# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW MEXICO

UNITED STATES OF AMERICA and NEW MEXICO ENVIRONMENT DEPARTMENT,			
Plaintiffs,			
v.			
MATADOR PRODUCTION COMPANY,	Civil No.		
Defendant.			
	_		
CONSENT DECREE			

### **TABLE OF CONTENTS**

I. JU	URISI	DICTION AND VENUE	3
II. A	PPLI	CABILITY	4
		ITIONS	
		PENALTY	
		LIANCE REQUIREMENTS	
		RTING REQUIREMENTS	
		OVAL OF DELIVERABLES	
		LATED PENALTIES	
		E MAJEURE	
		TE RESOLUTION	
		RMATION COLLECTION AND RETENTION	
		CT OF SETTLEMENT/RESERVATION OF RIGHTS	
		S	
		CES	
		CTIVE DATE	
		NTION OF JURISDICTION	
		FICATION	
		INATIONC PARTICIPATION	
		TORIES/SERVICE	
		RATION	
		JUDGMENT	
		C. SECTION 162(F)(2)(A)(II) IDENTIFICATION	
		VDICES	
Appendix	к <b>А</b> :	Matador Production Company's Well Pads in New Mexico	
Appendix	кB:	Sampling and Analysis Plan	
Appendix	к C:	Matador Production Company Well Pads with Storage Vessel Systems Subject 40 C.F.R. § 60.5395a(a)(2) as of the Date of Lodging	to
Appendix		Matador Production Company Well Pads with Storage Vessel Systems Subject 20.2.72 NMAC as of the Date of Lodging	to
Appendix	к E:	Directed Inspection/Preventative Maintenance ("DI/PM") Program	
Appendix	κ F:	Mitigation Projects	
Appendix	κ G:	State Supplemental Environmental Project	

WHEREAS, the United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), and the New Mexico Environment Department ("NMED"), have filed a Complaint concurrently with the lodging of this Consent Decree, pursuant to Section 113(b) of the Clean Air Act ("Act"), 42 U.S.C. § 7413(b). The Complaint alleges that Defendant, Matador Production Company ("Matador"), violated requirements of the Act and the Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015, 40 C.F.R. Part 60 Subpart OOOOa ("NSPS OOOOa"). The Complaint further alleges that Matador violated requirements of the New Mexico Air Quality Control Act, NMSA 1978, §§ 74-2-1 et seq., ("AQCA") and corresponding regulations and permits issued thereunder by NMED pursuant to an EPAapproved State Implementation Plan ("SIP"). These violations occurred at numerous Storage Vessels that are part of Matador's oil and natural gas production system located in Lea and Eddy Counties in New Mexico. All of Matador's oil and natural gas production facilities referenced in the Complaint are located in the Permian Basin, one of the nation's largest oil and gas producing regions.

WHEREAS, Matador's oil and natural gas production system separates produced oil and produced water from natural gas at Well Pads. After separation, the produced oil and produced water, also known as "pressurized liquids," are emptied into Storage Vessels prior to being transported by pipelines or tanker trucks for sale, reuse, or disposal. As pressurized liquids are transferred into Storage Vessels, the pressure of the fluids decreases and vapors, which include volatile organic compounds ("VOC"), are released in a gaseous state.

WHEREAS, VOC is a precursor to ground-level ozone, commonly known as smog.

Ground-level ozone is one of six criteria pollutants for which EPA has promulgated National

Ambient Air Quality Standards ("NAAQS") due to its adverse effects on human health and the environment.

WHEREAS, the ground-level ozone formation is caused by the emissions of VOCs and oxides of nitrogen into the atmosphere.

WHEREAS, Matador has equipped Storage Vessels that are part of its oil and natural gas production system with Vapor Control Systems that include covers and closed vent systems required to route vapors from the Storage Vessels to a control device or through a Vapor Recovery Unit.

WHEREAS, both NSPS OOOOa and NMED's General Construction Permit for Oil and Gas Facilities require owners and operators of oil and natural gas production systems to comply with design and operating requirements associated with the Vapor Control System so that it captures and routes all emissions from Storage Vessels to a process stream or to a control device.

WHEREAS, the Complaint alleges that on April 16-18, 2019, EPA and NMED inspected 21 of Matador's oil and natural gas production Well Pads. At 19 of these Well Pads where production was occurring, the inspectors observed that Storage Vessels were emitting significant amounts of VOC emissions to the atmosphere.

WHEREAS, the Complaint alleges that, during flyover inspections conducted by EPA on September 30, 2019 and October 2-3, 2019, EPA observed significant VOC emissions to the atmosphere at six of Matador's Well Pads.

WHEREAS, the Complaint further alleges that many of the Storage Vessels at Matador's Well Pads were equipped with Vapor Control Systems that failed to route all vapors from the Storage Vessel to control devices or to a process, resulting in vapors being emitted directly to the atmosphere.

WHEREAS, NMED is the only entity authorized to bring claims under the AQCA on behalf of the State of New Mexico, and to settle and provide a release of liability for such claims.

WHEREAS, Matador does not admit any liability to the United States or NMED arising out of the occurrences alleged in the Complaint.

WHEREAS, the United States, NMED, and Matador (the "Parties") recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation among the Parties and that this Consent Decree is fair, reasonable, and in the public interest;

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I (Jurisdiction and Venue), and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

#### I. <u>JURISDICTION AND VENUE</u>

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367; and CAA Section 113(b), 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this District pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C §§ 1391(b) and 1395(a), because the violations alleged in the Complaint are alleged to have occurred in, and Matador conducts business in, this judicial district. For purposes of this Consent Decree, or any action to enforce this Consent Decree, Matador consents to the Court's jurisdiction over this Consent Decree and any such action and over Matador and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Matador agrees that the Complaint states claims upon which relief may be granted pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b).

#### II. <u>APPLICABILITY</u>

- 3. The obligations of this Consent Decree apply to and are binding upon the United States, NMED, and upon Matador and any successors, assigns, or other entities or persons otherwise bound by law. Unless otherwise noted, the obligations of this Consent Decree shall become enforceable on the Effective Date as provided in Section XV (Effective Date).
- 4. No transfer of ownership or operation of any Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Matador of its obligation to ensure that the terms of the Consent Decree are implemented, unless (1) the transferee agrees to be substituted for Matador as a Party under the Decree and thus be bound by the terms thereof and to undertake the obligations required by Section V (Compliance Requirements) of this Consent Decree as to the Facility, (2) the United States consents to relieve Matador of its obligations, and (3) the Court approves a modification of the Consent Decree substituting the transferee for Matador and providing that the transferee will implement the terms of the Consent Decree with respect to the Facility. The United States may refuse to approve such a modification to the Consent Decree if it determines that the proposed transferee does not possess the requisite technical abilities or financial means to implement the Consent Decree. If the United States opposes the substitution, the issue shall first be subject to dispute resolution pursuant to Section X (Dispute Resolution). If the United States agrees to the substitution, or upon approval of the

substitution following dispute resolution, the Parties will file a joint motion with the Court seeking such substitution.

- 5. Matador may transfer its interest in any Facility without relieving Matador of its Consent Decree obligations, without consent of other Parties, and without modification of the Consent Decree, provided that, at least 30 Days prior to such transfer, Matador shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to EPA, DOJ, and NMED in accordance with Section XIV (Notices).
- 6. Matador shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Consent Decree, as well as to any contractor retained to perform work required under this Consent Decree. Matador shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.
- 7. In any action to enforce this Consent Decree, Matador shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

#### III. <u>DEFINITIONS</u>

- 8. Terms used in this Consent Decree that are defined in the Act, 42 U.S.C. § 7401 et seq., the AQCA, or in the regulations promulgated pursuant to those statutes, shall have the meanings assigned to them in the Act, the AQCA, or such regulations, unless otherwise provided in this Consent Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply.
  - a. "AVO" shall mean audio, visual, and olfactory.

- b. "Calendar Day" shall mean any of the seven days of the week. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until close of business the next business day.
- c. "Complaint" shall mean the Complaint filed by the United States andNMED in this action.
- d. "Compromised Equipment" shall mean equipment associated with a

  Vapor Control System that shows signs of wear beyond normal wear and

  tear (and cannot be addressed by cleaning the equipment) such that the

  equipment creates a likelihood of VOC emissions in excess of the

  quantity, rate, opacity, or concentration specified by an applicable air

  quality regulation, permit condition, or notice of intent application.

  Examples include, but are not limited to, indications of inefficient

  connection of the thief hatch to the Storage Vessel, such as cracks or

  grooves in gaskets, abnormally or heavily corroded equipment, and

  beveling of sealing surfaces.
- e. "Consent Decree" or "Decree" shall mean this Consent Decree and all appendices attached hereto.
- f. "Construction Permit" shall mean a permit issued pursuant to the AQCA regulations at 20.2.72 NMAC.
- g. "Construction Permit Program" shall mean the permit program pursuant to the AQCA regulations at 20.2.72 NMAC.
- h. "Construction Permit Facility" shall mean a Facility subject to the

- requirements of 20.2.72 NMAC.
- "Date of Lodging" shall mean the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the District of New Mexico.
- j. "Day" or "day" shall mean a Calendar Day.
- k. "Defendant" or "Matador" shall mean Matador Production Company.
- 1. "Design Analysis Methodology" shall mean the methodology, prepared pursuant to Paragraph 27 of this Consent Decree.
- m. "DOJ" means the United States Department of Justice and any of its successor departments or agencies.
- n. "Effective Date" shall have the definition provided in Section XV (Effective Date).
- o. "Engineering Evaluation" shall mean the evaluations performed by

  Matador in compliance with Paragraph 28 of this Consent Decree.
- p. "Environmental Mitigation Project" shall mean a project specified in

  Subsection N and Appendix F of this Consent Decree to remedy, reduce,

  or offset past excess emissions resulting from Matador's alleged violations

  of the Act and the AQCA in this matter.
- q. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.
- r. "Facility" shall mean each Well Pad identified in Appendix A and any
  Well Pad where a Storage Vessel System identified pursuant to Paragraph
  56 is located.

- s. "Flare Letdown Valve" shall mean a device in a Subject Vapor Control

  System that allows vapor to flow to a combustion control device.
- t. "Flame Arrestor" shall mean a device in a Vapor Control System which allows gas to pass through it but stops a flame from returning to a gas source in order to prevent a larger, uncontrolled fire or explosion.
- u. "Heater-Treater" shall mean a unit that heats the reservoir fluid to break oil/water emulsions and to reduce the oil viscosity. The water is then typically removed by using gravity to allow the water to separate from the oil.
- v. "IR Camera Inspection" shall mean an inspection of a Vapor Control

  System using an optical gas imaging infrared camera designed for and
  capable of detecting hydrocarbon and VOC emissions, conducted from
  ground level or from equipment platforms by trained personnel who
  maintain proficiency through regular use of the optical gas imaging
  infrared camera.
- w. "Malfunction" shall mean any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, monitoring system, or a process to operate in a normal or usual manner.
   Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.
- x. "Maximum Design Pressure" shall mean the pressure of each Subject
   Vapor Control System determined according to the Design Analysis
   Methodology as the highest pressure of a Subject Vapor Control System

- before over-pressurization occurs.
- y. "Minor Processes" shall mean those processes that are so designated during the Engineering Evaluation conducted pursuant to the Design Analysis Methodology.
- z. "NMED" shall mean the New Mexico Environment Department and any of its successor departments or agencies.
- aa. "Normal Operations" shall mean all periods of Well Pad operation, excluding Malfunctions, periods of well maintenance, or periods of Shut-In. Normal Operations include, but are not limited to, receipt or transfer of liquids from a Separator or Heater-Treater.
- bb. "NSPS OOOO" shall mean the Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced after August 23, 2011, and on or before September 15, 2015, set forth at 40 C.F.R. Part 60 Subpart OOOO.
- cc. "NSPS OOOOa" shall mean the Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015, set forth at 40 C.F.R. Part 60 Subpart OOOOa NMAC.
- dd. "Operating Permit" shall mean a permit issued pursuant to the AQCA regulations at 20.2.70 NMAC.
- ee. "Operating Permit Program" shall mean the permit program pursuant to the AQCA regulations at 20.2.70 NMAC.
- ff. "Paragraph" shall mean a portion of this Consent Decree identified by an

- Arabic numeral.
- gg. "Parties" shall mean the United States, NMED, and Matador.
- hh. "Peak Modeled Pressure" shall mean the highest pressure experienced by the Subject Vapor Control System during Normal Operations, as determined using the Design Analysis Methodology.
- ii. "Permanently Decommission" shall mean permanently remove from service and destroy the engine block.
- iji. "Potential Minimum Instantaneous Vapor Flow Rate" or "PMIVFR" shall mean the minimum instantaneous rate of vapors routed to a Subject Vapor Control System during Normal Operations, including flashing, working, breathing, and standing losses, as determined using the Design Analysis Methodology.
- kk. "Potential Peak Instantaneous Vapor Flow Rate" or "PPIVFR" shall mean the maximum instantaneous rate of vapors routed to a Subject Vapor Control System during Normal Operations, including flashing, working, breathing, and standing losses, as determined using the Design Analysis Methodology.
- 11. "Plaintiffs" shall mean the United States and NMED.
- mm. "PRD" shall mean pressure relief device.
- nn. "Pressurized Liquids" shall mean pressurized Produced Oil upstream of the Storage Vessel(s) that has not been exposed to the atmosphere or pressurized Produced Water upstream of the Storage Vessel(s) that has not been exposed to the atmosphere.

- oo. "Produced Oil" shall mean oil that is separated from extracted reservoir fluids during Production Operations.
- pp. "Produced Water" shall mean water that is separated from extracted reservoir fluids during Production Operations.
- qq. "Production Operations" shall mean the extraction, separation using Separators and/or Heater-Treaters, and temporary storage of reservoir fluids from an oil or natural gas well at a Well Pad.
- rr. "PRV" shall mean pressure relief valve.
- ss. "QA/QC" shall mean quality assurance and quality control.
- tt. "Reliable Information" shall mean any observance or detection of VOC emissions from a Subject Vapor Control System by EPA, NMED, local government inspectors acting as duly designated representatives of NMED, government contractors, Matador employees, or Matador contractors, including but not limited to any observance or detection of VOC emissions from a bypass device open to the atmosphere, an open thief hatch, an open PRV, or an open-ended line; Visible Smoke Emissions from a combustion control device; deviations detected by a Storage Vessel pressure monitor under circumstances described in Paragraph 39; an assessment indicating that VRU runtime is less than the permitted runtime based on a monthly assessment of rolling 12-month VRU operational data at a site covered by a Construction Permit; a bypass to atmosphere (or, where specified, a bypass to atmosphere or to a control device) pursuant to Paragraph 42; or the failure of a Pilot Monitor. The

following shall not be considered Reliable Information:

- Observations or detections of VOC emissions from a lit flare, so long as the flare is operated and maintained in conformance with the manufacturer's specifications and the plume of VOC emissions is insignificant and does not extend away from the flare tip;
- Observations while pressure relief devices and open-ended lines are open for active maintenance, during well unloading, during tank truck load-out conducted without emission controls, during gauging activities, and during onsite active well maintenance (e.g., swabbing, liquids unloading) at the associated well production facility;
- (3) Evidence of surface staining alone that has been identified during the Field Survey or previously identified as Reliable Information;
- (4) Observations while conducting the pressure test required by Paragraph 38; and
- (5) Observations or detections of VOC emissions made by Matador or its contractors from aircraft, drones, satellites or other remote sensing technology, not otherwise required by Appendix E

  ("DI/PM Program") of this Consent Decree or by law.
- uu. "Root Cause Analysis" shall mean an assessment conducted through the process of investigation and an analysis of relevant historical trends to determine the primary cause and contributing cause(s), if any, of Reliable Information. Each Root Cause Analysis shall also evaluate whether the

- primary cause of the Reliable Information was two or more Minor Processes occurring simultaneously during Normal Operations.
- vv. "Routed to Process" shall have the meaning set forth in 40 C.F.R. § 60.5430 or § 60.5430a (as applicable).
- ww. "Section" shall mean a portion of this Consent Decree identified by a Roman numeral.
- xx. "Separator" shall mean a pressurized vessel designed to separate reservoir fluids into their constituent components of oil, natural gas, and water.
- yy. "Shut-In" shall mean the flow of all liquids and vapor into the Storage

  Vessel System or piece of equipment has ceased and cannot be resumed

  without Matador personnel opening valves, activating equipment, or

  supplying a power source.
- zz. "Storage Vessel" shall mean a unit that is constructed primarily of non-earthen materials (*e.g.*, steel, fiberglass, or plastic) which provides structural support and is designed to contain an accumulation of produced reservoir fluids (*i.e.*, Produced Oil or Produced Water). A liquid knockout vessel or similar device is not considered a Storage Vessel.
- aaa. "Storage Vessel System" shall mean one or more Storage Vessels, with at least one Produced Oil Storage Vessel, that share a common Vapor Control System.
- bbb. "Subject Vapor Control Systems" shall mean the Vapor Control Systems, identified pursuant to Paragraph 26, including those Storage Vessel

  Systems newly identified pursuant to Paragraph 56, that consist of one or

- more Storage Vessels that are subject to a control device or VRU requirement pursuant to either NSPS OOOO, NSPS OOOOa, or the Construction Permit Program.
- ccc. "Subsection" shall mean a portion of this Consent Decree within a Section that is identified with a capitalized alphabetical letter.
- ddd. "Tier 2 Engine" shall mean a nonroad Tier 2 engine as defined at 40 C.F.R. § 1039.801.
- eee. "Tier 4 Engine" shall mean a nonroad Tier 4 engine as defined at 40 C.F.R. § 1039.801.
- fff. "United States" shall mean the United States of America, acting on behalf of EPA.
- working, breathing, and standing losses as well as any emissions routed to the Storage Vessel(s) or the Vapor Control System(s)). The Vapor Control System includes the Storage Vessel System, vapor control piping, fittings, connectors, liquid knockout vessels, openings on Storage Vessels (such as thief hatches and any other pressure relief devices), the Vapor Recovery Unit, and emission control devices.
- hhh. "Vapor Recovery Unit" or "VRU" shall mean a device that captures and compresses vapors from a source and routes such vapors for recovery to a sales line (*i.e.*, "Routes to Process").
- iii. "Visible Smoke Emissions" shall mean observations of smoke for any

- period or periods of duration greater than or equal to one minute in any 15-minute period during Normal Operations, pursuant to EPA Method 22.
- ijji. "VOC" shall mean volatile organic compounds as defined in 40 C.F.R. § 60.2.
- kkk. "Well Pad" shall mean a property with one or more Storage Vessel(s) capable of receiving Produced Oil from Production Operations.

#### IV. <u>CIVIL PENALTY</u>

- 9. Within 30 Days after the Effective Date, Matador shall pay the sum of \$1,150,000.00 as a civil penalty, together with interest accruing from the date on which the Consent Decree is lodged with the Court, at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.
- 10. Matador shall pay \$650,000.00 of the civil penalty due by FedWire Electronic Funds Transfer ("EFT") to the DOJ account, in accordance with instructions provided to Matador by the Financial Litigation Unit ("FLU") of the United States Attorney's Office for the District of New Mexico after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number, which Matador shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to:

Christopher Norfleet
Matador Production Company
One Lincoln Centre
5400 LBJ Freeway
Suite 1500
Dallas, Texas 75240

#### christopher.norfleet@matadorresources.com

on behalf of Matador. Matador may change the individual to receive payment instructions on its behalf by providing written notice of such change to DOJ and EPA in accordance with Section XIV (Notices).

- 11. Matador shall pay \$500,000.00 of the civil penalty due to the State of New Mexico General Fund, NMED-Air Quality Bureau, 525 Camino de los Marquez, Suite 1, Santa Fe, New Mexico, 87505 by wire transfer (ACH deposit) or by certified or corporate check. On the date that delivery of funds is initiated, Matador shall notify the Air Quality Bureau by email at ENV-AQB.Settlement.Notifications@state.nm.us.
  - 12. Wire transfers must be made to Wells Fargo Bank as follows:

Wells Fargo Bank, N.A. 100 W Washington Street, Floor 20 Phoenix, AZ 85003 Routing Transit Number: 12100024

Routing Transit Number: 121000248 Deposit Account Number: 4123107799

Descriptor: NMED-AQB-C&E

13. Certified or corporate checks must be sent to the following address:

New Mexico Environment Department Air Quality Bureau c/o Compliance and Enforcement Manager 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico 87505

14. At the time of payment, Matador shall send notice that payment has been made: (i) to EPA via email at cinwd\_acctsreceivable@epa.gov or via regular mail at EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; (ii) to DOJ via email or regular mail in accordance with Section XIV; (iii) to EPA in accordance with Section XIV; and (iv) to NMED via email or regular mail in accordance with Section XIV. Such notice shall

state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United*States and NMED v. Matador Production Company and shall reference the civil action number,

CDCS Number and DOJ case number 90-5-2-1-12297.

15. Matador shall not deduct any penalties paid under this Consent Decree pursuant to this Section or Section VIII (Stipulated Penalties) in calculating its federal, state or local income tax.

#### V. <u>COMPLIANCE REQUIREMENTS</u>

#### A. FIELD SURVEYS

- 16. <u>Vapor Control System Field Survey</u>. By no later than 120 Days after the Effective Date for all Facilities listed in Appendices C and D, and by no later than 90 Days after the Effective Date for the remaining Facilities listed in Appendix A, Matador shall conduct a field survey for all Storage Vessel Systems at Well Pads listed in Appendix A.
  - 17. During the field survey, Matador shall:
    - a. inventory Storage Vessels and equipment and identify their location,
       orientation, piping configuration, and operational status;
    - b. inventory the control devices and VRUs and identify their location, orientation, piping configuration and operational status;
    - c. at sites where a control device or VRU is operated pursuant to NSPS

      OOOO, NSPS OOOOa, or a Construction Permit, compile the

      manufacturer designed maximum and minimum inlet pressure or vapor

      volumetric flow rate and temperature range for each control device and

      VRU associated with each Vapor Control System or, if such information is

      not available, provide (1) the results of an engineering assessment that

- determines the minimum and maximum flow rates or pressures necessary to achieve the expected destruction efficiency of the flare and (2) an IR Camera Inspection conducted during the Field Survey to confirm proper flare operation;
- d. evaluate the condition of all PRVs, thief hatches, flow regulating valves associated with a VRU or control device, blowdown valves, mountings, and gaskets at each tank;
- e. evaluate the condition of all VRUs, control device components, and associated monitoring systems in the Vapor Control System;
- f. identify equipment needed to be repaired, replaced, or upgraded to reduce the likelihood of VOC emissions in excess of the quantity, rate, opacity, or concentration specified by an applicable air quality regulation, permit condition, or NOI application; and
- g. ensure that all signage at each Well Pad (i) is of durable construction with lettering legible and large enough to be read under normal conditions at a distance of 50 feet; (ii) displays the property name, operator's name, and township and range, and, if the well serving the Storage Vessel System is located on the Well Pad, signage shall also display the well and API numbers; and (iii) remains in place until the well is plugged and abandoned.

- 18. Matador shall ensure that, at the time of the field survey, every thief hatch is either welded to or mounted on the Storage Vessel with a suitable gasket, in accordance with good engineering practices and manufacturer specifications.
- 19. Matador shall confirm, at the time of the field survey, using field testing or Supervisory Control and Data Acquisition ("SCADA") data review (where such data includes inlet pressure and valve position or flow), the set point of any backpressure regulating devices at the inlet of any control device or VRU, unless the Storage Vessel System is equipped with a pressure gauge that records the set point of the backpressure regulator.
- 20. If, while surveying the PRVs, thief hatches, blowdown valves, mountings, gaskets, VRUs, control devices, and monitoring systems, Matador observes Compromised Equipment, Reliable Information, evidence of significant staining emanating from pressure relief valves, or any equipment in need of repair or replacement to reduce the likelihood of VOC emissions in excess of the quantity, rate, opacity, or concentration specified by an applicable air quality regulation, permit condition, or NOI application, Matador shall take appropriate corrective action, including the repair, replacement, or upgrade of equipment. If Matador fails to take appropriate corrective action to address any such observations within five Days, Matador shall immediately Shut-In and cease all Production Operations associated with that Vapor Control System.
- 21. Nothing herein shall require Matador to repair, replace, or upgrade such equipment on Shut-In Storage Vessel Systems and their associated Vapor Control System except

that Matador must repair, replace, or upgrade such equipment prior to resuming Normal Operations.

- 22. Matador shall maintain records of the following information collected during the field survey:
  - a. The date each Storage Vessel System underwent the field survey;
  - b. The full name of the employee who performed the field survey;
  - c. A description of the PRVs and thief hatches that includes pressure set points, and descriptions of PRVs, thief hatches, blowdown valves, mountings, gaskets, VRUs, control devices, and monitoring systems that includes the manufacturer and model number;
  - d. Whether Compromised Equipment, Reliable Information, or significant staining around potential venting points were observed; and
  - e. What, if any, repair, replacement, upgrade, or other corrective action was performed, including a description of the PRV, thief hatch, blowdown valve, mounting, gasket, VRU, control device, or monitoring system, and a description of how that equipment was repaired or with what it was replaced or upgraded.

#### B. SAMPLING

23. <u>Pressurized Liquid Sampling</u>. By no later than 120 Days after the Effective Date for all Facilities listed in Appendices C and D and by no later than 90 Days after the Effective Date for the remaining Facilities listed in Appendix A, Matador shall comply with the Sampling and Analysis Plan attached hereto as Appendix B as to all Storage Vessel Systems at Well Pads listed in Appendix A. Notwithstanding the foregoing, Matador shall comply with the Sampling

and Analysis Plan at Shut-In Storage Vessel Systems within 30 days of resuming Production Operations. Matador shall provide at least 10 Days' written notice to EPA and NMED of the date when field sampling events are planned to occur.

#### C. EMISSIONS DETERMINATIONS

- 24. For each Storage Vessel that is part of a Storage Vessel System that is located at a Well Pad identified in Appendix A, except those Storage Vessel Systems located at Well Pads identified in Appendix C, Matador shall determine the potential for VOC emissions in accordance with 40 C.F.R. § 60.5365(e) or § 60.5365a(e), as applicable.
- 25. For each Well Pad listed in Appendix A, Matador shall determine (a) the potential emission rate of CO and NOx in accordance with 20.2.72 NMAC (Construction Permit Program); (b) the potential emission rate of CO, NOx, and VOC in accordance with 20.2.73 NMAC (notices of intent); and (c) the potential to emit CO, NOx, and VOC in accordance with 20.2.70 NMAC (Operating Permit Program). Matador may use emission rates from approved Construction Permit registrations if Matador provides documentation to EPA and NMED to demonstrate that (a) the equipment identified during the field survey matches the Construction Permit, and (b) the sampling data underlying the Construction Permit emission rates were collected in accordance with the Sampling and Analysis Plan.
- 26. By no later than 150 Days after the Effective Date, based on the emissions determinations required by Paragraphs 24 and 25, Matador shall submit to EPA, for review and approval after consultation with NMED, a list of all of Matador's Well Pads that include one or more Storage Vessels subject to a control device or VRU requirement pursuant to either NSPS OOOO or NSPS OOOOa or 20.2.72 NMAC. Such list shall include the Well Pads identified in Appendices C and D. The Vapor Control Systems identified on the list required by this

Paragraph shall be referred to herein as the "Subject Vapor Control Systems." For each such Subject Vapor Control System, Matador shall specify whether it is subject to a control device or VRU requirement under (i) 40 C.F.R. 60.5395a(a)(2) or 60.5395(d)(1), (ii) the VRU exception in 40 C.F.R. 60.5365(e)(3) or 40 C.F.R. 60.5365a(e)(5)), or (iii) the requirements pursuant to 20.2.72 NMAC. For each Facility at which a Subject Vapor Control System is located, Matador shall specify whether such Facility is subject to the requirements of 20.2.70 NMAC. If, at any time, EPA identifies a Vapor Control System that is subject to a control device or VRU requirement that was not included in Matador's list of Subject Vapor Control Systems, Matador shall comply with the requirements set forth in Paragraphs 16 through 54 at such Facility in accordance with a schedule approved by EPA after consultation with NMED.

### D. COMPLIANCE ASSESSMENT FOR SUBJECT VAPOR CONTROL SYSTEMS

- 27. <u>Design Analysis Methodology</u>. Prior to the Effective Date, Matador submitted, and EPA, after consultation with NMED, approved a written Design Analysis Methodology for all Subject Vapor Control Systems. The Design Analysis Methodology sets forth a methodology for analyzing whether the Vapor Control System is adequately designed and sized for PMIVFR, PPIVFR, and Peak Modeled Pressure. Any updates or modifications to the Design Analysis Methodology must be approved by EPA after consultation with NMED.
- 28. <u>Engineering Evaluation</u>. No later than 210 Days after the Effective Date, Matador shall prepare an Engineering Evaluation for each Subject Vapor Control System that is based on the approved Design Analysis Methodology. Each Engineering Evaluation shall incorporate the results of the field survey performed pursuant to Paragraphs 16 through 22 (Field Surveys) and the results of the pressurized liquid sampling performed pursuant to Paragraph 23 (Pressurized

Liquid Sampling). Each Engineering Evaluation shall include a determination as to whether the Subject Vapor Control System is adequately designed and sized for the PMIVFR, PPIVFR, and the Peak Modeled Pressure, as determined in accordance with the Design Analysis Methodology. For each Subject Vapor Control System that is not adequately designed and sized for the PMIVFR, PPIVFR, and the Peak Modeled Pressure, as determined in accordance with the Design Analysis Methodology, Matador shall determine what design, equipment, operational, or other modifications are necessary to achieve this objective and revise the Engineering Evaluation accordingly.

- Matador has determined, pursuant to Paragraph 28, that modifications are necessary to ensure that the Subject Vapor Control System is adequately designed and sized for the PMIVFR, PPIVFR, and the Peak Modeled Pressure, as determined in accordance with the Design Analysis Methodology, Matador shall implement the modifications referenced in the revised Engineering Evaluation no later than 270 Days after the Effective Date.
- 30. <u>Production Operations Shut-In</u>. If Matador has not implemented the modifications required by Paragraph 29 by the date specified therein, Matador shall immediately Shut-In and cease all Production Operations associated with that Subject Vapor Control System.
- 31. In the event that Production Operations are temporarily Shut-In pursuant to Paragraph 20 or 30, Matador may resume Production Operations for up to five Calendar Days for the sole purpose of (i) completing an Engineering Evaluation at a Subject Vapor Control System, or (ii) taking corrective actions pursuant to Paragraph 20.
- 32. <u>Verification by IR Camera Inspection</u>. No later than 300 Days after the Effective Date, Matador shall verify that each Subject Vapor Control System is adequately designed and

sized for the PMIVFR, PPIVFR, and the Peak Modeled Pressure, as determined in accordance with the Design Analysis Methodology by conducting an IR Camera Inspection of each Subject Vapor Control System.

- a. Inspections under this Paragraph must be conducted pursuant to the IR
   Camera Inspection Standard Operating Procedure ("SOP") prepared by
   Matador and approved by EPA pursuant to Appendix E (DI/PM Program).

   A video record of each IR Camera Inspection performed pursuant to this
   Paragraph shall be maintained and available to EPA and NMED upon request.
- b. Such inspection shall be conducted during Normal Operations while, and immediately after, Produced Oil is sent to the Storage Vessel System. If multiple separators are capable of sending Produced Oil simultaneously to the Storage Vessel System, such inspections shall also be conducted when all separators are sending Produced Oil either simultaneously or by manually triggering each separator in succession.
- If Matador observes Reliable Information during an IR Camera Inspection,
   Matador shall comply with the requirements of Paragraph 44.
- 33. <u>Certification of Completion Report</u>. No later than 330 Days after the Effective Date, Matador shall submit to the Plaintiffs a Certification of Completion Report, in spreadsheet or database format, that contains the following information for each Subject Vapor Control System:
  - a. The results of the Engineering Evaluation (including any revised Engineering Evaluation);

- b. The PMIVFR, PPIVFR, Vapor Control System Capacity, Peak Modeled
   Pressure, and the Maximum Design Pressure, as determined in accordance
   with the Design Analysis Methodology;
- c. A description of each modification made to equipment or to operations as a result of the Engineering Evaluation;
- d. A description of the site-specific or system-wide operational parameters or practices relied upon in the Engineering Evaluation (including but not limited to the maximum operating pressure for final stage of separation, the minimum available headspace in Storage Vessels, and whether the flow to the Storage Vessels is intermittent (*i.e.*, transient) or steady state);
- e. The minimum Storage Vessel System thief hatch and PRV settings; and
- f. The date an IR Camera Inspection was completed pursuant to Paragraph 32 (Verification by IR Camera Inspection) and the results of such inspection, along with all corrective actions performed to address Reliable Information, the date and time of each corrective action performed, and the date and method of verification used to determine that the corrective action was successful.
- 34. Operational or Equipment Changes after the Certification of Completion Report.

  After Matador has submitted a Certification of Completion Report for a Subject Vapor Control System in compliance with Paragraph 33, if an operational or equipment change is made such that: (1) the PPIVFR is increased beyond what was evaluated in the Engineering Evaluation or (2) the Subject Vapor Control System capacity decreases, Matador shall:
  - a. revise the Engineering Evaluation required by Paragraph 28 within 30

- Days of the operational or equipment change;
- implement all modifications necessary to ensure that the Subject Vapor
   Control System is adequately designed and sized for PMIVFR, PPIVFR,
   and Peak Modeled Pressure, in accordance with the Design Analysis
   Methodology, within 90 Days of the operational or equipment change;
- c. if Matador fails to implement the modifications required by Paragraph
   34(b), Matador shall immediately Shut-In and cease all Production
   Operations associated with that Subject Vapor Control System;
- d. verify that each Subject Vapor Control System is adequately designed and sized for the PMIVFR, PPIVFR, and the Peak Modeled Pressure, in accordance with the Design Analysis Methodology, by conducting an IR Camera Inspection in compliance with Paragraph 32; and
- e. submit an updated Certification of Completion Report together with the next Semi-Annual Report required pursuant to Paragraph 97, or the Semi-Annual Report due at least 30 Days following completion of all requirements in this Paragraph 34.

### E. DIRECTED INSPECTION / PREVENTATIVE MAINTENANCE FOR SUBJECT VAPOR CONTROL SYSTEMS

35. <u>Directed Inspection/Preventive Maintenance Program</u>. By no later than 30 Days after the Effective Date, Matador shall submit for review and approval by EPA, in consultation with NMED, a directed inspection and preventative maintenance ("DI/PM") Plan for Subject Vapor Control Systems in accordance with the requirements under Appendix E (DI/PM Program). Matador shall commence implementation of the DI/PM Plan, as approved, no later

than 30 Days after approval at all Facilities listed in Appendices C and D. For any other Facilities at which a Subject Vapor Control System is located, Matador shall commence implementation of the approved DI/PM Plan no later than 60 Days after Matador's submission of the list of Subject Vapor Control Systems pursuant to Paragraph 26.

### F. STORAGE VESSEL PRESSURE MONITORING FOR SUBJECT VAPOR CONTROL SYSTEMS

No later than 90 Days after the Effective Date for all Facilities listed in 36. Appendices C and D, and no later than 60 Days after Matador's submission of the list of Subject Vapor Control Systems pursuant to Paragraph 26 at all other Facilities at which a Subject Vapor Control System is located, Matador shall, in accordance with the manufacturer's recommendations, install, calibrate, maintain, and operate one electronic pressure monitor for each Subject Vapor Control System (collectively, "Storage Vessel Pressure Monitors"). These monitors shall record data at least once every minute and, every five minutes, shall transmit five pressure measurement records — one from each minute of the five minutes — to a central monitoring station (e.g., a SCADA system). The Storage Vessel Pressure Monitors must be operated and function continuously except during instances of planned or unplanned maintenance or Malfunction of the Storage Vessel Pressure Monitors. If a Storage Vessel Pressure Monitor is identified as Malfunctioning, Matador shall complete the repair within five Days. Matador shall record all dates, durations, and causes of Storage Vessel Pressure Monitor maintenance, Malfunctions, and any failures and report this information as required by Section VI (Reporting Requirements). In the case of a telecommunications failure beyond Matador's control, it shall not be a violation of the data transmission requirement in this Paragraph if data

recorded during such failure is transmitted to a central monitoring station within a reasonable time after the recommencement of telecommunications services.

- 37. For the first 60 Days after the applicable deadline in Paragraph 36, Matador shall calibrate and optimize the Storage Vessel Pressure Monitors to ensure that the data produced by the Storage Vessel Pressure Monitors are accurate.
- 38. No later than 90 Days after the applicable deadline in Paragraph 36, Matador shall:
  - a. determine the highest point at which the PRDs are not emitting ("leak point") as described in section 10.4 of the Design Analysis Methodology.
     The leak point shall be no greater than the lowest set point of any pressure relief device; and
  - b. determine the trigger point, which must be at least two ounces per square inch below the lowest set point of any pressure relief device in the Subject Vapor Control System and less than the leak point (*e.g.*, if a Storage Vessel is equipped with a thief hatch with a set point of 16 oz/in<sup>2</sup> and a PRV with a set point of 14 oz/in<sup>2</sup> and with a leak point between 12-14 oz/in<sup>2</sup>, then the trigger point can be no greater than 12 oz/in<sup>2</sup>) (hereinafter "trigger point").
- 39. At any time after 90 Days after the deadlines in Paragraph 36, if the Storage Vessel Pressure Monitor records measurements that exceed the trigger point two or more times in a Day, such record shall constitute Reliable Information and Matador shall comply with the requirements of Paragraphs 44 through 52. Additional measurements exceeding the trigger point that occur after the occurrence of such a record that constitutes Reliable Information but prior to

the completion of the required corrective action required by Paragraph 44 must be included in the investigation required by that Paragraph, but will not qualify as separate Reliable Information events for purposes of Paragraphs 44 through 52.

### G. VRU AND CONTROL DEVICE MONITORING FOR SUBJECT VAPOR CONTROL SYSTEMS

- 40. No later than 150 Days after the Effective Date for all Facilities listed in Appendices C and D, and no later than 60 Days after Matador's submission of the list of Subject Vapor Control Systems pursuant to Paragraph 26 for all other Facilities at which a Subject Vapor Control System is located, where a VRU is utilized, Matador shall comply with the following requirements:
  - a. No later than 60 Days after any VRU is installed, Matador shall continuously monitor VRU operational status, except during planned or unplanned maintenance or Malfunction of the monitor, and such data shall be recorded at least once every fifteen minutes and transmitted at least once every fifteen minutes to a SCADA system. In the case of a telecommunications failure beyond Matador's control, it shall not be a violation of the data transmission requirement in this Paragraph if data recorded during such failure is transmitted to a SCADA system within a reasonable time after the recommencement of telecommunications services.
  - b. The operation of the Flare Letdown Valve shall respond to measurements
     from the Storage Vessel Pressure Monitor, and such Storage Vessel
     Pressure Monitor shall be operated and maintained in accordance with the

- manufacturer's specifications.
- c. The operation of the VRU shall respond to measurements from the VRU's storage vessel pressure measurement system or the Storage Vessel
   Pressure Monitor.
- d. The VRUs shall be capable of operating down to zero inlet flow rate. No later than 60 Days after any VRU is installed, Matador shall install a Flare Letdown Valve that shall open to the control device whenever necessary, based on the tank pressure monitoring and VRU monitoring. No later than 15 Days after any Flare Letdown Valve is installed, Matador shall continuously monitor the Flare Letdown Valve position, except during planned or unplanned maintenance or Malfunction of the monitor, and such data shall be recorded at least once every five minutes and transmitted at least once every five minutes to a SCADA system. If a Flare Letdown Valve position monitor Malfunction is identified, Matador shall complete the repair within five Days. In the case of a telecommunications failure beyond Matador's control, it shall not be a violation of the data transmission requirement in this Paragraph if data recorded during such failure is transmitted to a SCADA system within a reasonable time after the recommencement of telecommunications services.
- e. For sites covered by a Construction Permit, cumulative VRU operational data shall be assessed monthly. Any such assessment indicating that VRU runtime is less than the permitted runtime shall constitute Reliable Information and Matador shall comply with the requirements of

Paragraphs 44 through 52.

- 41. Matador must reduce VOCs in gasses routed to a control device consistent with the requirements of 40 C.F.R. §§ 60.5412(d)(1) or 60.5412a(d)(3) or the applicable Construction Permit.
- 42. <u>Bypass Monitoring</u>. No later than 150 Days after the Effective Date for all Facilities listed in Appendices C and D, and no later than 60 Days after Matador's submission of the list of Subject Vapor Control Systems pursuant to Paragraph 26 for all other Facilities at which a Subject Vapor Control System is located:
  - a. For each Subject Vapor Control System that is operated pursuant to a Construction Permit, Matador shall comply with the bypass monitoring requirements pursuant to 40 C.F.R. §§ 60.5411a(c)(3), 60.5416a(c)(3), and 60.5420a(c)(8). Whenever a bypass to the atmosphere occurs at such a Facility, such bypass shall constitute Reliable Information and Matador shall comply with the requirements set forth in Paragraphs 44 through 52.
  - b. For each Subject Vapor Control System that is operated pursuant to the VRU exception (under 40 C.F.R. § 60.5365(e) or § 60.5365a(e)) Matador shall comply with the bypass monitoring requirements pursuant to 40 C.F.R. §§ 60.5411a(c)(3), 60.5416a(c)(3), and 60.5420a(c)(8). Whenever a bypass to the atmosphere or to a control device occurs at such a Facility, such bypass shall constitute Reliable Information and Matador shall comply with the requirements set forth in Paragraphs 44 through 52.
  - c. For each Subject Vapor Control System that is subject to a control device or VRU requirement under 40 C.F.R. 60.5395a(a)(2) or 60.5395(d)(1),

Matador shall comply with the bypass monitoring requirements pursuant to 40 C.F.R. §§ 60.5411a(c)(3), 60.5416a(c)(3), and 60.5420a(c)(8). Whenever a bypass to the atmosphere occurs at such a Facility, such bypass shall constitute Reliable Information and Matador shall comply with the requirements set forth in Paragraphs 44 through 52.

#### H. COMBUSTION CONTROL DEVICE PILOT MONITORING

No later than 150 Days after the Effective Date for all Facilities listed in 43. Appendices C and D, and no later than 60 Days after Matador's submission of the list of Subject Vapor Control Systems pursuant to Paragraph 26 for all other Facilities at which a Subject Vapor Control System is located, Matador shall, in accordance with the manufacturer's recommendations, install, calibrate, maintain, and operate, for each combustion control device at a Subject Vapor Control System, a thermocouple or equivalent device to detect the presence of a flame for each combustion control device (collectively, "Pilot Monitors"). These monitors shall record data at least once every five minutes and shall transmit the recorded data every five minutes to a central monitoring station (e.g., SCADA system). The Pilot Monitors must be operated and function continuously except during instances of planned or unplanned maintenance or Malfunction of the Pilot Monitors. If a Pilot Monitor is identified as Malfunctioning, Matador shall complete the repair or maintenance within five Days. Matador shall record all dates, durations, and causes of Pilot Monitor maintenance, Malfunctions, and any failures and report this information as required by Section VI (Reporting Requirements). Each record of a Pilot Monitor Malfunction or any other failure shall constitute Reliable Information and Matador shall comply with the requirements of Paragraphs 44 through 52. In the case of a telecommunications failure beyond Matador's control, any reasonable delay in data transmission

that results from such failure shall not be a violation of the data transmission requirement in this Paragraph and shall not be considered Reliable Information if data recorded during such failure is transmitted to a central monitoring station within a reasonable time after the recommencement of telecommunications services.

## I. RELIABLE INFORMATION, ROOT CAUSE ANALYSIS, AND CORRECTIVE ACTION FOR SUBJECT VAPOR CONTROL SYSTEMS

- 44. Within five Calendar Days after Matador obtains Reliable Information at a Subject Vapor Control System Matador shall either (i) identify the suspected cause of the Reliable Information and complete all necessary corrective actions to address the Reliable Information or (ii) Shut-In the Vapor Control System at which Reliable Information was obtained until such time as all corrective actions necessary to address the Reliable Information have been completed. Where the cause of Reliable Information is planned maintenance (other than the types of maintenance excluded from the definition of Reliable Information in Paragraph 8(tt), Matador shall also record the cause and duration of such maintenance and report this information as required by Section VI (Reporting Requirements).
- 45. If Matador becomes aware of: (i) three or more instances of Reliable Information related to any single Subject Vapor Control System in any rolling six-month period that derive from observations or detections from any source of Reliable Information other than the combustion control device pilot monitoring conducted pursuant to Paragraph 43, or (ii) three or more instances of Reliable Information related to any single Subject Vapor Control System in any rolling six-month period that derive from observations or detections from the combustion control device pilot monitoring conducted pursuant to Paragraph 43, then Matador shall complete, within 30 Days of the third such instance, a Root Cause Analysis. Matador shall

identify the corrective actions to be taken to address any operation, maintenance, or design cause(s) identified and implement such corrective actions no later than 30 Days after the completion of the Root Cause Analysis. Additional instances of Reliable Information at a Subject Vapor Control System at which Matador is performing a Root Cause Analysis at that time shall be added as additional information in that Root Cause Analysis, but such additional instances shall not trigger additional Root Cause Analyses.

- 46. If at any time Matador observes, as part of a Root Cause Analysis or otherwise, any improperly open bypass device, thief hatch, or PRV, or any open-ended line, Matador shall address such observation with corrective action (including by manually closing such device or equipment, if appropriate) as quickly as practicable and no later than 8 hours after the observation.
- 47. In the event that a Subject Vapor Control System is temporarily Shut-In pursuant to Paragraph 44, Matador shall proceed as follows:
  - a. If the Storage Vessel System has not yet undergone an Engineering
    Evaluation pursuant to Paragraph 28, Production Operations shall remain
    Shut-In until the Engineering Evaluation and all necessary modifications,
    pursuant to Paragraph 29, have been completed. Matador shall comply
    with the requirements of Paragraph 32 (Verification by IR Camera
    Inspection) at such Storage Vessel System within 30 Days of resuming
    any Production Operations associated with that Storage Vessel System.
  - If the Storage Vessel System has already undergone an Engineering
     Evaluation pursuant to Paragraph 28, Production Operations shall remain
     Shut-In until completion of all necessary corrective actions.

- 48. If Matador determines as part of a Root Cause Analysis that the Subject Vapor Control System is not adequately designed and sized for PMIVFR, PPIVFR, and Peak Modeled Pressure, as determined in accordance with the Design Analysis Methodology, Matador shall revise the Engineering Evaluation.
- 49. If Matador determines as part of a Root Cause Analysis that the primary cause of any instance of Reliable Information at a Subject Vapor Control System was due to two or more Minor Processes occurring simultaneously during Normal Operations, Matador shall revise the Engineering Evaluation. The revised Engineering Evaluation shall assess whether the Subject Vapor Control System is adequately designed and sized for the PMIVFR, PPIVFR, and the Peak Modeled Pressure in accordance with Section 7.12 of the Design Analysis Methodology.
- 50. If a revised Engineering Evaluation indicates the Subject Vapor Control System is not adequately designed and sized for the PMIVFR, PPIVFR, or the Peak Modeled Pressure pursuant to Paragraphs 48 or 49, Matador shall:
  - a. implement necessary modifications no later than 90 Days after the completion of the Root Cause Analysis to ensure that the Subject Vapor Control System is adequately designed and sized;
  - b. immediately Shut-In and cease all Production Operations associated with that Subject Vapor Control System if Matador fails to implement the modifications required by Paragraph 50(a) within 90 Days after the completion of the Root Cause Analysis; and,
  - c. submit an updated Certification of Completion Report together with the next Semi-Annual Report required pursuant to Paragraph 97 or with the Semi-Annual Report due at least 30 Days following completion of all

requirements in this Paragraph 50.

- 51. If the revised Engineering Evaluation results in any modification of the Storage Vessel System, Matador shall comply with the requirements of Paragraph 32 (Verification by IR Camera Inspection) at such Storage Vessel System within 30 Days of resuming any Production Operations associated with that Storage Vessel System.
- 52. In the event that Production Operations are temporarily Shut-In pursuant to Paragraph 50(b), Matador may resume Production Operations for up to five Days for the sole purpose of making the necessary modifications pursuant to Paragraph 50(a).

# J. PERFORMANCE STANDARDS FOR SUBJECT VAPOR CONTROL SYSTEMS

- 53. No later than the date that Matador submits the Certification of Completion Report required by Paragraph 33, above, Matador shall comply with requirements applicable to Storage Vessels set forth in NSPS 40 C.F.R. Part 60, Subparts OOOO and OOOOa and, for each Construction Permit Facility, 20.2.72 NMAC. For each Facility that Matador has specified, pursuant to Paragraph 26, is subject to 20.2.70 NMAC, Matador shall comply with such requirements.
- 54. No later than the date that Matador submits the Certification of Completion Report required by Paragraph 33, above, Matador shall submit (a) a registration in accordance with the requirements of 20.2.72 NMAC for each Construction Permit Facility and (b) an application pursuant to NMAC 20.2.70, for each Facility that Matador has specified, pursuant to Paragraph 26, is subject to 20.2.70 NMAC, including but not limited to groups of stationary

sources that are located on one or more contiguous or adjacent properties and are under the common control of Matador.

# K. PLUGGING AND ABANDONMENT

55. The permanent plugging and abandonment of a well ("P&A"), in compliance with 19.15.25.10 NMAC, shall be deemed to satisfy all requirements of this Consent Decree applicable to the well (as long as the well no longer emits or has the potential to emit hydrocarbons) and the Storage Vessel System (as long as the Storage Vessel System is no longer servicing wells that have not been plugged and abandoned). Matador shall submit to EPA and NMED verified reporting of abandonment made in accordance with 19.15.25.11 NMAC. Matador shall maintain copies of all documentation required by this Paragraph for inspection and review by EPA and NMED (as applicable). In each Semi-Annual Report, Matador shall report any wells and associated Storage Vessel Systems that have been permanently plugged and abandoned. Nothing herein shall preclude Matador from reusing any equipment from a plugged and abandoned well.

# L. NEWLY IDENTIFIED STORAGE VESSEL SYSTEMS

- 56. If, at any time, Matador redirects Produced Oil from a Storage Vessel System at a Well Pad identified in Appendix A to any Storage Vessel System at a Well Pad in New Mexico that is not identified in Appendix A ("Newly Identified Storage Vessel System"), Matador shall:
  - a. notify EPA and NMED within 30 Days of sending Produced Oil to the Newly Identified Storage Vessel System;
  - comply with Paragraphs 16 through 54 for such Newly Identified Storage
     Vessel System within 60 Days of sending Produced Oil to the Newly
     Identified Storage Vessel System; and

c. for each Newly Identified Storage Vessel System that is determined,
 pursuant to Paragraph 26, to include a Subject Vapor Control System,
 Matador shall submit an updated list of Subject Vapor Control Systems to
 EPA as part of the next semi-annual report, as required by Paragraph 97.

# M. EMISSION CREDIT GENERATION

57. Matador shall not use any emission reductions that result from actions required by this Consent Decree for the purposes of obtaining project decreases, netting reductions or emission offset credits, including applying for, obtaining, trading, or selling any emission reductions credits.

# N. ENVIRONMENTAL MITIGATION PROJECTS

- 58. Matador shall implement the Environmental Mitigation Project(s) ("Projects") described in Appendix F and the terms of this Consent Decree.
- 59. Matador shall maintain and, within 45 Days of a request from EPA or NMED, provide copies of all documents to identify and substantiate the costs expended to implement the Projects described in Appendix F.
- 60. All plans and reports prepared by Matador pursuant to the requirements of this Subsection N (Environmental Mitigation Projects) are required to be submitted to EPA and NMED.
- 61. <u>Project Certification</u>. As part of each plan submitted to EPA and NMED for any Project, Matador shall certify that:
  - a. Matador is not required to perform the Project on the schedule set forth in this Consent Decree by any federal, state, or local law or regulation or by any agreement, grant, or as injunctive relief awarded in any other action in

any forum;

- The Project is not a project that Matador was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Consent Decree; and
- c. Matador has not received and will not receive credit for the Project in any other enforcement action.
- 62. Matador shall use its best efforts to secure as much environmental benefit as possible for the Projects, consistent with the applicable requirements and limits of this Consent Decree.
  - 63. Matador shall comply with the reporting requirements described in Appendix F.
- 64. <u>Project Completion Notice</u>. No later than 60 Days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), Matador shall submit to EPA and NMED a report that documents the date the Project was completed, the results achieved by implementing the Project, including a general discussion of the environmental benefits and, where feasible, the estimated emissions reductions, and the costs expended by Matador in implementing the Project.

# O. SUPPLEMENTAL ENVIRONMENTAL PROJECT

- 65. Matador shall implement a Supplemental Environmental Project ("SEP"), known as the Well Completion Engine Replacement Project, in accordance with all provisions of this Subsection. Matador shall spend no less than \$1,250,000 to implement this SEP.
  - 66. Matador shall:
    - a. procure two dual-fuel Tier 4 Engines (with a maximum load rating of
       2500 BHP) ("Procured Engines") within nine months of the Effective

Date;

- b. Permanently Decommission two diesel Tier 2 Engines (with a maximum load rating of 2500 BHP) that were used for well completions within a year of the Effective Date;
- utilize two dual-fuel Tier 4 Engines in no fewer than 45 percent of
   Matador's well completions each year for three years following the
   procurement of the two dual-fuel Tier 4 Engines under subsection (a); and
- d. ensure that, taken together, the well completions under subparagraph 66(c)
   and any well completions by Matador's contractor using the Procured
   Engines collectively result in the completion of no fewer than 108 wells.
- 67. In the event Matador is unable to use the Procured Engines to complete a well that is owned by Matador, it may use two other dual-fuel Tier 4 Engines to satisfy the requirements in Paragraphs 66(c) and (d).
- 68. Matador shall not receive any remuneration from any third party for the use of the two dual-fuel Tier 4 Engines.
- 69. Matador is responsible for the satisfactory completion of the SEP in accordance with the requirements of this Decree. Matador may use contractors or consultants in planning and implementing the SEP.
- 70. With regard to the SEP, Matador certifies the truth and accuracy of each of the following:
  - a. that, all cost information provided to EPA in connection with EPA's approval of the SEP is complete and accurate and that Matador in good faith estimates that the cost to implement the SEP is \$1,250,000;

- b. that, as of the date of executing this Decree, Matador is not required to perform or develop the SEP by any federal, state, or local law or regulation and is not required to perform or develop the SEP by agreement, grant, or as injunctive relief awarded in any other action in any forum;
- c. that the SEP is not a project that Matador was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Decree;
- d. that Matador has not received and will not receive credit for the SEP in any other enforcement action;
- e. that Matador will not receive any reimbursement for any portion of the SEP from any other person; and
- f. that, under penalty of perjury, Matador would have agreed to perform a comparably valued, alternative project other than a diesel emissions reduction Supplemental Environmental Project, if the Agency were precluded by law from accepting a diesel emissions reduction Supplemental Environmental Project.
- 71. <u>SEP Completion Report</u>. No later than 30 Days after completion of the SEP, Matador shall submit a SEP Completion Report to DOJ and EPA, in accordance with Section XIV (Notices). The SEP Completion Report shall contain the following information:
  - a. a detailed description of the SEP as implemented;
  - b. a description of any problems encountered in completing the SEP and the solutions thereto;

- c. an itemized list of all eligible SEP costs expended;
- d. certification that the SEP has been fully implemented pursuant to the provisions of this Decree; and
- e. a quantification of the emission reductions resulting from implementation of the SEP.
- 72. After receiving the SEP Completion Report, EPA will notify Matador as to whether Matador has satisfactorily completed the SEP. If Matador has not completed the SEP in accordance with this Consent Decree, stipulated penalties may be assessed under Section VIII.
- 73. Each submission required under this Subsection shall be signed by an official with knowledge of the SEP and shall bear the certification language set forth in Paragraph 100.
- 74. Any public statement, oral or written, in print, film, or other media, made by Defendant making reference to the SEP under this Decree shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action, *United States and NMED v. Matador Production Company*, taken on behalf of the U.S. Environmental Protection Agency and New Mexico Environment Department under the Clean Air Act."
- 75. For federal income tax purposes, Matador agrees that it will neither capitalize into inventory or basis nor deduct any costs or expenditures incurred in performing the SEP.

# P. STATE SUPPLEMENTAL ENVIRONMENTAL PROJECT

76. In order to settle the matters contained herein, and in addition to the State portion of the civil penalty identified in Section IV (Civil Penalty), Matador shall spend no less than

\$500,000 to implement the State Supplemental Environmental Project ("SSEP") as set forth in Appendix G.

- 77. With regard to the SSEP, Matador certifies the truth and accuracy of each of the following:
  - a. that all cost information provided to NMED in connection with NMED's approval of the SSEP is complete and accurate and that Matador in good faith estimates that the cost to implement the SSEP is \$500,000;
  - b. that, as of the date of executing this Decree, Matador is not required to perform or develop the SSEP by any federal, state, or local law or regulation and is not required to perform or develop the SSEP by agreement, grant, or as injunctive relief awarded in any other action in any forum;
  - c. that the SSEP is not a project that Matador was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Decree;
  - d. that Matador has not received and will not receive credit for the SSEP in any other enforcement action;
  - e. that Matador will not receive any reimbursement for any portion of the SSEP from any other person;
  - f. that Matador will not deduct the cost of this SSEP for otherwise obtain any favorable tax treatment for such payment or project; and
  - g. the SSEP does not involve a donation or gift to anyone involved.

78. Any public statement, oral or written, in print, film, or other media, made by Defendant making reference to the SSEP under this Decree shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action, *United States and NMED v. Matador Production Company*, taken on behalf of the U.S. Environmental Protection Agency and New Mexico Environment Department under the Clean Air Act."

# Q. THIRD-PARTY VERIFICATION PROGRAM

- 79. Matador shall retain or appoint a verifier selected pursuant to this Subsection ("Verifier") to conduct a compliance verification program ("Compliance Verification Program") at each Subject Vapor Control System (including any Vapor Control Systems newly identified pursuant to Paragraph 56), to (a) evaluate Matador's compliance with Consent Decree requirements in Section V; and (b) complete a Verification Program Report as detailed in Paragraph 96 of this Subsection.
- 80. Matador shall bear the cost of retaining the Verifier and shall ensure that its contract with the Verifier explicitly requires that the Verifier conduct the Compliance Verification Program in accordance with the requirements of this Subsection. Where the Verifier is proposed in accordance with Paragraph 83 and approved by EPA, Matador shall ensure that such Verifier conducts the Compliance Verification Program in accordance with the requirements of this Subsection.
- 81. Matador shall not employ the Verifier, or any personnel of the Verifier, who managed, conducted, or otherwise participated in this Compliance Verification Program (unless the Verifier is an employee approved under Paragraph 83), to provide any other commercial,

business, or voluntary services to Matador for a period of at least one year following the Verifier's submission of its final Verification Program Report.

- 82. <u>Hiring</u>. Within 30 Days of the Effective Date, Matador shall submit to EPA and NMED the name(s) and qualifications of one or more proposed Verifiers that meet the following requirements:
  - a. The proposed Verifier has expertise and competence in Vapor Control
     Systems, NSPS OOOO, NSPS OOOOa, and the requirements pursuant to
     20.2.72 NMAC or similar state permit programs;
  - b. The proposed Verifier or any personnel of the Verifier have not been employed by Matador, have not conducted research and/or development for Matador, and have not provided advisory services of any kind (including but not limited to design, construction, financial, engineering, hazardous waste management, legal, or consulting services) to Matador, within two years of the Effective Date; and
  - c. The proposed Verifier has not been retained by Matador to satisfy any of the requirements of Section V (Compliance Requirements) of this Consent Decree.
- 83. In the event that Matador is unable, after reasonable best efforts, to identify a Verifier who would satisfy all of the conditions in Paragraph 82, Matador may propose a Verifier who does not meet the requirements of Paragraph 82(b) (including an employee) and shall submit to EPA and NMED:
  - a. an explanation of its efforts to find a Verifier who meets the conditions in
     Paragraph 82;

- b. the names of one or more proposed Verifiers who do not meet the requirement in Paragraph 82(b) and an explanation of why this requirement is not being met; and
- c. an explanation of how Matador will ensure that the Verifier will have sufficient independence to objectively and competently perform the Compliance Verification Program.
- Matador in writing which of the proposed Verifiers, if any, it has approved. Within 30 Days of EPA's written approval, Matador shall retain or appoint the approved candidate to serve as the Verifier and to perform the activities set forth in this Subsection. If EPA has not responded within 90 Days of receiving Matador's submission, Matador's proposed Verifier shall be deemed approved and Matador shall retain or appoint the approved candidate to serve as the Verifier and to perform the activities set forth in this Subsection.
- 85. If EPA disapproves of all proposed Verifiers, Matador shall, within 30 Days of receipt of EPA's written notification, submit to EPA for approval the names and qualifications of one or more additional proposed Verifiers that meet the qualifications set forth in Paragraph 82 of this Subsection, or who meet the qualifications set forth in Paragraph 83 of this Subsection if Matador is unable, after reasonable best efforts, to identify one or more additional proposed Verifiers who would satisfy all of the conditions in Paragraph 82. EPA, after consulting with NMED, shall again provide written approval or disapproval of the proposed Verifier, per Paragraph 84 of this Subsection.
- 86. <u>Verifier Replacement Procedure.</u> If Matador or EPA determines that the Verifier approved by EPA cannot satisfactorily perform the required Compliance Verification Program,

Matador, EPA, and NMED shall informally confer. If they agree that a new Verifier should be selected, Matador shall submit to EPA for approval the name and qualifications of one or more proposed replacement Verifiers who meet the qualifications set forth in Paragraph 82 of this Subsection, or who meet the qualifications set forth in Paragraph 83 of this Subsection if Matador is unable, after reasonable best efforts, to identify one or more additional proposed Verifiers who would satisfy all of the conditions in Paragraph 82. If Matador and EPA do not agree on the need to select a replacement Verifier, EPA's position shall control, subject to Matador's right to invoke the dispute resolution procedures in Section X (Dispute Resolution) of this Consent Decree.

- 87. Nothing in Paragraph 86 precludes EPA from assessing stipulated penalties for Matador's failure to comply with the requirements of this Subsection.
- 88. <u>Conducting the Compliance Verification Program.</u> Matador shall give the Verifier a copy of this Consent Decree and all appendices, the approved Design Analysis Methodology, the Engineering Evaluations developed pursuant to Paragraph 28, the Certification of Completion Reports developed pursuant to Paragraphs 33 and 34, and all other information and access necessary to complete the Compliance Verification Program.
- 89. Matador shall ensure that its contract with the Verifier explicitly requires the Verifier to evaluate Matador's compliance with the Consent Decree requirements in Section V at each Subject Vapor Control System (including any Vapor Control Systems newly identified in accordance with Paragraph 56(c)), including but not limited to whether:
  - a. the site-specific inputs and assumptions were correctly identified in the
     Engineering Evaluation, as informed by the Design Analysis
     Methodology;

- each Subject Vapor Control System is adequately designed and sized for PMIVFR, PPIVFR, and Peak Modeled Pressure, as informed by the Design Analysis Methodology; and
- c. all modifications made pursuant to Paragraphs 26 or 31 have been fully and correctly implemented in accordance with the requirements of this Consent Decree.

Where the Verifier is proposed in accordance with Paragraph 83 and approved by EPA, Matador shall ensure that such Verifier evaluates Matador's compliance with the Consent Decree requirements as set forth in this Paragraph.

- 90. The Compliance Verification Program shall include a site visit by the Verifier to no fewer than 40 percent of the Subject Vapor Control Systems (including any Vapor Control Systems newly identified in accordance with Paragraph 56(c)). The Facilities subject to site visits shall be chosen by the Verifier and the Verifier's site visits shall be conducted in sufficient detail to permit the Verifier to validate the results of the evaluation made pursuant to Paragraph 89. Matador shall instruct the Verifier to notify Matador within 24 hours of any observation of Reliable Information during the site visit.
- 91. One or more representatives of Matador shall accompany the Verifier during the on-site portion of the Compliance Verification Program. The representatives of Matador shall not interfere with the independent judgment of the Verifier.
- 92. Matador shall permit representatives of EPA and NMED to participate in the on-site portion of the Compliance Verification Program as observers. Matador shall make best

efforts to notify EPA and NMED of the Verifier's site visit schedule at least 14 Days in advance as well as any changes to that schedule after the initial notice.

- 93. As to each Subject Vapor Control System, the Compliance Verification Program shall be completed no later than 90 Days after Matador submits the Certification of Completion Report pursuant to Paragraphs 33 or 34.
- 94. Matador shall cooperate fully with any reasonable requests of the Verifier, and provide the Verifier with access, upon reasonable notice and taking into account operational impacts, to all records, employees, contractors, and properties under Matador's ownership or control that the Verifier reasonably deems appropriate to effectively perform the duties described in this Subsection.
- 95. Matador shall direct the Verifier to prepare a Compliance Verification Program Report describing work performed and conclusions reached by the Verifier pursuant to Paragraph 89. Matador shall ensure that the Verifier submits the Compliance Verification Program Reports simultaneously to Matador and EPA no later than 30 Days after the end of each half of the calendar year (*i.e.*, January through June, and July through December) for any Subject Vapor Control systems included in the Compliance Verification Program during that period. In the next Semi-Annual Report following each Compliance Verification Program Report, Matador shall provide a summary of its response to any outstanding findings or corrective actions identified by the Verifier in the Compliance Verification Program Report.
- 96. The Compliance Verification Program Report shall present the Compliance Verification Program findings and shall, at a minimum, contain the following information:
  - an identification of all Well Pads evaluated and the period of time for which site-specific records were reviewed;

- b. the date(s) the on-site portion of the Verification Program was conducted (if applicable);
- c. identification of Verifier's team members;
- d. identification of representatives of Matador and regulatory agency personnel observing the Compliance Verification Program;
- e. Compliance Verification Program findings for any Subject Vapor Control Systems reviewed during the relevant period, including (i) whether the site-specific inputs and assumptions were correctly identified in the Engineering Evaluation using the Design Analysis Methodology, (ii) whether each Subject Vapor Control System is adequately designed and sized for PMIVFR, PPIVFR, and Peak Modeled Pressure using the Design Analysis Methodology, and (iii) whether all modifications made pursuant to Paragraphs 29 or 34 have been fully and correctly implemented in accordance with the requirements of this Consent Decree;
- f. copies of any photos or videos obtained during the Compliance

  Verification Program and the names of any Matador representatives or personnel interviewed;
- g. recommendations by the Verifier, based on the findings and areas of concern, for corrective actions;
- h. detailed description of any Reliable Information observed, including the
   date the Reliable Information was observed, a description of the Reliable
   Information, and identification of the Subject Vapor Control System at
   issue; and

i. a certification by the Verifier, in the form set forth in Paragraph 100 (Reporting Requirements).

# VI. REPORTING REQUIREMENTS

- 97. Following entry of this Consent Decree, Matador shall submit to the United States and NMED in accordance with the requirements of Section XIV (Notices), a Semi-Annual Report no later than 30 Days after the end of each half of the calendar year (*i.e.*, January through June, and July through December). Each Semi-Annual Report shall contain the following information, where applicable, for the reporting period:
  - a. All records required to be maintained regarding the Field Surveys performed pursuant to Paragraph 22;
  - b. The manufacturer designed maximum and minimum inlet pressure or vapor volumetric flow rate and temperature range for each control device and VRU associated with each Vapor Control System for all Subject Vapor Control Systems, or, if such information is not available, provide the results of an engineering assessment that determines the minimum and maximum flow rates or pressures necessary to achieve the expected destruction efficiency of the flare and an IR Camera Inspection conducted during the Field Survey to confirm proper flare operation;
  - All records of pressurized liquid sampling performed pursuant to
     Paragraph 23, including but not limited to QA/QC assessments and
     analytical results;
  - d. All emissions determinations performed pursuant to Paragraphs 24 and 25,

along with calculations and supporting documentation (including pressurized liquid sampling and analyses). Such determinations shall include the total site-wide potential emission rate and potential to emit for VOC, CO, and NOx; the CO, NOx, and VOC emission factors utilized in the calculations; the determination of applicability of NSPS OOOO, NSPS OOOOa, notice of intent, and permitting requirements based upon such emissions determination; and the maximum average daily throughput (as defined at 40 C.F.R. § 60.5430a) determined for a 30-day period of production prior to the applicable emission determination deadline specified in 40 C.F.R. § 60.5365a(e) or the relevant throughput data (including the 12-month period) for estimating each storage vessel's uncontrolled actual VOC emissions. If any VOC recovered and Routed to Process through a VRU was not included in the emissions determination, identify the mass of the VOC not included in tons per year. If the emissions determination took into account any legally and practically enforceable limit in an Operating Permit or other requirement, identify the applicable permit identification number and/or regulatory provision setting forth such limit, and the potential mass of VOC accounted for in the emissions determination as limited by the legally and practically enforceable limit.

- e. The Design Analysis Methodology prepared pursuant to Paragraph 27, including any updates or modifications to such Methodology;
- f. All Certification of Completion reports prepared pursuant to Paragraph 33

- 34 or 50 including any updates or modifications to such reports;
- g. Where any Facility was required to be Shut-In pursuant to Paragraphs 20, 30, 34, 44, or 50, identify the Facility, the date such operations were required to be Shut-In, the cause of the Shut-In, and the date production operations resumed;
- Identify all Storage Vessel Systems newly identified pursuant to
   Paragraph 56, including the dates by which Matador must comply with
   Paragraphs 16 through 54 at such Systems;
- i. The DI/PM Plan prepared pursuant to Paragraph 35 and Appendix E
   (DI/PM Requirements), including any updates or modifications to such
   Plan;
- j. All records of IR Camera inspections, AVO inspections, new or modified maintenance or inspection schedules or replacement program, and a summary of any reviews of or modifications to the spare parts program, prepared in accordance with Paragraph 35 and Appendix E (DI/PM Requirements);
- k. Whenever Matador obtains Reliable Information, the date Reliable
  Information was obtained; a description of the Reliable Information
  (including but not limited to observations obtained during AVO or IR
  camera inspections, pressure monitor data, control device or VRU monitor
  data, and Flare Letdown Valve position data); identification of the Subject
  Vapor Control System at issue; a description of the corrective actions
  implemented and the date and time corrective actions were implemented

- (or schedule for implementation of such corrective actions), the date the corrective action was verified by an IR camera inspection if required, and a summary of the results of that inspection;
- Whenever Matador completes a Root Cause Analysis, the operation,
  maintenance, or design cause(s) identified in the Root Cause Analysis, and
  a description of the corrective actions implemented and the date and time
  corrective actions were implemented (or schedule for implementation of
  such corrective actions);
- m. The Compliance Verification Program Report required pursuant to
   Subsection Q (Third Party Verification Program);
- n. The list of Subject Vapor Control Systems prepared pursuant to Paragraph 26, including whether each is subject to a control device or VRU requirement under (i) 40 C.F.R. 60.5395a(a)(2) or 60.5395(d)(1), (ii) the VRU exception in 40 C.F.R. 60.5365(e)(3) or 40 C.F.R. 60.5365a(e)(5)), or (iii) 20.2.72 NMAC;
- o. All dates, durations and causes of maintenance, Malfunctions, and failures of the Storage Vessel Pressure Monitor, pursuant to Paragraph 36;
- p. All dates, durations, and causes of maintenance, Malfunctions, and failures of the Flare Letdown Valve position monitor, pursuant to Paragraph 40;
- q. All dates, durations and causes of maintenance, Malfunctions, and failures
   of the Pilot Monitor failures, pursuant to Paragraph 43;
- r. All dates and causes of planned maintenance, pursuant to Paragraph 44;

- s. A summary of activities undertaken pursuant to Subsection N

  (Environmental Mitigation Projects), the status of Environmental

  Mitigation Project milestones set forth in Appendix F, and a summary of costs incurred in the implementation of Subsection N since the previous Semi-Annual report;
- t. A summary of activities undertaken pursuant to Subsection P (State
  Supplemental Environmental Project or "SSEP"), the status of the SSEP
  milestones set forth in Appendix G, and a summary of costs incurred in
  the implementation of Appendix G since the previous Semi-Annual report;
  and
- u. A summary of activities undertaken pursuant to Subsection O
   (Supplemental Environmental Project or "SEP"), the status of the SEP
   milestones set forth in Subsection O, and a summary of costs incurred in
   the implementation of Subsection O since the previous Semi-Annual
   report.
- 98. This report shall also include a description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If Matador violates, or has reason to believe that it may violate, any requirement of this Consent Decree with an associated stipulated penalty, Matador shall notify the United States, EPA, and NMED in accordance with the requirements of Section XIV (Notices) of such violation and its likely duration, in writing, within 10 Days of the Day Matador first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken,

to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Matador shall so state in the report. Matador shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the day Matador becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Matador of its obligation to provide the notice required by Section IX (Force Majeure). If EPA or NMED become aware of any violation of any requirement of this Consent Decree, they will use best efforts to promptly notify Matador of such violation.

- 99. Whenever any violation of this Consent Decree or of any applicable permits or any other event affecting Matador's performance under this Consent Decree may pose an immediate threat to the public health or welfare or the environment, Matador shall comply with any applicable federal and state or local laws and, in addition, shall notify EPA and NMED as per Section XIV (Notices) orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Matador first knew of the violation or event. This notice requirement is in addition to the requirement to provide notice of a violation of this Consent Decree set forth in the preceding Paragraph.
- 100. <u>Certification Statement</u>. Each report submitted by Matador under this Section, and each Certification of Completion Report submitted pursuant to the requirements of Paragraphs 33, 34 or 50 shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for

gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- 101. This certification requirement does not apply to emergency notifications where compliance would be impractical.
- 102. The reporting requirements of this Consent Decree do not relieve Matador of any reporting obligations required by the Act, or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.
- 103. Any information provided pursuant to this Consent Decree may be used by the United States or NMED in any proceeding to enforce the provisions of this Decree and as otherwise permitted by law.
- 104. <u>Confidential Business Information</u>. Matador may assert that any information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2 or 20.2.1.115 NMAC by following the procedures set forth in those regulatory provisions.

# VII. <u>APPROVAL OF DELIVERABLES</u>

- 105. After review of any plan, report, or other item that is required to be submitted for EPA's approval pursuant to this Consent Decree, EPA will, after consultation with NMED, in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission.
- 106. If the submission is approved pursuant to Paragraph 105(a), Matador shall take all actions required by the plan, report, or other document, in accordance with the schedules and

requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part pursuant to Paragraph 105(b) or (c), Matador shall, upon written direction from the EPA (after consulting with NMED), take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions, subject to Matador's right to dispute only the specified conditions or the disapproved portions, under Section X (Dispute Resolution).

- 107. If the submission is disapproved in whole or in part pursuant to Paragraph 105(c) or (d), Matador shall, within 45 Days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, Matador shall proceed in accordance with the preceding Paragraph.
- 108. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA after consulting with NMED may again require Matador to correct any deficiencies, in accordance with the preceding Paragraphs, subject to Matador's right to invoke Dispute Resolution and the right of EPA or NMED to seek stipulated penalties as provided in the preceding Paragraphs.
- 109. If Matador elects to invoke Dispute Resolution as set forth in Paragraphs 106 or 108, Matador shall do so by sending a Notice of Dispute in accordance with Paragraph 125 within 30 Days (or such other time as the Parties agree to in writing) after receipt of the applicable decision.
- 110. Any stipulated penalties applicable to the original submission, as provided in Section VIII (Stipulated Penalties), accrue during the 45 Day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in

part; provided that, if the original submission was so deficient as to constitute a material breach of Matador's obligations under this Consent Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

# VIII. STIPULATED PENALTIES

111. Matador shall be liable for stipulated penalties to the United States and NMED for violations of this Consent Decree as specified below, unless excused under Section IX (Force Majeure), or reduced or waived by the United States or NMED pursuant to Paragraph 114 of the Consent Decree. A violation includes failing to perform any obligation required by the terms of this Consent Decree, including any work plan approved under this Consent Decree, according to all applicable requirements of this Consent Decree and within the specified time schedules established by or approved under this Consent Decree.

Violation	Penalty per Facility unless otherwise noted
(a) Failure to conduct the Vapor Control System Field Survey, as specified in Paragraph 16, for all Storage Vessel Systems at the Well Pads listed in Appendix A.	\$550 per Day for the first 30 Days and \$2750 per Day thereafter
(b) Failure to perform any of the requirements of the Vapor Control System Field Survey as specified in Paragraphs 17, 18, and 19.	\$550 per Day for the first 30 Days and \$2750 per Day thereafter

(c) Following any observation by Matador, during the Field Survey required by Paragraphs 16 through 19, of Compromised Equipment, Reliable Information, evidence of significant staining emanating from pressure relief valves, or any equipment in need of repair or replacement, the failure to take corrective action or, within 5 Days of such observation, Shut-In all Production Operations, as specified in Paragraph 20.	\$1000 per Day for the first 30 Days and \$5000 per Day thereafter
(d) Failure to collect and analyze Pressurized Liquids samples from all Storage Vessel Systems at Well Pads listed in Appendix A, as specified in Paragraph 23.	\$550 per Day for the first 30 Days and \$2750 per Day thereafter
(e) Failure to submit to EPA and NMED a list of all Vapor Control Systems that include one or more Storage Vessels subject to a control device, VRU, or Construction Permit as required by Paragraph 26, or to specify the requirements to which each is subject, as required in Paragraph 26.	\$550 per Day for the first 30 Days and \$3300 per Day thereafter
(g) Failure to prepare an Engineering Evaluation for each Subject Vapor Control System, as specified in Paragraph 28.	\$1000 per Day for the first 30 Days and \$5000 per Day thereafter
(h) Failure to Shut-In Production Operations as required in Paragraph 30.	\$1500 per Day for the first 30 Days and \$7500 per Day thereafter
(i) Resuming operations for greater than five Calendar Days in violation of Paragraph 31.	\$1000 per Day for the first 30 Days and \$5000 per Day thereafter

(j) Failure to verify that each Subject Vapor Control System is adequately designed by conducting an IR Camera Inspection, as specified in Paragraph 32.	\$550 per Day for the first 30 Days and \$3300 per Day thereafter
(k) Failure to submit to EPA and NMED a Certification of Completion Report as specified in Paragraph 33.	\$550 per Day for the first 30 Days and \$3300 per Day thereafter
(1) Failure to revise an Engineering Evaluation, implement the necessary modifications, verify effectiveness with an IR Camera Inspection, or submit an updated Certification of Completion report, as required by Paragraph 34.	\$550 per Day for the first 30 Days and \$3300 per Day thereafter
(m) Failure to submit the DI/PM plan, as required by Paragraph 35.	\$550 per Day for the first 30 Days and \$3300 per Day thereafter
(n) Failure to implement the approved DI/PM plan at each Subject Vapor Control System, as required by Paragraph 35.	\$1500 per Day for the first 30 Days and \$2750 per Day thereafter
(o) Failure to comply with any of the requirements pertaining to Storage Vessel Pressure Monitoring set forth in Subsection F, Paragraphs 36 through 39.	\$550 per Day for the first 30 Days and \$2750 per Day thereafter
(p) Failure to comply with any of the requirements pertaining to VRU, Bypass, and Control Device Monitoring set forth in Subsections G through I, Paragraphs 40 through 52.	\$550 per Day for the first 30 Days and \$2750 per Day thereafter

(q) Failure to complete a Root Cause Analysis and complete all necessary corrective actions or temporarily Shut-In Production Operations associated with the Storage Vessel System within five Days after obtaining Reliable Information, as required in Paragraph 44.	\$1500 per Day for the first 30 Days and \$7500 per Day thereafter
(r) Failure to record and report the cause and duration of maintenance where the cause of Reliable Information is planned maintenance as required in Paragraph 44.	\$2750 per Storage Vessel System per Failure
(s) Failure to complete all necessary corrective actions, as required by Paragraph 46.	\$1500 per Day for the first 30 Days and \$7500 per Day thereafter
(t) Failure to comply with requirements applicable to a Storage Vessel, as required in Paragraph 53.	\$1500 per Day for the first 30 Days and \$7500 per Day thereafter
(u) Failure to submit a Construction Permit or an Operating Permit application for a Facility, as required in Paragraph 54.	\$550 per Day for the first 30 Days and \$3300 per Day thereafter
(v) Failure to comply with any of the requirements for Newly Identified Storage Vessel Systems as required in Paragraph 56.	\$550 per Day for the first 30 Days and \$2750 per Day thereafter
(w) Failure to implement the Environmental Mitigation Projects as required by Subsection N.	\$550 per Day for the first 30 Days and \$3300 per Day thereafter

(x) Failure to submit a Semi-Annual Report as required by Paragraph 97 or to comply with the Reporting Requirements for the Environmental Mitigation Projects, as set forth in Paragraph 64.	\$550 per Day for the first 30 Days and \$2750 per Day thereafter
(y) Failure by Matador to comply with any of the requirements pertaining to the Third-Party Verification Program set forth in Subsection Q.	\$550 per Day for the first 30 Days and \$3300 per Day thereafter
(z) Failure to comply with any of the requirements pertaining to the implementation of the State Supplemental Environmental Project as set forth in Subsection P.	\$550 per Day for the first 30 Days and \$3300 per Day thereafter
(a)(a) Failure to comply with any of the requirements pertaining to the implementation of the Supplemental Environmental Project as set forth in Subsection O.	\$550 per Day for the first 30 Days and \$3300 per Day thereafter

- 112. <u>Late Payment of Civil Penalty</u>. If Matador fails to pay the civil penalty required to be paid under Section IV (Civil Penalty) when due, Matador shall pay a stipulated penalty of \$2,000 per Day for each Day that the payment is late to the United States or NMED.
- 113. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.
- 114. Matador shall pay any stipulated penalties that accrue pursuant to this Section to the United States and NMED, as applicable, within 30 Days of receiving a written demand by the

United States, unless Matador invokes the dispute resolution procedures under Section X ("Dispute Resolution") of this Consent Decree within the 30-Day period. The United States, after consultation with NMED, may seek stipulated penalties under this Section by sending a written demand to Matador. Matador shall pay 50 percent of the total penalty owed to the United States and 50 percent of the total penalty owed to NMED. The United States may waive stipulated penalties or reduce the amount of stipulated penalties it seeks, in the unreviewable exercise of its discretion and in accordance with this Paragraph.

- 115. Stipulated penalties shall continue to accrue as provided in Paragraph 111, during any Dispute Resolution, but need not be paid until the following:
  - a. If the dispute is resolved by agreement or by a decision of EPA or NMED that is not appealed to the Court, Matador shall pay accrued penalties determined to be owing, together with interest, to the United States or NMED within 30 Days of the effective date of the agreement or the receipt of the EPA's or NMED's decision or order;
  - b. If the dispute is appealed to the Court and the United States or NMED prevails in whole or in part, Matador shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in Paragraph c., below;
  - If any Party appeals the District Court's decision, Matador shall pay all accrued penalties determined to be owing, together with interest, within 15
     Days of receiving the final appellate court decision.

- 116. If Matador fails to pay stipulated penalties according to the terms of this Consent Decree, Matador shall be liable for interest on such penalties, at the rate specified in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or NMED from seeking any remedy otherwise provided by law for Matador's failure to pay any stipulated penalties.
- 117. Matador shall pay stipulated penalties owing to the United States and NMED in the manner set forth and with the confirmation notices required by Paragraphs 10 and 11 (Payment Instructions) except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.
- 118. Stipulated penalties are not the United States' or NMED's exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XII (Effect of Settlement/Reservation of Rights), the United States and NMED expressly reserve the right to seek any other relief they deem appropriate for Matador's violation of this Consent Decree or applicable law, including but not limited to an action against Matador for statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt. However, the amount of any statutory penalty assessed for a violation of this Consent Decree shall be reduced by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

# IX. FORCE MAJEURE

119. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Matador, of any entity controlled by Matador, or of Matador's contractors, that delays or prevents the performance of any obligation under this

Consent Decree despite Matador's best efforts to fulfill the obligation. The requirement that Matador exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (a) as it is occurring and (b) following the potential force majeure, such that the delay and any adverse effects of the delay are minimized. "Force Majeure" does not include Matador's financial inability to perform any obligation under this Consent Decree.

120. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Matador shall provide notice to Chris Williams by email to Williams.Christopher@epa.gov within three Days of when Matador first knew that the event might cause a delay. Within ten Days thereafter, Matador shall provide in writing to EPA and NMED an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Matador's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Matador, such event may cause or contribute to an endangerment to public health, welfare or the environment. Matador shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Matador from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Matador shall be deemed to know of any circumstance of which

Matador, any entity controlled by Matador, or Matador's contractors knew or should have known.

- 121. If EPA, after a reasonable opportunity for review and comment by NMED, agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA, after a reasonable opportunity for review and comment by NMED, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify Matador in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.
- 122. If EPA, after a reasonable opportunity for review and comment by NMED, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Matador in writing of its decision.
- 123. If Matador elects to invoke the dispute resolution procedures set forth in Section X (Dispute Resolution), it shall do so no later than 30 Days after receipt of EPA's notice. In any such proceeding, Matador shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Matador complied with the requirements of Paragraphs 119 and 120. If Matador carries this

burden, the delay at issue shall be deemed not to be a violation by Matador of the affected obligation of this Consent Decree identified to EPA, NMED, and the Court.

# X. DISPUTE RESOLUTION

- 124. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree.
- 125. <u>Informal Dispute Resolution</u>. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Matador sends DOJ, EPA, and NMED a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States (after consultation with NMED) shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, Matador invokes formal dispute resolution procedures as set forth below.
- 126. <u>Formal Dispute Resolution</u>. Matador shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by sending DOJ, EPA, and NMED a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Matador's position and any supporting documentation relied upon by Matador.
- 127. The United States, after consultation with NMED, will send Matador its

  Statement of Position within 45 Days of receipt of Matador's Statement of Position. The United

States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position is binding on Matador, unless Matador files a motion for judicial review of the dispute in accordance with the following Paragraph.

- 128. <u>Judicial Dispute Resolution</u>. Matador may seek judicial review of the dispute by filing with the Court and serving on the United States and NMED a motion requesting judicial resolution of the dispute. The motion must be filed within fourteen Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Matador's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.
- 129. The United States shall, after consultation with NMED, respond to Matador's motion within the time period allowed by the Local Rules of this Court. Matador may file a reply memorandum, to the extent permitted by the Local Rules.
- 130. <u>Disputes Concerning Matters Accorded Record Review</u>. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 126 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules, or any other items requiring approval by EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Matador shall

have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.

- 131. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 126, Matador shall bear the burden of demonstrating that its position complies with this Consent Decree and better furthers the objectives of the Consent Decree.
- 132. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Matador under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 115. If Matador does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VIII (Stipulated Penalties).

# XI. INFORMATION COLLECTION AND RETENTION

- 133. The United States, NMED, and their representatives, including attorneys, contractors, and consultants, shall have the right of entry into any Facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:
  - a. monitor the progress of activities required under this Consent Decree;
  - b. verify any data or information submitted to the United States or NMED in accordance with the terms of this Consent Decree;
  - obtain samples and, upon request, splits of any samples taken by Matador
     or its representatives, contractors, or consultants;

- d. obtain documentary evidence, including photographs and similar data; and
- e. assess Matador's compliance with this Consent Decree.
- 134. Upon request, Matador shall provide EPA and NMED or their authorized representatives splits of any samples taken by Matador. Upon request, EPA and NMED shall provide Matador splits of any samples taken by EPA or NMED.
- 135. Until three years after the termination of this Consent Decree, Matador shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate to Matador's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or NMED, Matador shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.
- Paragraph, Matador shall notify the United States and NMED at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States or NMED, Matador shall deliver any such documents, records, or other information to EPA or NMED. Matador may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Matador asserts such a privilege, it shall provide the following: (a) the title of the document, record, or information; (b) the date of the

document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by Matador. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

- 137. Matador may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2 or 20.2.1.115 NMAC. As to any information that Matador seeks to protect as CBI, Matador shall follow the procedures set forth in 40 C.F.R. Part 2 or 20.2.1.115 NMAC.
- 138. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or NMED pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Matador to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

- 139. This Consent Decree resolves the civil claims of the United States and NMED for the violations alleged in the Notices of Violations and Complaint filed in this action through the date of lodging as to all of the Facilities listed in Appendix A.
- 140. The United States and NMED reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States or NMED to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit

conditions, except as expressly specified in Paragraph 139. The United States and NMED further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, any of Matador's facilities, whether related to the violations addressed in this Consent Decree or otherwise.

- 141. In any subsequent administrative or judicial proceeding initiated by the United States or NMED for injunctive relief, civil penalties, or other appropriate relief relating to any of Matador's Facilities, Matador shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or NMED in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 139.
- 142. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Matador is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Matador's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and NMED do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Matador's compliance with any aspect of this Consent Decree will result

in compliance with provisions of the Act, 42 U.S.C. § 7401, *et seq.*, or with any other provisions of federal, State, or local laws, regulations, or permits.

- 143. This Consent Decree does not limit or affect the rights of any of the Parties against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Matador, except as otherwise provided by law.
- 144. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not a party to this Consent Decree.
- 145. Matador does not admit liability to the United States and NMED arising out of the occurrences alleged in the Complaint. Nothing in this Consent Decree shall be construed as an admission of Matador's liability, nor shall Matador's performance of any obligation under this Decree be considered any admission of liability.

#### XIII. COSTS

146. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and NMED shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Matador.

#### XIV. NOTICES

147. Unless otherwise specified in this Consent Decree, materials shall be accompanied by a cover letter identifying the number of files or attachments (to enable the recipient to confirm the completeness of the submittal) and submitted electronically as described below, unless such notices are unable to be uploaded to the CDX electronic system (in the case of EPA) or transmitted by email (in the case of all parties). For all notices to EPA, Defendant

shall register for the CDX electronic system and upload the notice at

https://cdx.epa.gov/epa\_home.asp. Any notice that cannot be uploaded to CDX or transmitted via email shall be submitted via overnight mail (and if any attachment is voluminous, it shall be provided on a disk, hard drive, or other equivalent successor technology) to the addresses below. As to the United States: submit materials to DOJ at the email or, if necessary, the mail address below. As to EPA: submit materials via CDX, email or, if necessary, the mail address below if CDX or email is not possible).

As to DOJ by email (preferred): eescdcopy.enrd@usdoj.gov

Re: DJ # 90-5-2-1-12297

As to DOJ by mail: EES Case Management Unit

Environment and Natural Resources Division

U.S. Department of Justice

P.O. Box 7611

Washington, D.C. 20044-7611 Re: DJ # 90-5-2-1-12297

As to DOJ by overnight mail: 4 Constitution Square

150 M Street, N. E.

Suite 2.900

Washington, D.C. 20002 Re: DJ # 90-5-2-1-12297

As to EPA by email (preferred): <u>AED Oil Gas CD@epa.gov</u>

As to EPA by mail: Director, Air Enforcement Division

1200 Pennsylvania Avenue NW William J Clinton South Building MC 2242A Washington, D.C. 20460

As to EPA by telephone: 202-564-7889

As to NMED by email: ENV-AQB.Settlement.Notifications@state.nm.us

As to NMED by mail: Air Quality Bureau

Attn: Compliance & Enforcement Section Chief

525 Camino de los Marquez, Suite 1

Santa Fe, NM 87505

As to Matador by email (preferred):

<u>christopher.norfleet@matadorresources.com</u> <u>jason.conway@matadorresources.com</u> sfletcher@gibsondunn.com

As to Matador by mail:

Christopher Norfleet
Jason Conway
Matador Production Company
One Lincoln Centre
5400 LBJ Freeway
Suite 1500
Dallas, Texas 75240

Stacie B. Fletcher Gibson, Dunn & Crutcher LLP 1050 Connecticut Avenue NW Washington, DC 20036

Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above. Notices submitted pursuant to this Section shall be deemed submitted upon mailing or transmission by email, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

#### XV. EFFECTIVE DATE

148. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

#### XVI. RETENTION OF JURISDICTION

149. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Consent Decree or entering

orders modifying this Consent Decree, pursuant to Sections X and XVII, or effectuating or enforcing compliance with the terms of this Consent Decree.

#### XVII. MODIFICATION

- 150. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Consent Decree, it shall be effective only upon approval by the Court. Non-material modifications to this Consent Decree shall be effective when signed in writing by the Parties.
- 151. Any disputes concerning modification of this Consent Decree shall be resolved pursuant to Section X (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 130, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

#### **XVIII. TERMINATION**

152. After Matador (a) has completed the requirements of Paragraphs 16 through 34 for each of the Well Pads listed in Appendix A, (b) has thereafter maintained continuous satisfactory compliance with this Consent Decree for a period of three years at all Subject Vapor Control Systems (except that such three-year requirement shall not apply at those Storage Vessel Systems identified pursuant to Paragraph 56), (c) has complied with all other requirements of this Consent Decree including those relating to the Mitigation Projects required by Subsection N, the State Supplemental Environmental Project required by Subsection P, and the Supplemental Environmental Project required by Subsection O, and (d) has paid the civil penalty and any

accrued stipulated penalties as required by this Consent Decree, Matador may serve upon the Plaintiffs a request for termination, stating that Matador has satisfied those requirements, together with all necessary supporting documentation.

- 153. <u>Partial Termination</u>. Matador may seek consent to terminate the requirements of this Consent Decree with respect to Facilities listed in Appendix A that are to be transferred to an unrelated entity and entirely from Matador's operational control and for which Matador has completed the requirements of Section V (Compliance Requirements) (except that Subsection P "State Supplemental Environmental Project" need not be completed) of this Consent Decree by submitting requests for partial termination in accordance with this Paragraph.
  - a. Such request for partial termination shall be provided to the United States and NMED in writing and identify the Facility (or Facilities) to be subject to the partial termination, and for Subject Vapor Control System(s), state the date that a Certification of Completion Report pursuant to Paragraph 33 was submitted for the Subject Vapor Control System(s).
  - b. The United States and NMED may request additional information regarding the Facility (or Facilities) to verify that Matador has substantially complied with other requirements of this Consent Decree as to the Facility (or Facilities).
  - c. Until such time as the United States and NMED consent to Matador's request for partial termination, Matador's obligations under this Consent Decree shall remain in effect as to such Facility (or Facilities). Such consent shall not be unreasonably withheld or delayed.
  - d. Matador shall not submit more than three individual requests for partial

termination and may not seek partial termination of greater than 15 percent of the Subject Vapor Control Systems identified pursuant to Paragraph 26 and greater than 15 percent of the Facilities associated with Well Pads listed on Appendix A that are not Subject Vapor Control Systems.

- 154. Following receipt by the United States and NMED of Matador's request for termination or partial termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Matador has satisfactorily complied with the requirements for termination or partial termination of this Consent Decree. If the United States, after consultation with NMED, agrees that the Consent Decree may be terminated or partially terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating or partially terminating the Consent Decree.
- 155. If the United States, after consultation with the NMED, does not agree that the Consent Decree may be terminated or partially terminated, Matador may invoke Dispute Resolution under Section X (Dispute Resolution). However, Matador shall not seek Dispute Resolution of any dispute regarding termination or partial termination until 90 Days after service of its request for termination or partial termination.

#### XIX. PUBLIC PARTICIPATION

156. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States and NMED reserve the right to withdraw or withhold their consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is

inappropriate, improper, or inadequate. Matador consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Consent Decree, unless the United States or NMED has notified Matador in writing that it no longer supports entry of the Consent Decree.

#### XX. SIGNATORIES/SERVICE

- 157. Each undersigned representative of Matador, NMED, and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.
- 158. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Matador agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons. Matador need not file an answer to the complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

#### XXI. INTEGRATION

159. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Consent Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in

this Consent Decree.

#### XXII. FINAL JUDGMENT

160. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, NMED, and Matador.

# XXIII. 26 U.S.C. SECTION 162(f)(2)(A)(ii) IDENTIFICATION

161. For purposes of the identification requirement of Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), performance of the requirements set out in Section II (Applicability), Paragraph 6; Section V (Compliance Requirements), Paragraphs 16 through 64, Paragraphs 79 through 96, and Appendices B (Sampling and Analysis Plan), E (DI/PM Program), and F (Mitigation Projects); Section VI (Reporting Requirements), Paragraphs 97(a) through (s), 98 through 100; and Section XI (Information Collection and Retention), Paragraphs 133 through 136, is restitution or required to come into compliance with law.

#### XXIV. APPENDICES

- 162. The following Appendices are attached to and part of this Consent Decree:
- "Appendix A" is Matador Production Company's Well Pads in New Mexico;
- "Appendix B" is the Sampling and Analysis Plan;
- "Appendix C" is the Matador Production Company Well Pads with Storage Vessel Systems Subject to 40 C.F.R. § 60.5395a(a)(2) OOOOa as of the Date of Lodging;
- "Appendix D" is the Matador Production Company Well Pads with Storage Vessel Systems Subject to 20.2.72 NMAC as of the Date of Lodging;
- "Appendix E" is the DI/PM Program;

"Appendix F" is the Mitigation Projects; and	d	
"Appendix G" is the State Supplemental En	vironmental Project.	
	Dated and entered this day of	, 20
	LINITED STATES DISTRICT HIDGE	

#### FOR THE UNITED STATES OF AMERICA:

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Assistant Attorney General Environment and Natural Resources Division U.S. Department of Justice

Nicole Veilleux

03/26/23 Date: \_\_\_\_\_

#### NICOLE VEILLEUX

Senior Counsel Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Washington, DC 20044-7611

ALEXANDER M.M. UBALLEZ United States Attorney

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Ruth.F.Keegan@usdoj.gov

Fax: 505.346.7296

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ALEXANDREA ROLAND

Office of Regional Counsel
U.S. Environmental Protection Agency, Region 6
1201 Elm Street
Dallas, TX 75270
(214) 665-2753
roland.alexandrea@epa.gov

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

LAWRENCE STARFIELD

Digitally signed by LAWRENCE STARFIELD Date: 2023.03.24 18:10:23 -04'00'

LAWRENCE E. STARFIELD

Acting Assistant Administrator Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

ROSEMARIE A. KELLEY Director, Office of Civil Enforcement U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

MARY E. GREENE Director, Air Enforcement Division Office of Civil Enforcement U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

# FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY, CONTINUED:

Date: March 20, 2023

Digitally signed by Seager, Cheryl Date: 2023.03.20 11:11:16-05'00'

CHERYL SEAGER

Director

Office of Enforcement and Compliance Assurance Division U.S. Environmental Protection Agency, Region 6 1201 Elm Street Dallas, Texas 75270

#### FOR THE NEW MEXICO ENVIRONMENT DEPARTMENT:

Date: 3/13/2023

DocuSigned by: James C. Kenney

JAMES C. KENNEY

Secretary

New Mexico Environment Department

1190 St. Francis Drive

Santa Fe, New Mexico 87501

DocuSigned by:

Bruce Baizel

Date: 3/13/2023

**BRUCE BAIZEL** General Counsel

New Mexico Environment Department

1190 St. Francis Drive

Santa Fe, New Mexico 87501

FOR MATADOR PRODUCTION COMPANY:

03-24-23

Date

Glenn W. Stetson

Executive Vice President -- Production

Matador Production Company

# Appendix A:

Matador Oil Company's Well Pads in New Mexico as of the Date of Lodging

Tank Battery ID	Case 1:23-cv-00260-JFR-GJF Docum Facility	ent 2-1 County	Filed 03/27/23 Page 92 Latitude	2 of 136 Longitude
289	ACE STERN VEGAS TB	Eddy	32.37585703	-104.1003164
162	AIRSTRIP 31-18S-35E RN TB	Lea	32.69785	-103.504934
209	AMETHYST STATE COM TB	Eddy	32.17563651	-104.0122898
64	AMOCO 1 FEDERAL	Lea	32.77451284	-103.7229015
63	AMOCO 2 STATE	Lea	32.77809072	-103.7430739
65	AMOCO AG 1 FEDERAL	Lea	32.77114461	-103.7148927
66	AMOCO CP 8 FEDERAL	Lea	32.76003616	-103.7869368
67	AMOCO EAST 2 STATE	Lea	32.77429716	-103.7394083
3	ANNE COM # 1	Eddy	32.221	-104.073
157	ANNE COM 15 TB	Eddy	32.220795	-104.08123
68	ARCO 5 FEDERAL 1 TB	Eddy	32.77868246	-103.897162
69	ARCO 5 FEDERAL 2 TB	Eddy	32.77734881	-103.8903082
70	ARCO 8 FEDERAL 1,2,5 TB	Eddy	32.75986105	-103.893742
296	ARCO 8 FEDERAL 4 TB	Eddy	32.75628173	-103.8939986
73	AUSTIN MONTEITH COM	Lea	33.11614022	-103.3279991
273	AUSTIN STATE 1 TB	Eddy	32.44202097	-104.1389026
151	B BANKER TB	Eddy	32.2663	-104.083335
347	BIG BUCKS FED TB	Lea	32.49849	-103.6271
259	BIG CHIEF COM 02 TB	Eddy	32.37278176	-104.0776117
260	BIG CHIEF COM 03 TB	Eddy	32.37642146	-104.0904347
261	BIG CHIEF COM 04 TB	Eddy	32.38737145	-104.0775874
262	BIG CHIEF FEE 06 TB	Eddy	32.37997927	-104.0948512
263	BIG CHIEF FEE 07 TB	Eddy	32.37642607	-104.0969826
264	BIG CHIEF FEE 09 TB	Eddy	32.39103608	-104.0728955
265	BIG CHIEF FEE 10 TB	Eddy	32.38283094	-104.0807989
348	BIG MOOSE FED TB	Lea	32.50152	-103.6342
250	BIGGERS FED EAST TB	Lea	32.12464733	-103.405531
218	BIGGERS FED WEST TB	Lea	32.12498988	-103.4104461

Tank Battery ID	Facility	County	Latitude	Longitude
362	BO HOWARD TB	Eddy	32.5	-104.135429
299	BOLA 7 FEDERAL 3H TB	Lea	32.76794684	-103.8125936
298	BOLA 7 FEDERAL 5 TB	Lea	32.7645308	-103.7978772
287	BOROS FED EAST TB	Eddy	32.04880319	-103.7617445
285	BOROS FED WEST TB	Eddy	32.0488655	-103.770337
237	BRAD LUMMIS FED COM TB	Lea	32.20862404	-103.4436733
234	BRUCE KEPLINGER TB	Lea	32.473425	-103.419935
300	CAL MON 15 STATE 2 TB	Lea	32.75333542	-103.6533245
76	CAN-KEN 4 FEDERAL	Eddy	32.77815266	-103.8684664
229	CARL MOTTEK FED TB	Lea	32.22350818	-103.4967623
5	CAUDILL 8 # 2	Lea	32.93518998	-103.2783822
77	CAVINESS 10 FEDERAL	Lea	32.75974132	-103.6438391
78	CAVINESS 11 FEDERAL	Lea	32.75998915	-103.6394552
79	CEDAR 32 STATE COM 1 TB	Eddy	32.79254289	-103.8849741
301	CEDAR 32 STATE COM 2 TB	Eddy	32.78531077	-103.8946303
232	CHARLES LING FED EAST TB	Lea	32.23766734	-103.5382397
233	CHARLES LING FED WEST TB	Lea	32.23810323	-103.5470257
153	CHARLIE SWEENEY 31 TB	Eddy	32.270202	-104.131457
198	CHARLIE SWEENEY FED TB	Eddy	32.255297	-104.119587
303	CHEVRON 12 FEDERAL 5,6 TB	Lea	32.76440805	-103.7168356
304	CHOLLA 1 FED 2 TB	Eddy	32.7745188	-103.8159244
305	CHOLLA 1 FED 4 TB	Eddy	32.77768059	-103.8152696
21	CIMARRON STATE 16 TB	Lea	32.665713	-103.559249
180	COLEMAN NORTH TB	Eddy	32.305255	-104.153791
223	COLONEL R HOWARD 1 TB	Eddy	32.29389433	-104.1686556

Tank Battery ID	Facility	County	Latitude	Longitude
179	COLONEL R HOWARD 2 TB	Eddy	32.29650562	-104.1676908
146	CONINE 03-20S-35E RN	Lea	32.6053282	-103.4498504
82	CORBIN 15 FEDERAL	Lea	32.75000942	-103.6569361
181	D CULBERTSON 26-15S-36E TL STATE TB	Lea	32.98254924	-103.2686685
83	DAYTON STATE COM	Eddy	32.75043612	-104.3898688
364	DEE OSBORNE TB	Lea	32.47118	-103.409742
266	DINERO 16 STATE 04 TB	Eddy	32.3890236	-104.0948956
267	DINERO STATE 05 TB	Eddy	32.39462772	-104.0904282
268	DINERO STATE COM 02 TB	Eddy	32.38732622	-104.0872114
251	DR. LANA WHITE TB	Eddy	32.21496	-104.03429
147	DR. K SOUTH TB	Eddy	32.28422	-104.149659
156	DR. SCRIVNER FED COM TB	Eddy	32.242709	-104.03517
343	DUMP STATE 3H TB	Eddy	32.5065765	-104.0648346
174	EAGLE 2 STATE NORTH TB	Lea	32.60372527	-103.5327488
346	EAST LIVINGSTON 31 FED TB	Lea	32.98255	-103.2687
350	EDDY BD STATE 1 TB	Eddy	32.5244064	-103.9890289
351	EDDY BD STATE 2 TB	Eddy	32.5352859	-103.9922333
352	EDDY BD STATE 3 TB	Eddy	32.5316582	-103.9922333
84	EDDY JP STATE COM	Eddy	32.69841266	-103.8253756
274	EJ GARNER COM 01 TB	Eddy	32.44558325	-104.1549127
164	ELAND 32 STATE TB	Lea	32.697841	-103.679634
353	EMPEROR OIL CO FED B-1 TB	Eddy	32.5461655	-103.9793625
271	ESPERANZA 22 STATE COM 01 TB	Eddy	32.46314694	-104.1712132
272	ESPERANZA 22 STATE COM 02 TB	Eddy	32.46364248	-104.1841976

Tank Battery ID	Facility	County	Latitude	Longitude
86	EWT 1 FEDERAL	Lea	32.77374733	-103.7166566
87	FEDERAL 30	Lea	32.62915272	-103.6967323
195	FEDERAL 30 SLOT 3 TB	Lea	32.63752936	-103.7010366
310	FEDERAL AF 2 TB	Lea	32.75612124	-103.7913952
89	FEDERAL AM	Lea	32.76350379	-103.7907506
201	FLORENCE STATE 23-23S-34E AR TB	Lea	32.284516	-103.442748
192	FOREHAND RANCH 35-23S-27E TB	Eddy	32.254642	-104.163778
200	GARRETT FED COM TB	Eddy	32.179769	-104.012099
354	GAVILAN FED 1 TB	Lea	32.5277901	-103.6746979
363	GAVILON FED TB	Lea	32.524475	-103.672067
243	GENERAL KEHOE TB	Eddy	32.253061	-104.053414
370	GOURLEY FED 2 TB	Eddy	32.3664703	-104.095809
371	GOURLEY FED 3 TB	Eddy	32.3664589	-104.086715
225	GOVERNMENT D FED TB	Eddy	32.50111422	-104.1442266
247	GREVEY COM TB	Lea	32.03339522	-103.3959969
27	GUITAR 10 # 1	Eddy	32.23803468	-104.0743959
28	GUITAR 10 TB	Eddy	32.235375	-104.067938
92	HALE 11 FEDERAL	Eddy	32.67340973	-103.9448293
93	HANLAD STATE	Lea	32.77492024	-103.4306323
216	HANNIFIN FED TB	Eddy	32.69134293	-103.829392
NA	HAT MESA TB	Lea	32.4987373	-103.6690292
186	HEYCO STATE TB	Eddy	32.53147678	-104.000658
94	HEYCO STATE VERTICAL TB	Eddy	32.53674195	-103.9988994
145	HIBISCUS STATE COM TB	Lea	32.68287582	-103.4735402
95	HONDO 4 FEDERAL	Eddy	32.77906312	-103.8761614

Tank Battery ID	Facility	County	Latitude	Longitude
96	HUDSON 11 FEDERAL 2 TB	Eddy	32.76375714	-103.8334573
367	HORSESHOE FED TB	Lea	32.472387	-103.607194
311	HUDSON 11 FEDERAL 5 TB	Eddy	32.76630053	-103.834082
215	IRVIN WALL TB	Lea	32.25452574	-103.39439
255	JACK SLEEPER ST COM TB	Eddy	32.329274	-104.10132
361	JACKSON COKER TB	Lea	32.849697	-103.216631
154	JANIE CONNER TB	Eddy	32.216682	-104.050357
244	JEFF HART EAST TB	Lea	32.27063554	-103.4196001
374	JEFF HART WEST TB	Lea	32.269069	-103.428976
33	JIM ROLFE TB	Lea	32.72762264	-103.5549438
149	JIMMY KONE TB	Eddy	32.246228	-104.10287
34	KEMNITZ EAST 1 TB (LEGACY)	Lea	32.89091444	-103.551221
306	KEMNITZ EAST 2 TB (LEGACY)	Lea	32.90937371	-103.5462346
222	KEMNITZ NE 22-16S-34E TB	Lea	32.90121549	-103.5451556
307	KEMNITZ NORTHEAST 3 TB (LEGACY)	Lea	32.92365275	-103.5676112
308	KEMNITZ NORTHEAST 5 TB (LEGACY)	Lea	32.90588134	-103.5378754
309	KEMNITZ NORTHEAST 6 TB (LEGACY)	Lea	32.93068679	-103.5677681
217	KITTY HAWK FED TB	Eddy	32.68774425	-103.8203713
191	KYLIE AYV TB	Eddy	32.30239123	-104.1455822
169	LANDRETH FED COM TB	Lea	32.28352337	-103.4316972
249	LEATHERNECK NORTH TB	Eddy	32.54869188	-104.1202576
341	LEATHERNECK SOUTH TB	Eddy	32.541278	-104.120535
204	LEO THORSNESS 13 TB	Lea	32.222926	-103.533884

Tank Battery ID	Facility	County	Latitude	Longitude
168	LEPAKAST STATE COM TB	Lea	32.28406396	-103.4163442
220	LESLIE FED COM EAST TB	Lea	32.12445942	-103.3854494
238	LESLIE FED COM WEST TB	Lea	32.12422973	-103.3917871
269	LITTLE SQUAW COM 01 TB	Eddy	32.36552331	-104.0775979
270	LITTLE SQUAW COM 02 TB	Eddy	32.35824077	-104.0775747
98	LOCO SAND HILLS 9 FEDERAL	Eddy	32.756977	-103.971072
99	LOVING 2 STATE	Eddy	32.34032677	-104.0549118
158	MALLON 27 FED COM TB	Lea	32.624872	-103.545301
213	MARBOB 19 ST COM TB	Eddy	32.64622359	-104.1207764
183	MARBOB ST 2 TB	Eddy	32.64074448	-104.1072783
184	MARBOB ST 3&4 TB	Eddy	32.652	-104.11
203	MARLAN DOWNEY 09 TB	Lea	32.326109	-103.37603
253	MARLAN DOWNEY EAST TB	Lea	32.334148	-103.370934
160	MARRA 1 TB	Eddy	32.22307775	-104.0601533
102	MESQUITE 3 FEDERAL 2 TB	Eddy	32.77460254	-103.8642869
378	MICHAEL RYAN FED TB	Eddy	32.389	-104.101
202	MISS SUE 12-23S-27E RB TB	Eddy	32.323191	-104.155535
355	MONGOOSE FEE 1H TB	Lea	32.6876183	-103.5209808
377	MONIKA TB	Lea	32.836159	-103.221105
372	NATHAN FED 1 TB	Eddy	32.3616104	-104.090812
373	NATHAN FED 2 TB	Eddy	32.3609962	-104.096801
224	NINA CORTEL WEST FED COM TB	Lea	32.41386302	-103.6680352
360	NINA CORTELL SOUTH FED COM TB	Lea	32.399364	-103.660139
275	NIX YATES 01 TB	Eddy	32.42375225	-104.1580745
254	NOEL HENSLEY FED COM TB	Eddy	32.209222	-104.130195

Tank Battery ID	Facility	County	Latitude	Longitude
207	NORRIS-THORNTON TB	Eddy	32.28624342	-104.1560674
178	NORRIS-THORNTON TB (AKA NORRIS-THORNTON #2)	Eddy	32.2893956	-104.1552474
366	OCOTILLO SUNRISE TB	Lea	32.13605	-103.45194
148	OLIVINE STATE TB	Lea	32.96440321	-103.2664915
104	PARKER 5 FEDERAL	Eddy	32.76982232	-103.8987099
312	PARKER DEEP 5 FED COM 1 TB	Eddy	32.77398819	-103.898518
105	PARKER DEEP 5 FED COM 2 TB	Eddy	32.77912776	-103.8942678
313	PARKER DEEP 5 FED COM 3 TB	Eddy	32.77088245	-103.8935329
150	PAUL TB	Eddy	32.195713	-104.048749
276	PECOS FED COM 01 TB	Eddy	32.42731939	-104.145237
43	PENNZOIL FEDERAL 2	Eddy	32.41262685	-104.176441
44	PICKARD STATE	Lea	32.7286964	-103.5794607
45	PIPELINE 16 STATE 01	Lea	32.66168333	-103.5634562
107	PMS 8 FED 1 TB	Eddy	32.76713144	-103.8854576
319	PMS 8 FED 2 TB	Eddy	32.76723889	-103.8945462
320	PMS 8 FED 3 TB	Eddy	32.7636412	-103.8983142
321	PMS 8 FED 4 TB	Eddy	32.76362035	-103.8896906
375	PONY EXPRESS FED WEST TB	Lea	32.579263	-103.664217
47	RANGER 33	Lea	32.53573145	-103.4700511
282	RAY STATE COM SLOT 3 TB	Eddy	32.25457	-104.04446
277	REEVES FED 02 TB	Eddy	32.44193387	-104.1625944
108	RICHARDSON UNIT	Lea	33.14245207	-103.3333342
258	RODNEY ROBINSON NORTH TB	Lea	32.33978	-103.616396
294	RODNEY ROBINSON SOUTH TB	Lea	32.31324323	-103.605654

Tank Battery ID	Facility	County	Latitude	Longitude
49	RUSTLER BREAKS 12-24-27 TB	Eddy	32.226319	-104.137336
50	SALT DRAW 11 FEDERAL 01	Eddy	32.1468717	-104.0558298
109	SANTA FE EXPLORATION	Lea	32.77076126	-103.6998545
230	SAPPHIRE STATE TB	Eddy	32.058005	-104.01729
61	SCOTT WALKER 36 TB	Eddy	32.342733	-104.148196
110	SCRIBNER 5 FEDERAL	Eddy	32.77726713	-103.8848775
111	SEYMOUR STATE COM 1 TB	Chaves	33.53440841	-104.2400527
322	SEYMOUR STATE COM 2 TB	Chaves	33.52715263	-104.2372755
171	SHEARN STATE COM TB	Lea	32.2545823	-103.396555
112	SHELDON 15 FEDERAL	Lea	32.75365486	-103.6438043
113	SHOOT 12 FED 1 TB	Lea	32.75545066	-103.7175972
323	SHOOT 12 FED 3 TB	Lea	32.76073638	-103.7179767
114	SOUTH TAYLOR 13 FED 1 TB	Eddy	32.74086824	-103.8171941
324	SOUTH TAYLOR 13 FED 4 TB	Eddy	32.74459914	-103.8169643
115	SOUTHEAST AIRSTRIP COM	Lea	32.69895939	-103.4991072
116	SST (former HEYCO)	Eddy	32.69551531	-104.1162633
228	SST NORTH 06-19S-29E TB	Eddy	32.69642167	-104.1210145
211	SST SOUTH 06-19S-29E TB	Eddy	32.68587824	-104.106607
165	STATE 23 TB	Lea	32.2914266	-103.4429276
278	STATE 36-1 TB	Eddy	32.43462997	-104.1506055
279	STATE 36-2 TB	Eddy	32.44199189	-104.1452816
166	STATE R COM TB	Lea	32.26999133	-103.4264033
197	STEBBINS FED 19 SLOT 3 TB	Eddy	32.55788478	-104.1077507
175	STEBBINS FED 20 SLOT 3 TB	Eddy	32.556442	-104.106030
193	STEBBINS FED 20 SLOT 4 TB	Eddy	32.55294773	-104.1056132

Tank Battery ID	Facility	County	Latitude	Longitude
117	TANK 1 FEDERAL	Lea	32.76981648	-103.7255526
295	TED PAUP FED TB	Eddy	32.533	-104.088
365	TERI STATE TB	Lea	32.827238	-103.23441
52	TIGER 14 CDP TB	Eddy	32.211051	-104.050808
189	TOM MATTHEWS TB	Eddy	32.229431	-104.083337
359	TOMAHAWK 28 FED TB	Lea	32.54682	-103.67042
245	TONY LARUSSA ST COM TB	Eddy	32.253383	-104.181126
280	TOOTHMAN GAS COM 01 TB	Eddy	32.44923079	-104.1495511
349	TOQUE STATE COM TB	Lea	32.50759	-103.614136
NA	TORY 3 FED TB	Lea	32.5168953	-103.6662064
119	TRAVIS 24 STATE COM	Eddy	32.73549511	-104.1235616
122	TURNER 7 FEDERAL DEEP	Eddy	32.58976908	-104.32644
293	UNCLE CHES FED TB	Lea	32.55227724	-103.4584249
236	UNCLE DON 35 STATE TB	Lea	32.34143034	-103.3447229
53	VANDAGRIFF FEDERAL 1	Eddy	32.95761949	-104.2339047
227	VERNA RAE FED COM TB	Lea	32.60763188	-103.5953001
291	VONI FED EAST TB	Eddy	32.03336247	-103.7799837
292	VONI FED WEST TB	Eddy	32.03460483	-103.7858309
356	WALTERTHON FEE 1 TB	Eddy	32.38293	-104.1893
357	WALTERTHON FEE 2 TB	Eddy	32.3829041	-104.2013397
176	WARREN FED COM TB	Eddy	32.269261	-104.140918
124	WEST YOUNG 8 FEDERAL	Lea	32.75894529	-103.7828293
125	YOUNG DEEP 3 FEDERAL	Lea	32.77108488	-103.7517592
126	YOUNG DEEP 4 FEDERAL	Lea	32.77109236	-103.7649817
340	YOUNG DEEP UNIT 11, 13, 15, 17, 22	Lea	32.76448787	-103.7730968

Tank Battery ID	Facility	County	Latitude	Longitude
	TB			
329	YOUNG DEEP UNIT 12 TB	Lea	32.77359391	-103.763443
330	YOUNG DEEP UNIT 18 TB	Lea	32.76079041	-103.7737628
331	YOUNG DEEP UNIT 20 TB	Lea	32.76104491	-103.7781063
334	YOUNG DEEP UNIT 23, 25, 30, 32, 33 TB	Lea	32.76878678	-103.7581852
333	YOUNG DEEP UNIT 24 TB	Lea	32.76514748	-103.761065
335	YOUNG DEEP UNIT 28 TB	Lea	32.75542366	-103.7662763
336	YOUNG DEEP UNIT 29 TB	Lea	32.76077186	-103.7577642
337	YOUNG DEEP UNIT 31 TB	Lea	32.75956883	-103.7652809
338	YOUNG DEEP UNIT 34 TB	Lea	32.75545514	-103.7688549
339	YOUNG DEEP UNIT 36, 37 TB	Lea	32.76884273	-103.7674408
328	YOUNG DEEP UNIT 38 TB	Lea	32.76878469	-103.7526835
327	YOUNG DEEP UNIT 39 TB	Lea	32.7605635	-103.7482271
127	YOUNG DEEP UNIT BONE SPRING TB	Lea	32.76763988	-103.7606812
152	ZACH MCCORMICK FED COM 18-1 TB	Eddy	32.22253423	-104.0319296
194	ZACH MCCORMICK FED SLOT 2 TB	Eddy	32.21951	-104.033002

# Appendix B: Sampling and Analysis Plan

# **Applicability**

Technical methods for the collection of pressurized hydrocarbon liquids (Crude Oil and Condensate) and the subsequent fluid analysis. The procedures described in this protocol are primarily based on Gas Processor Association (GPA) 2174 and 2186 Standards.

# Pressurized Hydrocarbon Liquid Sample Collection Method

Samples will be collected using the GPA 2174-20 6.4 Water Displacement Technique – Partial Displacement

- 1. Cylinder Selection and Preparation
  - a. The sample cylinder will be stainless steel and sized for 500 mL or larger to ensure a sample volume of at least 250 mL for lab analysis.
  - b. The sample cylinder shall be thoroughly cleaned per manufacturer's recommendations prior to sampling.
  - c. The water to be displaced should be laboratory grade water with a pH between 5 and 7
  - d. Duplicate samples will be collected, so two cylinders will be required per sampled stream.
- 2. Constant Volume Cylinder Sampling Apparatus Setup
  - a. An example of an appropriate Constant Volume Cylinder Sampling apparatus can be found in Figure 7 of GPA 2174 (included below for reference)

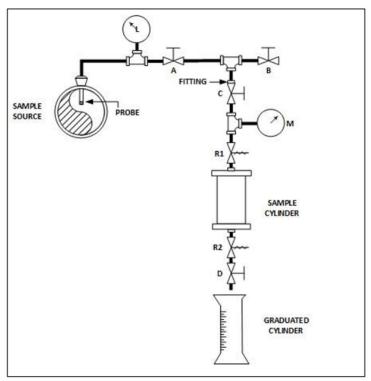


Figure 7 - Constant Volume Cylinder Sampling

- b. The sample collection point will be the drain valve of the sight glass on the first stage separator. A visual inspection of the sight glass should confirm that the leg of the separator contains product and ensure that the sight glass is intact with no evidence of leakage.
  - i. If a sight glass sample collection point is not available, the sample point should be from a section of piping that includes a positive velocity, minimal turbulence, and a sample port on top of the pipe. This sampling location should be as far upstream of the dump valve as possible to produce a sample that is most representative of conditions in the separator. Samples from this backup sampling point should be obtained using a probe designed to secure the product from the center one-third of the flowing stream with the probe facing upstream. For maximum probe insertion length calculations refer to ASME PTC 19.3 TW-2016. The sample probe connected to the sample collection point shall be insulated and fitted with an inline thermocouple and digital pressure gauge to record the temperature and pressure of the fluid being drawn into the sample cylinder. The sample probe will contain a calibrated pressure gauge. The sampling probe shall face upstream and the maximum insertion length is determined using the calculation methodology in ASME PTC 19.3 TW-2016.

- c. The operating conditions at the time the sample is collected shall be equal to or greater than the highest anticipated operating pressure.
  - i. Matador's typical process flow involves first stage separation at a 3-phase separator, then subsequent second stage separation at a heater treater. Since the separator operates at a pressure higher than the heater treater, the sample will be capable of representing the highest anticipated pressure conditions at the lower pressure heater treater through process simulation.
  - ii. For sites with a single stage of separation upstream of the stock tanks, a Matador representative will accompany the sampling representative to increase the backpressure on the vessel to a predetermined pressure that meets the scenario requirements for sample use outlined later in this protocol.
- d. The sampling technician shall collect a sample when flow is stable in the separator.
- e. Prior to the sample being collected in the collection cylinder, the process connection used for sampling shall be purged multiple times to confirm representative product is being sampled and that potential gas bubbles have been removed upstream of the sample collection cylinder.

# 3. Sample Collection

- a. Collect a pressurized liquid sample into double valve cylinder by partial displacement sampling method (GPA 2174-20 6.4 included for reference below)
  - 6.4 Water Displacement Technique Partial Displacement
  - 6.4.1 A double valve sample cylinder filled with clean water and a vessel to measure displaced liquid are required for this technique (see Figure 7). The water used shall meet the requirements in 5.2.1.
  - 6.4.2 The total volume of the sample cylinder must be determined, and then 70% and 20% of the total volume should be calculated. NOTE 13 For example, if the total volume of the sample cylinder is 500 ml, then 70% of the total volume is 350 ml and 20% is 100 ml.
  - 6.4.3 Open valve A at the sample source and thoroughly blow out any accumulated material. Close valve A at the sample source.
  - 6.4.4 Connect the sample cylinder to sampling source valve A as shown in Figure 7.
  - 6.4.5 With valves B, C, and D closed, open sample source valve A to the full, open position. Observe sample pressure on gauge L. Crack valve B and fitting at valve C to purge the line. Do not allow pressure L to drop below the original sample pressure. Discontinue purging after a sufficient time, and only when liquid product is present. If the product flashes

without leaving a liquid residue at valve B and the fitting at valve C, the operator shall use his judgment in determining when to discontinue purging. Close valve B and tighten fitting at valve C.

- 6.4.6 With valve D still closed, slowly open valve C to the full, open position. Pressure at gauges L and M should be equal.
- 6.4.7 Slowly open valve D to allow a slow discharge of the water into the measuring vessel. To prevent flashing, do not allow pressure M to drop below the sampling pressure. Continue operation until 70% by volume of water has been displaced by product in the sample cylinder.
- 6.4.8 Close valves D, C, and A in that order. Open valve B to release pressure on the sample line.
- 6.4.9 With the sample cylinder still attached to source valve A, slowly open valve D to drain another 20% of the water from the sample cylinder. (At this point, 10% of the water still remains in the sample cylinder.) Disconnect sample cylinder from the sample source.
- 6.4.10 Check valves C and D for leaks and cap valves to protect threads. Prepare sample information tag and box for transportation per applicable requirements (DOT, etc.).

The sample collection rate should be no greater than 60 ml/min (roughly 1 drop per second into the graduated cylinder) to prevent flashing. Maintaining a constant sample collection pressure is important to prevent flashing.

The cylinder shall not be filled more than 70% full of sample product. This allows room for thermal expansion of the product. When sample cylinders are filled in a cold environment then the amount should be reduced further because most analyses will be performed in a warmer environment.

Record both pre and post sampling temperatures and pressures during the collection event. The recorded sample pressure gauge reading during the collection will be compared to the sample pressure gauge reading before the analysis process begins to ensure that a leak has not occurred. If liquid pressure is less than 200 psi, the gauge must be capable of measuring within 10% accuracy. If liquid pressure is more than 200 psi, the gauge must be capable of measuring within 5% accuracy. The temperature gauge shall be capable of reading liquid temperature within 2°F and the range of the gauge must be at least 32°F to 200°F

In addition, the vessel pressure and temperature should be recorded using calibrated equipment provided by the sampling team. Calibration

certificates will be provided for the calibrated temperature and pressure sensors to be used during the sampling program. The temperature should be recorded from an inline temperature probe on the sampling apparatus but as a best practice should be verified against the temperature gauge residing permanently on the vessel. The pressure should be recorded from the sampling apparatus gauge but as a best practice should be verified against the pressure gauge residing permanently on the vessel. Recording temperature with an infrared radiography (IR) device (alone or without secondary verification) is not permitted.

After the sample has been collected and prior to transportation, the technician will ensure the sample cylinder valves are not leaking and will secure external valve connections with tape.

- 4. Labeling, Handling, and Transportation of Sample Cylinders
  - a. The below information shall be provided to the technician performing sampling and the technician shall record the below information:
    - i. Date and time
    - ii. Sample ID number or cylinder number
    - iii. Sample type (crude oil, condensate, or produced water)
    - iv. Vessel pressure and temperature during sampling
    - v. Facility name and location where sample was gathered
    - vi. Vessel description (i.e. first stage separator, heater treater, storage tank)
    - vii. Well name
  - b. Labels or tags should be completed and associated to each sample container with the following information:
    - i. Container ID
    - ii. Container contents
    - iii. Sample source
    - iv. Pressure and temperature of the sampled source stream near the sample point
    - v. Date and time of collection
    - vi. Field technician name
    - vii. Ambient temperature and pressure
    - viii. Transportation labeling requirements are often unnecessary due to sample weight limits falling below requirements outlined in 49 CFR 172.301. When samples are transported via commercial carriers, Class 3 and UN 1993 labeling will be used according to the 49 CFR 172.101 Hazardous Material Table.

# Pressurized Hydrocarbon Liquid Analysis Method

- 1. Processing and Handling
  - a. Once the lab has received the sample cylinder, the pressure and sampling outage records shall be checked to verify that the cylinder wasn't filled above 80%.

- b. The sample cylinder shall be inspected for leaks upon arrival to the laboratory.
- c. The sample cylinder shall be logged and assigned a job number for tracking procedures performed upon it from receipt, through QA/QC, extended gas analysis, and post job storage and cylinder cleaning.
- d. Sample cylinders shall be stored in an environmentally controlled location. Any samples suspected of containing reactive materials shall be stored in an inert environment.

#### 2. Bubble Point Verification

- a. A bubble point verification will be performed as a sample QA/QC check to demonstrate that a pressurized liquid hydrocarbon sample did not contain material amounts of entrained gas at the time of sampling and that the sample has not been compromised prior to testing.
  - i. Input a volume of laboratory grade water into the cylinder that matches the  $\sim \! \! 10\%$  outage removed during the sample collection. Confirm rate of increase of pressure occurs at similar volume to outage as rough sample check.
  - ii. Continue the addition of water until the sample cylinder pressure is roughly 200-300 psi over the sampling pressure while measuring the volume of water added.
  - iii. Place the sample cylinder in the sample over to increase the temperature to the sampled temperature. Once the pressure readout has stabilized, invert the sample cylinder multiple times to ensure a well-mixed and homogenous sample then wait until pressure has stabilized again.
  - iv. Take pressure measurements while letting out increments of .5 mL and plot.
  - v. Plot the pressure and volume of water removed and identify the breakover point that indicates the bubble point pressure
  - vi. If the calculated bubble point pressure is  $\pm 30\%$  from the field sample pressure, then that sample shall not be used and the lab shall contact Matador to discuss the results. If verification was not able to be achieved on either sample, then resampling will need to be performed.

### 3. Extended Hydrocarbon Analysis (GPA 2186)

- a. Connect the sample cylinder up to the water pump and inject water into the sample cylinder until the pressure is at least 200-300 psi above the bubble point. During system purge and analysis, ensure the cylinder pressure remains in this range to avoid and flashing of the sample.
- b. All connections and tubing from the sample cylinder to the gas chromatograph shall be made of stainless steel, utilizing the smallest diameter and shortest length of plumbing practical to minimize dead space. Prior to beginning the analysis, mix the sample cylinder by inverting multiple times, then purge the plumbing to the sampling

- valve with the pressurized liquid hydrocarbon sample while maintaining sample cylinder pressure above the bubble point.
- c. Directly inject pressurized liquid sample, in one homogeneous injection, on the gas chromatograph, equipped with TCD detection, by means of a high pressure liquid sampling valve and back pressure valve.
- d. In lab, flash a portion of the pressurized liquid and stabilize hydrocarbon liquid before running on a gas chromatograph with an FID.
- e. Using Determine Reid Vapor Pressure (RVP) of the tank liquid via ASTM D6377 (Determination of Vapor Pressure of Crude: VPCRx).
- f. Measure the storage tank liquid specific gravity by ASTM D4052/5002
- g. The TCD and FID will be combined using a Bridging Calculation Methodology to give a complete summary extended liquids analysis report for entry into emission modeling programs and a more detailed report.
- h. The target analytes are included in the following tables and the expected accuracy of the analytical method is 98% and above.

#### Table 2A - List of Typical Components in a Natural Gas Liquid Sample

- 2. Ethane
- 3. Propane
- 4. Isobutane
- n-Butane
- 6. Isopentane
- n-Pentane
- 2,2-Dimethylbutane
- Cyclopentane 2,3-Dimethylbutane
- 10. 2-Methylpentane
- 11. 3-Methylpentane
- 12. n-Hexane
- 13. 2,2-Dimethylpentane
- Methylcyclopentane
- 15. 2,4-Dimethylpentane
- 16. 2,2,3-Trimethylbutane
- 17. Benzene
- 18. 3,3-Dimethylpentane
- Cyclohexane
- 20. 2-Methylhexane
- 21. 2,3-Dimethylpentane
- 22. 1,1-Dimethylcyclopentane
- 23. 3-Methylhexane
- 24. 1, trans-3-Dimethylcyclopentane
- 25. 1, cis-3-Dimethylcyclopentane
- 26. 1, trans-2-Dimethylcyclopentane
- 27. n-Heptane
- 28. Methylcyclohexane
  - 1,1,3-Trimethylcyclopentane 2,2-Dimethylhexane
- 29. 1, cis-2-Dimethylcyclopentane
- 30. 2,5- Dimethylhexane
- 31. 2,4-Dimethylhexane 2,2,3-Trimethylpentane
- Ethylcyclopentane 32. 3,3-Dimethylhexane
- 1, trans-2, cis-4-Trimethylcyclopentane
- 33. 1, trans-2, cis-3-Trimethylcyclopentane
- 34. 2,3,4-Trimethylpentane
- 35. Toluene
- 2,3 Dimethylhexane
- 37. 1,1,2-Trimethylcyclopentane
- 38. 2-Methylheptane
- 39. 4-Methylheptane
- 40. 3,4-Dimethylhexane
- 41. 3-Methylheptane
- 3-Ethylhexane
- 1, cis-3-Dimethylcyclohexane
  - 1, cis-2, trans-3-Trimethylcyclopentane 1, cis-2, trans- 4-Trimethylcyclopentane
- 43. 1, trans, 4-Dimethylcyclohexane
- 44. 2,2,5-Trimethylhexane
- 45. 1,1-Dimethylcyclohexane
- 46. 1-Methyl, trans-3-ethylcyclopentane
- 47. 1-Methyl, cis-3-ethylcyclopentane

- 48. 1-Methyl, trans-2-ethyl-cyclopentane 2,2,4-Trimethylhexane
- Cycloheptane
- 1-Methyl, 1-ethylcyclopentane
- n-Octane
- 1, trans-2-Dimethylcyclohexane
- 51. Unknown
- 52. 1, trans-3-Dimethylcyclohexane 1, cis, 4-Dimethylcyclohexane
  - 1, cis-2, cis-3-Trimethylcyclopentane
- Isopropylcyclopentane
- 54. Unknown
- 55. 2,2-Dimethylheptane
- 2,4-Dimethylheptane 56.
  - 1-Methyl, cis-2-ethylcyclopentane
- 57. 2,2,3-Trimethylhexane
- 58. 2,6-Dimethylheptane
  - 1, cis-2-Dimethylcyclohexane
- 59. n-Propylcyclopentane
- 1, cis-3, cis-5-Trimethylcyclohexane
- 2,5-Dimethylheptane
- 3,5-Dimethylheptane
- 61. Ethylcyclohexane
- 62. 3,3-Dimethylheptane, 2,3,3-Trimethylhexane
  - 1,1,3-Trimethylcyclohexane
- 63. 1,1,4-Trimethylcyclohexane
- 64. Unknown
- 2,3,4-Trimethylhexane
- 66. Ethylbenzene
- 1, trans-2, trans-4-Trimethylcyclohexane 67.
- 2,3-Dimethylheptane
- 1, cis-3, trans-5-Trimethylcyclohexane
- meta-Xylene
  - para-Xylene
- 3,4-Dimethylheptane
- 70. 2-Methyloctane
- 4-Methyloctane 71. Unknown
- 72. 3-Methyloctane
- 73. Unknown
- 74. Unknown
- 1, trans-2, cis-3-Trimethylcyclohexane 1, trans-2, cis-4-Trimethylcyclohexane
- ortho-Xylene
- 77. 1,1,2-Trimethylcyclohexane
- 78. Unknown
- Unknown 79.
- 80. N-Nonane
- Unknown
- 82. Unknown 83. Unknown
- 1, cis-2, trans- 3-Trimethylcyclohexane 1, cis-2, cis-3-Trimethylcyclohexane
- 85. Unknown
- 86. Isopropylbenzene
- 87. 2,2-Dimethyloctane

Table 2B - List of Typical Components in a Natural Gas Liquid Sample

88.	Isopropylhexane	121. Unknown
	Cyclooctane	122. 1-Methyl, 2-propylbenzene
	Unknown	123. Unknown
90.	Unknown	124. N-Butylcyclohexane
	Unknown	125. Unknown
-	Unknown	126. 1,3-Diethylbenzene
	n-Butylcyclopentane	1-Methyl, 3-propylbenzene
	n-Propylcyclohexane	127. n-Butylbenzene.
94	3.3-Dimethyloctane	1,2-Diethylbenzene
	Unknown	1 Methyl, 4 proplybenzene
96.	Unknown	128. 1,4-Diethylbenzene
97.	n-Propylbenzene	129. 1-Methyl, 2-propylbenzene
	Unknown	130. 1,4-Dimethyl, 2-ethylbenzene
	meta-Ethyltoluene	131. Unknown
	para-Ethyltoluene	132. Unknown
	2.3- Dimethyloctane	133 1,2-Dimethyl, 4-ethylbenzene
101	4-Methylnonane	134. 1,3-Dimethyl, 2 ethylbenzene
	5-Methylnonane	135. Unknown
	1,3,5-Trimethylbenzene	136. 1,2-Dimethyl, 3-ethylbenzene
102.	2-Methylnonane	137. Unknown
	3-Ethyloctane	138. n-Undecane
	ortho-Ethyltoluene	139. Unknown
	3-Methylnonane	140. 2-Methyl, n-butylbenzene
105.	Unknown	141. Unknown
106	Unknown	142. 1,2,4,5 Tetramethylbenzene
107.	Unknown	143. 1,2,3,5-Tetramethylbenzene
108.	Unknown	144. Unknown
109.	1,2,4-Trimethylbenzene,	145. Unknown
	tert-Butylbenzene	146. 1-Butyl, 2-methylbenzene
	Methylcyclooctane	147. Unknown
110.	tert-Butylcyclohexane	148. 1,2,3,4-Tetramethylbenzene
	Isobutylcyclohexane	Cyclodecane
	n-Decane	149. Unknown
113.	Isobutylbenzene	150. Unknown
114.	sec-Butylbenzene	151. n-Pentylbenzene
	Unknown	152. Unknown
116.	1-Methyl, 3-isopropylbenzene	153. Unknown
	1.2,3-Trimethylbenzene	154. 1-tert, Rutyl-3, 5-dimethylbenzene
	1-Methyl, 4-isopropylbenzene	155. Unknown
	Unknown	156. Naphthaleuc
120.	Unknown	157. n-Dodecane

i. The Minimum Detection Limit of the C5 and lighter components are listed in the table below

Table 1 - Components and Compositional Ranges Allowed (mole %)

Component	Lower R	lange 1	RR Range		Upper Range 1	
Nitrogen	0.01	0.11	0.12	4.90	4.91	5.00
Carbon Dioxide	0.01	0.02	0.03	5.29	-	-
Methane	0.01	0.04	0.05	25.77	25.78	40.00
Ethane	0.01	0.06	0.07	24.80	-	-
Propane	0.01	0.04	0.05	25.43	-	-
i-Butane	0.01	0.05	0.06	25.11	-	-
n-Butane	0.01	0.04	0.05	25.09	-	-
i-Pentane	0.01	0.20	0.21	26.02	-	-
n-Pentane	0.01	0.19	0.20	25.07	-	-
Hexanes + 2	20.00					100.00

<sup>&</sup>lt;sup>1</sup> Range of original scope but not evaluated in the round robin

<sup>&</sup>lt;sup>2</sup> Included in blends but not included in the round robin since these values are calculated and not determined in the gas chromatography portion of the analysis

## 4. Reporting

a. An example report is included below for reference and this template will be followed for liquid hydrocarbon analyses.

January 9, 2018

#### FESCO, Ltd. 1100 FESCO Avenue - Alice, Texas 78332

For: Matador Production Company One Lincoln Centre 5400 LBJ Freeway, Suite 1500 Dallas, Texas 75240

Sample: Ranger 33 State COM No. 123H

First Stage Separator Hydrocarbon Liquid

Sampled @ 88 psig & 88 °F

Date Sampled: 12/06/17 Job Number: 74172.002

#### **CHROMATOGRAPH EXTENDED ANALYSIS - GPA 2186-M**

COMPONENT	MOL %	LIQ VOL %	WT %
Nitrogen	0.039	0.007	0.007
Carbon Dioxide	0.047	0.013	0.013
Methane	1.906	0.525	0.194
Ethane	3.149	1.369	0.600
Propane	5.780	2.589	1.615
Isobutane	1.361	0.724	0.501
n-Butane	4.950	2.537	1.823
2,2 Dimethylpropane	0.056	0.035	0.026
Isopentane	2.461	1.463	1.125
n-Pentane	3.119	1.838	1.426
2,2 Dimethylbutane	0.020	0.013	0.011
Cyclopentane	0.000	0.000	0.000
2,3 Dimethylbutane	0.583	0.388	0.318
2 Methylpentane	1.134	0.765	0.619
3 Methylpentane	0.794	0.527	0.434
n-Hexane	1.734	1.159	0.947
Heptanes Plus	72.869	86.047	90.340
Totals:	100.000	100.000	100.000

#### **Characteristics of Heptanes Plus:**

Specific Gravity	0.8533	(Water=1)
°API Gravity	34.32	@ 60°F
Molecular Weight	195.6	
Vapor Volume	13.85	CF/Gal
Weight	7.11	Lbs/Gal

## **Characteristics of Total Sample:**

Specific Gravity	0.8128	(Water=1)
°API Gravity	42.59	@ 60°F
Molecular Weight	157.8	
Vapor Volume	16.35	CF/Gal
Weight	6.77	Lbs/Gal

Base Conditions: 14.650 PSI & 60 °F

Certified: FESCO, Ltd. - Alice, Texas

Sampled By: EJ Garza Analyst: XG Processor: XGdjv Cylinder ID: W-2714

David Dannhaus 361-661-7015

FESCO, Ltd. Job Number: 74172.002

### TANKS DATA INPUT REPORT - GPA 2186-M

COMPONENT	Mol %	LiqVol %	Wt %
Carbon Dioxide	0.047	0.013	0.013
Nitrogen	0.039	0.007	0.007
Methane	1.906	0.525	0.194
Ethane	3.149	1.369	0.600
Propane	5.780	2.589	1.615
Isobutane	1.361	0.724	0.501
n-Butane	5.006	2.572	1.849
Isopentane	2.461	1.463	1.125
n-Pentane	3.119	1.838	1.426
Other C-6's	2.530	1.694	1.382
Heptanes	8.613	5.536	5.005
Octanes	8.400	6.061	5.645
Nonanes	5.489	4.656	4.404
Decanes Plus	42.561	65.599	70.768
Benzene	2.287	1.040	1.132
Toluene	3.700	2.015	2.161
E-Benzene	0.160	0.100	0.107
Xylenes	1.660	1.041	1.117
n-Hexane	1.734	1.159	0.947
2,2,4 Trimethylpentane	0.000	0.000	0.000
Totals:	100.000	100.000	100.000

## Characteristics of Total Sample:

Specific Gravity	0.8128	(Water=1)
°API Gravity	42.59	@ 60°F
Molecular Weight	157.8	
Vapor Volume	16.35	CF/Gal
Weight	6.77	Lbs/Gal

## Characteristics of Decanes (C10) Plus:

Specific Gravity	0.8768	(Water=1)
Molecular Weight	262.3	

## Characteristics of Atmospheric Sample:

°API Gravity	38.34	@ 60°F
Reid Vapor Pressure Equivalent (D-6377)	8.85	psi

QUALITY CONTROL CHECK					
Sampling Conditions Test Samples					
Cylinder Number		W-2714*	W-2486		
Pressure, PSIG	88	78	77		
Temperature, °F	88	70	70		

<sup>\*</sup> Sample used for analysis

FESCO, Ltd.  TOTAL EXTENDED REPORT - GPA 2186-M			Job Number: 74172.002
COMPONENT	Mol %	LiqVol %	Wt %
Nitrogen	0.039	0.007	0.007
Carbon Dioxide	0.047	0.013	0.013
Methane	1.906	0.525	0.194
Ethane	3.149	1.369	0.600
Propane	5.780	2.589	1.615
Isobutane	1.361	0.724	0.501
n-Butane	4.950	2.537	1.823
2,2 Dimethylpropane	0.056	0.035	0.026
Isopentane	2.461	1.463	1.125
n-Pentane	3.119	1.838	1.426
2,2 Dimethylbutane	0.020	0.013	0.011
Cyclopentane	0.000	0.000	0.000
2,3 Dimethylbutane	0.583	0.388	0.318
2 Methylpentane	1.134	0.765	0.619
3 Methylpentane	0.794	0.527	0.434
n-Hexane	1.734	1.159	0.947
Methylcyclopentane	1.726	0.993	0.921
Benzene	2.287	1.040	1.132
Cyclohexane	2.751	1.522	1.467
2-Methylhexane	0.748	0.565	0.475
3-Methylhexane	0.655	0.489	0.416
2,2,4 Trimethylpentane	0.000	0.000	0.000
Other C-7's	1.479	1.026	0.930
n-Heptane Methylcyclohexane	1.255 3.296	0.941 2.154	0.797 2.051
Toluene	3.700	2.015	2.161
Other C-8's	3.987	2.977	2.785
n-Octane	1.116	0.930	0.808
E-Benzene	0.160	0.100	0.107
M & P Xylenes	1.150	0.725	0.774
O-Xylene	0.510	0.315	0.343
Other C-9's	4.520	3.769	3.616
n-Nonane	0.969	0.887	0.788
Other C-10's	4.305	3.946	3.855
n-decane	0.815	0.813	0.735
Undecanes(11)	4.212	3.961	3.924
Dodecanes(12)	3.254	3.305	3.320
Tridecanes(13)	3.458	3.766	3.835
Tetradecanes(14)	3.123	3.643	3.761
Pentadecanes(15)	2.519	3.147	3.288
Hexadecanes(16)	2.219	2.963	3.122
Heptadecanes(17)	1.862	2.630	2.797
Octadecanes(18)	1.833	2.725	2.916
Nonadecanes(19) Eicosanes(20)	1.714 1.326	2.656 2.135	2.858 2.311
Heneicosanes(21)	1.192	2.019	2.198
Docosanes(22)	1.063	1.877	2.055
Tricosanes(23)	0.918	1.679	1.849
Tetracosanes(24)	0.889	1.685	1.865
Pentacosanes(25)	0.882	1.736	1.929
Hexacosanes(26)	0.630	1.283	1.433
Heptacosanes(27)	0.744	1.572	1.763
Octacosanes(28)	0.648	1.415	1.592
Nonacosanes(29)	0.643	1.451	1.638
Triacontanes (30)	0.593	1.380	1.563
Hentriacontanes Plus(31+) Total	3.722	13.813	16.161 100.000
I Otal	100.000	100.000	100.000

Page 3 of 3

- 5. Flash Gas Composition Calculation
  - a. Ensure the sample conditions are sufficient to simulate the highest anticipated pressure scenario for flash emissions at the stock tanks.
    - i. In the case of multiple stages of separation, if the sample is collected from the first stage separator at a pressure in excess of the MAOP of the subsequent heater treater or vapor recovery tower, the sample will suffice, and a historical lookback is not necessary.
    - ii. If a single stage separator is used or the first stage separator sample pressure is below the MAOP of the heater treater, the highest anticipated pressure scenario will be identified using the 95<sup>th</sup> percentile pressure in trailing 12 month historical data (where available) or reasonable engineering judgement based on flare valve set pressure, pressure kill setpoints at the facility, etc. The sample will be deemed sufficient for PTE process simulation if the sample pressure exceeds this identified highest anticipated pressure.
  - b. Add pseudo components from the Extended Liquid Hydrocarbon Analysis into a ProMax environment and add the components from the lab analysis into Promax process streams.
  - c. Set the equation of state being used to Peng Robinson for the flash gas simulation.
  - d. Check calculated vapor pressure for secondary comparison to sample vapor pressure
  - e. Build out a process flow diagram in ProMax to match Matador production equipment and input anticipated operating pressures and temperature into the separator (ensuring the same or more conservative inputs than the sample conditions), applicable intermediate pressure vessels and tanks and build out process flow to match Matador production equipment to tanks.
    - i. Tank temperature conditions are set per site location with meteorological data according to AP-42, 5<sup>th</sup> Edition, Volume I, Chapter 7.
    - ii. Tank pressure is set at PVRV setpoint or below.
  - f. Flash Gas composition at the tanks is then recorded for emissions calculations.
- 6. Matador will determine flash emissions rates from produced water storage tanks by utilizing process simulation. In the process simulation software, water and representative hydrocarbon extended analyses are introduced upstream of the 1st stage of separation and processed through the stages of separation to determine the resulting flash at the water tanks. Refer to the approved Design Assessment Methodology (DAM) for additional steps when modelling the produced water flash emissions for the Engineering Evaluation.

## Representative Sample Selection Methodology

Use of site-specific samples is preferred for emissions estimations, but not always practical due to processing time frames. A representative sample may be used for emissions determinations when the sample was collected and analyzed consistent with the Pressured Hydrocarbon Liquid Sampling and Analysis Plan above and it meets the criteria outlined below:

First, if the representative analysis is from a production/exploration site, it is critical that the representative sample has originated from the same producing reservoir/formation as the actual site stream. This geologic criterion is an appropriate limitation because it is likely that a reservoir will have the same basic material characteristics and components at least within a certain area of a reservoir. The distance between the facility from which the representative sample was collected and the location for which emissions estimations are being performed will not exceed 25 miles.

Second, the petroleum liquids being produced at the representative and the actual site must have a similar API gravity, plus/minus three degrees, as an indicator that they are of similar composition. API gravity is used throughout the industry to differentiate between heavy/light oil and condensate streams and can be easily obtained by the owner/operator.

Third, for the representative sample of a stream to give a reasonably accurate emissions estimate, the sample needs to be taken from a site that processes the stream in a similar manner as the actual site. The streams must be treated similarly at both sites because the output of one process may be in the inlet to another process. Gas and liquids need to be separated in a similar manner since this can greatly affect the flash emissions due to the strong effect of changes in pressure and temperature on the vapor-liquid equilibrium. Since this is a critical portion of determining if a sample is representative, the process/conditioning/vessel immediately before where the sample is taken must be within  $\pm 20$  psi pressure and  $\pm 20$  degrees Celsius temperature of the process/conditioning/vessel stream that is being represented. In the case of emissions estimations through process simulation, the sample will meet this representative criteria if it was collected above the bubble point of the highest anticipated pressure operating conditions of the downstream vessel being simulated.

It is recommended that multiple similar sites to the actual site are reviewed and the site that yields the highest estimate of emissions be used as the representative site. This will ensure that the actual site emissions are most likely less than the site actually sampled. It is also recommended that the representative analysis be as recent as possible, but no more than 3 years old, in order to provide the most current and accurate data.

# **Appendix C:**

Matador Oil Company Well Pads with Storage Vessel Systems in New Mexico Subject to 40 C.F.R. § 60.5395a(a)(2) as of the Date of Lodging

Tank Battery ID	Facility	County	Latitude	Longitude
289	ACE STERN VEGAS TB	Eddy	32.37585703	-104.1003164
162	AIRSTRIP 31-18S-35E RN TB	Lea	32.69785	-103.504934
157	ANNE COM 15 TB	Eddy	32.220795	-104.08123
151	B BANKER TB	Eddy	32.2663	-104.083335
347	BIG BUCKS FED TB	Lea	32.49849	-103.6271
348	BIG MOOSE FED TB	Lea	32.50152	-103.6342
250	BIGGERS FED EAST TB	Lea	32.12464733	-103.405531
218	BIGGERS FED WEST TB	Lea	32.12498988	-103.4104461
287	BOROS FED EAST TB	Eddy	32.04880319	-103.7617445
285	BOROS FED WEST TB	Eddy	32.0488655	-103.770337
237	BRAD LUMMIS FED COM TB	Lea	32.20862404	-103.4436733
234	BRUCE KEPLINGER TB	Lea	32.473425	-103.419935
229	CARL MOTTEK FED TB	Lea	32.22350818	-103.4967623
232	CHARLES LING FED EAST TB	Lea	32.23766734	-103.5382397
233	CHARLES LING FED WEST TB	Lea	32.23810323	-103.5470257
153	CHARLIE SWEENEY 31 TB	Eddy	32.270202	-104.131457
198	CHARLIE SWEENEY FED TB	Eddy	32.255297	-104.119587
21	CIMARRON STATE 16 TB	Lea	32.665713	-103.559249
180	COLEMAN NORTH TB	Eddy	32.305255	-104.153791
146	CONINE 03-20S-35E RN	Lea	32.6053282	-103.4498504
181	D CULBERTSON 26-15S-36E TL STATE TB	Lea	32.98254924	-103.2686685
251	DR. LANA WHITE TB	Eddy	32.21496	-104.03429
147	DR. K SOUTH TB	Eddy	32.28422	-104.149659
156	DR. SCRIVNER FED COM TB	Eddy	32.242709	-104.03517

Tank Battery ID	Facility	County	Latitude	Longitude
346	EAST LIVINGSTON 31 FED TB	Lea	32.98255	-103.2687
164	ELAND 32 STATE TB	Lea	32.697841	-103.679634
353	EMPEROR OIL CO FED B-1 TB	Eddy	32.5461655	-103.9793625
195	FEDERAL 30 SLOT 3 TB	Lea	32.63752936	-103.7010366
201	FLORENCE STATE 23-23S-34E AR TB	Lea	32.284516	-103.442748
192	FOREHAND RANCH 35-23S-27E TB	Eddy	32.254642	-104.163778
200	GARRETT FED COM TB	Eddy	32.179769	-104.012099
243	GENERAL KEHOE TB	Eddy	32.253061	-104.053414
247	GREVEY COM TB	Lea	32.03339522	-103.3959969
28	GUITAR 10 TB	Eddy	32.235375	-104.067938
186	HEYCO STATE TB	Eddy	32.53147678	-104.000658
145	HIBISCUS STATE COM TB	Lea	32.68287582	-103.4735402
215	IRVIN WALL TB	Lea	32.25452574	-103.39439
255	JACK SLEEPER ST COM TB	Eddy	32.329274	-104.10132
361	JACKSON COKER TB	Lea	32.849697	-103.216631
154	JANIE CONNER TB	Eddy	32.216682	-104.050357
244	JEFF HART EAST TB	Lea	32.27063554	-103.4196001
33	JIM ROLFE	Lea	32.72762264	-103.5549438
149	JIMMY KONE TB	Eddy	32.246228	-104.10287
222	KEMNITZ NE 22-16S-34E TB	Lea	32.90121549	-103.5451556
169	LANDRETH FED COM TB	Lea	32.28352337	-103.4316972
249	LEATHERNECK NORTH TB	Eddy	32.54869188	-104.1202576
341	LEATHERNECK SOUTH TB	Eddy	32.541278	-104.120535
204	LEO THORSNESS 13 TB	Lea	32.222926	-103.533884
220	LESLIE FED COM EAST TB	Lea	32.12445942	-103.3854494

Tank Battery ID	Facility	County	Latitude	Longitude
238	LESLIE FED COM WEST TB	Lea	32.12422973	-103.3917871
158	MALLON 27 FED COM TB	Lea	32.624872	-103.545301
213	MARBOB 19 ST COM TB	Eddy	32.64622359	-104.1207764
203	MARLAN DOWNEY 09 TB	Lea	32.326109	-103.37603
253	MARLAN DOWNEY EAST TB	Lea	32.334148	-103.370934
202	MISS SUE 12-23S-27E RB TB	Eddy	32.323191	-104.155535
355	MONGOOSE FEE 1H TB	Lea	32.6876183	-103.5209808
224	NINA CORTEL WEST FED COM TB	Lea	32.41386302	-103.6680352
254	NOEL HENSLEY FED COM TB	Eddy	32.209222	-104.130195
366	OCOTILLO SUNRISE TB	Lea	32.13605	-103.45194
148	OLIVINE STATE TB	Lea	32.96440321	-103.2664915
150	PAUL TB	Eddy	32.195713	-104.048749
44	PICKARD STATE	Lea	32.7286964	-103.5794607
47	RANGER 33	Lea	32.53573145	-103.4700511
282	RAY STATE COM SLOT 3 TB	Eddy	32.25457	-104.04446
258	RODNEY ROBINSON NORTH TB	Lea	32.33978	-103.616396
49	RUSTLER BREAKS 12-24-27 TB	Eddy	32.226319	-104.137336
61	SCOTT WALKER 36 TB	Eddy	32.342733	-104.148196
171	SHEARN STATE COM TB	Lea	32.254582	-103.396555
228	SST NORTH 06-19S-29E TB	Eddy	32.69642167	-104.1210145
211	SST SOUTH 06-19S-29E TB	Eddy	32.68587824	-104.106607
197	STEBBINS FED 19 SLOT 3 TB	Eddy	32.55788478	-104.1077507
175	STEBBINS FED 20 SLOT 3 TB	Eddy	32.556442881	-104.106030
193	STEBBINS FED 20 SLOT 4 TB	Eddy	32.55294773	-104.1056132
295	TED PAUP FED TB	Eddy	32.533	-104.088

# Appendix D:

Matador Oil Company Well Pads with Storage Vessel Systems
Subject to 20.2.72 NMAC as of the Date of Lodging

Tank Battery ID	Facility	County	Latitude	Longitude
289	ACE STERN VEGAS TB	Eddy	32.37585703	-104.1003164
162	AIRSTRIP 31-18S-35E RN TB	Lea	32.69785	-103.504934
157	ANNE COM 15 TB	Eddy	32.220795	-104.08123
151	B BANKER TB	Eddy	32.2663	-104.083335
347	BIG BUCKS FED TB	Lea	32.49849	-103.6271
348	BIG MOOSE FED TB	Lea	32.50152	-103.6342
250	BIGGERS FED EAST TB	Lea	32.12464733	-103.405531
218	BIGGERS FED WEST TB	Lea	32.12498988	-103.4104461
362	BO HOWARD TB	Eddy	32.5	-104.135429
287	BOROS FED EAST TB	Eddy	32.04880319	-103.7617445
285	BOROS FED WEST TB	Eddy	32.0488655	-103.770337
237	BRAD LUMMIS FED COM TB	Lea	32.20862404	-103.4436733
234	BRUCE KEPLINGER TB	Lea	32.473425	-103.419935
229	CARL MOTTEK FED TB	Lea	32.22350818	-103.4967623
232	CHARLES LING FED EAST TB	Lea	32.23766734	-103.5382397
233	CHARLES LING FED WEST TB	Lea	32.23810323	-103.5470257
153	CHARLIE SWEENEY 31 TB	Eddy	32.270202	-104.131457
198	CHARLIE SWEENEY FED TB	Eddy	32.255297	-104.119587
21	CIMARRON STATE 16 TB	Lea	32.665713	-103.559249
180	COLEMAN NORTH TB	Eddy	32.305255	-104.153791
181	D CULBERTSON 26-15S-36E TL STATE TB	Lea	32.98254924	-103.2686685
364	DEE OSBORNE TB	Lea	32.47118	-103.409742
251	DR. LANA WHITE TB	Eddy	32.21496	-104.03429
147	DR. K SOUTH TB	Eddy	32.28422	-104.149659

Tank Battery ID	Facility	County	Latitude	Longitude
156	DR. SCRIVNER FED COM TB	Eddy	32.242709	-104.03517
174	EAGLE 2 STATE NORTH TB	Lea	32.60372527	103.5327488
346	EAST LIVINGSTON 31 FED TB	Lea	32.98255	-103.2687
164	ELAND 32 STATE TB	Lea	32.697841	-103.679634
353	EMPEROR OIL CO FED B-1 TB	Eddy	32.5461655	-103.9793625
195	FEDERAL 30 SLOT 3 TB	Lea	32.63752936	-103.7010366
201	FLORENCE STATE 23-23S-34E AR TB	Lea	32.284516	-103.442748
192	FOREHAND RANCH 35-23S-27E TB	Eddy	32.254642	-104.163778
200	GARRETT FED COM TB	Eddy	32.179769	-104.012099
363	GAVILON FED TB	Lea	32.524475	-103.672067
243	GENERAL KEHOE TB	Eddy	32.253061	-104.053414
247	GREVEY COM TB	Lea	32.03339522	-103.3959969
28	GUITAR 10 TB	Eddy	32.235375	-104.067938
186	HEYCO STATE TB	Eddy	32.53147678	-104.000658
367	HORSHOE FED TB	Lea	32.472387	-103.607194
215	IRVIN WALL TB	Lea	32.25452574	-103.39439
255	JACK SLEEPER ST COM TB	Eddy	32.329274	-104.10132
361	JACKSON COKER TB	Lea	32.849697	-103.216631
154	JANIE CONNER TB	Eddy	32.216682	-104.050357
244	JEFF HART EAST TB	Lea	32.27063554	-103.4196001
374	JEFF HART WEST TB	Lea	32.269069	-103.428976
149	JIMMY KONE TB	Eddy	32.246228	-104.10287
249	LEATHERNECK NORTH TB	Eddy	32.54869188	-104.1202576
341	LEATHERNECK SOUTH TB	Eddy	32.541278	-104.120535
204	LEO THORSNESS 13 TB	Lea	32.222926	-103.533884

Tank Battery ID	Facility	County	Latitude	Longitude
220	LESLIE FED COM EAST TB	Lea	32.12445942	-103.3854494
238	LESLIE FED COM WEST TB	Lea	32.12422973	-103.3917871
158	MALLON 27 FED COM TB	Lea	32.624872	-103.545301
213	MARBOB 19 ST COM TB	Eddy	32.64622359	-104.1207764
203	MARLAN DOWNEY 09 TB	Lea	32.326109	-103.37603
253	MARLAN DOWNEY EAST TB	Lea	32.334148	-103.370934
378	MICHAEL RYAN FED TB	Eddy	32.389	-104.101
202	MISS SUE 12-23S-27E RB TB	Eddy	32.323191	-104.155535
377	MONIKA TB	Lea	32.836159	-103.221105
224	NINA CORTEL WEST FED COM TB	Lea	32.41386302	-103.6680352
360	NINA CORTELL SOUTH FED COM TB	Lea	32.399364	-103.660139
254	NOEL HENSLEY FED COM TB	Eddy	32.209222	-104.130195
366	OCOTILLO SUNRISE TB	Lea	32.13605	-103.45194
150	PAUL TB	Eddy	32.195713	-104.048749
44	PICKARD STATE	Lea	32.7286964	-103.5794607
375	PONY EXPRESS FED WEST TB	Lea	32.579263	-103.664217
282	RAY STATE COM SLOT 3 TB	Eddy	32.25457	-104.04446
258	RODNEY ROBINSON NORTH TB	Lea	32.33978	-103.616396
294	RODNEY ROBINSON SOUTH TB	Lea	32.31324323	-103.605654
49	RUSTLER BREAKS 12-24-27 TB	Eddy	32.226319	-104.137336
61	SCOTT WALKER 36 TB	Eddy	32.342733	-104.148196
228	SST NORTH 06-19S-29E TB	Eddy	32.69642167	-104.1210145
211	SST SOUTH 06-19S-29E TB	Eddy	32.68587824	-104.106607
197	STEBBINS FED 19 SLOT 3 TB	Eddy	32.55788478	-104.1077507
175	STEBBINS FED 20 SLOT 3 TB	Eddy	32.556443	-104.106030

# Appendix E: <u>Directed Inspection / Preventative Maintenance Program</u> For Subject Vapor Control Systems

- 1. Matador shall develop a DI/PM Plan that includes: (a) a schedule for the performance of all requirements set forth in this Appendix E, and (b) Standard Operating Procedures ("SOPs") for each of the inspection and maintenance programs listed in Paragraph 2 of this Appendix, below.
- 2. Matador shall develop Standard Operating Procedures ("SOP") for the following aspects of the DI/PM Plan:
- a. <u>Weekly AVO Inspections.</u> Matador shall perform an AVO Inspection at each Subject Vapor Control System on a weekly basis. Matador shall develop an SOP, informed by the Engineering Evaluations, for AVO Inspections. The SOP for weekly AVO inspections shall include:
- (1) Definitions for "audio," "visual," and "olfactory" components of AVO inspections to assist in training of the personnel who will conduct these inspections; and
- (2) Procedures for walk-around AVO inspection of all Vapor Control Systems and associated production equipment (*e.g.*, Separators) on a weekly basis (including while Storage Vessel(s) are receiving Produced Oil from Production Operations) to ensure that all equipment is operating properly and to check for hissing, hydrocarbon odors, new stains, or any other evidence of VOC emissions. In addition, the procedures shall include, but not be limited to:
- (i) As to the well: check for presence of choke and surface flowing pressure.
- (ii) As to the Separators and Heater-Treaters: check for final stage of separation maximum operating pressure and minimum temperature, set point of any device restricting final stage Separator or Heater-Treater dump flow rate, and ensure the valves are in the correct position.

- (iii) As to the Vapor Control System: check to ensure that PRDs are properly sealed; thief hatches are closed, latched, and properly sealed; other valves are in the correct position (*e.g.*, blowdown valve is not open); and that tank piping (*e.g.*, load line, blowdown line, vapor line) have no other observed or detected emissions.
- (iv) As to the VRUs and all control devices: check to ensure that the Flare Letdown Valve is closed whenever the pressure or flow to the flare is inconsistent with flare manufacturer specifications.
- (v) As to the combustion control devices: ensure that burner is operational and that there are no Visible Smoke Emissions; confirm the presence of a pilot light and that the liquid knockout is drained as necessary, inlet valves are functioning properly, and that the auto-ignitor is in good working condition.
- (vi) As to the pilot monitor, the tank pressure monitor, and the vapor inlet monitor: ensure that the data is being recorded at the required interval and being transmitted to a SCADA system;(vii) As to the Subject Vapor Control Systems: develop procedures for addressing ReliableInformation, including performing a Root Cause Analysis, and implementing corrective action.
- b. Monthly IR Camera Inspection Program. Matador shall develop an SOP for monthly IR
   Camera Inspections that includes, but is not limited to, the following procedures:
- (1) Matador shall perform an IR Camera Inspection at each Subject Vapor Control System on a monthly basis.
- (2) Matador shall record the date and time of all IR Camera Inspections and record and maintain a video of any emissions detected from the Vapor Control System during an IR Camera Inspection.

- (3) Matador shall maintain and provide the following records pertaining to each IR Camera Inspection in the Semi-Annual Report required pursuant to Paragraph 97 of the Consent Decree:
  - (i) The date, time, Well Pad, Subject Storage Vessel System, number of Storage Vessels inspected, and number of combustion devices inspected;
  - (ii) The date, time and description of any Reliable Information that is observed; and
  - (iii) The model and manufacturer, where available, of any combustion devices found with: a) VOC emissions observed (indicating incomplete combustion); or b) no pilot light present.

## c. Other Monthly Inspections.

- (1) Matador shall perform the bypass device inspection that is required by 40 C.F.R. § 60.5416a(c)(3).
- (2) Matador shall ensure that all signage at the Well Pad associated with each Subject Vapor Control System at each Well Pad (i) is of durable construction with lettering legible and large enough to be read under normal conditions at a distance of 50 feet; (ii) displays the property name, operator's name, township and range, and, if the well serving the Storage Vessel is located on the Well Pad, signage shall also display the well and API number; and (iii) remains in place until the well is plugged and abandoned.
- d. <u>Alternative Monitoring Plans.</u> Once per quarter (or on a more frequent basis if proposed by Matador and approved by EPA), Matador may comply with the requirements for IR Camera Inspection in subpart b of this Appendix through the use of an alternative monitoring plan approved by EPA after consultation with NMED.
- e. Preventative Maintenance. Matador shall develop an SOP for preventative maintenance that

includes, but is not limited to, maintenance, inspection, and replacement schedules for equipment subject to wear and tear. Such SOP shall include, but not be limited to, the following actions:

- (1) Clean and check PRV and thief hatch seals and gaskets for integrity, check that the spring in the thief hatch/PRV aligns with the parameter identified in the Engineering Evaluation (through visual observation), repair or replace any Compromised Equipment, clean or replace Flame Arrestor and air-intake, clean or replace burner tray, check proper operation of dump valve on Separator by manually actuating the dump valve and visually observing its operation (unless actuation occurs without manual activation during the inspection), and perform any other appropriate maintenance and inspection activities. These activities shall occur no less frequently than semi-annually.
- (2) Where Separator dump valve orifices are present, check to ensure they are in good condition and replace them as necessary. This shall occur no less frequently than annually.
- (3) Clear liquids from any lines where liquids can accumulate no less frequently than quarterly. Should maintenance activities or other inspection activities, including any Root Cause Analysis, indicate that liquids are accumulating in vapor lines and causing VOC emissions, Matador shall perform this maintenance more frequently to minimize the accumulation of liquids in vapor lines.
- f. <u>Spare Parts Program</u>. Matador shall develop an SOP for a Spare Parts Program that supports normal operation, maintenance, and replacement requirements. The SOP shall include written procedures for the acquisition of parts on an emergency basis (*e.g.*, vendor availability on a next-day basis), and evaluate appropriate parts to be kept on hand (*e.g.*, gaskets and seals for thief hatches kept on trucks and replacement PRVs kept at a central Matador location). No later than 30 Days after the Effective Date, Matador shall ensure that a current employee has been

designated with the responsibility to maintain an adequate spare parts inventory.

- g. Recordkeeping and Reporting. Matador shall establish and implement requirements for documentation of compliance with DI/PM practices and procedures, including documentation of the date of the inspection/maintenance activity, the observation of any Reliable Information, and the performance of any Corrective Action. Matador shall report all observations of Reliable Information and instances of corrective action in conducting inspections pursuant to the DI/PM Plan as required by Paragraph 97.
- h. <u>Training</u>. Matador shall ensure that all persons (*e.g.*, employees and contractors) responsible for implementation or execution of any part of the DI/PM program, except for independent contractors solely responsible for servicing equipment (*e.g.*, combustor manufacturer personnel replacing a burner tray), have completed training on the aspects of the DI/PM program, including any SOPs, that are applicable to the person's duties. Matador shall ensure that refresher training is performed once per calendar year and that new personnel are sufficiently trained prior to any involvement in the DI/PM program. New personnel training will include a job-shadowing program and refresher training shall include on-the-job review by supervising personnel or personnel familiar with the requirements of this Consent Decree and SOPs.
- i. <u>Annual Review</u>. Matador shall perform the following during each calendar year for each Subject Vapor Control System, and any other equipment subject to the DI/PM program:
- (1) A DI/PM program-trained employee or contractor of Matador, whose primary responsibilities do not include performing duties in the DI/PM program on a routine basis for the particular Subject Vapor Control System under evaluation, shall undertake the following for each Subject Vapor Control System, and any other equipment subject to the DI/PM, in consultation

with persons performing DI/PM program duties for that particular Subject Vapor Control System:

- (i) Verify that maintenance and inspection schedules and the replacement program have been followed at the appropriate frequency;
- (ii) Review maintenance and corrective action work records required to be maintained by this Consent Decree and records necessary to implement the DI/PM program for the Vapor Control System to confirm proper recordkeeping, timely response to all issues (*e.g.*, emissions or other operational issues), and determine if there are recurrent or systemic issues associated with a particular Vapor Control System; and
- (iii) Make any appropriate updates to the DI/PM program, including SOPs.
- (2) Upon completion of review of all Subject Vapor Control Systems, Matador shall evaluate whether there are recurrent or systemic issues across Matador's Subject Vapor Control Systems.
- (3) If Matador determines that actions need to be taken to address operations or maintenance activities at one or more Vapor Control Systems based on Matador's review described in this Paragraph 2(i), such as making appropriate updates to the DI/PM program, including SOPs, Matador shall take such actions as soon as practicable, but no later than 30 Days after completion of the Annual Review of all Subject Vapor Control Systems.
- (4) Matador shall complete the review required by this Paragraph 2(i) for no fewer than half of its Subject Vapor Control Systems during the first semi-annual period of each calendar year (e.g., Matador shall review its 2021 records for no fewer than half of its Subject Vapor Control Systems between January 1 and June 30 of 2022).

(5) With each Semi-Annual Report, Matador shall submit documentation of the following information: (a) the date that review of the Subject Vapor Control System was completed; (b) a discussion of whether Matador identified any systemic issues; and (c) the nature and timing of all modifications, corrective actions, or other actions planned or undertaken as a result of this review.

# Appendix F: Mitigation Projects

Matador shall comply with the requirements of this Appendix and with Subsection M (Environmental Mitigation Projects) of the Consent Decree to implement and secure the environmental benefits of each of the Projects described in this Appendix.

## I. Vapor Recovery Unit Conversion Project

A. By no later than January 1, 2024, Matador shall replace three four-stroke rich burn gaspowered VRUs with electric-drive variable speed VRUs at Facilities listed in Appendix D. Matador shall ensure that all such replaced VRUs are located at Facilities at which NMED permits require that VRU uptime will be no less than 75 percent. Matador shall operate and maintain the three electric-drive variable speed VRUs discussed above for a period of three years.

## II. Pneumatic Controller Conversion Project

- A. By no later than January 1, 2025, Matador shall replace no fewer than 300 existing intermittent-bleed and 100 existing low-continuous-bleed natural gas-driven Pneumatic Controllers with Non-emitting Controllers.
- By no later than January 1, 2025 and continuing until termination of the Consent Decree,
   Matador shall ensure that no fewer than 85 percent of the Total Controller Count in New
   Mexico are Non-emitting Controllers.
- C. The Total Controller Count shall be determined as of January 1, 2025, and includes all emitting Pneumatic Controllers and all Non-emitting Controllers at Matador Facilities.The Total Controller Count shall not include any controllers that are necessary for a

safety or process purpose that cannot otherwise be met without emitting natural gas and those identified in Paragraph E.

## D. For purposes of this Appendix:

- a. "Pneumatic Controller" means a device that monitors a process parameter such as liquid level, pressure, or temperature and uses pressurized gas (which may be released to the atmosphere during normal operation) and sends a signal to a control valve in order to control the process parameter. Controllers that do not utilize pressurized gas are not Pneumatic Controllers.
- b. "Non-emitting Controller" means a device that monitors a process parameter such as liquid level, pressure, or temperature and sends a signal to a control valve in order to control the process parameter and does not emit natural gas to the atmosphere. Examples of Non-emitting Controllers include but are not limited to instrument air or inert gas Pneumatic Controllers, electric controllers, mechanical controllers, and Routed Pneumatic Controllers.
- c. "Routed Pneumatic Controller" means a Pneumatic Controller of any type that releases natural gas to a process, sales line, or to a combustion device instead of directly to the atmosphere.
- E. The following are not subject to the provisions of this Appendix: (1) temporary

  Pneumatic Controllers that emit natural gas and are used for well abandonment activities

  or are used prior to or through the end of flowback, (2) Pneumatic Controllers used as

  emergency shutdown devices located at a well site, (3) temporary or portable Pneumatic

  Controllers that emit natural gas and are onsite for less than 90 days.

## Appendix G: State Supplemental Environmental Project

- 1. Pursuant to Section V, Subsection P, of the Consent Decree, and in accordance with the specifications and provisions in this Appendix, Matador shall implement an aerial emissions monitoring State Supplemental Environmental Project ("SSEP"). The requirements set forth in this Appendix, as they may apply to any Well Pad on Appendix A (including any Subject Vapor Control System), are in addition to the requirements set forth elsewhere in this Consent Decree.
- 2. No later than 90 Days after the Effective Date, and thereafter quarterly for three years, Matador shall conduct monitoring for methane or VOC emissions using aerial optical gas imaging or other innovative detection technology (hereinafter "Aerial Monitoring") at all Facilities identified in Appendix A.
- 3. Within five Days of Matador's receipt of each final quarterly Aerial Monitoring report, Matador shall review the Aerial Monitoring data, identify each instance of detected methane or VOC emissions in excess of the quantity, rate, opacity, or concentration specified by an applicable air quality regulation, permit condition, or NOI application ("Emissions Detection") and determine the cause thereof.
- 4. If the Emissions Detection indicates emissions from an unlit combustion device, Matador shall implement any necessary corrective action as soon as practicable but no later than seven (7) Days after Matador's receipt of the relevant final quarterly Aerial Monitoring report.
- 5. If the Emissions Detection indicates emissions from a source other than an unlit combustion device, Matador shall, within twenty (20) Days after Matador's receipt of the

relevant final quarterly Aerial Monitoring report, conduct an on-site investigation and implement any necessary corrective action.

- 6. As to any Emissions Detection, Matador shall comply with 20.2.7 NMAC, as applicable.
- 7. <u>Reporting</u>: Matador shall provide EPA and NMED with a summary report for the monitoring conducted in each quarter with the following information:
  - i. GPS coordinates, facility name, permit information, and date of detection as to any Facility where Emissions Detections occurred or where any emissions were detected from an unlit flare or from a Storage Vessel System;
  - ii. video, photographic, or other evidence summary identifying the equipment involved in any detection and the extent of the Emissions Detections;
  - iii. date and time of any on-site investigation;
  - results of any on-site investigation and a description and date of any corrective action implemented;
  - v. the basis for any determination that VOC emissions associated with any detection from an unlit flare or from a Storage Vessel System is *not* in excess of the quantity, rate, opacity, or concentration specified by an applicable air quality regulation, permit condition, or NOI application; and
  - vi. documentation confirming the effectiveness of the implemented corrective action.

Matador shall provide the summary reports to EPA and NMED for each quarter together with the relevant Semi-Annual Report (i.e., the Semi-Annual Report shall include the summary monitoring reports for the prior six-month period). Matador shall provide these summary reports in addition to the information required under Paragraph 97(t).

8. <u>Recordkeeping</u>: The SSEP is subject to the recordkeeping requirements contained in Section XI of the Consent Decree.