500.0	10.600

Attachment A - Table 10				
Tag Name	F182030.PV	F182030A.PV	FIC8197.PV	
Units	LB/HR		LB/HR*	LB/LB*
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	FLARE STEAM FLOW	FLARE STM/HC RATIO
Timestamp	F182030.PV - Average	F182030A.PV - Average	FIC8197.PV - Average	
5/21/2013 3:00	131.03	45.53	500.0	3.816
5/21/2013 4:00	116.2	41.94	500.0	4.303
5/21/2013 5:00	63.78	39.97	500.0	7.839
5/21/2013 6:00	8.93	39.04	500.0	55.991
5/21/2013 9:00	14.83	39.85	500.0	33.715
5/21/2013 10:00	15.25	40.42	500.0	32.787
5/21/2013 11:00	16.94	40.32	500.0	29.516
5/21/2013 12:00	20.06	41.09	500.0	24.925
5/21/2013 13:00	7.78	42.54	500.0	64.267
5/21/2013 14:00	36.38	44.03	500.0	13.744
5/21/2013 15:00	10.53	44.19	500.0	47.483
5/21/2013 16:00	11.74	43.86	500.0	42.589
5/21/2013 17:00	38.69	44.31	500.0	12.923
5/21/2013 18:00	49.07	44.6	500.0	10.190
5/21/2013 19:00	30.48	45.21	500.0	16.404
5/21/2013 20:00	15.65	45.67	500.0	31.949
5/21/2013 21:00	4.42	46.84	500.0	113.122
5/21/2013	0.28	46.02	500.0	1785.714
5/22/2013 0:00	0.28	44.9	500.0	1785.714
5/22/2013 1:00	0.56	44.08	500.0	892.857
5/22/2013 6:00	0.56	40.58	500.0	892.857
5/22/2013 8:00	11.62	39.78	500.0	43.029
5/22/2013 9:00	20.85	39.06	500.0	23.981
5/22/2013 13:00	171.77	42.47	500.0	2.911
5/22/2013 14:00	153.37	40.39	500.0	3.260
5/22/2013 17:00	156.42	38.6	500.0	3.197
5/22/2013 18:00	120.25	39.86	500.0	4.158
5/22/2013 19:00	120.25	39.98	500.0	4.158
5/22/2013 20:00	108.05	40.12	500.0	4.627
5/22/2013 21:00	98.94	40.25	500.0	5.054
5/22/2013	117.33	40.68	500.0	4.261
5/22/2013 23:00	118.23	40.4	500.0	4.229
5/23/2013 0:00	100.22	39.78	500.0	4.989
5/23/2013 1:00	69.71	38.69	500.0	7.173
5/23/2013 2:00	74.8	37.13	500.0	6.684
5/23/2013 3:00	88.47	36.77	500.0	5.652
5/23/2013 4:00	98.8	36.46	500.0	5.061
5/23/2013 5:00	77.6	36.17	500.0	6.443
5/20/2014 13:00	123.38	47.4	453.7	3.677
5/20/2014 14:00	165.65	50.63	471.7	2.847
5/20/2014 15:00	169.41	51.89	489.7	2.890
5/20/2014 16:00	125.6	51.55	507.7	4.042
5/20/2014 17:00	119.69	51.3	525.7	4.392
5/20/2014 18:00	124.46	51.31	543.7	4.368
5/20/2014 19:00	198.36	50.76	561.7	2.832
5/21/2014 1:00	212.88	41.05	669.7	3.146
5/21/2014 2:00	49.29	41.38	687.7	13.953
5/21/2014 3:00	125.81	41.73	705.7	5.609
5/21/2014 6:00	147.4	38.09	759.7	5.154
5/21/2014 7:00	80.17	38.63	777.7	9.701
5/21/2014 8:00	54.18	39.43	795.8	14.687
5/21/2014 9:00	29.04	40.89	813.8	28.022

Attachment A - Table 10				
Tag Name	FI82030.PV	FI82030A.PV	FIC8197.PV	
Units	LB/HR		LB/HR*	LB/LB*
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	FLARE STEAM FLOW	FLARE STM/HC RATIO
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	FIC8197.PV - Average	
5/21/2014 10:00	24.25	42.84	831.8	34.299
5/21/2014 11:00	175.7	44.31	849.8	4.836
5/21/2014 12:00	169.41	41.55	867.8	5.122
5/21/2014 13:00	129.48	42.16	885.8	6.841
5/21/2014 14:00	283.04	41.1	903.8	3.193
5/21/2014 15:00	125.53	40.51	921.8	7.343
5/21/2014 16:00	124.05	39.74	939.8	7.576
5/21/2014 17:00	122.47	39.82	957.8	7.821
5/21/2014 18:00	95.56	39.77	975.8	10.211
5/21/2014 19:00	75.91	39.65	993.8	13.092
5/21/2014 20:00	105.97	39.41	1011.8	9.548
5/21/2014 21:00	124.3	39.39	1029.8	8.285
5/21/2014	192.69	41.27	1047.8	5.438
12/27/2014 0:00	504.54	22.11	1620.9	3.213
12/28/2014 9:00	580.67	24.6	3088.6	5.319
4/3/2015 15:00	156.63	23.93	552.5	3.528
6/10/2015 15:00	89.8	45.95	473.0	5.267
6/10/2015 16:00	164.26	41.56	883.5	5.378
6/10/2015 17:00	254.32	46.16	1294.0	5.088
6/10/2015 18:00	238.49	44.53	1292.8	5.421
6/10/2015 20:00	127.31	27.86	484.7	3.807
6/13/2015 15:00	142.38	20.09	464.4	3.262
6/13/2015 16:00	158.48	19.39	531.1	3.351
6/14/2015 17:00	122.96	19	450.9	3.667
6/14/2015 18:00	132.95	19.1	537.5	4.043
6/14/2015 20:00	173.29	18.54	580.2	3.348
6/14/2015 21:00	176.12	18.61	580.1	3.294
6/14/2015	183.27	18.98	562.7	3.070
6/14/2015 23:00	170.25	18.43	545.6	3.205
6/15/2015 0:00	167.94	18.43	564.0	3.358
6/15/2015 1:00	178.46	18.36	564.0	3.160
6/15/2015 2:00	170.89	18.29	575.6	3.368
6/15/2015 3:00	184.77	18.59	556.9	3.014
6/15/2015 4:00	161.98	18.32	496.0	3.062
6/15/2015 5:00	158.32	18.34	532.5	3.364
6/15/2015 6:00	161.93	18.39	560.7	3.462
6/15/2015 7:00	177.02	18.56	501.7	2.834
6/15/2015 12:00	152.37	20.62	432.8	2.840
6/15/2015 21:00	119.42	20.23	480.0	4.020
6/15/2015	154.36	20.28	441.8	2.862
6/16/2015 0:00	164.96	19.61	485.9	2.946
6/16/2015 1:00	168.92	19.14	515.8	3.053
6/16/2015 2:00	171.84	19.67	518.9	3.019
6/16/2015 3:00	186.34	18.84	528.0	2.833
7/30/2015 13:00	203.63	19.6	574.8	2.823
7/30/2015 15:00	175.44	19.19	552.3	3.148
7/30/2015 16:00	192.78	19.17	556.8	2.888
7/30/2015 17:00	180.35	19.66	567.7	3.148
8/6/2015 7:00	191.17	25.94	575.7	3.012
8/7/2015 5:00	193.03	25.98	547.4	2.836
8/8/2015 5:00	174.57	27.79	575.4	3.296
8/8/2015 6:00	140.66	27.98	565.6	4.021

Attachment A - Table 10				
Tag Name	FI82030.PV	FI82030A.PV	FIC8197.PV	
Units	LB/HR		LB/HR*	LB/LB*
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	FLARE STEAM FLOW	FLARE STM/HC RATIO
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	FIC8197.PV - Average	
8/8/2015 7:00	138.49	27.66	567.9	4.100
8/18/2015 6:00	196.65	26	570.8	2.903
8/18/2015 7:00	157.48	26.73	570.7	3.624
8/28/2015 8:00	190.89	25.36	554.5	2.905
9/10/2015 4:00	169.69	24.8	570.0	3.359
9/12/2015 3:00	194.81	25.5	567.7	2.914
9/12/2015 5:00	207.17	25.2	586.5	2.831
9/20/2015 3:00	199.28	25.41	613.8	3.080
9/25/2015 5:00	181.98	25.75	594.5	3.267
9/26/2015 7:00	193.51	26.27	605.9	3.131
10/7/2015 0:00	203.51	24.37	598.6	2.941
10/7/2015 1:00	199.62	24.9	602.9	3.020
10/7/2015 2:00	183.35	24.98	614.3	3.350
10/7/2015 3:00	201.05	24.62	612.5	3.046
10/7/2015 5:00	207.8	24.94	609.2	2.932
10/7/2015 6:00	184.14	24.66	608.0	3.302
10/7/2015 8:00	215.25	24.76	611.6	2.841
10/8/2015 1:00	202.83	25.04	614.8	3.031
10/8/2015 7:00	195.38	24.9	648.3	3.318
10/8/2015 8:00	206.54	25.17	646.0	3.127
12/28/2015 7:00	924.23	20.32	5257.0	5.688
1/24/2016 13:00	201.83	21.69	569.1	2.819
2/18/2016 11:00	199.36	23.37	558.2	2.800
2/23/2016 16:00	185.12	23.71	550.8	2.976
3/1/2016 2:00	187	24.79	532.7	2.849
3/1/2016 3:00	180.97	25.22	524.0	2.896
3/12/2016 3:00	186.57	25.3	540.4	2.897
3/12/2016 11:00	165.05	27.47	536.2	3.249
3/12/2016 13:00	153.3	25.57	566.4	3.694
3/12/2016 19:00	167.97	25.69	516.5	3.075
3/12/2016	184	27.74	548.9	2.983
3/12/2016 23:00	156.01	25.44	531.1	3.404
3/13/2016 17:00	154.41	26.11	464.7	3.009
3/14/2016 18:00	144.41	27.75	483.8	3.350
3/15/2016 1:00	175.28	27.07	539.9	3.080
3/15/2016 2:00	185.5	25.94	540.8	2.915
3/15/2016 3:00	169.14	25.84	527.0	3.116
3/15/2016 6:00	181.38	25.73	563.3	3.106
3/15/2016 8:00	206.66	27.36	597.0	2.889
3/15/2016 9:00	199.57	25.12	590.5	2.959
3/15/2016 14:00	186.96	26.81	566.0	3.027
3/15/2016 18:00	173.18	26.07	555.4	3.207
3/15/2016 19:00	176.93	25.59	542.5	3.066
3/15/2016 21:00	176.18	26.04	537.9	3.053
3/17/2016 13:00	165.08	26.45	479.2	2.903
3/17/2016 15:00	167.74	26.71	477.0	2.844
3/17/2016 21:00	166.35	25.33	506.9	3.047
3/17/2016	170.49	25.56	485.3	2.846
3/18/2016 20:00	173.51	28.01	502.0	2.893
3/18/2016 23:00	160.49	25.65	485.7	3.026
3/19/2016 2:00	162.63	25.01	478.1	2.940
3/19/2016 20:00	156.31	25.52	484.9	3.102

Attachment A - Table 10

Tag Name	FI82030.PV	FI82030A.PV	FIC8197.PV	
Units	LB/HR		LB/HR*	LB/LB*
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	FLARE STEAM FLOW	FLARE STM/HC RATIO
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	FIC8197.PV - Average	
3/19/2016	149.73	26.5	511.6	3.417
3/19/2016 23:00	147.82	25.34	522.0	3.531
3/20/2016 1:00	142.57	25.09	528.0	3.703
3/20/2016 4:00	166.25	24.8	517.6	3.113
3/22/2016 1:00	160.62	26.37	490.7	3.055
3/22/2016 3:00	177	26.6	500.4	2.827
3/22/2016 4:00	159.12	26.09	489.4	3.076
3/22/2016 6:00	164.84	26.05	487.8	2.959
3/22/2016 13:00	126.92	26.96	468.5	3.691
3/22/2016 15:00	128.58	26.66	487.7	3.793
3/22/2016 16:00	138.02	26.99	479.7	3.475
3/22/2016 17:00	161.25	27.29	480.6	2.980
3/22/2016 18:00	138.95	26.95	483.8	3.481
3/22/2016 19:00	127.17	26.65	492.5	3.872
3/22/2016	148.03	25.74	568.1	3.838
3/23/2016 1:00	174.73	26.29	531.0	3.039
3/23/2016 3:00	196.08	25.91	554.0	2.825
3/23/2016 6:00	190.11	25.52	590.2	3.105
3/23/2016 18:00	188.44	27.19	527.8	2.801
3/23/2016 20:00	170.72	26.08	537.7	3.150
3/24/2016 16:00	164.68	25.76	479.5	2.912
3/24/2016 17:00	161.19	25.81	478.3	2.967
3/24/2016 18:00	172.02	26.39	483.9	2.813
3/24/2016 20:00	168.25	26.08	539.4	3.206
3/24/2016	159.25	25.91	494.6	3.106
3/25/2016 19:00	174.47	25.87	551.4	3.161
3/26/2016 0:00	187.73	25.38	577.2	3.074
3/26/2016 1:00	182.4	24.92	577.9	3.168
3/27/2016 15:00	170.97	26.88	499.5	2.922
3/28/2016 1:00	169.42	25.6	539.2	3.182
3/29/2016 0:00	178.62	26	507.9	2.843
3/29/2016 1:00	163.19	26.24	527.5	3.232
3/29/2016 2:00	178.32	25.92	548.2	3.074
3/29/2016 3:00	185.45	26.09	544.7	2.937
3/29/2016 5:00	160.61	26.71	572.5	3.565
3/29/2016 6:00	177.54	26.51	568.4	3.202
3/29/2016 12:00	169.47	28.47	533.2	3.146
3/30/2016 16:00	183.55	26.54	564.0	3.073
3/30/2016 17:00	183.11	27.38	556.7	3.040
3/31/2016 13:00	145.75	27.05	490.2	3.363
3/31/2016 15:00	128.44	26.48	485.5	3.780
3/31/2016 16:00	121.78	26.45	479.3	3.936
3/31/2016 21:00	157.16	26.93	484.2	3.081
3/31/2016 23:00	180.04	25.75	550.6	3.058
4/1/2016 14:00	178.51	27.34	501.4	2.809
4/1/2016 17:00	171.76	26.81	500.4	2.913
4/1/2016 18:00	143.03	27.07	480.5	3.359
4/1/2016 20:00	134.18	24.97	495.9	3.696
4/1/2016 23:00	155.03	25.64	521.7	3.365
4/2/2016 0:00	158.06	25.6	548.3	3.469
4/2/2016 1:00	161.4	25.19	536.1	3.322
4/2/2016 2:00	156.48	25.29	530.2	3.388

Attachment A - Table 10

Tag Name	FI82030.PV	FI82030A.PV	FIC8197.PV	
Units	LB/HR		LB/HR*	LB/LB*
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	FLARE STEAM FLOW	FLARE STM/HC RATIO
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	FIC8197.PV - Average	
4/2/2016 4:00	181.81	25.8	549.2	3.021
4/2/2016 5:00	181.54	25.8	549.9	3.029
4/2/2016 19:00	132.4	24.74	450.0	3.399
4/3/2016 2:00	161.84	25.93	506.2	3.128
4/3/2016 5:00	195.66	26.39	548.3	2.802
4/4/2016 1:00	142.31	25.87	488.9	3.435
4/4/2016 3:00	153.36	25.91	492.1	3.209
4/4/2016 20:00	115.07	25.47	445.4	3.870
4/4/2016 23:00	156.02	26.72	470.7	3.017
4/5/2016 1:00	169.09	27.17	496.4	2.936
4/5/2016 4:00	180.78	26.45	517.6	2.863
4/5/2016 15:00	188.84	28.29	542.4	2.872
4/5/2016 19:00	133.09	26.58	524.9	3.944
4/5/2016 21:00	148.36	25.89	531.3	3.581
4/5/2016 23:00	167.58	25.29	549.5	3.279
4/6/2016 19:00	119.57	27.46	384.7	3.217
4/6/2016 20:00	150.7	26.64	428.8	2.845
4/7/2016 0:00	147.39	26.35	471.3	3.198
4/7/2016 19:00	77.62	28.1	352.0	4.535
4/7/2016 21:00	150.12	28.89	448.8	2.990
4/7/2016 23:00	167.16	27.44	503.1	3.009
4/8/2016 1:00	190.02	28.01	540.2	2.843
4/8/2016 3:00	155.08	27.51	544.5	3.511
4/9/2016 0:00	129	27.36	477.3	3.700
4/9/2016 2:00	137.82	27.2	480.5	3.486
4/9/2016 5:00	137.93	27.35	503.1	3.647
4/9/2016 7:00	158.33	28.43	495.4	3.129
4/9/2016 10:00	120.42	26.98	458.0	3.803
4/9/2016 12:00	144.77	27.67	436.2	3.013
4/9/2016 13:00	130.85	28.45	432.7	3.307
4/9/2016 17:00	134.85	27.9	425.3	3.154
4/9/2016 18:00	97.53	27.69	321.5	3.296
4/9/2016 21:00	128.74	27.08	359.6	2.793
4/9/2016	121.86	26.79	420.1	3.447
4/10/2016 0:00	147.37	28.1	460.3	3.123
4/10/2016 1:00	130.56	26.68	454.4	3.481
4/10/2016 2:00	135.1	26.28	451.4	3.341
4/10/2016 5:00	138.01	27.36	480.8	3.484
4/10/2016 6:00	139.1	27.27	502.0	3.609
4/10/2016 8:00	160.78	27.75	499.1	3.104
4/10/2016 14:00	151.67	28.09	447.0	2.947
4/10/2016 17:00	145.53	29.76	432.2	2.970
4/10/2016 20:00	159.81	28.92	472.4	2.956
4/11/2016 19:00	134.11	27.73	472.4	3.523
4/15/2016 13:00	151.39	31.37	492.2	3.251
4/16/2016 19:00	175.63	27.7	547.4	3.117
4/17/2016 13:00	164.28	30.06	467.9	2.848
4/18/2016 19:00	148.88	25.22	541.6	3.638
4/18/2016 20:00	145.03	25.76	552.6	3.810
4/18/2016 21:00	153.74	25.85	521.1	3.390
4/19/2016 0:00	166.27	25.66	471.3	2.835
4/20/2016 13:00	174.18	30.01	489.3	2.809

Attachment A - Table 10

Tag Name	FI82030.PV	FI82030A.PV	FIC8197.PV	
Units	LB/HR		LB/HR*	LB/LB*
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	FLARE STEAM FLOW	FLARE STM/HC RATIO
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	FIC8197.PV - Average	
4/20/2016 19:00	138.36	26.89	449.9	3.251
4/20/2016 20:00	130.87	27.45	462.6	3.535
5/13/2016 20:00	142.13	31.08	528.4	3.718
5/15/2016 0:00	120.42	28.61	393.2	3.265
5/15/2016 5:00	138.93	29.16	489.0	3.520
5/17/2016 15:00	709.9	13.51	2496.8	3.517
5/17/2016 16:00	377.63	44.85	2460.8	6.517
5/17/2016 17:00	278.57	43.47	2424.8	8.705
5/17/2016 18:00	287.68	43.61	2388.8	8.304
5/18/2016 6:00	685.06	37.01	1956.7	2.856
5/18/2016 8:00	655.25	36.83	1884.7	2.876
5/18/2016 9:00	610.31	37.13	1848.7	3.029
5/18/2016 10:00	566.68	37.32	1812.7	3.199
5/18/2016 11:00	617.54	33.97	1776.6	2.877
5/18/2016 12:00	499.85	34.15	1740.6	3.482
5/18/2016 13:00	497.08	34.12	1704.6	3.429
5/18/2016 14:00	454.56	33.74	1668.6	3.671
5/18/2016 15:00	426.95	34.2	1632.6	3.824
5/18/2016 16:00	425.84	34.4	1596.6	3.749
5/18/2016 17:00	390.08	34.47	1560.6	4.001
5/18/2016 20:00	387.29	18.01	1452.5	3.751
5/18/2016	381.4	17.96	1380.5	3.620
5/18/2016 23:00	372.69	17.37	1344.5	3.608
5/19/2016 0:00	442.41	18.76	1308.5	2.958
5/19/2016 3:00	184.4	19.09	1200.5	6.510
5/19/2016 4:00	185.24	18.22	1164.5	6.286
5/19/2016 5:00	186.62	18.09	1128.5	6.047
5/19/2016 6:00	186.07	18.16	1092.4	5.871
5/19/2016 7:00	184.73	18.19	1056.4	5.719
5/19/2016 8:00	191.2	18.2	1020.4	5.337
5/19/2016 9:00	249.1	22.31	984.4	3.952
5/19/2016 10:00	271.69	23.33	948.4	3.491
5/19/2016 11:00	216.76	21.06	912.4	4.209
5/19/2016 12:00	170.3	19.24	876.4	5.146
5/19/2016 13:00	172.46	19.66	840.4	4.873
5/19/2016 15:00	170.6	20.75	768.4	4.504
5/19/2016 16:00	241.08	21.72	732.3	3.038
7/1/2016 9:00	399.44	25.27	1132.7	2.836
12/10/2016 18:00	162.01	17.78	1129.8	6.974

\*Highlighted text from 1/16/2012 to 5/23/2013:

Estimated from 1/1/12 to 1/24/14 due to no historian data available on steam flow during this period. Calculated approximate steam/hydrocarbon ratio with correction for molecular weight for the following two years (2014-2015). Used calculated curve to estimate steam flow with min steam of 500 lb/hr and max of 7500 lb/hr.

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
1/16/2012 9:00	831.28	18.79	982.5
2/3/2012 10:00	1915.17	18.97	991.5
2/3/2012 11:00	1917.49	18.89	987.5
2/3/2012 12:00	2063.59	18.6	973.1
2/3/2012 13:00	1891.15	18.94	990.0
3/12/2012 11:00	1830.56	19.14	999.9
3/12/2012 12:00	2150.98	18.48	967.1
3/12/2012 13:00	1606	18.9	988.0
3/12/2012 16:00	2059.62	18.38	962.1
3/12/2012 17:00	2031.57	18.34	960.1
3/12/2012 18:00	2101.54	18.28	957.1
3/12/2012 19:00	2131.62	18.34	960.1
4/3/2012 14:00	692.78	18.69	977.5
4/3/2012 15:00	274.47	18.65	975.5
4/3/2012 16:00	288.27	18.5	968.1
4/3/2012 17:00	287.39	18.06	946.2
4/3/2012 18:00	289.66	17.76	931.3
4/3/2012 19:00	287.99	18.08	947.2
4/3/2012 20:00	277.19	17.82	934.3
4/3/2012 21:00	249.05	17.88	937.3
4/3/2012	21.36	18.02	944.2
4/3/2012 23:00	0	18.53	969.6
4/4/2012 10:00	954.05	17.73	929.8
4/4/2012 11:00	869.89	17.55	920.9
4/4/2012 12:00	465.84	17.84	935.3
4/4/2012 18:00	39.78	18.71	978.5
4/6/2012 1:00	1372.71	18.87	986.5
4/17/2012 17:00	3273.49	18.96	991.0
7/19/2012 21:00	2437.49	18.44	965.1
9/5/2012 19:00	11894.21	18.08	947.2
9/27/2012 20:00	299.3	19.03	994.4
9/27/2012	282.09	18.6	973.1
9/27/2012 23:00	295.03	19	992.9
9/28/2012 0:00	277.23	18.27	956.7
9/28/2012 1:00	291.16	18.32	959.1
9/28/2012 2:00	277.58	18.6	973.1
9/28/2012 3:00	286.58	18.69	977.5
1/6/2013 13:00	104.67	18.8	983.0
1/29/2013 6:00	1239.36	18.87	986.5
1/29/2013 7:00	1620.42	18.6	973.1
9/13/2013 19:00	939.95	15.99	843.3
9/13/2013 20:00	2940.66	18.17	951.7

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
10/15/2013 5:00	1939.82	18.42	964.1
2/9/2014 12:00	22681.59	18.27	956.7
5/22/2014 2:00	8603.37	17.92	939.3
5/22/2014 3:00	2911.97	18.72	979.0
10/21/2014 6:00	3371.7	18.97	991.5
10/21/2014 7:00	2920.44	18.25	955.7
10/21/2014 8:00	2968.15	18.2	953.2
10/21/2014 9:00	3091.05	18.19	952.7
10/21/2014 10:00	3047.92	18.16	951.2
10/21/2014 11:00	3005.74	18.13	949.7
10/21/2014 14:00	3198.04	18.39	962.6
10/21/2014 15:00	3117.34	18.33	959.6
10/21/2014 16:00	3058.86	18.18	952.2
10/21/2014 17:00	4100.28	18.31	958.6
10/21/2014 21:00	1542.79	18.8	983.0
1/13/2015 1:00	863.79	18.85	985.5
1/13/2015 2:00	862.25	18.56	971.1
1/13/2015 3:00	847.17	18.52	969.1
1/13/2015 4:00	845.37	18.58	972.1
1/13/2015 5:00	836	18.56	971.1
1/13/2015 6:00	834.79	18.46	966.1
1/13/2015 7:00	841.34	18.45	965.6
1/13/2015 8:00	847.4	18.42	964.1
1/13/2015 9:00	827.08	18.43	964.6
1/13/2015 10:00	852.72	18.63	974.6
1/13/2015 11:00	839.18	18.67	976.5
1/13/2015 12:00	852.09	18.77	981.5
1/13/2015 13:00	838.36	18.88	987.0
1/13/2015 14:00	835.89	18.79	982.5
1/13/2015 15:00	840.34	18.76	981.0
1/13/2015 18:00	858.72	18.96	991.0
1/14/2015 0:00	854.83	19.02	993.9
1/14/2015 3:00	854.53	18.92	989.0
1/14/2015 5:00	902.04	19.13	999.4
1/14/2015 8:00	849.24	18.88	987.0
1/14/2015 11:00	839.6	18.82	984.0
1/14/2015	875.63	18.8	983.0
1/14/2015 23:00	884.99	18.81	983.5
1/15/2015 0:00	860.01	18.61	973.6
1/15/2015 1:00	880.91	18.69	977.5
1/15/2015 2:00	860.41	18.4	963.1
1/15/2015 3:00	854.94	18.36	961.1

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
1/15/2015 4:00	687.72	18.84	985.0
3/4/2015 15:00	11688.16	17.42	914.4
5/16/2015 21:00	1040.18	18.83	984.5
5/16/2015	977.43	18.97	991.5
5/17/2015 10:00	2032.18	18.42	964.1
5/17/2015 11:00	3026.56	17.69	927.8
5/17/2015 12:00	1971.06	18.07	946.7
5/20/2015 15:00	6648.02	18.64	975.0
6/2/2015	5169.56	18.74	980.0
6/2/2015 23:00	4349.58	18.47	966.6
6/11/2015 7:00	71.97	18.84	985.0
6/11/2015 8:00	88.44	18.83	984.5
6/11/2015 9:00	119.37	18.91	988.5
6/11/2015 14:00	66.65	18.6	973.1
6/11/2015 15:00	71.12	18.04	945.2
6/11/2015 16:00	110.14	18.02	944.2
6/11/2015 21:00	85.5	18.87	986.5
6/11/2015	77.76	18.39	962.6
6/11/2015 23:00	71.93	18.42	964.1
6/12/2015 0:00	77.24	18.36	961.1
6/12/2015 1:00	99.35	18.41	963.6
6/12/2015 2:00	106.02	18.41	963.6
6/12/2015 3:00	124.44	18.84	985.0
6/12/2015 4:00	129.25	18.6	973.1
6/12/2015 5:00	122.08	18.51	968.6
6/12/2015 6:00	134.09	18.7	978.0
6/12/2015 7:00	135.2	18.6	973.1
6/12/2015 8:00	149.87	18.74	980.0
6/12/2015 9:00	151.21	18.87	986.5
6/12/2015 21:00	104.36	18.65	975.5
6/12/2015	120.25	18.4	963.1
6/12/2015 23:00	119.09	18.25	955.7
6/13/2015 0:00	118.91	18.09	947.7
6/13/2015 1:00	290.55	18.56	971.1
6/13/2015 2:00	395.66	18.45	965.6
6/13/2015 3:00	641.63	18.48	967.1
6/13/2015 5:00	201.23	19.04	994.9
6/13/2015 6:00	216.81	18.87	986.5
6/13/2015 17:00	202.39	18.66	976.0
6/13/2015 18:00	263.84	18.56	971.1
6/13/2015 19:00	255.22	18.43	964.6
6/13/2015 20:00	247.37	18.36	961.1

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
6/13/2015 21:00	250.57	18.21	953.7
6/13/2015	248.07	18.09	947.7
6/13/2015 23:00	252.18	18.01	943.7
6/14/2015 0:00	244.72	18	943.2
6/14/2015 1:00	250.47	18.38	962.1
6/14/2015 2:00	225.95	18.12	949.2
6/14/2015 3:00	234.27	18.09	947.7
6/14/2015 4:00	242.31	18.51	968.6
6/14/2015 5:00	219.54	18.6	973.1
6/14/2015 6:00	213.09	18.49	967.6
6/14/2015 7:00	215.35	18.47	966.6
6/14/2015 8:00	226.62	18.24	955.2
6/14/2015 9:00	240.18	18.81	983.5
6/14/2015 13:00	4987.27	18.84	985.0
6/14/2015 17:00	122.96	19	992.9
6/14/2015 18:00	132.95	19.1	997.9
6/14/2015 19:00	237.98	18.83	984.5
6/14/2015 20:00	173.29	18.54	970.1
6/14/2015 21:00	176.12	18.61	973.6
6/14/2015	183.27	18.98	992.0
6/14/2015 23:00	170.25	18.43	964.6
6/15/2015 0:00	167.94	18.43	964.6
6/15/2015 1:00	178.46	18.36	961.1
6/15/2015 2:00	170.89	18.29	957.6
6/15/2015 3:00	184.77	18.59	972.6
6/15/2015 4:00	161.98	18.32	959.1
6/15/2015 5:00	158.32	18.34	960.1
6/15/2015 6:00	161.93	18.39	962.6
6/15/2015 7:00	177.02	18.56	971.1
6/15/2015 8:00	481.71	18.62	974.1
6/16/2015 1:00	168.92	19.14	999.9
6/16/2015 3:00	186.34	18.84	985.0
6/16/2015 5:00	179.01	18.72	979.0
6/16/2015 7:00	194.71	18.61	973.6
7/30/2015 18:00	221.02	18.81	983.5
12/26/2015 7:00	654.23	19.1	997.9
12/26/2015 8:00	661.04	19.06	995.9
12/26/2015 9:00	696	19.01	993.4
12/26/2015 12:00	694.8	19.03	994.4
12/26/2015 21:00	618.28	19.06	995.9
12/26/2015	649.2	19.08	996.9
12/27/2015 1:00	751.3	19.04	994.9

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
12/27/2015 2:00	750.13	18.85	985.5
12/27/2015 3:00	788.81	18.88	987.0
12/27/2015 4:00	791.72	18.88	987.0
12/27/2015 5:00	788.16	19.1	997.9
12/27/2015 6:00	799.75	19	992.9
12/27/2015 7:00	806.66	19.06	995.9
12/27/2015 9:00	800.6	19	992.9
12/27/2015 10:00	809.47	18.88	987.0
12/27/2015 11:00	796.14	18.99	992.5
1/1/2016 0:00	640.93	19.12	998.9
1/1/2016 3:00	661.01	19.13	999.4
1/1/2016 4:00	668.75	19.13	999.4
1/1/2016 5:00	657.94	19.07	996.4
1/1/2016 6:00	657.75	19.14	999.9
1/1/2016 8:00	669.51	19.09	997.4
1/1/2016 9:00	642.69	18.98	992.0
1/10/2016 11:00	792.05	19.11	998.4
1/11/2016 0:00	666.7	19.14	999.9
1/11/2016 1:00	708.16	19.04	994.9
1/11/2016 2:00	756.51	19.03	994.4
1/11/2016 3:00	802.13	18.96	991.0
1/11/2016 4:00	801.39	18.86	986.0
1/11/2016 5:00	787.61	19.02	993.9
1/11/2016 6:00	805.72	18.91	988.5
1/11/2016 7:00	833.54	19.09	997.4
1/11/2016 8:00	811.6	18.96	991.0
1/11/2016 9:00	865.65	19.06	995.9
1/11/2016 10:00	797.25	18.9	988.0
1/12/2016 11:00	910.25	19.13	999.4
1/12/2016	709.77	19.13	999.4
1/12/2016 23:00	766.33	19	992.9
1/13/2016 0:00	836.7	19.08	996.9
1/13/2016 1:00	801.99	18.78	982.0
1/13/2016 3:00	911.54	19.07	996.4
1/13/2016 8:00	908.37	19.03	994.4
1/13/2016 9:00	901.89	18.88	987.0
1/13/2016 11:00	855.19	19.12	998.9
1/16/2016 1:00	694.04	19.11	998.4
1/16/2016 2:00	686.6	19.06	995.9
1/16/2016 3:00	725.29	18.97	991.5
1/16/2016 8:00	773.4	19.12	998.9
1/17/2016 0:00	659.37	19.03	994.4

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
1/17/2016 1:00	698.31	18.91	988.5
1/17/2016 2:00	710.8	18.36	961.1
1/17/2016 3:00	717.04	18.61	973.6
1/17/2016 4:00	728.27	18.72	979.0
1/17/2016 5:00	722.59	18.58	972.1
1/17/2016 6:00	716.17	18.55	970.6
1/17/2016 7:00	710.46	18.73	979.5
1/17/2016 8:00	723.44	18.89	987.5
1/17/2016 9:00	735.53	19.01	993.4
1/17/2016 10:00	739.95	18.86	986.0
1/17/2016 11:00	692.45	18.59	972.6
1/22/2016 8:00	562	19.1	997.9
1/25/2016 8:00	550.96	19.12	998.9
2/3/2016 10:00	740.42	19.01	993.4
2/3/2016 11:00	730.49	19.13	999.4
2/4/2016 11:00	709.64	18.99	992.5
2/5/2016 2:00	660.85	19.14	999.9
2/5/2016 3:00	657.69	19.11	998.4
5/9/2016 15:00	1133.93	18.59	972.6
5/17/2016 13:00	4331.74	15.86	836.8
5/17/2016 15:00	709.9	13.51	720.0
5/18/2016 20:00	387.29	18.01	943.7
5/18/2016	381.4	17.96	941.2
5/18/2016 23:00	372.69	17.37	911.9
5/19/2016 0:00	442.41	18.76	981.0
5/19/2016 2:00	464.8	18.31	958.6
5/19/2016 3:00	184.4	19.09	997.4
5/19/2016 4:00	185.24	18.22	954.2
5/19/2016 5:00	186.62	18.09	947.7
5/19/2016 6:00	186.07	18.16	951.2
5/19/2016 7:00	184.73	18.19	952.7
5/19/2016 8:00	191.2	18.2	953.2
7/9/2016 20:00	165.19	18.43	964.6
7/9/2016 21:00	537.26	18.05	945.7
7/9/2016	340.78	16.85	886.1
7/9/2016 23:00	289.56	17.91	938.8
7/10/2016 0:00	278.67	17.45	915.9
7/10/2016 1:00	266.88	17.7	928.3
7/10/2016 2:00	261.2	17.02	894.5
7/10/2016 3:00	242.21	17.04	895.5
7/10/2016 4:00	261.74	17.33	909.9
7/10/2016 5:00	222.58	17.15	901.0

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
7/10/2016 6:00	312.72	16.69	878.1
7/10/2016 7:00	240.14	17.11	899.0
7/10/2016 8:00	269.19	17.03	895.0
7/10/2016 9:00	260.37	17.98	942.2
7/10/2016 10:00	223.01	17.64	925.3
7/10/2016 11:00	216	17.62	924.3
7/10/2016 12:00	211.45	17.9	938.3
7/10/2016 13:00	223.86	17.92	939.3
7/10/2016 14:00	214.51	18.59	972.6
7/10/2016 15:00	210.7	18.26	956.2
7/10/2016 16:00	204.82	18.41	963.6
7/10/2016 17:00	183.72	17.96	941.2
7/10/2016 18:00	182.29	17.87	936.8
7/10/2016 19:00	214.72	17.99	942.7
7/10/2016 20:00	185.72	17.54	920.4
7/10/2016 21:00	202.77	17.35	910.9
7/10/2016	231.11	17.18	902.5
7/10/2016 23:00	218.19	17.29	907.9
7/11/2016 0:00	212.54	17.43	914.9
7/11/2016 1:00	218.83	17.81	933.8
7/11/2016 2:00	209.39	17.16	901.5
7/11/2016 3:00	204.38	17.52	919.4
7/11/2016 4:00	192.29	17.09	898.0
7/11/2016 5:00	210.9	17.12	899.5
7/11/2016 6:00	208.17	17.04	895.5
7/11/2016 7:00	207.33	17.04	895.5
7/11/2016 8:00	206.17	17.03	895.0
7/11/2016 10:00	199.88	17.39	912.9
7/11/2016 11:00	189.63	17.01	894.0
7/11/2016 12:00	172.05	17.06	896.5
7/11/2016 13:00	177.29	17	893.5
7/11/2016 14:00	196.04	17.71	928.8
7/11/2016 15:00	176.02	17.59	922.8
7/11/2016 16:00	180.32	16.97	892.0
7/11/2016 17:00	146.65	16.96	891.5
7/11/2016 18:00	212.3	17.34	910.4
7/11/2016 19:00	177.48	17.82	934.3
7/11/2016 20:00	187.39	18.08	947.2
7/11/2016 21:00	211.43	17.5	918.4
7/11/2016	236.37	17.24	905.4
7/11/2016 23:00	212.71	17.46	916.4
7/12/2016 0:00	225.18	17.39	912.9

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
7/12/2016 1:00	227.78	17.74	930.3
7/12/2016 2:00	271.26	18.63	974.6
7/12/2016 4:00	201.53	17.22	904.4
7/12/2016 5:00	218.28	16.85	886.1
7/12/2016 6:00	214.87	16.98	892.5
7/12/2016 7:00	223.37	16.82	884.6
7/12/2016 8:00	217.58	16.9	888.5
7/12/2016 9:00	224.86	16.99	893.0
7/12/2016 10:00	193.61	17.02	894.5
7/12/2016 11:00	186.33	16.85	886.1
7/12/2016 12:00	184.39	17.2	903.5
7/12/2016 13:00	184.72	17.09	898.0
7/12/2016 14:00	197.86	17.96	941.2
7/12/2016 15:00	172.88	17.36	911.4
7/12/2016 16:00	184.72	17.88	937.3
7/12/2016 17:00	199.59	17.98	942.2
7/12/2016 18:00	263.29	17.75	930.8
7/12/2016 19:00	133.94	17.5	918.4
7/12/2016 20:00	169.14	17.92	939.3
7/12/2016 21:00	190.34	17.55	920.9
7/12/2016	201.56	17.64	925.3
7/12/2016 23:00	175.09	17.51	918.9
7/13/2016 0:00	187.53	17.26	906.4
7/13/2016 1:00	182.05	16.87	887.0
7/13/2016 2:00	182.95	16.75	881.1
7/13/2016 3:00	194.53	16.69	878.1
7/13/2016 4:00	194.85	16.64	875.6
7/13/2016 5:00	200.05	16.7	878.6
7/13/2016 6:00	200.4	17.04	895.5
7/13/2016 7:00	195.84	16.92	889.5
7/13/2016 8:00	202.42	17.02	894.5
7/13/2016 9:00	208.13	17.27	906.9
7/13/2016 10:00	191.33	17.28	907.4
7/13/2016 11:00	172.07	17.18	902.5
7/13/2016 12:00	164.11	17.5	918.4
7/13/2016 13:00	175.88	18.74	980.0
7/13/2016 14:00	160.07	17.84	935.3
7/13/2016 15:00	146.21	17.75	930.8
7/13/2016 16:00	161.74	17.96	941.2
7/13/2016 17:00	175.45	18.46	966.1
7/13/2016 18:00	156.19	18.66	976.0
7/13/2016 19:00	200.21	18.5	968.1

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
7/13/2016 20:00	174.01	19.1	997.9
7/13/2016 21:00	191.2	18.22	954.2
7/13/2016	191.34	18.15	950.7
7/13/2016 23:00	188.02	18.07	946.7
7/14/2016 0:00	176.88	17.79	932.8
7/14/2016 1:00	224.18	18.83	984.5
7/14/2016 3:00	216.67	19.06	995.9
7/14/2016 4:00	186.21	17.99	942.7
7/14/2016 5:00	181.49	17.66	926.3
7/14/2016 6:00	187.53	17.66	926.3
7/14/2016 7:00	186.72	17.69	927.8
7/14/2016 8:00	197.59	17.55	920.9
7/14/2016 9:00	204.18	17.58	922.3
7/14/2016 10:00	179.68	17.5	918.4
7/14/2016 11:00	163.34	17.47	916.9
7/14/2016 12:00	161.83	17.67	926.8
7/14/2016 13:00	180.81	18.85	985.5
7/15/2016 12:00	176.98	18.32	959.1
7/15/2016 14:00	716.51	17.2	903.5
7/15/2016 15:00	167.7	17.67	926.8
7/15/2016 16:00	155.81	18.32	959.1
7/15/2016 17:00	179.34	18.96	991.0
7/15/2016 18:00	183.36	18.97	991.5
7/15/2016 19:00	170.81	18.25	955.7
7/15/2016 20:00	177.46	17.75	930.8
7/15/2016 21:00	212.62	18.54	970.1
7/15/2016	247.37	18.37	961.6
7/16/2016 1:00	218.02	18.14	950.2
7/16/2016 2:00	217.76	17.35	910.9
7/16/2016 3:00	209.4	17.27	906.9
7/16/2016 4:00	210.23	17.12	899.5
7/16/2016 5:00	228.52	17.21	903.9
7/16/2016 6:00	225.66	17.52	919.4
7/16/2016 7:00	224.41	17.55	920.9
7/16/2016 8:00	226.6	17.46	916.4
7/16/2016 9:00	232.58	17.55	920.9
7/16/2016 10:00	201.66	17.54	920.4
7/16/2016 14:00	198.37	18.63	974.6
7/16/2016 17:00	194.76	19.06	995.9
7/16/2016 18:00	188.83	18.27	956.7
7/16/2016 19:00	173.95	18.27	956.7
7/16/2016 20:00	192.95	18.18	952.2

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
7/16/2016 21:00	207.56	17.83	934.8
7/16/2016	240.28	18.8	983.0
7/17/2016 1:00	205.63	17.7	928.3
7/17/2016 2:00	210.97	17.35	910.9
7/17/2016 3:00	207.53	17.24	905.4
7/17/2016 4:00	217.64	17.28	907.4
7/17/2016 5:00	220.73	17.34	910.4
7/17/2016 6:00	213.64	17.37	911.9
7/17/2016 7:00	221.46	17.48	917.4
7/17/2016 8:00	225.1	17.4	913.4
7/17/2016 9:00	221.67	17.32	909.4
7/17/2016 10:00	191.28	17.35	910.9
7/17/2016 11:00	173.1	17.27	906.9
7/17/2016 12:00	179.78	17.48	917.4
7/17/2016 13:00	202.68	18.52	969.1
7/17/2016 14:00	203.5	18.58	972.1
7/17/2016 17:00	244.2	18.86	986.0
7/17/2016 19:00	280.25	19.11	998.4
7/17/2016 20:00	323.39	18.45	965.6
7/17/2016 21:00	364.83	18.2	953.2
7/17/2016	426.79	18.63	974.6
7/17/2016 23:00	452.5	18.82	984.0
7/18/2016 0:00	472.24	18.49	967.6
7/18/2016 1:00	1408.74	17.74	930.3
7/18/2016 2:00	2639.56	15.84	835.8
7/18/2016 3:00	269.75	17.14	900.5
7/18/2016 4:00	305.97	18.18	952.2
7/18/2016 5:00	339.66	18.12	949.2
7/18/2016 6:00	337.03	17.75	930.8
7/18/2016 7:00	1930.56	17.11	899.0
7/18/2016 8:00	4097.38	15.9	838.8
7/18/2016 9:00	4931.43	16.05	846.3
7/18/2016 11:00	5892.39	17.92	939.3
7/18/2016 12:00	2366.59	18.63	974.6
7/18/2016 13:00	2391.51	17.27	906.9
7/18/2016 14:00	1374.37	17.55	920.9
9/12/2016 15:00	3261.76	18	943.2
9/12/2016 16:00	904.3	18.6	973.1
11/12/2016 6:00	510.7	18.94	990.0
11/12/2016 9:00	555.39	18.98	992.0
11/14/2016 9:00	627.96	18.72	979.0
11/18/2016 7:00	729.49	19.07	996.4

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
11/18/2016 10:00	840.07	19.1	997.9
11/18/2016 11:00	747.2	18.91	988.5
11/19/2016 1:00	647.28	18.9	988.0
11/19/2016 2:00	681.32	19	992.9
11/19/2016 4:00	646.1	18.47	966.6
11/19/2016 5:00	641.19	18.51	968.6
11/19/2016 6:00	642.79	18.4	963.1
11/19/2016 7:00	642.45	18.33	959.6
11/19/2016 8:00	630.39	18.12	949.2
11/19/2016 9:00	668.18	18.34	960.1
11/19/2016 10:00	698.62	18.37	961.6
11/19/2016	510.55	18.74	980.0
11/20/2016 0:00	526.1	19.06	995.9
11/20/2016 3:00	519.83	19.09	997.4
11/20/2016 5:00	543.97	19.02	993.9
11/20/2016 6:00	545.34	18.98	992.0
11/20/2016 8:00	555.41	18.94	990.0
11/20/2016 10:00	526.6	19.05	995.4
11/23/2016 0:00	459.81	19.11	998.4
11/23/2016 1:00	454.24	18.77	981.5
11/23/2016 9:00	555.93	19	992.9
11/23/2016 11:00	607.76	18.92	989.0
11/23/2016 23:00	509.02	18.89	987.5
11/24/2016 0:00	527.89	18.99	992.5
11/24/2016 1:00	523.37	18.72	979.0
11/24/2016 2:00	544.15	18.6	973.1
11/24/2016 3:00	547.79	18.54	970.1
11/24/2016 7:00	547.91	18.57	971.6
11/24/2016 8:00	617.81	19.1	997.9
11/24/2016 9:00	574.22	18.51	968.6
11/24/2016 10:00	619.61	18.37	961.6
11/24/2016 11:00	576.34	18.75	980.5
11/25/2016 0:00	549.32	19.12	998.9
11/25/2016 11:00	651.84	18.65	975.5
11/25/2016	530.32	19.07	996.4
11/25/2016 23:00	561.37	19.12	998.9
11/26/2016 0:00	560.35	18.92	989.0
11/26/2016 1:00	575.07	18.75	980.5
11/27/2016 6:00	616.1	18.75	980.5
11/27/2016 7:00	647.29	18.98	992.0
11/27/2016 8:00	656.68	18.89	987.5
11/27/2016 9:00	633.88	18.64	975.0

Attachment A - Table 11

Tag Name	FI82030.PV	FI82030A.PV	
Units	LB/HR		BTU/SCF
Description	FLARE GAS FLOW	FLARE GAS MOLE WEIGHT	Flare Gas NHV
Timestamp	FI82030.PV - Average	FI82030A.PV - Average	
11/27/2016 10:00	686.21	18.67	976.5
11/27/2016 12:00	716.13	18.55	970.6
11/27/2016 13:00	746.28	18.69	977.5
11/27/2016 14:00	692.85	18.82	984.0
11/27/2016 15:00	645.35	18.84	985.0
11/27/2016 16:00	643.78	18.79	982.5
11/27/2016 17:00	630.78	18.64	975.0
11/27/2016 18:00	609.49	18.66	976.0
11/27/2016 19:00	623.78	18.86	986.0
11/27/2016 21:00	664.85	18.74	980.0
11/27/2016	663.94	18.7	978.0
11/27/2016 23:00	672.94	18.8	983.0
11/28/2016 0:00	669.6	18.92	989.0
11/28/2016 12:00	713.78	18.7	978.0
11/28/2016 13:00	729.62	18.92	989.0
11/28/2016 17:00	707.85	18.77	981.5
11/28/2016 20:00	712.3	18.97	991.5
11/28/2016	743.73	18.88	987.0
11/28/2016 23:00	678.38	18.22	954.2
11/29/2016 0:00	680.96	18.13	949.7
11/29/2016 1:00	677.36	18.01	943.7
11/29/2016 2:00	686.82	18.08	947.2
11/29/2016 5:00	744.42	19.04	994.9
11/29/2016 6:00	730.84	18.6	973.1
11/29/2016 7:00	708.29	18.52	969.1
11/29/2016 8:00	879.29	19.01	993.4
11/29/2016 14:00	568.32	18.31	958.6
11/29/2016 15:00	533.22	18.48	967.1
11/29/2016 16:00	575.01	18.54	970.1
11/29/2016 17:00	566.63	18.51	968.6
11/29/2016 20:00	615.86	18.73	979.5
11/29/2016 21:00	617.19	18.79	982.5
11/29/2016 23:00	657.52	18.75	980.5
11/30/2016 0:00	678.25	18.49	967.6
11/30/2016 1:00	706.58	18.53	969.6
11/30/2016 4:00	724.17	18.75	980.5
11/30/2016 9:00	823.5	18.89	987.5
11/30/2016 10:00	514.92	18.41	963.6
12/10/2016 18:00	162.01	17.78	932.3